

**Fall Semester 2021 – These are extraordinary times, which may necessitate frequent shifts in the syllabus. I will provide as much advance warning as possible when changes are necessary, and will be flexible as needed with your response to these changes.**

## **FW 813 – Natural Resource and Environmental Governance**

Fall Semester 2021

Mondays, 1:50 – 4:40pm (we will actually meet 2:40-4:40pm and add some additional sessions)

Room 230 (South) Case Hall

*Michigan State University occupies the ancestral, traditional and contemporary lands of the Anishinaabeg – Three Fires Confederacy of Ojibwe, Odawa and Potawatomi peoples.*

*The university resides on land ceded in the 1819 Treaty of Saginaw.*

Dr. Mark Axelrod (he/him/his) ([axelrod3@msu.edu](mailto:axelrod3@msu.edu), 517-258-0248)

362 North Case Hall; office hours to be scheduled outdoors and on zoom

### **Introduction**

Nobel laureate Douglass North has described institutions as “the rules of the game in a society or, more formally...the humanly devised constraints that shape human interaction (1990).” In this course, we will examine how formal and informal institutions allocate responsibility and power for governing human relationships with the natural environment, and how such resource governance institutions affect human behavior towards their surroundings and each other. We will encounter a wide variety of institutions. Some, such as scientific forest management in India or the US Clean Air Act, are explicitly designed to affect resource use. Others, such as the US federal court system, are designed for “non-environmental” purposes but have impacts on natural resources nonetheless. This course explores recent scholarship from many disciplinary approaches, unpacking and comparing the institutional machinery of democracies and other governance structures, with a focus on which stakeholders are empowered.

We begin by discussing alternatives for measuring environmental outcomes (e.g., resource protection vs equitable allocation), followed by an overview of three important influences on human behavior and state policies towards the environment: resource demand for consumption and production (economics of scarcity), knowledge, and culture. In the second part of the course, we examine how those three pressures are channeled through different varieties of political control, from colonial domination to democracy. We conclude by analyzing the effects of particular governance institutions, including decentralization and participatory governance, on environmental behavior and outcomes.

### **Learning Objectives**

By the end of this course, you will be prepared to:

- Identify stakeholder interests and relative power
- Compare political institutions and their influence on natural resources and environmental governance
- Compare measurements of environmental outcomes
- Integrate theories of social and natural sciences
- Incorporate institutional and ecological variables into comparative research projects
- Apply resource management case studies to understand how policy makers navigate different political arrangements
- Design a research project on natural resources and/or environmental governance

### **Course Meetings**

Class sessions focus on readings assigned for the week, and their application to current and historical events. It is essential that all class members contribute to the conversation so that we can learn from different experiences and points of view. You are expected to prepare, attend, and participate every time we meet. **Please contact me in advance if you must miss a class.** Opposing opinions, ideas, and viewpoints are expected and encouraged. Indeed, many of the authors we read disagree with each other. The point of our inquiry is to better understand which arguments are best supported by evidence. In the course of our debates and disagreements, **it is crucial that we all respect each other’s ideas, experiences and identities, even (or especially) when we disagree.**

### **Note regarding COVID-19 protocols**

The following statement was developed by my colleagues in James Madison College. Although this course is not part of the College, I am a member of that faculty and we will be meeting in the building occupied by the College. As such, this statement generally applies to FW 813 this fall, though some portions may not make sense in the graduate seminar context. We will also discuss our own group principles for operating in the current environment, including which aspects we choose to adopt from this statement.

**“We, the JMC Community, have a collective responsibility to work to ensure the safety and well-being of each other, including all students, faculty and staff, and the multiple communities in which we live.** Evidence shows that mitigating measures are necessary to reduce transmission as well as severity of symptoms. This is why the university has instituted both vaccination and mask mandates. Our ability to continue in-person learning is also contingent upon limiting and controlling the spread of Covid-19. Thus, all are expected to follow the University’s policies regarding masking and vaccines.

Students should have received the first dose of the vaccine by Tuesday, August 31. You can submit verification of your vaccination or find more information about exemptions [here](#). Remember that you are not fully vaccinated until two weeks after your second dose of the vaccine. Please take appropriate precautionary steps if you are not fully vaccinated. MSU community members who are not fully vaccinated, or have a vaccine exemption, must participate in the University’s [Covid Early Detection Program](#). [Note: Everyone on campus may voluntarily participate, and there is a dropbox for samples in the North Case Hall lobby. I personally commit to participating on a weekly basis.]

Masks must be worn over the nose and mouth while on MSU campus, including during class. If you have a medical condition that prevents you from wearing a face mask, please contact MSU’s [Resource Center for Persons with Disabilities](#) to seek accommodation. You must obtain and present documentation that shows your exemption from the mask mandate.

Please refrain from eating or drinking during class, but if you do, please put your mask back on when you are not eating or drinking.

We will enforce the mask mandate in accordance with university policies. If you do not come with a face mask, you will be allowed to leave in order to attain one. Should you refuse to wear a face mask, your professor will ask you to exit the classroom in order to continue teaching. Your absence will be unexcused and may negatively affect your grade. If you refuse to leave, class will be dismissed and the professor will file a report with the College Administration.

If you have contracted Covid-19 or are required to self-quarantine due to exposure to someone else who has Covid-19, we will do our best to accommodate your needs. In these cases, please alert your professor so that they can let others know there is an exposure. Professors will not disclose personal identity, but will say there is a positive case in our class. Even rudimentary contact tracing can help limit the spread of Covid. MSU, working with the Ingham County Health Department, will handle contact tracing and notifications of positive cases. Please report any positive case to MSU’s COVID-19 Triage Hotline at 855-958-2678. We encourage students to share information when contacted for purposes of contact tracing to protect the entire MSU community.

**Be Flexible! Due to our new reality and unexpected changes in the academic and home environments of both faculty and students, it may be necessary for faculty to pivot the course to zoom for the safety and care of the community.** This may not always feel convenient or desirable, but we strive to keep everyone safe while continuing our shared education mission. No doubt, we all long to return to pre-Covid days when we could sit closely together and participate in long discussions without having to monitor anyone’s mask wearing habits, but current circumstances demand that we put these expectations on hold. Please be patient with your professors and classmates. Moving the course online may affect our schedule, but all faculty will do their best to give you a memorable experience in this course while negotiating the college and university’s pandemic procedures.”

## **Grading and Assignments** (continued on next page)

For all assignments, late papers (unless accompanied by doctor's note or other verified excuse) will receive a reduction of one grade point for every two days after the deadline (i.e., 1 minute to 48 hours late reduces grade by 1.0; 48-96 hours late reduces grade by 2.0). If you have some extenuating circumstance that requires an extension for an assignment, **please request such an extension at least 72 hours prior to the deadline if possible.** I will be flexible to the extent others are not affected by delays.

Given our unique circumstances this semester, I only ask that you let me know in advance of class sessions you will miss, if possible. I will not penalize anyone for missed sessions, unless it becomes disruptive to the learning process. If you need to join a session remotely from home due to illness or care-giving responsibilities, I will make sure a zoom option is available if there is advance notice.

This course will be conducted in line with the Spartan Code of Honor (<https://honorcode.msu.edu>). Among other requirements, academic honesty requires that **you must cite the source of any and all facts or ideas when they are presented in your written assignments.** You may use any citation format, as long as it is consistent and provides sufficient detail for your sources to be checked. The MSU library provides a number of well-known formats at: <https://www.lib.msu.edu/research/cite-resources/> **Any act of academic dishonesty will result in zero credit for the assignment in question. IF IN DOUBT, I WILL BE HAPPY TO DISCUSS THE PROPER COURSE OF ACTION. Past experience has shown that most errors are easily avoidable with a short discussion.**

Semester grades will be based on the following assignments:

1. There is a substantial amount of reading for the seminar. **Quality Preparation and Participation** are essential in order for all of us to learn from each other and advance our own scholarly contributions. Quality participation involves comments and questions that advance our collective understanding of concepts discussed in this course. (20% of the final grade)
2. **2 short papers reacting to the week's readings**, to be shared via email with classmates at least 24 hours before class (i.e., by 1:50pm Sunday). You will select weeks in advance. Each reaction paper should be 1-2 pages, and its primary goal is to raise topics for discussion in class. Please make sure to address the readings from a *critical angle, not merely a summary*. Some possible approaches to consider: 1) the current state of scholarly debate in the area, and whether there are other questions that should be answered, 2) whether the theories/hypotheses in the readings make logical sense, and/or 3) whether the empirical research findings actually achieve what they claim to accomplish (and how could they be improved). Your reaction paper should serve as a lead-in to our class discussion, so *you are strongly encouraged to include a few discussion questions for classmates to ponder in advance*. (3% each – 6% total – of final semester grade)
3. You will then be responsible for working with Mark (and probably one classmate) to organize and lead **discussion for the same 2 class sessions**. We will meet, electronically or in person, in the week before the session to plan out the day's agenda. Discussion leadership will help you frame the day's readings and will prepare you for teaching a similar type of course in the future. (10% each – 20% total – of final grade)
4. In preparation for your research proposal<sup>1</sup>, you will submit a 2-4 page **research topic memo**, due 27 September. This memo should include: your proposed topic and why it is important to study, a preliminary research question, an initial literature review, and hypothesized answers. You may also include a preliminary discussion of how you will test hypotheses. (5% of final grade)

---

<sup>1</sup> The schedule and details of this assignment will be flexible to allow it to be most useful for students' thesis/dissertation processes. Please contact me as soon as possible if you would like to shift the schedule and/or the assignment structure for your individual situation.

5. Please submit a *first draft of your research proposal for review by 1 November*. This draft will not be graded, but will serve as the basis for a brief prospective research presentation (4% of final grade), up to 5 minutes (*sessions to be scheduled*). In addition to a very brief overview of your project, your presentation should also include a self-assessment of remaining gaps in the research design. Remember that the clearer your draft and presentation, the more useful feedback you will receive.
6. You will then provide **constructive commentary, in writing and up to 5 minutes speaking, on one colleague's first draft and presentation**. Your commentary should respond to the presenter's own concerns, other remaining theoretical and empirical challenges, *and suggestions for overcoming these limitations*. Commentary is due *one week after the presentation*. This assignment will prepare you to serve as a conference presenter and discussant, while advancing your own research. (15% of final grade) Reviewer expectations will be discussed in advance of the discussion session.
7. Your **final research proposal** is due via email by **Wednesday, December 15, at 7:45pm (i.e., end of the scheduled final exam period, in lieu of an exam)**. This proposal should respond to – and clearly reference – existing literature in the field and demonstrate how your efforts will advance that scholarship. It should include a clear analytical research question, well developed hypotheses, and clear description of the research methods you propose to test your hypotheses (30% of final grade). Along with the final draft, please include at least a 1-2 paragraph summary of the changes you have made since the previous version. That summary is useful for practicing your response to peer reviewers, and will help me assess your response to constructive criticism from colleagues. We will discuss this project throughout the semester to ensure that you are making progress towards the final proposal.

You will receive a grade for each day of class and each assignment on the 4.0 scale. At the end of the semester, those grades will be weighted and averaged as identified above. Weighted averages of greater than 3.75 will result in a 4.0 reported grade for the semester; 3.25-3.75 = 3.5 reported grade; 2.75-3.25 = 3.0 reported grade; 2.25-2.75=2.5 reported grade; 1.75-2.25=2.0 reported grade; and so forth.

## **Additional Course Policies**

### **Needed Accommodations for Course Activities and Assignments**

Requests for accommodations may be made by contacting the Resource Center for Persons with Disabilities at 517-884-RPCD or on the web at [rcpd.msu.edu](http://rcpd.msu.edu). Once your eligibility for an accommodation has been determined, you will be issued a Verified Individual Services Accommodation (VISA) form. Please present this form to me as soon as possible so that we can develop a plan that works best for your learning opportunities. Our continuously changing environment may result in challenges you have not encountered previously, so I encourage you to consult with RCPD and me if you experience new challenges in this context. I am committed to ensuring everyone has the opportunity to participate in the experiences of this course.

### **MSU Limits to Confidentiality** [statement by Dr. Paulette Granberry Russell (July 2015)]

“[All] materials submitted for this class are generally considered confidential pursuant to the University's student record policies. However, students should be aware that University employees, including instructors, may not be able to maintain confidentiality when it conflicts with their responsibility to report certain issues based on external legal obligations or that relate to the health and safety of MSU community members and others. As the instructor, I must report the following information to other University offices if you share it with me:

- Suspected child abuse/neglect, even if this maltreatment happened when you were a child,
- Allegations of sexual assault or sexual harassment when they involve MSU students, faculty, or staff, and
- Credible threats of harm to oneself or to others.

These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared. In almost all cases, it will be your decision whether you wish to speak with that individual. If you would like to talk about these events in a more confidential setting you are encouraged to make an appointment with the MSU Counseling Center.”

Please note: I recognize that gender-based violence and the other experiences listed above can undermine students’ academic success and I am committed to supporting survivors. In addition to the Counseling Center, additional confidential resources now exist, and I am happy to help you connect.

## **Course Readings**

A quick word on the readings: I have not chosen them because I agree with everything written. Rather, I think they represent good entry points into the scholarly debates and topics that we will study, and they generally do a good job of identifying the interesting issues related to those topics. They also represent up-to-date scholarship in a variety of disciplines, including some new scholarship that I am confronting at the same time as you. However, they are not infallible and many of them contradict each other. You should approach readings with a healthy degree of skepticism. Be prepared to discuss their shortcomings, and potential solutions to resolve those concerns. That approach will help you gain a better understanding of the subject matter and will make you a better researcher in the process.

The listed literature is heavily dependent on the perspectives with which I am most familiar. However, these do not represent the full frame of governance knowledge. If you are familiar with other relevant recent literature that the class should read, please let me know and we will try to incorporate it into the syllabus.

Unless otherwise noted, all journal articles should be available electronically through the MSU Library, by typing the article title in the top search box at <http://lib.msu.edu/> In addition, we will read some individual book chapters, available on reserve as noted, and two nearly complete books:

- 1) Andreas Duit (editor). 2014. *State and Environment: The Comparative Study of Environmental Governance*. Cambridge, Massachusetts: The MIT Press.
- 2) Prakash Kashwan. 2017. *Democracy in the Woods: Environmental Conservation and Social Justice in India, Tanzania, and Mexico*. New York, NY: Oxford University Press.

I recommend purchasing these books if you plan to continue research in this field. However, the Duit book is available electronically from the library and you may also consider sharing the library’s or my copies. The Kashwan book is only available in hard cover, and therefore somewhat expensive.

In addition, I recommend the following books, both of which should be available in the library: (on social science research): King, Gary, Robert O. Keohane, and Sidney Verba [KKV]. 1994. *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton, NJ: Princeton University Press.

(on collective action and resource use): Ostrom, Elinor. 1990. *Governing the commons: the evolution of institutions for collective action*. Cambridge, England: Cambridge University Press.

I will, of course, be happy to recommend other readings on topics of interest.

## **Week 1 (Wednesday, 1 Sept): Introduction; Comparing China, India, and US (air pollution); Environmental Governance**

Challies, Edward, and Jens Newig. 2019. *What is ‘environmental governance’? A working definition* 14 June 2019 [cited 19 June 2019]. Available from <https://sustainability-governance.net/2019/06/14/what-is-environmental-governance-a-working-definition/>

Duit, ch.1 (Andreas Duit, “Introduction: The Comparative Study of Environmental Governance”) [D2L]

Lemos, Maria Carmen, and Arun Agrawal. 2006. Environmental Governance. *Annual Review of Environment and Resources* 31(1): 297-325. [READ ONLY sections: “Defining Environmental Governance” (pages 298-299) and “The Terrain of Environmental Governance” (309-312)]. <http://www-personal.umich.edu/~arunagra/papers/publications/2006.%20Maria%20Carmen%20Lemos%20and%20Arun%20Agrawal.%20%20Environmental%20Governance.pdf>

Kashwan, Prakash. 2017. *Democracy in the woods: environmental conservation and social justice in India, Tanzania, and Mexico*. New York, NY: Oxford University Press. [chapter 1, especially “Theoretical Framework” (pages 7-16)] [D2L]

COMPARATIVE AIR POLLUTION CASE STUDY (relatively short news articles; discussion questions via email):

*Concerns about air pollution (threats to human security)*

Somini Sengupta, “Air Pollution Is Shortening Your Life. Here’s How Much,” *New York Times*, August 22, 2018. <https://www.nytimes.com/2018/08/22/climate/air-pollution-deaths.html>

Malavika Vyawahare, “Air Pollution In India Led To Over 1 Lakh Child Deaths In 2016: WHO,” *Huffington Post*, 29 Oct 2018. [https://www.huffingtonpost.in/2018/10/29/air-pollution-in-india-led-to-over-1-lakh-child-deaths-in-2016-who\\_a\\_23574608/](https://www.huffingtonpost.in/2018/10/29/air-pollution-in-india-led-to-over-1-lakh-child-deaths-in-2016-who_a_23574608/)

Dan Levin, “Study Links Polluted Air in China to 1.6 Million Deaths a Year,” *New York Times*, August 13, 2015. <http://www.nytimes.com/2015/08/14/world/asia/study-links-polluted-air-in-china-to-1-6-million-deaths-a-year.html>

(Interactive) Jin Wu, Derek Watkins, Josh Williams, Shalini Venugopal Bhagat, Hari Kumar and Jeffrey Gettleman, “Who Gets to Breathe Clean Air in New Delhi?” *New York Times*, Dec. 17, 2020. <https://www.nytimes.com/interactive/2020/12/17/world/asia/india-pollution-inequality.html>

Didi Kirsten Tatlow, “China Air Quality Study Has Good News and Bad News,” *New York Times*, March 30, 2016. <https://www.nytimes.com/2016/03/31/world/asia/china-air-pollution-beijing-shanghai-guangzhou.html>

(Photos) Alan Taylor, “China’s Toxic Sky,” *The Atlantic*, January 30, 2013. <http://www.theatlantic.com/infocus/2013/01/chinas-toxic-sky/100449/3>.

Nadja Popovich, “America’s Skies Have Gotten Clearer, but Millions Still Breathe Unhealthy Air,” *New York Times*, June 19, 2019. <https://www.nytimes.com/interactive/2019/06/19/climate/us-air-pollution-trump.html>

Hiroko Tabuchi, “In the Shadows of America’s Smokestacks, Virus Is One More Deadly Risk,” *New York Times*, May 17, 2020 (updated May 19). <https://www.nytimes.com/2020/05/17/climate/pollution-poverty-coronavirus.html>

Jonathan Kaiman, “China faces \$176bn bill to clean up air pollution,” *The Guardian*, 20 December 2013. <http://www.theguardian.com/environment/2013/dec/20/china-bill-clean-air-pollution>

Edward Wong, “As Beijing Shuts Down Over Smog Alert, Worse-Off Neighbors Carry On,” *New York Times*, December 9, 2015. <https://www.nytimes.com/2015/12/10/world/asia/beijing-air-pollution-red-alert.html>

*Causes of Problematic Urban Air Quality*

Edward Wong, “Coal Burning Causes the Most Air Pollution Deaths in China, Study Finds,” *New York Times*, August 17, 2016. <https://www.nytimes.com/2016/08/18/world/asia/china-coal-health-smog-pollution.html>

Geeta Anand, “Farmers’ Unchecked Crop Burning Fuels India’s Air Pollution,” *New York Times*, November 2, 2016. <https://www.nytimes.com/2016/11/03/world/asia/farmers-unchecked-crop-burning-fuels-indias-air-pollution.html>

Sushmita Pathak, “Fireworks Of Diwali Spark Worries About Pollution ... And Coronavirus Cases,” *NPR Goats and Soda*, November 12, 2020. <https://www.npr.org/sections/goatsandsoda/2020/11/12/934097578/fireworks-of-diwali-spark-worries-about-pollution-and-coronavirus-cases>

Jeff Masters, “July 4 Fireworks Create Unhealthy Levels of Air Pollution,” *Weather Underground*, July 5, 2017. <https://www.wunderground.com/cat6/july-4-fireworks-create-unhealthy-levels-air-pollution>

Jonathan Lambert, “Study Finds Racial Gap Between Who Causes Air Pollution And Who Breathes It,” National Public Radio, March 11, 2019. <https://www.npr.org/sections/health-shots/2019/03/11/702348935/study-finds-racial-gap-between-who-causes-air-pollution-and-who-breathes-it> [full study, not required reading: <https://www.pnas.org/content/116/13/6001>]

*Private/Citizen Responses to Air Pollution*

Anthony Kuhn, “For Some In China’s Middle Class, Pollution Is Spurring Action,” *NPR Morning Edition*, March 2, 2017. <http://www.npr.org/sections/parallels/2017/03/02/518173670/for-some-in-chinas-middle-class-pollution-is-spurring-action>

Lauren Frayer, “What Will Persuade Rice Farmers In Punjab To Stop Setting Fires In Their Fields?” *NPR Morning Edition*, November 21, 2018. <https://www.npr.org/669227134>

(addresses climate change rather than air quality itself) Hiroko Tabuchi and Lisa Friedman, “U.S. Cities, States and Businesses Pledge to Measure Emissions,” *New York Times*, July 11, 2017. <https://www.nytimes.com/2017/07/11/climate/cities-states-businesses-emissions-climate-pact.html>

(long article, but please at least skim or listen to the embedded audio version) Linda Villarosa, “Pollution Is Killing Black Americans. This Community Fought Back,” *New York Times Magazine* July 28, 2020. <https://www.nytimes.com/2020/07/28/magazine/pollution-philadelphia-black-americans.html>

### *Institutional Responses to Air Pollution*

- David Eimer, “Beijing Olympics: China to celebrate week of ‘fresh air,’” *The Telegraph*, August 2, 2008. <http://www.telegraph.co.uk/sport/olympics/2489141/Beijing-Olympics-China-to-celebrate-weekof-fresh-air.html>
- Edward Wong, “China to Reward Cities and Regions Making Progress on Air Pollution,” *New York Times*, February 13, 2014. <http://www.nytimes.com/2014/02/14/world/asia/china-to-reward-localities-for-improving-air-quality.html>
- Jennifer Duggan, “China deploys drones to spy on polluting industries,” *The Guardian*, 19 March 2014. <http://www.theguardian.com/environment/2014/mar/19/china-drones-pollution-smog-beijing>
- Edward Wong, “Beijing Issues Red Alert Over Air Pollution for the First Time,” *New York Times*, December 7, 2015. <https://www.nytimes.com/2015/12/08/world/asia/beijing-pollution-red-alert.html>
- Edward Wong, “Statistics From China Say Coal Consumption Continues to Drop,” *New York Times*, March 2, 2016. <https://www.nytimes.com/2016/03/03/world/asia/china-coal-consumption-down.html>
- Edward Wong, “Nearly 14,000 Companies in China Violate Pollution Rules,” *New York Times*, June 13, 2017. <https://www.nytimes.com/2017/06/13/world/asia/china-companies-air-pollution-paris-agreement.html>
- Chris Buckley and Keith Bradsher, “China Unveils Superagencies to Fight Pollution and Other Threats to Party Rule,” *New York Times*, March 13, 2018. <https://www.nytimes.com/2018/03/13/world/asia/china-xi-jinping-congress-pollution-corruption.html>
- Liu Jiefei, “Firework Ban Clears the Air for Chinese New Year,” *Caixin Global*, Feb 08, 2019. <https://www.caixinglobal.com/2019-02-08/firework-ban-clears-the-air-for-chinese-new-year-101377975.html>
- Nida Najar, “Despite Pollution, Coal Plant Is Cleared to Reopen in New Delhi,” *New York Times*, March 18, 2017. <https://mobile.nytimes.com/2017/03/18/world/asia/new-delhi-coal-plant-pollution.html>
- S. Shobana, “Supreme Court Allows Sale, Use Of Safer Firecrackers With Conditions: Highlights,” *NDTV*, October 23, 2018 <https://www.ndtv.com/india-news/supreme-court-allows-sale-use-of-safer-firecrackers-with-conditions-live-updates-1936014>
- Hiroko Tabuchi, Jack Ewing, and Matt Apuzzo, “6 Volkswagen Executives Charged as Company Pleads Guilty in Emissions Case,” *New York Times* Jan. 11, 2017. <https://www.nytimes.com/2017/01/11/business/volkswagen-diesel-vw-settlement-charges-criminal.html>
- Coral Davenport, “Eastern States Press Midwest to Improve Air,” *New York Times*, December 9, 2013. <http://www.nytimes.com/2013/12/09/us/politics/eastern-states-press-midwest-to-improve-air.html>
- Lisa Friedman, “Cost of New E.P.A. Coal Rules: Up to 1,400 More Deaths a Year,” *New York Times*, Aug. 21, 2018. <https://www.nytimes.com/2018/08/21/climate/epa-coal-pollution-deaths.html>
- Hiroko Tabuchi, “Toyota to Pay a Record Fine for a Decade of Clean Air Act Violations,” *New York Times* Jan. 14, 2021. <https://www.nytimes.com/2021/01/14/climate/toyota-emissions-fine.html>
- Coral Davenport, “Trump Administration Declines to Tighten Soot Rules, Despite Link to Covid Deaths,” *New York Times*, Dec. 7, 2020 (updated Dec. 15). <https://www.nytimes.com/2020/12/07/climate/trump-epa-soot-covid.html>

### *Additional recommended readings if you are interested in further detail:*

- Gardiner Harris, “Delhi Wakes Up to an Air Pollution Problem It Cannot Ignore,” *New York Times*, February 14, 2015. <http://www.nytimes.com/2015/02/15/world/asia/delhi-wakes-up-to-an-air-pollution-problem-it-cannot-ignore.html>
- Jonathan Watts, “Air pollution inequality widens between rich and poor nations,” *The Guardian*, 1 May 2018. <https://www.theguardian.com/environment/2018/may/01/air-pollution-inequality-widens-between-rich-and-poor-nations>
- Damian Carrington, “‘Compelling’ evidence air pollution worsens coronavirus – study,” *The Guardian*, 13 July 2020. <https://www.theguardian.com/world/2020/jul/13/compelling-evidence-air-pollution-worsens-coronavirus-study>
- (outside of the case study area, but recommended reading) Emily Kwong, “Mongolia’s Capital Banned Coal To Fix Its Pollution Problem. Will It Work?” *NPR Morning Edition*, July 30, 2019. <https://www.npr.org/727688757>
- (addresses climate change rather than air quality itself) Adam Liptak and Coral Davenport, “Supreme Court Deals Blow to Obama’s Efforts to Regulate Coal Emissions,” *New York Times*, February 9, 2016. <https://www.nytimes.com/2016/02/10/us/politics/supreme-court-blocks-obama-epa-coal-emissions-regulations.html>
- Marcantonio, Richard, Debra Javeline, Sean Field, and Agustín Fuentes. 2021. “Global distribution and coincidence of pollution, climate impacts, and health risk in the Anthropocene.” *PLOS ONE* 16 (7):e0254060.
- Narain, Urvashi and Ruth Greenspan Bell, “Who Changed Delhi’s Air? The Roles of the Court and the Executive in Environmental Policymaking,” *Resources for the Future Discussion Paper*, RFF DP 05-48 (December 2005). <http://www.rff.org/documents/RFF-DP-05-48.pdf>
- Raïk, Daniela B., Arthur L. Wilson, and Daniel J. Decker. 2008. Power in Natural Resources Management: An Application of Theory. *Society & Natural Resources* 21(8): 729-39.
- Ren, Xuefei. 2020. “From a comparative gesture to structured comparison: an analysis of air pollution control in Beijing and Delhi.” *Cambridge Journal of Regions, Economy and Society* 13 (3):461-73.
- Rosencranz, Armin, and Michael Jackson. 2003. The Delhi Pollution Case: The Supreme Court of India and the Limits of Judicial Power. *Columbia Journal of Environmental Law* 28 (2):223-254.
- Young, Oran R. et al. 2015. Institutionalized Governance Processes: Comparing Environmental Problem Solving in China and the United States. *Global Environmental Change* 31: 163-73.

## **Part I: Environmental Performance and Resource Contestation**

### **Week 2 (13 September): Descriptive Research at multiple scales: Defining and measuring environmental success and human/environmental security**

Duit, chapter 2 (James Meadowcroft, “Comparing Environmental Performance”)

Jens Newig and Ed Challies. 2021 April 12. “Assessing ‘success’ of environmental governance: How to define effectiveness, legitimacy and justice?” *Sustainability Governance Blog*. <https://sustainability-governance.net/2021/04/12/assessing-success-of-environmental-governance-how-to-define-effectiveness-legitimacy-and-justice/>

Selections from Wendling, Z. A., Emerson, J. W., de Sherbinin, A., Esty, D. C., et al. (2020). *2020 Environmental Performance Index*. New Haven, CT: Yale Center for Environmental Law & Policy. <https://epi.yale.edu> [PLEASE READ [Policy Makers’ Summary](#) and SELECT [one country and one category](#) to explore further]

Gadgil, Madhav, and Ramachandra Guha. 1995. *Ecology and Equity: The Use and Abuse of Nature in Contemporary India*. London ; New York: Routledge. [READ ONLY pp. 3-5] [reserve]

Adger, W.N., J.M. Pulhin, J. Barnett, G.D. Dabelko, G.K. Hovelsrud, M. Levy, Ú. Oswald Spring, and C.H. Vogel. 2014. Human Security. In *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by C.B. Field, V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea and L.L. White, 755-91. Cambridge, UK and New York, NY: Cambridge University Press. [https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap12\\_FINAL.pdf](https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap12_FINAL.pdf) [READ ONLY pp. 755-771], and save remainder of chapter for week 4]

Leite, M., H. Ross, and F. Berkes. 2019. Interactions between individual, household, and fishing community resilience in southeast Brazil. *Ecology and Society* 24(3):2. <https://www.ecologyandsociety.org/vol24/iss3/art2/>

Recommended for week 2:

- King, Keohane, and Verba. 1994, chapter 2 on descriptive research (skip formal models)
- Gerring, John. 2012. Mere Description. *British Journal of Political Science* 42(04): 721-46.
- Duit, chapter 4 (Detlef Jahn, “The Three Worlds of Environmental Politics”)
- Burck, Jan, Ursula Hagen, Christoph Bals, Niklas Höhne, Leonardo Nascimento, Tasneem Essop, Sophia Binz, Violeta Helling, and Björk Lucas. 2021. "Climate Change Performance Index (CCPI) RESULTS: Climate Mitigation Efforts of 57 Countries plus the EU. Covering 90% of the Global Greenhouse Gas Emissions." Germanwatch, NewClimate Institute, and Climate Action Network International.
- Bennett, Nathan J., Laure Katz, Whitney Yadao-Evans, Gabby N. Ahmadi, Scott Atkinson, et al. 2021. "Advancing Social Equity in and Through Marine Conservation." *Frontiers in Marine Science* 8 (994).
- Engle, Nathan L. 2011. Adaptive Capacity and Its Assessment. *Global Environmental Change* 21(2): 647-56.
- Allison, Edward H., Allison L. Perry, Marie-Caroline Badjeck, W. Neil Adger, Katrina Brown, et al. 2009. Vulnerability of National Economies to the Impacts of Climate Change on Fisheries. *Fish and Fisheries* 10: 173-96.
- Pintér, László, Peter Hardi, and Peter Bartelmus. 2005. Indicators of Sustainable Development: Proposals for a Way Forward: Discussion Paper Prepared under a Consulting Agreement on behalf of the UN Division for Sustainable Development. New York: International Institute for Sustainable Development, available at [http://www.iisd.org/pdf/2005/measure\\_indicators\\_sd\\_way\\_forward.pdf](http://www.iisd.org/pdf/2005/measure_indicators_sd_way_forward.pdf)
- Nelson, Donald R., W. Neil Adger, and Katrina Brown. 2007. Adaptation to Environmental Change: Contributions of a Resilience Framework. *Annual Review of Environment and Resources* 32(1): 395-419.
- International Institute for Sustainable Development (IISD). *Measurement and Assessment: Navigating the sustainability transition* 2008. Available from <http://www.iisd.org/measure/>
- Parris, Thomas M. and Kates, Robert W. 2003. “Characterizing and measuring sustainable development”. *Annual Review of Environment and Resources* 28: 559-586.



**Week 3 (20 September): People and the Environment – Human Security, Consumption and Production/Livelihoods**

- Serena Solomon, "On a Fijian Island, Hunters Become Conservators of Endangered Turtles," *New York Times*, January 2, 2017. <https://www.nytimes.com/2017/01/02/world/asia/on-a-fijian-island-hunters-become-conservators-of-endangered-turtles.html>
- Ari Shapiro, "India's Big Battle: Development Vs. Pollution," *NPR All Things Considered*, May 13, 2016. <http://www.npr.org/2016/05/13/477930821/indias-big-battle-development-vs-pollution>
- Jack Losh, "Conservation in crisis: why Covid-19 could push mountain gorillas back to the brink," *The Guardian*, 5 May 2020. <https://www.theguardian.com/environment/2020/may/05/conservation-in-crisis-covid-19-could-push-mountain-gorillas-back-to-the-brink-aoe>
- Gadgil and Guha, Prologue and Chapter 1 (PAGES 1-53 and Tables/Appendix on 60-68) [reserve]
- Lemos, Maria Carmen, and Arun Agrawal. 2006. Environmental Governance. *Annual Review of Environment and Resources* 31(1): 297-325. [READ ONLY "Market- and Agent-Focused Instruments" (pp. 305-308)].  
<http://www-personal.umich.edu/~arunagra/papers/publications/2006.%20Maria%20Carmen%20Lemos%20and%20Arun%20Agrawal.%20%20Environmental%20Governance.pdf>
- Fairbrother, Malcolm. 2019. "When Will People Pay to Pollute? Environmental Taxes, Political Trust and Experimental Evidence from Britain." *British Journal of Political Science* 49 (2):661-82.
- Brashares, Justin S., Christopher D. Golden, Karen Z. Weinbaum, Christopher B. Barrett, and Grace V. Okello. 2011. Economic and Geographic Drivers of Wildlife Consumption in Rural Africa. *Proceedings of the National Academy of Sciences* 108(34): 13931-36.

Recommended for Week 3:

- Scott, James C. 1976. *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia*. New Haven: Yale University Press. [available as e-book through MSU library, or reserve] [READ ONLY pp. 13-26 and 32-34]
- The Guardian. 2015. "Episode 5: Economics," *The Biggest Story in the World Podcast*. <http://www.theguardian.com/environment/ng-interactive/2015/mar/16/the-biggest-story-in-the-world>
- Hickman, Jonathan E., Niels Andela, Kostas Tsigaridis, Corinne Galy-Lacaux, Money Osohou, and Susanne E. Bauer. 2021. "Reductions in NO<sub>2</sub> burden over north equatorial Africa from decline in biomass burning in spite of growing fossil fuel use, 2005 to 2017." *Proceedings of the National Academy of Sciences* 118 (7):e2002579118.
- Klein, Carissa, Madeleine C. McKinnon, Becky Twohey Wright, Hugh P. Possingham, and Benjamin S. Halpern. 2015. Social Equity and the Probability of Success of Biodiversity Conservation. *Global Environmental Change* 35: 299-306.
- Bennett, Abigail, Xavier Basurto, John Virdin, Xinyan Lin, Samantha J. Betances, Martin D. Smith, Edward H. Allison, Barbara A. Best, Kelly D. Brownell, Lisa M. Campbell, Christopher D. Golden, Elizabeth Havice, Christina C. Hicks, Peter J. Jacques, Kristin Kleisner, Niels Lindquist, Rafaela Lobo, Grant D. Murray, Michelle Nowlin, Pawan G. Patil, Douglas N. Rader, Stephen E. Roady, Shakuntala H. Thilsted, and Sarah Zoubek. 2021. "Recognize fish as food in policy discourse and development funding." *AMBIO* 50 (5):981-9.
- Christopher W. Tessum, et al. 2019. Inequity in consumption of goods and services adds to racial-ethnic disparities in air pollution exposure. *Proceedings of the National Academy of Sciences* 116(13): 6001-6006
- Hicks, Christina C., Philippa J. Cohen, Nicholas A. J. Graham, Kirsty L. Nash, Edward H. Allison, Coralie D'Lima, David J. Mills, Matthew Roscher, Shakuntala H. Thilsted, Andrew L. Thorne-Lyman, and M. Aaron MacNeil. 2019. "Harnessing global fisheries to tackle micronutrient deficiencies." *Nature* 574 (7776):95-8.
- McClanahan, Tim, Edward H Allison, and Joshua E Cinner. 2015. "Managing fisheries for human and food security." *Fish and Fisheries* 16 (1):78-103.
- Barrett, Christopher B., Alexander J. Travis, and Partha Dasgupta. 2011. On Biodiversity Conservation and Poverty Traps. *Proceedings of the National Academy of Sciences* 108(34): 13907-12.
- Dasgupta, Susmita, Benoit Laplante, Hua Wang, and David Wheeler. 2002. Confronting the Environmental Kuznets Curve. *The Journal of Economic Perspectives* 16(1): 147-68.
- Bozigar, Matthew, Clark L. Gray, and Richard E. Bilsborrow. 2016. Oil Extraction and Indigenous Livelihoods in the Northern Ecuadorian Amazon. *World Development* 78: 125-35.

**Week 4 (27 September): Resource Contestation and Conflict – scarcity, abundance, insecurity**  
**[RESEARCH TOPIC MEMO DUE AT THE BEGINNING OF CLASS]**

- Ostrom, Elinor. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge, England: Cambridge University Press. [reserve] **[READ ONLY pp. 1-7]**
- Adger, W.N., et al. 2014. Human Security. In *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by C.B. Field, et al., Cambridge, UK and New York, NY: Cambridge University Press. **READ ONLY PAGES 771-791** [http://www.ipcc.ch/pdf/assessment-report/ar5/wg2/WGIIAR5-Chap12\\_FINAL.pdf](http://www.ipcc.ch/pdf/assessment-report/ar5/wg2/WGIIAR5-Chap12_FINAL.pdf)

Somini Sengupta, "A New Breed of Crisis: War and Warming Collide in Afghanistan," *New York Times*, Aug. 30, 2021 (updated Aug. 31). <https://www.nytimes.com/2021/08/30/climate/afghanistan-climate-taliban.html>

Koubi, Vally, Gabriele Spilker, Tobias Böhmelt, and Thomas Bernauer. 2014. Do Natural Resources Matter for Interstate and Intrastate Armed Conflict? *Journal of Peace Research*. 51(2): 227-43.

Select one of the following 2 sets of readings:

- Klaus, Kathleen, and Matthew I Mitchell. 2015. Land Grievances and the Mobilization of Electoral Violence. *Journal of Peace Research* 52(5): 622-35. AND
- Ide, Tobias. 2015. Why Do Conflicts over Scarce Renewable Resources Turn Violent? A Qualitative Comparative Analysis. *Global Environmental Change* 33: 61-70.

OR

- Ide, Tobias, Michael Brzoska, Jonathan F. Donges, and Carl-Friedrich Schleussner. 2020. "Multi-method evidence for when and how climate-related disasters contribute to armed conflict risk." *Global Environmental Change* 62: AND
- De Juan, Alexander, and Tim Wegenast. 2020. "Temperatures, food riots, and adaptation: A long-term historical analysis of England." *Journal of Peace Research* 57 (2):265-80.

IF YOU HAVE NOT PREVIOUSLY READ IT, CONSIDER: Garrett Hardin, "The Tragedy of the Commons," *Science* 162(3859): 1243-1248 (1968). [though note the concept has been corrupted for racist aims, including by Hardin himself]

Recommended:

- Urdal, Henrik. 2008. "Population, Resources, and Political Violence." *Journal of Conflict Resolution* 52 (4):590-617.
- Khagram, Sanjeev, and Saleem Ali. 2006. Environment and Security. *Annual Review of Environment and Resources* 31(1): 395-411. <http://www.uvm.edu/~shali/KhagramAli.pdf>
- Asal, Victor, Michael Findley, James A. Piazza, and James Igoe Walsh. 2016. Political Exclusion, Oil, and Ethnic Armed Conflict. *Journal of Conflict Resolution* 60(8): 1343-67.
- Ash, Konstantin, and Nick Obradovich. 2020. "Climatic Stress, Internal Migration, and Syrian Civil War Onset." *Journal of Conflict Resolution* 64 (1):3-31.
- Siri Aas Rustad and Helga Malmin Binningsbø. 2012. A price worth fighting for? Natural resources and conflict recurrence. *Journal of Peace Research* 49(4): 531-546.
- van Weezel, Stijn. 2019. "On climate and conflict: Precipitation decline and communal conflict in Ethiopia and Kenya." *Journal of Peace Research* 56 (4):514-28.
- Dreher, Axel, and Merle Kreibbaum. 2016. Weapons of Choice: The Effect of Natural Resources on Terror and Insurgencies. *Journal of Peace Research* 53(4): 539-53.
- Homer-Dixon, Thomas F.; Boutwell, Jeffrey H.; Rathjens, George W. 1993. Environmental Change and Violent Conflict: Growing Scarcities of Renewable Resources Can Contribute to Social Instability and Civil Strife. *Scientific American* 268(2): 38-45.
- Ross, Michael L. 2004. How Do Natural Resources Influence Civil War? Evidence from Thirteen Cases. *International Organization* 58(01): 35-67.
- Koubi, Vally. 2019. "Climate Change and Conflict." *Annual Review of Political Science* 22 (1):343-60.
- Maertens, Ricardo. 2021. "Adverse Rainfall Shocks and Civil War: Myth or Reality?" *Journal of Conflict Resolution* 65 (4):701-28.
- Declan Walsh and Somini Sengupta, "For Thousands of Years, Egypt Controlled the Nile. A New Dam Threatens That," *New York Times*, Feb. 9, 2020. <https://www.nytimes.com/interactive/2020/02/09/world/africa/nile-river-dam.html>
- Linke, Andrew M, and Brett Ruether. 2021. "Weather, wheat, and war: Security implications of climate variability for conflict in Syria." *Journal of Peace Research* 58 (1):114-31.

- Pardini, Chelsea A., and Ana Espinola-Arredondo. 2021. "Violence, coercion, and settler colonialism." *Journal of Theoretical Politics* 33 (2):236-73.

### **Week 5 (4 October): People and the Environment – Scientific and Cultural Inputs**

#### *Science/Knowledge*

- Benjamin, Ruha. 2019. "Assessing risk, automating racism." *Science* 366 (6464): 421-422.
- Richter, Lauren, Alissa Cordner, and Phil Brown. 2021. "Producing Ignorance Through Regulatory Structure: The Case of Per- and Polyfluoroalkyl Substances (PFAS)." *Sociological Perspectives* 64 (4):631-56.
- Tim Daw and Tim Gray, "Fisheries science and sustainability in international policy: a study of failure in the European Union's Common Fisheries Policy." *Marine Policy* 29 (3):189-97 (2005).
- Leiserowitz, Anthony A., Edward W. Maibach, Connie Roser-Renouf, Nicholas Smith, and Erica Dawson. 2013. Climategate, Public Opinion, and the Loss of Trust. *American Behavioral Scientist* 57(6): 818-37.
- Leo Hickman, "Climate change study forces sceptical scientists to change minds," *The Guardian*, July 29, 2012. <http://www.theguardian.com/science/2012/jul/29/climate-change-sceptics-change-mind>

#### *Culture*

- Lynn White, Jr., "Historical Roots of Our Ecological Crisis," *Science* 155(3767):1203-1207 (1967).
- RiverOfLife, Martuwarra, Anne Poelina, Donna Bagnall, and Michelle Lim. 2020. "Recognizing the Martuwarra's First Law Right to Life as a Living Ancestral Being." *Transnational Environmental Law* 9 (3):541-68.
- Coulthard, Sarah. 2008. Adapting to Environmental Change in Artisanal Fisheries—Insights from a South Indian Lagoon. *Global Environmental Change* 18(3): 479-89.
- Justin Gillis, "For Faithful, Social Justice Goals Demand Action on Environment," *New York Times*, June 20, 2015. <https://www.nytimes.com/2015/06/21/science/earth/for-faithful-social-justice-goals-demand-action-on-environment.html>
- Stephanie Kirchgaessner, "Pope's climate change encyclical tells rich nations: pay your debt to the poor," *The Guardian*, 18 June 2015. <http://gu.com/p/49qmh/sbl>  
[full text of the encyclical (NOT REQUIRED READING):  
[http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco\\_20150524\\_enciclica-laudato-si.html](http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html) ]

#### Recommended:

- The Guardian. 2015. "Episode 8: The US" and "Episode 9: Religion". *The Biggest Story in the World Podcast*. <http://www.theguardian.com/environment/ng-interactive/2015/mar/16/the-biggest-story-in-the-world>
- Ian Johnson, "On the Role of Chinese Religion in Environmental Protection," *New York Times*, October 17, 2016. <https://www.nytimes.com/2016/10/18/world/asia/china-religion-prasenjit-duara.html>
- Perlman, Rebecca L. 2020. "For Safety or Profit? How Science Serves the Strategic Interests of Private Actors." *American Journal of Political Science* 64 (2): 293-308.
- Sarah Cornell, Frans Berkhout, et al., "Opening up knowledge systems for better responses to global environmental change," *Environmental Science & Policy* 28: 60-70 (2013).
- Gustafsson, Karin M., Steven A. Wolf, and Anurag A. Agrawal. 2017. "Science-Policy-Practice Interfaces: Emergent knowledge and monarch butterfly conservation." *Environmental Policy and Governance* 27 (6):521-33.
- Fred Pearce, "Climategate: Anatomy of a Public Relations Disaster," *environment360* (2009). [http://e360.yale.edu/feature/climategate\\_anatomy\\_of\\_a\\_public\\_relations\\_disaster/2221/](http://e360.yale.edu/feature/climategate_anatomy_of_a_public_relations_disaster/2221/)
- Jacques, Peter J., and Claire Connolly Knox. 2016. Hurricanes and Hegemony: A Qualitative Analysis of Micro-Level Climate Change Denial Discourses. *Environmental Politics* 25(5): 831-52.
- Gadgil and Guha, chapters 2 and 3
- Aboul-Enein, Basil H. 2018. "'The earth is your mosque': narrative perspectives of environmental health and education in the Holy Quran." *Journal of Environmental Studies and Sciences* 8 (1):22-31.
- O. P. Dwivedi, and B.N. Tiwari, "Environmental Protection in the Hindu Religion," in George A. James, ed., *Ethical Perspectives on Environmental Issues in India* (New Delhi: A.P.H. Publishing, 1999).
- Conrad L. Kanagy, and Hart M. Nelsen, "Religion and Environmental Concern: Challenging the Dominant Assumptions," *Review of Religious Research*, 37(1): 33-45 (1995).

- Johan Colding and Carl Folke, "The Taboo System: Lessons about Informal Institutions for Nature Management," *Georgetown Int'l Environmental Law Review* 12:413 (2000).
- Maria Tengo, Kristin Johansson, Fanambinantsoa Rakotondraso, Jakob Lundberg, Jean-Aime Andriamaherilala, Jean-Aime Rakotoarisoa and Thomas Elmqvist, "Taboos and Forest Governance: Informal Protection of Hot Spot Dry Forest in Southern Madagascar," *Ambio* 36 (8): 683-91 (2007)

**Week 6 (11 October) – Governance development and implementation to address resource contestation**

Ostrom, Elinor. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge, England: Cambridge University Press. [reserve] [chapter 3, PAGES 58-101]

Linke, Andrew M., John O'Loughlin, J. Terrence McCabe, Jaroslav Tir, and Frank D. W. Witmer. 2015. Rainfall Variability and Violence in Rural Kenya: Investigating the Effects of Drought and the Role of Local Institutions with Survey Data. *Global Environmental Change* 34: 35-47.

*Governance Capacity*

Duit, Chapter 10 (Martin Sjöstedt, "Enforcement and Compliance in African Fisheries: The Dynamic Interaction between Ruler and Ruled")

Silva, M. R. O., M. G. Pennino, and P. F. M. Lopes. 2021. "Predicting potential compliance of small-scale fishers in Brazil: The need to increase trust to achieve fisheries management goals." *Journal of Environmental Management* 288:112372.

Johnson, McKenzie F. 2019. "Who governs here? Informal resource extraction, state enforcement, and conflict in Ghana." *Global Environmental Change* 58:101959.

Eric Lipton and Danielle Ivory, "Under Trump, E.P.A. Has Slowed Actions Against Polluters, and Put Limits on Enforcement Officers," *New York Times* Dec. 10, 2017.

<https://www.nytimes.com/2017/12/10/us/politics/pollution-epa-regulations.html>

Ernesto Londoño, Manuela Andreoni and Letícia Casado, "Amazon Deforestation Soars as Pandemic Hobbles Enforcement," *New York Times*, June 6, 2020.

<https://www.nytimes.com/2020/06/06/world/americas/amazon-deforestation-brazil.html>

Recommended:

- Bromley, Daniel W., and David Feeny. 1992. *Making the commons work: theory, practice, and policy*. San Francisco, Calif.: ICS Press.
- McKean, Margaret A. 1992. Success on the Commons: A Comparative Examination of Institutions for Common Property Resource Management *Journal of Theoretical Politics* 4(3): 247-81.
- Ostrom, Elinor, Joanna Burger, Christopher B. Field, Richard B. Norgaard, and David Policansky. 1999. "Revisiting the Commons: Local Lessons, Global Challenges." *Science* 284 (5412):278-82.
- Coleman, Eric A., and Esther Mwangi. 2015. Conflict, Cooperation, and Institutional Change on the Commons. *American Journal of Political Science* 59(4): 855-65.
- Ashwini Chhatre and Vasant Saberwal, "Political Incentives for Biodiversity Conservation," *Conservation Biology* 19 (2): 310-317 (2005).
- Weinthal, Erika, Jessica Troell, and Mikiyasu Nakayama. 2011. Water and Post-Conflict Peacebuilding: Introduction. *Water International* 36(2): 143-53.
- Stevens, Daniela. 2019. "The influence of the fossil fuel and emission-intensive industries on the stringency of mitigation policies: Evidence from the OECD countries and Brazil, Russia, India, Indonesia, China and South Africa." *Environmental Policy and Governance* 29 (4):279-92.
- Linke, Andrew M., Frank D. W. Witmer, John O'Loughlin, J. Terrence McCabe, and Jaroslav Tir. 2018. Drought, Local Institutional Contexts, and Support for Violence in Kenya. *Journal of Conflict Resolution* 62 (7):1544-78.
- Raakjær Nielsen, Jesper, and Christoph Mathiesen. 2003. "Important factors influencing rule compliance in fisheries lessons from Denmark." *Marine Policy* 27 (5):409-16.
- Martin Janicke, "Political System's Capacity for Environmental Policy: The Framework for Comparison." in *Capacity Building in National Environmental Policy: A Comparative Study of 17 Countries*, ed. H. Weidner and M. Janicke (2002).
- Jonathan Schwartz, "The Impact of State Capacity on Enforcement of Environmental Policies: The Case of China," *The Journal of Environment and Development* 12(1): 50-81 (2003).
- Sundström, Aksel. 2015. Covenants with Broken Swords: Corruption and Law Enforcement in Governance of the Commons. *Global Environmental Change* 31: 253-62.

- Bennett, Nathan J., Antonio Di Franco, Antonio Calò, Elizabeth Nethery, Federico Niccolini, Marco Milazzo, and Paolo Guidetti. 2019. "Local support for conservation is associated with perceptions of good governance, social impacts, and ecological effectiveness." *Conservation Letters* 12 (4): e12640.
- Rana, Pushpendra, and Ashwini Chhatre. 2016. Rules and Exceptions: Regulatory Challenges to Private Tree Felling in Northern India. *World Development* 77: 143-53.
- Gillard, Ross, Andrew Gouldson, Jouni Paavola, and James Van Alstine. 2017. "Can National Policy Blockages Accelerate the Development of Polycentric Governance? Evidence from Climate Change Policy in the United Kingdom." *Global Environmental Change* 45: 174-82.
- Gupta, Shreekanth, Shalini Saksena, and Omer F. Baris. 2019. "Environmental enforcement and compliance in developing countries: Evidence from India." *World Development* 117:313-27.

## **Part II: Who Governs?**

### **Week 7 (18 October) – Political Systems and Governing Institutions**

Duit, chapter 5 (Roger Karapın, "Wind-Power Development in Germany and the United States: Structural Factors, Multiple-Stream Convergence, and Turning Points")

Young, Oran R. et al.. 2015. Institutionalized Governance Processes: Comparing Environmental Problem Solving in China and the United States. *Global Environmental Change* 31: 163-73.

Stokes, Leah Cardamore. 2020. *Short circuiting policy: interest groups and the battle over clean energy and climate policy in the American states*. New York, NY: Oxford University Press. [**chapter 1 only**, e-book available through MSU Library]

Kashwan, Prakash. 2017. Inequality, Democracy, and the Environment: A Cross-National Analysis. *Ecological Economics* 131: 139-51.

Kashwan, Prakash. 2017. *Democracy in the Woods: Environmental Conservation and Social Justice in India, Tanzania, and Mexico*. New York, NY: Oxford University Press, chapter 4.

Recommended for week 7:

- Duit, chapter 6 (Thomas Sommerer, "Early Bird or Copycat, Leader or Laggard? A Comparison of Cross-National Patterns of Environmental Policy Change")
- Brown, David S., and Ahmed Mushfiq Mobarak. 2009. The Transforming Power of Democracy: Regime Type and the Distribution of Electricity. *American Political Science Review* 103(2): 193-213.
- De Soysa, Indra, Jennifer Bailey, and Eric Neumayer, "Free to Squander? Democracy and Sustainable Development, 1975-2000." In *Global environmental change and human security*, eds. R. A. Matthew, J. Barnett, et al. Cambridge, Mass.: MIT Press (2010). [e-book from MSU library]
- Buitenzorgy, Meilanie, and Arthur P. J. Mol. 2011. "Does Democracy Lead to a Better Environment? Deforestation and the Democratic Transition Peak." *Environmental and Resource Economics* 48 (1):59-70.
- Pellegrini, Lorenzo. 2011. "Corruption, Democracy, Democracy and Environmental Policy: An Empirical Contribution to the Debate." In *Corruption, Development and the Environment*: Springer Netherlands.
- Shapiro, Judith. 2001. *Mao's War against Nature: Politics and the Environment in Revolutionary China, Studies in Environment and History*. Cambridge; New York: Cambridge University Press.
- Banerjee, Onil, Alexander J. Macpherson, and Janaki Alavalapati. 2009. "Toward a Policy of Sustainable Forest Management in Brazil: A Historical Analysis." *Journal of Env't & Development* 18(2):130-53.

Highly Recommended for research design:

- Collier, David. 2011. "Understanding Process Tracing." *PS: Political Science & Politics* 44 (04):823-30.
- Vanhala, Lisa. "Process Tracing in the Study of Environmental Politics." *Global Environmental Politics* 17, no. 4 (2017): 88-105.
- King, Gary, Robert O. Keohane, and Sidney Verba. 1994. *Designing social inquiry: scientific inference in qualitative research*. Princeton, NJ: Princeton University Press.
- Beach, Derek, and Rasmus Brun Pedersen. 2013. *Process-Tracing Methods: Foundations and Guidelines*. Ann Arbor: University of Michigan Press.

**Week 8 (25 October): External Influences: Imperialism and Settler Colonialism**

Gadgil, Madhav, and Ramachandra Guha. 1992. *This fissured land: an ecological history of India*. Delhi: Oxford University Press [**READ ONLY chapter 4**]. [reserve]

Whyte, Kyle. 2018. "Settler Colonialism, Ecology, and Environmental Injustice." *Environment and Society* 9 (1):125.

Tănăsescu, Mihnea. 2020. "Rights of Nature, Legal Personality, and Indigenous Philosophies." *Transnational Environmental Law* 9 (3):429-53.

Gretchen Whitmer. 2019. [\*Executive Directive on State-Tribal Relations \(2019-17\)\*](#), October 31, State of Michigan.

Mark Landler and James Risen, "Trump Finds Reason for the U.S. to Remain in Afghanistan: Minerals," *New York Times*, July 25, 2017. <https://www.nytimes.com/2017/07/25/world/asia/afghanistan-trump-mineral-deposits.html>

Harriet Sherwood, "Israel accused of pillaging Dead Sea resources in occupied territory," *The Guardian*, September 2, 2012. <http://www.theguardian.com/world/2012/sep/03/israel-accused-dead-sea-occupied>

Recommended:

- Kashwan, Prakash. 2017. *Democracy in the Woods: Environmental Conservation and Social Justice in India, Tanzania, and Mexico*. New York, NY: Oxford University Press, chapter 2.
- Joel C. Yelin and DeMond S. Miller. 2009. "A Brief History of Environmental Inequity and Military Colonialism on the Isle of Vieques, Puerto Rico." *Environmental Justice* 2(3): 153-159.
- Fisher, Karen, and Meg Parsons. 2020. "River Co-governance and Co-management in Aotearoa New Zealand: Enabling Indigenous Ways of Knowing and Being." *Transnational Environmental Law* 9 (3):455-80.

**Week 9 (1 November): External Influences: "Neocolonialism" and Global Markets**

**[1<sup>st</sup> DRAFT OF RESEARCH PROPOSAL DUE AT THE BEGINNING OF CLASS]**

Kaczynski, Vlad M., and David L. Fluharty. 2002. "European policies in West Africa: who benefits from fisheries agreements?" *Marine Policy* 26 (2):75-93.

Lemos, Maria Carmen, and Arun Agrawal. 2006. Environmental Governance. *Annual Review of Environment and Resources* 31(1): 297-325. [READ ONLY "Globalization and Environmental Governance" (299-302)]

Winanti, Poppy Sulistyanning, and Hasrul Hanif. 2020. "When global norms meet local politics: Localising transparency in extractive industries governance." *Environmental Policy and Governance* 30 (5):263-75.

Deng, Qing. 2021. "Foreign direct investment and discriminatory environmental enforcement: a firm level perspective." *Environmental Politics* 30 (6):958-80.

Garcia-Johnson, Ronie. 2000. *Exporting environmentalism: U.S. multinational chemical corporations in Brazil and Mexico*. Cambridge, MA: MIT Press, pages 85-109. [reserve]

Clifford Krauss and Keith Bradsher, "China's Global Ambitions, With Loans and Strings Attached," *New York Times*, July 24, 2015. <http://www.nytimes.com/2015/07/26/business/international/chinas-global-ambitions-with-loans-and-strings-attached.html> [and see investment data: <http://www.nytimes.com/interactive/2015/07/24/business/international/the-world-according-to-china-investment-maps.html>]

Erica Goode, "Cuba's Environmental Concerns Grow with Prospect of U.S. Presence," *New York Times*, July 1, 2015. <http://www.nytimes.com/2015/07/02/science/earth/cubas-environmental-concerns-grow-with-prospect-of-us-presence.html>

Recommended:

- Steinberg, Jessica. 2019. *Mines, Communities, and States: The Local Politics of Natural Resource Extraction in Africa*. Cambridge: Cambridge University Press.
- Johnson, McKenzie F. 2019. "Strong (green) institutions in weak states: Environmental governance and human (in)security in the Global South." *World Development* 122:433-45.
- Bresnihan, Patrick. 2017. "The (Slow) Tragedy of Improvement: Neoliberalism, Fisheries Management & the Institutional Commons." *World Development* 120:210-220.
- García-López, Gustavo A. 2019. "Rethinking elite persistence in neoliberalism: Foresters and technobureaucratic logics in Mexico's community forestry." *World Development* 120:169-81.
- Prakash, Aseem, and Matthew Potoski. 2006. Racing to the Bottom?: Trade, Environmental Governance, and ISO 14001. *American Journal of Political Science* 50(2): 350-64.

**TO BE SCHEDULED APPROXIMATELY HERE: STUDENT PRESENTATIONS AND PEER COMMENTARY (written commentary due by beginning of class the following week)**

**Week 10 (8 November): External Influence continued – Neocolonialism (foreign aid and international institutions)**

- Johnson, McKenzie F. 2017. Institutional Change in a Conflict Setting: Afghanistan's Environment Law. *European Journal of International Relations* 23(1): 168-91.
- Kashwan, Prakash. 2015. Forest Policy, Institutions, and Redd+ in India, Tanzania, and Mexico. *Global Environmental Politics* 15(3): 95-117. [may replace with book chapter(s)]
- Manuela Andreoni, "Brazil Angrily Rejects Millions in Amazon Aid Pledged at G7, Then Accepts British Aid," *New York Times*, Aug. 27, 2019. <https://www.nytimes.com/2019/08/27/world/americas/brazil-amazon-aid.html>
- Lewis, Tammy L. 2011. Global Civil Society and the Distribution of Environmental Goods: Funding for Environmental NGOs in Ecuador. In *Environmental Inequalities Beyond Borders: Local Perspectives on Global Injustices*, edited by JoAnn Carmin and Julian Agyeman, 87-104. Cambridge, Mass.: MIT Press. [available as e-book through MSU Library]
- John Vidal, "World pays Ecuador not to extract oil from rainforest," *The Guardian*, December 31, 2011. <http://www.guardian.co.uk/environment/2011/dec/30/ecuador-paid-rainforest-oil-alliance>
- Associated Press, "Yasuni: Ecuador abandons plan to stave off Amazon drilling," August 15, 2013. <http://www.theguardian.com/world/2013/aug/16/ecuador-abandons-yasuni-amazon-drilling>

Recommended:

- Kolk, Ans. 1998. "From conflict to cooperation: International policies to protect the Brazilian Amazon." *World Development* 26 (8):1481-93.
- Kashwan, Prakash. 2017. *Democracy in the Woods: Environmental Conservation and Social Justice in India, Tanzania, and Mexico*. New York, NY: Oxford University Press, chapter 3.
- Rudra, Nita, and Nathan M. Jensen. 2011. "Globalization and the Politics of Natural Resources." *Comparative Political Studies* 44 (6):639-61.
- Martin, Pamela L. 2011. "Global Governance from the Amazon: Leaving Oil Underground in Yasuní National Park, Ecuador." *Global Environmental Politics* 11 (4):22-42.
- Keohane, Robert O., and Marc A. Levy, eds. 1996. *Institutions for environmental aid: pitfalls and promise*. Cambridge, MA: MIT Press. (especially Michael Ross, "Conditionality and Logging Reform in the Tropics")
- Axelrod, Mark, Brian Roth, Daniel Boyd Kramer, Shyam S. Salim, Julia M. Novak, T. V. Sathianandan, and Somy Kuriakose. 2015. Cascading Globalization and Local Response: Indian Fishers' Response to Export Market Liberalization. *The Journal of Environment & Development* 24(3): 315-44.
- Axelrod, Mark. Working Paper. Importing International Norms through Domestic Institutions: The Precautionary Principle in India.
- Aklin, Michaël, and Johannes Urpelainen. 2014. The Global Spread of Environmental Ministries: Domestic–International Interactions. *International Studies Quarterly* 58(4): 764-80.
- Khagram, Sanjeev. 2003. Neither Temples nor Tombs: A Global Analysis of Large Dams. *Environment* 45 (4).
- Buntaine, Mark T., Bradley C. Parks, and Benjamin P. Buch. "Aiming at the Wrong Targets: The Domestic Consequences of International Efforts to Build Institutions." *International Studies Quarterly* 61, no. 2 (2017): 471-88.

**Week 11 (15 November): Environmental Justice & Political Participation**

- Lau, Jacqueline D., Georgina G. Gurney, and Joshua Cinner. 2021. "Environmental justice in coastal systems: Perspectives from communities confronting change." *Global Environmental Change* 66:102208. [also video presentation: <https://youtu.be/xJtWch1b2zM>]
- Kojola, Erik, and David N. Pellow. 2021. "New directions in environmental justice studies: examining the state and violence." *Environmental Politics* 30 (1-2):100-18.
- Arora-Jonsson, Seema. 2011. Virtue and Vulnerability: Discourses on Women, Gender and Climate Change. *Global Environmental Change* 21(2): 744-51.
- Hamilton, James T. 1995. Testing for Environmental Racism: Prejudice, Profits, Political Power? *Journal of Policy Analysis and Management* 14(1): 107-32.
- Lopez-Ercilla, Ines, Maria Jose Espinosa-Romero, Francisco J. Fernandez Rivera-Melo, Stuart Fulton, Rebeca Fernández, Jorge Torre, Araceli Acevedo-Rosas, Arturo J. Hernández-Velasco, and

- Imelda Amador. 2021. "The voice of Mexican small-scale fishers in times of COVID-19: Impacts, responses, and digital divide." *Marine Policy* 131:104606.
- Brosemer, Kathleen, Chelsea Schelly, Valoree Gagnon, Kristin L. Arola, Joshua M. Pearce, Douglas Bessette, and Laura Schmitt Olabisi. 2020. "The energy crises revealed by COVID: Intersections of Indigeneity, inequity, and health." *Energy Research & Social Science* 68: 101661
- Katherine Bagley, "Connecting the Dots Between Environmental Injustice and the Coronavirus," *Yale Environment 360*, May 7, 2020. <https://e360.yale.edu/features/connecting-the-dots-between-environmental-injustice-and-the-coronavirus>

Highly, Highly Recommended if you have never read it:

- Roy, Arundhati. 1999. *The greater common good*. available from <http://www.narmada.org/gcg/gcg.html>

Recommended:

- Duit, chapter 11 (Andreas Duit and Ola Hall, "Causes and Consequences of Stakeholder Participation in Natural Resource Management: Evidence from 143 Biosphere Reserves in Fifty-Five Countries")
- Agyeman, Julian, David Schlosberg, Luke Craven, and Caitlin Matthews. 2016. "Trends and Directions in Environmental Justice: From Inequity to Everyday Life, Community, and Just Sustainabilities." *Annual Review of Environment and Resources* 41 (1):321-40.
- Sadler, Richard Casey, and Andrew R. Highsmith. "Rethinking Tiebout: The Contribution of Political Fragmentation and Racial/Economic Segregation to the Flint Water Crisis." *Environmental Justice* 9, no. 5 (2016): 143-51.
- Raik, Daniela B., Arthur L. Wilson, and Daniel J. Decker. 2008. Power in Natural Resources Management: An Application of Theory. *Society & Natural Resources* 21(8): 729-39.
- Kashwan, Prakash, Frank Biermann, Aarti Gupta, and Chukwumerije Okereke. 2020. "Planetary justice: Prioritizing the poor in earth system governance." *Earth System Governance* 6:100075.
- Hanna-Attisha, Mona, Jenny LaChance, Richard Casey Sadler, and Allison Champney Schnepf. 2016. Elevated Blood Lead Levels in Children Associated with the Flint Drinking Water Crisis: A Spatial Analysis of Risk and Public Health Response. *American Journal of Public Health* 106(2): 283-90.
- Brad Plumer and Nadja Popovich, "How Decades of Racist Housing Policy Left Neighborhoods Sweltering," *New York Times*, Aug. 24, 2020. <https://www.nytimes.com/interactive/2020/08/24/climate/racism-redlining-cities-global-warming.html>
- Dan Charles, Emily Kwong, and Thomas Lu, "Cleveland - What Climate Equity Could Look Like," *NPR Short Wave Podcast*, June 9, 2021. <https://www.npr.org/2021/06/07/1004025638/cleveland-what-climate-equity-could-look-like>
- Anna Maria Barry-Jester, "What Went Wrong In Flint," *FiveThirtyEight*, Jan. 26, 2016. <https://fivethirtyeight.com/features/what-went-wrong-in-flint-water-crisis-michigan/> (includes podcast at the bottom of the page)
- Saha, Robin and Paul Mohai. 2005. "Historical Context and Hazardous Waste Facility Siting: Understanding Temporal Patterns in Michigan," *Social Problems*, 52(4): 618-648.
- Mkutu, Kennedy, Tessa Mkutu, Martin Marani, and Augustine Lokwang Ekitela. 2019. "New Oil Developments in a Remote Area: Environmental Justice and Participation in Turkana, Kenya." *Journal of Environment and Development* 28 (3):223-52.
- Newig, Jens, Edward Challies, Nicolas W. Jager, Elisa Kochskaemper, and Ana Adzersen. 2018. "The Environmental Performance of Participatory and Collaborative Governance: A Framework of Causal Mechanisms." *Policy Studies Journal* 46 (2):269-97.
- Calhoun, Sarah, Flaxen Conway, and Suzanne Russell. 2016. "Acknowledging the voice of women: implications for fisheries management and policy." *Marine Policy* 74:292-9.
- Martin, Adrian, Anne Akol, and Nicole Gross-Camp. 2015. Towards an Explicit Justice Framing of the Social Impacts of Conservation. *Conservation and Society* 13(2): 166-78.
- Allison, Edward H., Blake D. Ratner, Björn Åsgård, Rolf Willmann, Robert Pomeroy, and John Kurien. 2012. Rights-Based Fisheries Governance: From Fishing Rights to Human Rights. *Fish and Fisheries* 13(1): 14-29.
- Pinderhughes, Raquel. 1996. "The Impact of Race on Environmental Quality: An Empirical and Theoretical Discussion." *Sociological Perspectives*, 39(2): 231-248.
- Anguelovski, Isabelle, and Debra Roberts. 2011. Spatial Justice and Climate Change: Multiscale Impacts and Local Development in Durban, South Africa. In *Environmental Inequalities Beyond Borders: Local Perspectives on Global Injustices*, JoAnn Carmin and Julian Agyeman (eds.). Cambridge, Mass.: MIT Press.
- Novak Colwell, Julia M., Mark Axelrod, Shyam S. Salim, and S. Velvizhi. 2017. A Gendered Analysis of Fisherfolk's Livelihood Adaptation and Coping Responses in the Face of a Seasonal Fishing Ban in Tamil Nadu & Puducherry, India. *World Development* 98: 325-37.
- Shiva, Vandana. 1999. "Women in the Forest," in George A. James, ed., *Ethical Perspectives on Environmental Issues in India* (New Delhi: A.P.H. Publishing Corporation). [reserve]



**Week 12 (22 November): Scale of Governance, Decentralization and Federalism [may need to reschedule depending on everyone's Thanksgiving holiday travel plans]**

Duit, chapter 9 (Kristen Andersson, Tom Evans, Clark C. Gibson, and Glenn Wright, "Decentralization and Deforestation: Comparing Local Forest Governance Regimes in Latin America")

Duit, chapter 7 (Susan Baker and Katarina Eckerberg, "The Role of the State in the Governance of Sustainable Development: Subnational Practices in European States")

Lemos, Maria Carmen, and Arun Agrawal. 2006. Environmental Governance. *Annual Review of Environment and Resources* 31(1): 297-325. [READ ONLY "Decentralized Environmental Governance" (302-305)]

Reich, Johannes. 2021. "Federalism and Mitigating Climate Change: The Merits of Flexibility, Experimentalism, and Dissonance." *Transnational Environmental Law* 10 (2):263-91.

Monogan, James E., David M. Konisky, and Neal D. Woods. 2017. Gone with the Wind: Federalism and the Strategic Location of Air Polluters. *American Journal of Political Science* 61(2): 257-70.

Scholtens, Joeri, and Maarten Bavinck. 2013. South Indian Trawl Fisheries – Assessing Their Governability. In *Governability of Fisheries and Aquaculture*, edited by Maarten Bavinck, Ratana Chuenpagdee, Svein Jentoft and Jan Kooiman, 177-99: Springer Netherlands.

[http://link.springer.com/chapter/10.1007%2F978-94-007-6107-0\\_10#](http://link.springer.com/chapter/10.1007%2F978-94-007-6107-0_10#)

Recommended:

- Russell, Aaron and Tracy Dobson. 2011. "Chiefs as Critical Partners for Decentralized Governance of Fisheries: An Analysis of Co-Management Case Studies in Malawi." *Society & Natural Resources* 24 (7):734-50.
- Benjamin, Charles E. 2008. Legal Pluralism and Decentralization: Natural Resource Management in Mali. *World Development* 36(11): 2255-76.
- Moss, Timothy, and Jens Newig. 2010. "Multilevel Water Governance and Problems of Scale: Setting the Stage for a Broader Debate." *Environmental management* 46 (1):1-6.
- Agrawal, Arun and Jesse C. Ribot. 2000. *Analyzing Decentralization: A Framework with South Asian and West African Environmental Cases*, World Resources Institution Working Paper, available at <http://dlc.dlib.indiana.edu/documents/dir0/00/00/04/40/>
- Suškevičs, Monika. 2012. Legitimacy Analysis of Multi-Level Governance of Biodiversity: Evidence from 11 Case Studies across the Eu. *Environmental Policy and Governance* 22(4): 217-37.
- Gollata, Judith A. M., and Jens Newig. 2017. Policy Implementation through Multi-Level Governance: Analysing Practical Implementation of Eu Air Quality Directives in Germany. *Journal of European Public Policy* 24(9): 1308-27.
- Cordner, Alissa, Vanessa Y. De La Rosa, Laurel A. Schaidler, Ruthann A. Rudel, Lauren Richter, and Phil Brown. 2019. "Guideline levels for PFOA and PFOS in drinking water: the role of scientific uncertainty, risk assessment decisions, and social factors." *Journal of Exposure Science & Environmental Epidemiology* 29 (2):157-71.
- Saurer, Johannes, and Jonas Monast. 2021. "Renewable Energy Federalism in Germany and the United States." *Transnational Environmental Law* 10 (2):293-320.
- Gupta, Joyeeta. 2008. "Global Change: Analyzing Scale and Scaling in Environmental Governance." In *Institutions and environmental change : principal findings, applications, and research frontiers*, ed. O. R. Young, L. A. King and H. Schroeder. Cambridge, Mass.: MIT Press.
- Novak, Julia M., and Mark Axelrod. 2016. Patterns of Multi-Level Fisheries Governance and Their Impact on Fishermen's Adaptation Strategies in Tamil Nadu, India. *Environmental Policy and Governance* 26(1): 45-58.

**Week 13 (29 November): Social Movements and Civil Society**

Revisit Leah Stokes' work from earlier in the semester

- Cook, Jeffrey J. "Framing the Debate: How Interest Groups Influence Draft Rules at the United States Environmental Protection Agency." *Environmental Policy & Governance*, 28: 3 (2018): 183-91.
- Kashwan, Prakash, Rosaleen V. Duffy, Francis Massé, Adeniyi P. Asiyani, and Esther Marijnen. 2021. "From Racialized Neocolonial Global Conservation to an Inclusive and Regenerative Conservation." *Environment: Science and Policy for Sustainable Development* 63 (4):4-19.
- Le Billon, Philippe, and Päivi Lujala. 2020. "Environmental and land defenders: Global patterns and determinants of repression." *Global Environmental Change* 65:102163.
- Pacheco-Vega, Raul, and Amanda Murdie. 2021. "When do environmental NGOs work? A test of the conditional effectiveness of environmental advocacy." *Environmental Politics* 30 (1-2):180-201.
- Emily Kwong, Brit Hanson, and Madeline K. Sofia, "A Rising Tide of Violence Against Environmental Activists," *NPR Short Wave Podcast*, April 14, 2021. <https://www.npr.org/2021/04/12/986451622/a-rising-tide-of-violence-against-environmental-activists>
- Tania Branigan, "Anti-pollution protesters halt construction of copper plant in China," *The Guardian*, July 3, 2012. <http://www.theguardian.com/world/2012/jul/03/china-anti-pollution-protest-copper>
- Revisit from Day 1: Linda Villarosa, "Pollution Is Killing Black Americans. This Community Fought Back," *New York Times Magazine* July 28, 2020. <https://www.nytimes.com/2020/07/28/magazine/pollution-philadelphia-black-americans.html>

Recommended:

- Keck, Margaret E., and Kathryn Sikkink. 1998. *Activists beyond borders: advocacy networks in international politics*. Ithaca: Cornell University Press, chapter 4.
- Böhmelt, Tobias. 2014. Political Opportunity Structures in Dictatorships? Explaining ENGO Existence in Autocratic Regimes. *The Journal of Environment & Development* 23(4): 446-71.
- Meckling, Jonas, and Jonas Nahm. "Strategic State Capacity: How States Counter Opposition to Climate Policy." *Comparative Political Studies* 0 (0):00104140211024308.
- Lowe, Philip, and Katy Wilkinson. 2009. "How do environmental actors make governance systems more sustainable? The role of politics and ideas in policy change." In *Governing sustainability*, ed. W. N. Adger and A. Jordan. Cambridge, UK; New York: Cambridge University Press.
- Böhmelt, Tobias, Thomas Bernauer, and Vally Koubi. 2015. The Marginal Impact of ENGOs in Different Types of Democratic Systems. *European Political Science Review* 7(01): 93-118.
- Giugni, Marco, and Maria T. Grasso. 2015. Environmental Movements in Advanced Industrial Democracies: Heterogeneity, Transformation, and Institutionalization. *Annual Review of Environment and Resources* 40(1): 337-61.
- Bentata, Pierre, and Michael Faure. 2015. The Role of ENGOs in Environmental Litigation: A French Case Study. *Environmental Policy and Governance* 25(6): 459-73.
- Cheon, Andrew, Shi-Teng Kang, and Swetha Ramachandran. 2021. "Determinants of Environmental Conflict: When Do Communities Mobilize against Fossil Fuel Production?" *Journal of Conflict Resolution* 65 (7-8):1308-36.
- Hadden, Jennifer, and Sarah Sunn Bush. 2021. "What's different about the environment? Environmental INGOs in comparative perspective." *Environmental Politics* 30 (1-2):202-23.
- Khagram, Sanjeev, James V. Riker, and Kathryn Sikkink. 2002. *Restructuring World Politics: Transnational Social Movements, Networks, and Norms*. Minneapolis: University of Minnesota Press.
- Kitschelt, Herbert P. 1986. Political Opportunity Structures and Political Protest: Anti-Nuclear Movements in Four Democracies. *British Journal of Political Science* 16(01): 57-85.
- Olzak, Susan, and Sarah A. Soule. 2009. Cross-Cutting Influences of Environmental Protest and Legislation. *Social Forces* 88(1): 201-25.
- Van Der Heijden, Hein-Anton. 1999. Environmental Movements, Ecological Modernisation and Political Opportunity Structures. *Environmental Politics* 8(1): 199-221.
- Xie, Lei, and Hein-Anton Van Der Heijden. 2010. Environmental Movements and Political Opportunities: The Case of China. *Social Movement Studies* 9(1): 51-68.
- Pellow, David Naguib. 2011. Politics by Other Greens: The Importance of Transnational Environmental Justice Movement Networks. In *Environmental Inequalities Beyond Borders: Local Perspectives on Global Injustices*, edited by JoAnn Carmin and Julian Agyeman, 247-66. Cambridge, Mass.: MIT Press.
- Koubi, Vally, Quynh Nguyen, Gabriele Spilker, and Tobias Böhmelt. 2021. "Environmental migrants and social-movement participation." *Journal of Peace Research* 58 (1):18-32.

**Week 14 (6 December) Additional Governance Institutions and Course Conclusion**

Duit, chapter 12 (Andreas Duit, “Conclusion: An Emerging Ecostate?”)

Kashwan, Prakash. 2017. *Democracy in the Woods: Environmental Conservation and Social Justice in India, Tanzania, and Mexico*. New York, NY: Oxford University Press, chapter 8.

Cao, Xun, Helen V. Milner, Aseem Prakash, and Hugh Ward. 2014. Research Frontiers in Comparative and International Environmental Politics. *Comparative Political Studies* 47(3): 291-308.

Visseren-Hamakers, Ingrid J., Jona Razzaque, Pamela McElwee, Esther Turnhout, Eszter Kelemen, Graciela M. Rusch, Álvaro Fernández-Llamazares, Ivis Chan, Michelle Lim, Mine Islar, Ambika P. Gautam, Meryl Williams, Eric Mungatana, Md Saiful Karim, Roldan Muradian, Leah R. Gerber, Gabriel Lui, Jinlong Liu, Joachim H. Spangenberg, and Dara Zaleski. 2021. "Transformative governance of biodiversity: insights for sustainable development." *Current Opinion in Environmental Sustainability* 53:20-8.

Eric Freedman, "Environmental reporting can help protect citizens in emerging democracies," *The Conversation*, May 31, 2019. <https://theconversation.com/environmental-reporting-can-help-protect-citizens-in-emerging-democracies-115822>

Kramarz, Teresa, David Cosolo, and Alejandro Rossi. 2017. Judicialization of Environmental Policy and the Crisis of Democratic Accountability. *Review of Policy Research* 34(1): 31-49.

Clifford Krauss and Peter Eavis, “Climate Activists Defeat Exxon in Push for Clean Energy,” *New York Times*, May 26, 2021 (updated July 2). <https://www.nytimes.com/2021/05/26/business/exxon-mobil-climate-change.html>

REVISIT [NO NEED TO RE-READ] Lemos, Maria Carmen, and Arun Agrawal. 2006. Environmental Governance. *Annual Review of Environment and Resources* 31(1): 297-325.

Recommended:

- Love, David C., Edward H. Allison, Frank Asche, Ben Belton, Richard S. Cottrell, Halley E. Froehlich, Jessica A. Gephart, Christina C. Hicks, David C. Little, Elizabeth M. Nussbaumer, Patricia Pinto da Silva, Florence Poulain, Angel Rubio, Joshua S. Stoll, Michael F. Tlusty, Andrew L. Thorne-Lyman, Max Troell, and Wenbo Zhang. 2021. "Emerging COVID-19 impacts, responses, and lessons for building resilience in the seafood system." *Global Food Security* 28:100494.
- Hayes, Graeme, Sikina Jinnah, Prakash Kashwan, David M. Konisky, Sherilyn MacGregor, John M. Meyer, and Anthony R. Zito. 2021. "Trajectories in environmental politics." *Environmental Politics* 30 (1-2):4-16.
- R. J. Smith, R. D. J. Muir, M. J. Walpole, A. Balmford, and N. Leader-Williams, “Governance and the loss of biodiversity,” *Nature* 426(6962): 67-70 (2003).
- Gallego-Álvarez, Isabel, and María José Fernández-Gómez. 2016. Governance, Environmental and Economic Factors: An International Analysis. *Environmental Policy and Governance* 26(1): 29-44.
- Gellers, Joshua C. 2015. Environmental Constitutionalism in South Asia: Analyzing the Experiences of Nepal and Sri Lanka. *Transnational Environmental Law* FirstView: 1-29.
- Jeffords, Chris. 2021. "On the relationship between constitutional environmental human rights and sustainable development outcomes." *Ecological Economics* 186:107049.
- Su, Zheng, Anthony Pezzola, Amanda Fidalgo, and Xun Cao. 2021. "Electoral competition, party system fragmentation, and air quality in Mexican municipalities." *Environmental Politics* 30 (6):981-1001.
- Ensor, Jonathan, and Eric Hoddy. 2021. "Securing the social foundation: A rights-based approach to planetary boundaries." *Earth System Governance* 7:100086.
- Gill, Gitanjali Nain. 2015. Environmental Justice in India: The National Green Tribunal and Expert Members. *Transnational Environmental Law* 5(1): 175-205.
- Cullet, Philippe. 2001. Human Rights and Displacement: the Indian Supreme Court Decision on Sardar Sarovar in International Perspective. *Int Comp Law Q* 50 (4):973-987.
- The Guardian. 2015. “Episode 2: An Angle” and “Episode 12: Impact,” *The Biggest Story in the World* Podcast. <http://www.theguardian.com/environment/ng-interactive/2015/mar/16/the-biggest-story-in-the-world>

**Final Exam Period (ie, Final Research Proposals Due): Wednesday, 15 December, 5:45-7:45pm**