

EAS 593
Environmental Justice
Winter 2018

Instructor: Dr. Paul Mohai, Professor
3520 Dana Building; 763-4598; pmohai@umich.edu

Time & Days: 2:30-4:00 pm, Tuesdays and Thursdays

Credits: 3

Where: 3556 Dana Building

Office Hours: 4:00 - 5:00 pm Tuesdays & Thursdays (or by appointment)

Objectives

In the early 1980s, protests by an African American community in Warren County, North Carolina, over the State's decision to place a hazardous waste PCB landfill in its community gained national attention. The protests were reminiscent of those during the Civil Rights Movement and led the U.S. General Accounting Office (GAO) to examine the demographics around hazardous waste landfills in the South more broadly. The GAO found that African Americans were not only disproportionately concentrated around these landfills, but in 75% of the cases African Americans were the predominant population. These findings, along with the Warren County protests, led the Commission for Racial Justice of the United Church of Christ to question whether such patterns existed nationwide. It sponsored a statistical study of the distribution of hazardous waste facilities in the U.S. and found that, among a range of factors examined, race was the best predictor of where such facilities are located. The results were released in 1987 in the now famous report *Toxic Wastes and Race in the United States*.

Motivated by these events and by the nascent research, Professors Bunyan Bryant and Paul Mohai organized the 1990 Michigan Conference on Race and the Incidence of Environmental Hazards. Convened January 25-28 at the School of Natural Resources (now School for Environment & Sustainability), the Conference was first of its kind in the nation to bring together academics, activists, and government officials to discuss the issues, research evidence, and policy gaps pertaining to environmental racism and injustice. Attendees drafted a letter to the Administrator of the U.S. Environmental Protection Agency (EPA) requesting a meeting with him to discuss the evidence, implications, and what the U.S. EPA could do about them. Eight representatives from the 1990 Conference were invited to meet with Administrator William Reilly on September 13, 1990. Dubbed the "Michigan Coalition", this and subsequent meetings with the EPA led to creation of the Office of Environmental Justice, the National Environmental Justice Advisory Council, and the first policy statement by the U.S. EPA (or any agency of the federal government) on environmental justice. Hearings in the U.S. Congress and a Presidential Executive Order in 1994 soon followed, while the environmental justice movement, academic research, and policy proposals focused on environmental justice have continued to grow and evolve.

The goal of this course is to understand this evolution and current research and thinking on the topic of environmental justice. The course will cover the origins of the environmental justice movement, the meanings ascribed to the term "environmental justice", and the impacts the environmental justice movement has had in society. We will examine recent research and policy debates in this area exploring the reasons why environmental injustices occur, what the health and other quality of life concerns are, and how affected groups, the media, academia, and policy makers have responded. Given wide attention to the Flint Water Crisis and to the environmental contamination of Michigan's "Most Polluted Zip Code" in Southwest Detroit, we will focus on these as important local examples of environmental justice controversy. A comparison between environmental justice movements in the U.S. and internationally will also be made. At the end of the course, students should not only have a good understanding of the environmental justice topic but also be prepared to analyze, critique, and contribute to the academic and political debates surrounding it.

Grading and Evaluation

Grades will be based on class participation, seven two-page commentaries on the weekly readings, a midterm project based on recent EJ mapping tools, and a 15-20 page term paper.

Class Participation:	20%
Commentaries:	30%
Midterm Project	20%
Term Paper	30% (Due April 18)

Class participation: The class participation grade will be based on attendance in class, contribution in class discussions, oral presentations, and discussion questions. See "Discussion Questions" for further details.

Commentaries: Students will turn in 7 commentaries over the term on the weekly readings that a) summarize and critique the readings' principal ideas, arguments, findings, etc. and b) discuss new ideas and insights obtained from them. More information about the commentaries will be given in class. No commentaries are assigned for readings in Weeks 1, 2, 14, and 15. Students may choose any seven of the remaining 11 weeks for which to submit commentaries.

Discussion questions: Students will turn in four sets of discussion questions over the course of the term. These are a set of three guiding questions based on the week's readings and will be due on weeks students choose not to write a commentary. Thus, each week from Week 3 to Week 13, students will turn in either a commentary or a set of discussion questions.

Midterm Project: For the midterm project, we will be using the U.S. EPA's EJSREEN and EJOLT's EJ Atlas. We will do short exercises using these two mapping tools over the first several weeks of class in order to acquaint everyone with these tools.

For the project, select one of the "40 Most Influential Environmental Justice Conflicts in U.S. History" indicated on EJOLT's EJ Atlas. Research this case via library and internet searches and via interviews with stakeholders identified in the Atlas. So that everyone in the class does not select the same case, I will ask everyone to submit in advance their top three to five choices.

Part I: In your research, bring the reader up-to-date on what new developments have happened regarding this case.

Part II: Use EJSREEN to examine the demographics of the neighborhoods in the vicinity of the conflict. Use EJSREEN also to examine what other potential environmental hazards are in the neighborhood

Each student will submit an 8-10 page report and make a 10-15 minute presentation to the class. Incorporate course materials in making your analyses.

Term Paper: The purpose of the term paper (15-20 pages) is to bring course materials to bear in analyzing and understanding a subject of particular interest to you within the general topic of Environmental Justice. Your goal will be to demonstrate an in-depth understanding of course materials as well as your ability to apply that material in order to analyze and uncover new insights about a phenomenon or issue of particular interest. A prospectus outlining the topic you plan to address will be collected and reviewed by me. More information about the term paper will be given in class. See also the attached guidelines.

Attendance Policy: Please be on time. Unexpected things can occur, so everyone is allowed two unexcused absences over the term, but please let me know in advance if you cannot come to class by sending me an e-mail. Unexcused absences (beyond 2) will result in deduction from the class participation grade.

Late Assignments: A two percent point deduction in grade will be allowed for every day an assignment is late. However, assignments later than seven days will not be accepted and will receive a grade of zero.

Laptop Computers: On certain days it will be helpful to have your laptops with you to work on short exercises with EJSREEN and the EJ Atlas. Otherwise, please keep cell phones and laptop computers closed and put away during class.

Coordination with other EJ Classes:

EAS 677(042) - Environmental Justice in the US and Europe: Understanding Differences and Commonalities, Tuesdays, 10:00 am to noon, March 6 to April 24, 1 Credit Joint Seminar with University of Michigan (USA) and Alpen-Adria University (Austria), Dr. Paul Mohai and Dr. Willi Haas.

Law 805 – Environmental Justice, Tuesdays, 4:10-6:10 pm, 250 Hutchins Hall, Professor Allyn Kantor

Reading Materials and Documentaries

Required readings will be available on EAS 593 CANVAS site.

Documentaries will be viewed in class and will include: 1) Here's to Flint; 2) How to Let Go of the World; 3) Bhopal: The Search for Justice; and 4) 48217: Michigan's Most Toxic Zip Code

Useful Websites

EJSCREEN: Environmental Justice Screening and Mapping Tool: <http://www.epa.gov/ejscreen>

EJSCREEN Users' Guide: http://ejscreen.epa.gov/mapper/help/ejscreen_help.pdf

Environmental Justice Atlas: <https://ejatlas.org/>

Poverty & Race Research Action Council: <http://www.prrac.org/>

Indigenous Environmental Network: <http://www.ienearth.org/>

Weekly Reading List

Week 1 – Jan. 4: Introduction to Course

Week 2 – Jan. 9 & 11: Launch of the Environmental Justice Movement

Mohai, P., D. Pellow, and J. T. Roberts. 2009. "Environmental Justice." *Annual Review of Environment & Resources* 34:405-430.

United Church of Christ, 1987 - *Toxic Waste and Race in the United States*, pp. 1-21.

Agyeman, J., Schlosberg, D., Craven, L. and Matthews, C., 2016. "Trends and directions in environmental justice: from inequity to everyday life, community, and just sustainabilities." *Annual Review of Environment and Resources*, 41: 321–40.

OPTIONAL

Bullard, R. and Wright, B.H., 1987. "Environmentalism and the politics of equity: emergent trends in the black community." *Mid-American Review of Sociology*, 12(2), pp.21-37.

Lee, C., 1992. "Toxic Waste and Race in the United States." Pages 10-27 in B. Bryant and P. Mohai, eds., *Race and the Incidence of Environmental Hazards* (Boulder, CO: Westview Press)

Mohai, P., and B. Bryant. 1992. "Environmental Racism: Reviewing the Evidence." Pages 163-176 in B. Bryant and P. Mohai, eds., *Race and the Incidence of Environmental Hazards* (Boulder, CO: Westview Press).

Bryant, B. and Mohai, P., 1992. "The Michigan conference: a turning point." *EPA J.*, 18, p.9.

Week 3 – Jan. 16 & 18: Meanings of Environmental Justice

Kuehn, R. 2000. "A Taxonomy of Environmental Justice." *Environmental Law Reporter* 30: 10681-703.

Lerner, S. 2010. "Introduction." *Sacrifice Zones: The Front Lines of Toxic Chemical Exposure in the United States*, pp. 1-15.

Agyeman, J., 2008. "Toward a 'just' sustainability?" *Continuum*, 22(6), pp.751-756.

Week 4 – Jan. 23 & 25: Debating the Evidence

Mohai, Paul. 2008. "Equity and the Environmental Justice Debate." *Research in Social Problems and Public Policy* 15: 21–49.

Mohai, P., and R. Saha, 2006. "Reassessing Racial and Socioeconomic Disparities in Environmental Justice Research". *Demography* 43(2): 383-399.

Bullard, R., P. Mohai, R. Saha, and B Wright. 2007. "A Current Appraisal of Toxic Wastes and Race in the United States – 2007." *Toxic Wastes and Race at Twenty*, United Church of Christ Justice and Witness Ministries, pp. 49-64.

Week 5 – Jan. 30 & Feb. 1: Recent Evidence:

Mohai, P., P. Lantz, J. Morenoff, J. House, and R. Mero. 2009. "Racial and Socioeconomic Disparities in Residential Proximity to Polluting Industrial Facilities: Evidence from the Americans' Changing Lives Study." *American Journal of Public Health* 99 (S3): S649-S656.

Collins, M.B., Munoz, I. and JaJa, J., 2016. Linking 'toxic outliers' to environmental justice communities. *Environmental Research Letters*, 11(1), p.015004.

Hajat, A. V. Diez-Roux, S. D. Adar, A. H. Auchincloss, G. S. Lovasi, M. S. O'Neill, L. Sheppard, J. D.

Kaufman. 2013. "Air pollution and individual and neighborhood socioeconomic status: Evidence from the Multi-Ethnic Study of Atherosclerosis (MESA)." *Environ Health Perspect.*121: 1325–33.

OPTIONAL

Bell, M. L., and K. Ebisu. 2012. "Environmental Inequality in Exposures to Airborne Particulate Matter Components in the United States." *Environ Health Perspect.*120: 1699-1704.

Zwickl, K., M. Ash, and J. K. Boyce. 2014. "Regional variation in environmental inequality: Industrial air toxics exposure in U.S. cities." *Ecological Economics* 107: 494–509.

Week 6 – Feb. 6 & 8: Environmental Justice and the Flint Water Crisis

Flint Advisory Task Force. 2016. *Flint Advisory Task Force Final Report*. Commissioned by Office of Governor Rick Snyder, State of Michigan, pp. 1-62.

https://www.michigan.gov/documents/snyder/FWATF_FINAL_REPORT_21March2016_517805_7.pdf

OPTIONAL

Feb. 6, 4:10-6:10 pm, HH210, Law School: Flint Water Crisis Speakers: Melissa Mays, Michael Pitt, Valdemar Washington

Michigan Civil Rights Commission. 2017. *The Flint Water Crisis: Systemic Racism through the Lens of Flint*. https://www.michigan.gov/documents/mdcr/VFlintCrisisRep-F-Edited3-13-17_554317_7.pdf

FiveThirtyEight. 2016. "What Went Wrong In Flint." <http://fivethirtyeight.com/features/what-went-wrong-in-flint-water-crisis-michigan/>

Hanna-Attisha, M., LaChance, J., Sadler, R.C. and Champney Schnepf, A., 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), pp.283-290.

Lee, S.J., Krings, A., Rose, S., Dover, K., Ayoub, J. and Salman, F., 2016. Racial inequality and the implementation of emergency management laws in economically distressed urban areas. *Children and youth services review*, 70, pp.1-7.

Week 7 – Feb. 13 & 15: Explaining Environmental Disparities from Longitudinal Studies

Feagin & Feagin, 1986 - Chpt. 2, "Institutionalized Discrimination," pp. 19-40.

Mohai, P., and Saha, R. 2015. "Which came first, people or pollution? A review of theory and evidence from longitudinal environmental justice studies." *Environ. Res. Lett.* 10: 125011

Mohai, P., and Saha, R. 2015. "Which came first, people or pollution? Assessing the disparate siting and post-siting demographic change hypotheses of environmental injustice." *Environ. Res. Lett.* 10: 115008

OPTIONAL

Feb. 13, 4:10-6:10 pm, HH210, Law School: Journalists covering the Flint Water Crisis: Will Potter, Curt Guyette

Saha, R., and P. Mohai. 2005. "Historical Context and Hazardous Waste Facility Siting: Understanding Temporal Patterns in Michigan." *Social Problems* 52: 618-648.

Week 8 – Feb. 20 & 22: Native Americans

Cole & Foster, 2001. Chapter 6 – "In Defense of Mother Earth: The Indigenous Environmental Network," pp. 134-150.

Byrne, J., and S. M. Hoffman. 2002. A 'Necessary Sacrifice': Industrialization and American Indian Land." *Environmental Justice: Discourses in International Political Economy Energy and Environmental Policy*, pp. 97-118.

Vickery, Jamie, and Lori M. Hunter. 2016. "Native Americans: Where in Environmental Justice Research?" *Society & Natural Resources* 29:36–52.

OPTIONAL

Lavelle, M. 2017. "Judge Orders Dakota Access Pipeline Review, Citing Environmental Justice." *Inside Climate News*, June 15, 2017. <https://insideclimatenews.org/news/14062017/dakota-access-pipeline-environmental-justice-review-standing-rock-court-ruling>

Indigenous Environmental Network: <http://www.ienearth.org/>

SPRING BREAK: February 24 to March 4

Week 9 – March 6 & 8: Europe

- Agyeman, J., 2002. Constructing environmental (in) justice: transatlantic tales. *Environmental Politics*, 11(3), pp.31-53.
- Laurent, É. 2011. "Issues in environmental justice within the European Union." *Ecological Economics* 70: 1846–1853
- Hajat, A., C. Hsia, and M. S. O'Neill. 2015. "Socioeconomic Disparities and Air Pollution Exposure: A Global Review." *Curr Envir Health Rpt* 2: 440–450.

OPTIONAL

- Padilla, C. M., W. Kihal-Talantikite, V. M. Vieira, P. Rossello, G. LeNir, D. Zmirou-Navier, S. Deguen. 2014. "Air quality and social deprivation in four French metropolitan areas—A localized spatio-temporal environmental inequality analysis." *Environmental Research* 134: 315–324
- Mitchell, G., P. Norman, and K. Mullin. 2015. "Who benefits from environmental policy? An environmental justice analysis of air quality change in Britain, 2001–2011." *Environ. Res. Lett.* 10: 105009

Week 10 – March 13 & 15: Developing Countries

- Guha, R., and J. Martinez-Alier. 1997. "The Environmentalism of the Poor." *Varieties of Environmentalism: Essays North and South*, pp. 3-21.
- Anguelovski, I., & J. Martinez-Alier. 2014. "The 'Environmentalism of the Poor' Revisited: Territory and Place in Disconnected Glocal Struggles." *Ecological Economics* 102: 167-176.
- Martinez-Alier, J., Temper, L., Del Bene, D. and Scheidel, A., 2016. "Is there a global environmental justice movement?" *The Journal of Peasant Studies*, 43(3), pp.731-755.

OPTIONAL

- Temper, L., D. del Bene, and J. Martinez-Alier. 2015. "Mapping the frontiers and front lines of global environmental justice: the EJAtlas." *Journal of Political Ecology* 22: 255-278.
- Willett, J. L. 2015. "Exploring the Intersection of Environmental Degradation and Poverty: Environmental Injustice in Nairobi, Kenya." *Social Work Education* 34: 558–572
- Environmental Justice Atlas: <https://ejatlas.org/>

Week 11 – March 20 & 22: Climate Justice

- Shonkoff, S. B., R. Morello-Frosch, M. Pastor, and J. Sadd. 2011. "The climate gap: environmental health and equity implications of climate change and mitigation policies in California—a review of the literature." *Climatic Change* 109 (Suppl 1):S485–S503
- Schlosberg, D. and L. B. Collins. 2014. "From environmental to climate justice: climate change and the discourse of environmental justice." *WIREs Clim Change* 5:359–374.
- Boyce, J. K. and M. Pastor. 2013. "Clearing the air: incorporating air quality and environmental justice into climate policy." *Climatic Change* 120: 801–814

OPTIONAL

- Joshi, S. 2014. "Environmental justice discourses in Indian climate politics." *GeoJournal* 79: 677–691.

Week 12 - March 27 & 29: Capitalism and Environmental Justice

- U.S. GAO. 2002. *Community Investment: Information on Selected Facilities That Received Environmental Permits*. Washington, DC: .S. GAO
- Ash, M. and Boyce, J.K., 2011. "Measuring corporate environmental justice performance." *Corporate Social Responsibility and Environmental Management*, 18(2), pp.61-79.
- Bell, K. 2015. "Can the capitalist economic system deliver environmental justice?" *Environ. Res. Lett.* 10: 125017

Week 13 – April 3 & 4: Environmental Justice and Michigan's Most Polluted Zip Code

Schlanger, Zoe. 2016. "Choking To Death in Detroit: Flint Isn't Michigan's Only Disaster." *Newsweek*, March 30, 2016. <http://www.newsweek.com/2016/04/08/michigan-air-pollution-poison-southwest-detroit-441914.html>

Schulz, A.J., Mentz, G.B., Sampson, N., Ward, M., Anderson, R., de Majo, R., Israel, B.A., Lewis, T.C. and Wilkins, D., 2016. "Race And The Distribution Of Social And Physical Environmental Risk: A Case Example from the Detroit Metropolitan Area." *Du Bois Review: Social Science Research on Race*, 13(2), pp.285-304.

Saturday, April 7 - Environmental Justice Tour of Southwest Detroit
(A bus will leave the Law School at 9:00 am and return at about 3:30 pm)

Week 14 – April 10 & 12: Debriefing of Detroit EJ Tour/Student Presentations

Week 15 – April 17: Course Wrap-Up

TERM PAPER DUE
Wednesday, April 18, 5:00 pm

GUIDELINES FOR TERM PAPER

Objectives of the Paper

The purpose of the paper is to bring course materials to bear in analyzing and understanding a subject of particular interest to you - within the general topic of environmental justice. Your goal will be to demonstrate an in-depth understanding of course materials as well as your ability to apply that material in order to analyze and uncover new insights about a phenomenon or issue of particular interest.

Feel free to discuss with me at any time ideas for your paper. Everyone will turn in a one-paragraph prospectus sometime in the middle of the term so that I can give you some feedback about your ideas. Term papers will be due the Monday after the last day of class. Each student will make a 10-15 minute presentation to the class previewing their paper.

Format of the Paper

Approximately 15-20 pages (with pages numbered); double-spaced; with title, abstract, and list of references (check the reference list of any published social science article as a model to guide you; be consistent with your style). Abstract is to be included on title page and should be no longer than about 100 words. Page limit does not include the abstract and list of references. Make sure to cite your sources in the text. Please use social science citation style (e.g., Smith, 1999) rather than footnotes. Also, please use Arial point 11 font and margins of 1 inch and printed double-sided. I will pass out a check list later.

Basis of Grade

1. Substance (25%) - The term paper should include real information, facts, substantive arguments.
2. Application of course materials (25%) - Clear use of course materials should be demonstrated, including information from assigned readings and class meetings. These materials should be used in helping to analyze and understand the topic you are examining.
3. Level of analysis (25%) - Avoid superficial analysis of the topic. Your objective is to get those who have read your paper to feel they now have an in-depth understanding of your topic. Achieving such an objective requires three ingredients: a) real information about the topic, b) appropriate application of course materials, c) and analytical, logical thinking on your part.
4. Organization and clarity of presentation (25%) - Also very important to any quality paper is the clarity in which information and ideas are presented. Think about what it is you want to accomplish in your paper and how you can best communicate that. This requires that your paper be organized. A general rule in writing good papers is that you introduce the topic of your paper in the first one or two paragraphs, making very clear to the reader about what the objectives of your paper are. I.e., what is the topic that you will be talking about and what is it that you will attempt to accomplish in the next few pages? Likewise at the end of the paper, you should devote a couple of paragraphs summarizing your main points and your conclusions. In short, the body of your paper should be organized by the following dictum: "Tell them what you're going to tell them, tell them, tell them what you told them!" Good grammar and spelling are also important ingredients in clearly presenting information, ideas, arguments, and conclusions.