

Enhancing graduate students' teaching praxis through the co-creation of an interdisciplinary undergraduate course on sustainable water management

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This course represents a two-pronged approach to sustainability education: it provides hands-on training in interdisciplinary teaching to graduate students while offering an innovative course to undergraduate students based on best practices in sustainability pedagogy. As PhD students in a National Science Foundation Integrative Research and Education Traineeship, we undertook the preparation, curriculum design and co-facilitation of an interdisciplinary course focused on water sustainability in urban environments. The class integrated our backgrounds in geology, planning, and community organizing to support undergraduates' learning during and beyond the duration of the course.

Topic and
subtopics:

Urban rivers, central to human life, have been shaped and reshaped over time according to shifting priorities. Given uneven power dynamics that produce racialized disparities, they are sites of contestation and conflict. This class examined the complex politics of urban river contamination and clean-up via a *comparative case study* of two rivers with Superfund sites in the Pacific Northwest: the Willamette River's Portland Harbor and the Lower Duwamish River.

In recent years, the federal government has attempted to redress past contamination and restore river functions by holding past polluters responsible via the designation of Superfund sites – areas contaminated by hazardous waste and deemed a priority for cleanup because of risks posed to human health and the environment. The comparative case of the Portland Harbor and the Lower Duwamish allowed students to explore ecological issues, toxic contaminants, environmental history, clean-up planning processes, public participation, community organizing, and social justice issues. Specific topics included:

- What is a superfund site?
- Background on case studies- Duwamish River in Seattle, Washington and Portland Harbor in Portland, Oregon
- Nature in the city and human-nature binaries
- Ecosystem functions and biological concerns
- Ecosystem services in the environmental history of the river
- Environmental justice and community organizing
- Policy implementation and the politics of determining responsibility
- Environmental planning, public participation and limits to policy
- Clean-up and remediation

Learning
goals:

*Learning goals for undergraduate
students*

- Critically examine common definitions of nature and environmentalism, expanding upon these concepts to include everyday ways that humans interact with the urban environment.
- Explore the sources of urban river pollution and their effects on humans and the environment.
- Investigate the role of regulatory agencies and non-profits in Superfund site management.
- Examine public engagement in environmental planning - with a critical lens of equity and environmental justice.
- Develop a critical understanding of the complex processes that shape environmental policy in urban environments.
- Understand the complex processes that shape environmental policy in urban environments.
- Analyze common definitions of nature and environmentalism, and expand upon these concepts to include everyday ways that humans interact with the urban environment.
- Learn to think critically about how decisions bearing on the urban environment are made, and the social and ecological outcomes of these decisions.

*Learning goals for graduate student
facilitators*

In addition to learning goals for the course participants, we had our own learning goals as graduate student course instructors. Despite the increased demand for interdisciplinary undergraduate courses, PhD students have few opportunities for pedagogical training. Though we were participating in NSF's flagship interdisciplinary training program, no built-in teaching component existed. To address this issue, we posed the guiding question: *What impact does interdisciplinary graduate student education have on the teaching philosophies and pedagogical practices of participating graduate student instructors, and, in turn, on undergraduate student learning?* We conducted research and theoretical review in the tradition of translational and action research in education, putting these methodological approaches into

practice in curriculum development and teaching. We harvested ideas from our own interdisciplinary training as researchers and practitioners, carefully documented each step, mentored one another across disciplinary and experiential divides, and continuously reflected on the process to further develop our pedagogical philosophies and praxis.

Primary audience:

The primary undergraduate audience included students from diverse backgrounds interested in exploring how environmental policies and decisions are made in urban ecosystems. The course was cross-listed in the departments of Environmental Science and Management and Urban Studies and Planning. It attracted students from urban and community planning, political science, public policy, community health, environmental science, biology and chemistry. The unique course co-development by graduate students included PhD students from both biophysical and social science backgrounds who aimed to gain skills and experience in designing and teaching interdisciplinary courses.

Prerequisites for undergraduates:
None.

Brief summary of learning objectives, materials, instructional methods, and assessments (up to 750 words):

Based on our own interdisciplinary training and a review of best practices in undergraduate sustainability education, we developed a constructivist pedagogy emphasizing experiential learning through real-world case studies, critical self-reflection, and interdisciplinary team teaching. A constructivist approach is fundamentally designed to enable transformative learning to occur, integrating inquiry, experience and participation (Dewey 1938/1997). As Jickling and Wals (2008, 7) explain, taking such an approach emphasizes that “knowledge is not fixed, cut up in pieces and handed over, but rather (co)created by transacting with prior tacit knowledge, the curriculum, and other learners’ knowledge and experiences. Hence, what is known is important, but so, too, is what students are able to do with what is known.” Scholarship following this approach finds that students learn best when they are actively engaged in constructing knowledge within the context of their own experiences, rather than passively receiving information from textbooks or teachers (Leder 1993; Kolb 2014). To this end, experiential learning (comprised of action, reflection and application of knowledge) through real- world case studies offers an effective mechanism for interdisciplinary, sustainability-focused education (Beard and Wilson, 2002; Brundiers et al. 2010). Case studies emphasizing experiential learning facilitate the connection of theory with

practice and foster a personal connection with the subject at hand (e.g., McKinney et al., 1998; Kreber, 2001; Domask, 2007). Comparative case studies, moreover, illuminate issues relevant beyond the case context itself (Cousin 2005). They offer an effective approach for engaging students in problem-solving activities, exposing students to complexity and ambiguity while offering a basis for imagining innovative strategies to address urgent problems with no single, clear, “win-win” solution. As such, they offer students much-needed spaces to explore alternative ways of thinking, valuing and doing (Wals and Jickling 2002).

Both the Lower Duwamish River and the Portland Harbor were designated as Superfund Sites fifteen years ago, but their trajectories have been very different. While citizen organizing and public participation led to the swift initiation of river clean-up in Seattle, Portland’s plan had yet to be drafted when our course began. The Lower Duwamish River was the first official environmental justice case of a Superfund site, allowing for a rich learning opportunity to examine the impacts of community organizing and public participation in remediating urban rivers. The comparison of rivers with similar geographies, ecological functions, economic contributions, and cultural histories – but that have been subject to different political processes – allowed us to pose questions such as:

- Why have these two cases unfolded in such different ways?
- What histories and politics contributed to these differences and what are their ecological outcomes?
- How are diverse groups of stakeholders affected?
- Whose narratives are privileged in the making of environmental policy around river clean-up?
- How are actors in each Superfund Site held accountable through environmental regulation and policy?

The comparative case study framework provided a platform for such nuanced insights to emerge, by allowing students to put the two sites into conversation with one another.

We also wanted students to learn the value of engaging multiple disciplines by addressing these complex questions through real world experience. The course included a cultural history tour of the region, site visits, and interviews with people active in various aspects of the remediation of both Superfund sites. We took field trips to the Duwamish River and Portland Harbor where we met with diverse organizations working on river clean-up: a community center serving a Latin American immigrant neighborhood, the Duwamish tribe longhouse, the

Port of Portland, Vietnamese seniors, and the Environmental Protection Agency. We also organized an expert panel with immigrants and houseless community members, for whom the impact of both river contamination and the potentially displacing effects of river cleanup are especially immediate. Students were paired with community organizations with which to conduct final class projects. These pairings were based on our pre-existing relationships with them; class discussions prior to this work, including preparation of questions and conversations about ethical engagement, helped mitigate some of the risks of experiential learning in and with marginalized communities.

To assess how well we achieved our teaching objectives, we evaluated the main components of the class: discussions, [blogposts](#), final projects, participation in field trips and class activities, and an anonymous, in-depth teaching evaluations. In these evaluations, students were asked to respond to ten questions that addressed how the class changed the way they think about the environment, what they learned from disciplines outside of their home department, and how they think their environmental perspectives and behaviors will be different after taking the course.

Statement of how course fits into broader program of study (500 words):

The liberal arts curriculum at Portland State aims to “provide students with integrated, connected learning experiences that lay the foundation for lifelong intellectual development...[teaching] you how to think critically, communicate effectively, and gain a broad awareness of the human experience to instill a deep sense of responsibility to yourself, your peers and your community.” These core goals of the broader university curriculum are at the heart of our course. We focused on developing critical self- reflection, asking students to critically examine how the knowledge they use and produce, and the methods on which it is based, are influenced by political, historical, cultural and social processes (e.g. Harding 1987; Boström et al. 2017). Students learned to analyze how “truth claims” can serve particular interests, and developed mechanisms for examining their own assumptions and biases as well as clarifying their own ethical and political commitments. Specifically, students acquired hands-on experience with ‘interdisciplinarity-in-action’ to address pressing issues in sustainable water management. The ability to integrate knowledge from a range of disciplines will serve them as they grapple with the complexities of present-day issues of sustainability, whether they are on the track to be planners, policymakers, biophysical or social scientists, or everyday citizens working in a range of diverse fields.

For graduate student instructors, the co-development and facilitation of this course fulfilled a critical gap in our training. While the urgency for interdisciplinary environmental education is

well established, many institutional barriers to promoting such research and teaching exist (see, for example, Borrego et al., 2014). Although many academics find themselves ill-equipped to teach interdisciplinary courses (Brundiers et al. 2010), the issue of *graduate student training* for interdisciplinary teaching has received little attention. Despite being the next generation of sustainability faculty, graduate students have few opportunities to learn how to incorporate real-world, interdisciplinary learning in course development for undergraduate students. Throughout a six-month pre-course preparation period, we selected and discussed readings together. Building from shared coursework, we chose reading materials that would be foundational, accessible, and provocative. We prepared a blog that would facilitate in-progress learning and a means of formative assessment, as well as an avenue for students to share their learning more broadly. We made collective decisions about field trips, guest speakers, and panels. Given that this community-based learning involved many marginalized community members, we worked through ethical, grassroots organizations in the planning process and budgeted for honorariums for all collaborators. We learned from our fellow instructors and learned to model flexible thinking, curiosity, a collaborative learning process, and an integrative approach to urban environmental challenges. Through this process, we deepened our pedagogical philosophies and our commitment to and comfort with interdisciplinary teaching.

Explanation of your innovative approach and how it removes barriers to learning and how the goals and topics of the course are aligned with the Institute's key issues (up to 750 words):

This course focuses on the challenges involved in sustainable water management, while connecting the issues of poverty and spatial inequality that are central to both water contamination and clean-up. Charged simply with teaching an interdisciplinary undergraduate class to be cross-listed in the departments of Environmental Science and Management and Urban Studies and Planning, we had flexibility in curriculum design and facilitation. We wanted to avoid what we dubbed a “stapler approach” to interdisciplinary studies, where methods and approaches of distinct disciplines were taught individually and added together rather than usefully integrated. Interdisciplinarity entails a goal of integrating, critiquing and transcending individual disciplines (Lattuca, et al., 2004; Ashe, 2009). We achieved this by close collaboration in planning and teaching using a peer-to-peer learning model, facilitating a democratic learning environment that welcomed diverse contributions, and basing the class in a challenging case study explored through experiential learning. We also used a variety of assignment types (such as community surveys, focus groups, interviews, participation in a public meeting, class discussion and field trips, production of outreach materials) to offer students a range of opportunities to practice new skills and demonstrate acquired knowledge.

An important result of our reflective process on our own coursework and additional pedagogical reading was a strong consensus that the course be based on a salient case study entailing a complex issue that eluded simple, straightforward resolution—what our professors often referred to as “wicked problems” (Brown et al., 2010), or what Pennington and colleagues (2013) refer to as “disorienting dilemmas.” Useful engagement with our case study, we decided, should necessitate the resources of multiple disciplines. Moreover, we were determined that it be a problem with regional dimensions that we could engage with locally, and that it should build on our own areas of expertise.

This multifaceted, comparative case allowed us to draw from our respective disciplinary backgrounds. One of us, an environmental geologist and former environmental consultant in the Portland Harbor Superfund site, had investigated and prepared Environmental Protection Agency (EPA) responses for companies operating in the Harbor. She could teach about the types of toxic contaminants in the Harbor and their sources as well as clean-up techniques, while guiding students through the process of how companies negotiate environmental due diligence. Our group's environmental planner could provide students with key planning and policy resources, and use her years of work in Seattle to plan and facilitate field trips with

policymakers and communities in the Duwamish River Superfund site. Our facilitator with a background in social movements and collective action, could offer students tools for activism and an introduction to community organizing and environmental justice. Finally, our peer mentor, who built on her own dissertation research to focus her class the previous year on the Portland case, offered a springboard from which to develop our comparative case, and facilitated the collaboration of our students with one of the key activist groups involved in influencing the outcomes of river clean-up based on social justice principles. The documentary film, “[A Peoples’ View of the Portland Harbor](#)”, co-produced by her students and the Portland Harbor Community Coalition, sparked our students’ interest in activism around justice-oriented river clean-up.

Presented from multiple angles, the case study allowed students to grapple with the complexity of sustainability. This reckoning was a thread throughout their blog posts and in their course evaluations. For example, one student shared in a blog post:

Even dredging, the most effective tool we have for cleaning the Willamette is far from flawless. [Director of non-profit] brought up the role that policies initially required to have the contractor with the lowest bid do the dredging, with abysmal results...Thinking on a larger scale, it is difficult to see the point in debating the effectiveness of cleanup techniques. Without policy and regulations focused on stemming the flow of hazardous material into the river, the overall effectiveness of the cleanup will be limited, regardless of the combination of technology used.

By pointing out that sustainability solutions, such as dredging, have unintended consequences, this student addresses the complexities of riverine cleanup.

Experiential education through cases, particularly in an interdisciplinary context, allow opportunities for linking learning to action. Action in the context of this course entailed community-engaged research, with benefits accruing for students and community partners alike (e.g., Horton and Freire 1990; Stoecker et al. 2009; Stoecker 2014). Experiential learning through direct collaboration with organizations, the production of meaningful final projects developed in collaboration with these organizations, together with field trips, panels, and community-based research, sustained student engagement during the course and beyond.

Academic year in which it was offered:

2016

Course deliverables:

Syllabus

Urban Rivers: Environmental Policy, Planning and Activism ESM 399 | 3 credits Spring 2016, Mondays from 1-4 pm, MCB 123 Instructor: Mary Ann Rozance

Rivers, often the necessary condition of human settlement, shape the cities they flow through. People who live in cities shape and reshape the rivers according to their shifting priorities. Fundamental to regional food supply, religious practice, transportation, trade, recreation, and industrial development, urban rivers have been harnessed to satisfy many different kinds of human wants and needs. But such functions are often in conflict – and the priorities of some groups of people take precedent over the needs of others – making urban rivers contested sites.

This class offers insight into the complex environmental politics governing urban rivers with a comparative case study of two contaminated rivers in the Pacific Northwest: the Portland Harbor and the Lower Duwamish River Superfund Sites. Many U.S. cities, including Portland and Seattle, made rivers central to industrialization, imposing few regulations to control pollution and showing little regard for alternative, conflicting priorities such as a clean supply of water for drinking or fishing. In recent years, the federal government has attempted to address past contamination and restore other river functions by holding past polluters responsible via the designation of Superfund sites – sites contaminated by hazardous waste and deemed a priority for cleanup because of risks posed to human health and the environment. In this class,

we will be examining the policies, planning and politics that influence river cleanup.

Learning Objectives

- Explore the sources of urban river pollution and their effects on humans and the environment.
- Investigate the role of regulatory agencies and non-profits in Superfund site management.
- Examine public engagement in environmental planning - with a critical lens of equity and environmental justice.
- Understand the complex processes that shape environmental policy in urban environments.
- Analyze common definitions of nature and environmentalism, and expand upon these concepts to include everyday ways that humans interact with the urban environment.
- Learn to think critically about how decisions bearing on the urban environment are made, and the social and ecological outcomes of these decisions.

Who should take this class?

This is an interdisciplinary, applied course appropriate for students from either biophysical or social science backgrounds interested in exploring how environmental policies and decisions are made in urban ecosystems. We will draw from primary sources and literature in urban ecology, environmental science, environmental remediation, public policy, community organizing and environmental justice. Field trips and guest speakers will enrich these perspectives.

Expectations & Assignments

Discussion Preparation & Participation
(15%)

Students are expected to complete all readings, watch film excerpts, etc., as well as thoughtfully complete a blog post before class, in preparation for discussion. Readings and links will be posted in the class Google Drive folder. Expect to spend about 6-8 hours each week preparing for class, including reading (from 5 to 35 pages per week), watching online

films, exploring websites, writing blog posts, doing quick sketches, visiting key sites around town, attending events, etc. You are expected to participate in class discussions and activities.

Attendance is required. You may miss one class without it impacting your grade; please let me know well in advance, if possible, if you will miss a class. If you miss more than two classes, you will not pass the class.

Field Trips (10%)

You are required to attend 2 field trips and one public meeting. If you cannot attend you must make arrangements with the instructor, otherwise you will not pass the class.

- Portland Harbor Field Trip: Monday April 11, 1PM-4PM. Meet at 1PM at the Port of Portland (1040 N. Lombard Street). Bring government issued photo ID.
- Duwamish River Field Trip: April 22-23. Meet Friday, April 22 at 7AM out front of MCB. We will return to Portland by 1PM on Saturday, April 23. Details on both field trips will be provided in class.
- Attend one public comment meeting for the Portland Harbor Superfund Proposed Cleanup (Dates TBD). Details on this assignment will be provided in class.

Weekly Blog Post (25%)

You are required to submit a blog post for 7 of the 9 weeks in the quarter. You are still responsible for completing the readings and other activities for the weeks you do not submit a blog post. Blog posts are due Sundays at noon (the day before our class meets). There will be questions and prompts each week posted on the class Google Drive folder. Blog posts can be completed in different formats. They can be a one-page critical reading reflection, video reflection, or a photo essay. Other ideas are welcome, but you must discuss other ideas with instructor in advance. Each blog post must include a minimum of 250 words of text and must reference at least one of the readings from the current week. (More info on blog posts will be provided in class)

Term Project (50%- Total)

You will be responsible for completing a term project, which can be done either individually or in small groups (no more than 3 people in a group). More details about the term project will be

provided in class. There are three components to the term project grade:

- Assignment 1 (20%): You will be responsible for making steady progress on a term project. The first assignment related to your term project is due in class on April 25th
- Presentation (5%): Project presentations will be during exam week, on Monday June 6th from 1PM-4PM
- Final Project (25%): Due Wednesday, June 8th at 12PM

General Classroom

Etiquette

- Please show respect to your classmates and instructors by being on time.
- Refer to the text/films (or other sources) as needed during discussion.
- Focus on understanding the ideas, issues, and values reflected in the sources.
- Do not stay confused; ask for clarifications.
- Stick to the point currently under discussion; make a note of ideas to which you want to come back.
- No need to raise hands, but be courteous and take turns talking; refer to one another's points and questions (e.g., "As so-and-so said a moment ago, ...").
- Listen carefully; clarify as needed.
- If you are someone that tends to speak a lot, be conscientious about stepping back to make space for others; if you are someone that tends to say less, be conscientious about challenging yourself to step forward more frequently. If you are struggling to engage, please let me know how I can support you.
- Turn off cell phones. Laptops are okay, but please turn off internet during discussions. No Facebook, email, etc. at any time during class! I may ask that laptops be put away for particular discussions/activities.
- If you are struggling with the readings and/or blog posts, please let me know. Early and honest communication is critical to your success in this class. We will go over some reading tips in class.
- Follow the **platinum rule**: treat others how *they* wish to be treated!

Academic Integrity

All students are expected to adhere to high standards of academic integrity. In this class especially that means that all work presented as original, must in fact be original, and the ideas and contributions of others must appropriately be acknowledged. Cite all sources!

Academic Accommodations / Campus Resources

If you are a student with a documented disability and are registered with the Disability Resource Center (DRC), please contact me immediately to facilitate arranging academic accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through the DRC should contact the DRC immediately.

There are a wide variety of resources available on campus to help you experience success, stay healthy, make connections, and maintain balance in your life. Here are a few:

www.pdx.edu/shac/center-for-student-health-and-counseling

- Office of Diversity & Multicultural Student Services: Smith 425,
www.pdx.edu/dmss/

- African American Students Services,
www.pdx.edu/dmss/AA

- Women's Resource Center:
www.pdx.edu/wrc/welcome-to-the-womens-resource-center

- Queer Resource Center:
www.pdx.edu/queer/

- La Casa Latina, Multicultural Center, and Native American Student & Community Center: www.pdx.edu/dmss/cultural-centers

Weekly Schedule of Readings, Due Dates, Activities

Week 1: Introduction to Urban Rivers and Superfund Sites **March 28**

Readings / Media

1. OPB Superfund article
2. PHCC Website
3. OPB Duwamish article
4. DRCC Website
5. Willamette Week. "What the Muck?"
6. Frontline Episode

Assignment due this week -- Activities

- Course introduction
- Getting to know our urban rivers
- Introduction to Portland Harbor and Duwamish River Superfund Sites **Homework DUE 3/30/2016, 5PM**

- Take public opinion survey for Portland Harbor:

<https://www.portlandoregon.gov/bes/article/569939>

- Once the survey is completed, take a screenshot of completed survey and email a screenshot to instructor with a short response to prompt in Google Drive folder

Week 2: Nature and the Anthropocene April 4 Readings / Media

1. Boone et al. Pesticide Regulation amid the influence of Industry p. 917-921
2. Fagin, The Learning Curve p. 462-465
3. Grandjean, Neurobehavioral Effects of Developmental Toxicity p. 330-336
4. Robbins et al. Ch. 8 (16 pgs)
5. Optional: Saving Wild Places in the Anthropocene, Cronon and Robbins radio interview (25 minutes)

Assignment due this week Blog Post (upload by 4/3, 12PM) Activities

- Human-Nature Binaries
- Contamination Bingo
- Discuss Final Projects

Week 3: Field Trip to Portland Harbor April 11 Readings / Media

1. The Economic Impacts of Remediating the Portland Harbor Superfund Site (p. 1-29)
2. OPB Portland Harbor Cleanup

Dispute Centers on Fish Consumption

3. EPA Risk Assessment Comments to LWG
4. OPB "EPA Criticizes Clean-up Study for Portland Harbor".
5. OPB Cleaning up Toxics in the

Willamette River.

Assignment due this week Blog Post (upload by 4/10, 12PM) Activities

- Field Trip to Portland Harbor!
- Meet at 1PM at field trip location: 1040 N. Lombard Street **Bring Government Issued Photo ID!**

- Guest Speaker:

- Jayson Shanafelt, Community Affairs Tour and Outreach Manager Port of Portland

Week 4: Environmental Planning: Public Participation and Limits to Policy April 18 Readings / Media

1. Jason Corburn *Street Science*-

Chapter 1 "Local Knowledge in Environmental Health Policy" 2. Krumholz, A retrospective view of equity planning Cleveland 1969– 1979 p. 163-174 3. Arnstein, A ladder of citizen participation p. 216-224

Assignment due this week Blog Post (upload by 4/17, 12PM) **Activities**

- Review public comments from Duwamish River Superfund

Seattle Field Trip! April 22- 23

Videos

1. Duwamish Tribe Longhouse project video 2. History of Billy Frank Jr. and Native American fishing rights video 3. History of Duwamish ecosystem services video

Assignment due this week Read two articles on the DRCC website and respond to reflection questions **Activities**

- Tour of Duwamish Tribe's Longhouse
- Meeting with EJ Activists and DRCC
- Tour of Early Action Sites with EPA, City of Seattle, and Port of Seattle
- Walking tour of the surrounding neighborhoods
- Overnight in HI Hostel
- ... Details to come!

Week 5: Clean-up and Remediation **April 25 Readings / Media**

1. Portland Harbor Site Remedial Action Objectives 2. LWG Draft Remedial Investigation Report

Assignment due this week Blog Post (upload by 4/24, 12PM) **Activities**

- Review cite imagery on how to cleanup a site from start to finish

Week 6: Ecosystem Functions and Biological Concerns & Policy Administration **May 2 Readings / Media**

1. Yeakley et al. Wild Salmonids in the Urbanizing Pacific Northwest (selected chapters)

Assignment due this week Blog Post (upload by 5/1, 12PM) **Activities** Guest Speakers (In Class)

- Tony Barber, Oregon EPA Director
- Sue MacMillan, DEQ Risk Assessor

Week 7: Environmental Justice and Community Organizing **May 9 Readings / Media**

1. Waneck, Special water issue: PCBs and Warren County (5 pgs) 2. A Review of EPA's First Environmental Justice Analysis in Conjunction with a CERCLA Remediation Plan (10 pgs). 3. Health Along the Duwamish A Superfund Runs Through It 4. Principles of Environmental

Justice 5. Bullard, Anatomy of the

Environmental Racism and Environmental Justice 6. Select articles from Unequal Protection and Confronting Environmental Racism. 7. Optional: Duwamish Environmental Justice Report

Assignment due this week Blog Post (upload by 5/8, 12PM) **Activities**

Week 8: Portland Harbor Community Panel **May 16 Readings / Media**

Portland Harbor Superfund Site: Public Testimony Guide Two blog posts from your peers PHCC Website Right 2 Survive Website Right 2 Dream Too Website Liedres Verdes Website Living Cully Website

Assignment due this week Blog Post (upload by 5/15, 12PM) **Activities** Guest Speakers (In Class)

- Erin Goodling, PhD Student, PHCC
- Wilma Alcock, PHCC, Community Member
- Darlene Solomon, PHCC, Community Member
- Lucia Llanos Pinos, Living Cully
- Velia Menduza, Liedres Verdes
- Mike Summers, Right 2 Survive
- Trish Reed, Right 2 Dream Too

Week 9: River Reflections **May 23 Readings / Media**

Portland's Working Rivers: The Heritage and Future of Portland's Industrial Heartland Woodhouse, Edward. 2006. Nanoscience, Green Chemistry, and the Privileged Position of Science. The New Political Sociology of Science, Scott Frickel and Kelly Moore, eds.

Assignment due this week Blog Post (upload by 5/22, 12PM) **Activities** River walk and reflection Dr. Carl Abbott, PSU Faculty Emeritus presents on the history of the Portland Harbor and industrial land use in Portland

Week 10 Memorial Day, No Class

Exam Week: Final Project Presentations **June 6 Readings / Media Assignment due this week**

Activities Final Presentations

Course deliverables: Examples of learning modules

Unit 1: Environmental Planning: Public Participation and Limits to Policy

This unit integrates readings, a pre-class assignment, required blog post, in class

Course deliverables: Examples of learning modules

Unit 1: Environmental Planning: Public Participation and Limits to Policy

This unit integrates readings, a pre-class assignment, required blog post, in class discussion and activities, as well as experiential learning through field trips and guest speakers.

Readings:

Corburn, *Street Science*. Chapter 1: "Local Knowledge in Environmental Health Policy"

Krumholz, "A retrospective view of equity planning Cleveland: 1969–1979" p. 163-174.

Arnstein, "A ladder of citizen participation" p. 216-224.

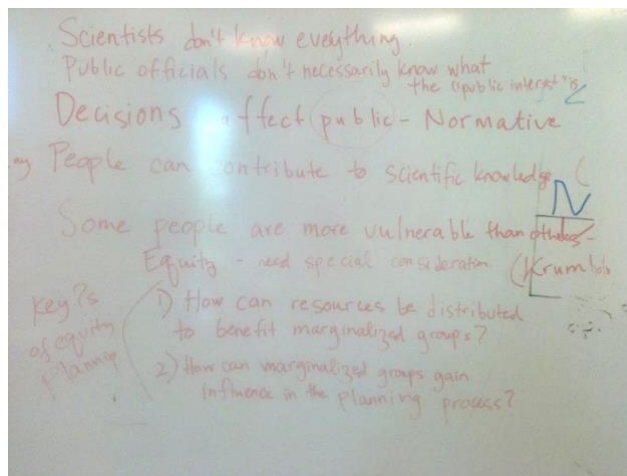
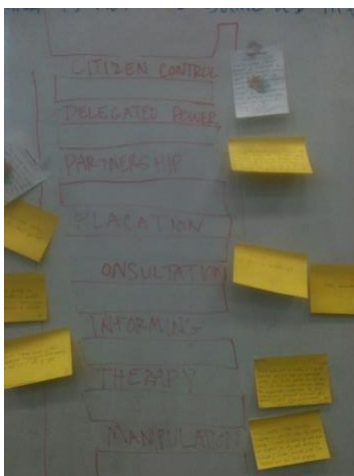
Pre-class assignments: Public Input Survey on Portland Harbor Superfund Site (see Figure A). The City of Portland gathered public opinion about river clean-up through an online survey. Students took this survey, then reflected on it in their blog, together with their field trip to the Portland Harbor.

Blog prompt:

Part A. Describe one thing you learned at the Port of Portland. (i.e. Did anything surprise you? What questions did you have? How were they answered? What other questions do you still have?)

Part B. Based on the readings this week, what should public entities like the City, the Port of Portland and the EPA keep in mind as they develop public participation outreach strategies? Describe at least three important considerations citing two readings

In-class activities: Students drew scenarios of participation from a hat and decided where they fell on Arnstein's ladder of participation. Discussion underscored the idea that participation is not the same as influence. Whiteboard notes summarize key points raised in the discussion of readings.



Experiential learning:

Recognizing that concepts related to these key theoretical areas cannot be understood in isolation from real-world policies, politics, and ecologies, experiential learning in the midst of the ongoing politics surrounding urban riverine Superfund sites in the Pacific Northwest helped students synthesize the theory in real time. Field trips, participatory action research projects, guest speakers, and daily media updates engaged students and brought concepts to life. This lesson immediately followed a field trip to the Port of Portland and preceded a trip to the Duwamish River in Seattle where we met with diverse organizations working on river clean-up: a Latin American community center, the Duwamish tribe longhouse, the Port of Portland, Vietnamese seniors, and the Environmental Protection Agency (photos in Figure B). Through an applied lens, they were asked to question how decisions around remediation are made, how agency regulators assign accountability, and the social and ecological outcomes of these decisions. Students were asked to reflect on the processes they saw unfolding with reference to several foundational planning theories, including those addressing public participation (Arnstein, 1969; Innes and Booher, 2004), equity planning (Krumholtz, 1982), integration of local knowledge in planning (Corburn, 2005), and environmental justice (Taylor, 2000).

One student writes:

While communities of South Park have been highly vocal and active influencing stronger river cleanup, these low income communities--often communities of color--have not gotten the level of response that communities around Lake Washington received. Politics that govern cities have systematically left low income communities out of planning processes and adequate consideration. In "A Ladder of Citizen Participation," Arnstein articulates the reason for citizen participation in processes affecting our public commons as a redistribution of power-giving voice to people so often excluded from the process (Arnstein, 1969). This article was published in 1969 and yet still today citizen participation is often a box for government officials to check rather than fully listening and changing plans or designs based on feedback from the public- people who will be greatly affected by the decisions made. (Student blogpost)

Another elaborates:

The Duwamish River Superfund site is an example of how the prioritization of economics in our political system forges a path for industrial development while leaving a trail of environmental and cultural degradation along the way. It is also an example of how working together as a collective community can help begin the healing process for the natural environment and for people. We met several groups of people who work hard to protect their community from environmental degradation and political marginalization. The people's devotion and dedication to taking a stand was perhaps my favorite experience of the trip. (Student blogpost)

Students were also able to attend to the comparative process and identified differences between the two cases. For example, one student shared in a blogpost:

The need for increased community engagement in the Portland Harbor Superfund project seems to me a central issue. In comparing the Duwamish and Portland Harbor, there seems a significant difference in the levels of engagement between the two cities' governing bodies and the communities most affected by the Superfund and the clean-up process...The communities from the neighborhoods of South Park and Georgetown and the Duwamish Tribe were driving forces insisting on more and better engagement with the City and Port of Seattle as well as the EPA. And most importantly, those communities pushed for better clean up technologies and it seems they helped the City and Port of Seattle recognize how essential it is to use technologies that remove more of the contaminants. The City of Portland recently conducted a survey of Portland residents on their priorities and opinions about the Portland Harbor cleanup. This was the first outreach by the City on the clean-up and was not widely distributed, nor was it comprehensive in eliciting the full views of the public with its limited questions and "pick a box" format.

Without deep engagement with people working on-the-ground, it is less likely students would appreciate the relevance of course materials. To build on this foundation, we also organized an in-class expert panel with immigrants and houseless community members, for whom the impact of both river contamination and the potentially displacing effects of river cleanup are especially immediate.

Figure A. Public Input Survey

Public Input Survey

The City of Portland is gathering public opinion about the Portland Harbor Superfund Site. They are using an online survey mechanism; this is the only opportunity the city is offering the public to share their opinions about the cleanup. The city will use the information from this survey to make their official comments towards the Superfund cleanup.

Your first assignment is to take this public opinion poll (**DUE March 30th, 5PM**) and respond to the question below.

1. Follow the link to the city's poll: <https://www.portlandoregon.gov/bes/article/569939>
2. On the final page of this survey under the question, "How did you hear about this survey?" select "Groundwork Portland"
3. Once you've completed this survey, take a screenshot to show that you've completed it.
4. Read this recent article in the Portland Mercury
<http://www.portlandmercury.com/news/2016/03/23/17776405/hall-monitor-remember-portland-your-rivers-also-filthy>
5. Email your screenshot to rozance@pdx with a brief response to the following question: "How might the questions posed in this survey, or the way this survey is written, overlook concerns about equity?"

A short paragraph is fine. You may choose to elaborate on this survey in your first blog post--connecting your experience in taking this survey to your week 2 readings.

Figure B. Field trips and community engagement in photos



Image 1 (top left): Students meet with officials from EPA, City of Seattle, King County, Port of Seattle and Boeing to learn about proposed remediation options and technologies.



Image 2 (top right): Students visit one of the clean-up sites at Port of Seattle.



Image 3 (bottom left): Students tour South Park and Georgetown Neighborhoods in Seattle with community organizers and student activists involved in the Duwamish River Cleanup Coalition.



Image 4 (bottom right): Students interview homeless members of the Portland Harbor Community Coalition in an expert, in-class panel.



Image 5 (upper left): Students meet with community organizers at the Vietnamese Senior Center, sharing a meal and singing karaoke.



Image 6 (upper right): Students visit the Duwamish Tribe longhouse and cultural center and meet with members of the Duwamish Tribe.



Image 7 (lower left): Students tour the Portland Harbor and learn about the contamination and proposed clean-up from Port officials.

UNIT 2: Environmental Justice and Community Organizing

One goal of the course was to address differential impacts of environmental choices in order to help students deepen a commitment to a critical vision of sustainability rooted in social justice beyond the classroom. This unit included pre-class work connected to previous units, readings, blog prompt, in class discussion and activities.

Pre-class work: This class builds from previous units on categories of contaminants, associated risks, problems with EPA regulation, remediation types, public participation, and two field trips to Superfund sites that integrated key concepts from these units. Prior to the class, students completed the following readings and reflected on these readings in relation to the case study and their prior knowledge, by responding to the blog prompt.

Readings:

Bullard, R. D. (1993). *Confronting Environmental Racism: Voices from the Grassroots*. Cambridge, MA: South End Press. (Chapter 1)

Environmental Protection Agency. 2013. *Duwamish Environmental Justice Analysis for the Lower Duwamish Waterway Cleanup*.

Geiser, K., & Waneck, G. (1983). PCBs and warren county. *Science for the People*, 15(4), 13-17.

Geiser, K., & Waneck, G. (1994). *PCBs in Warren County. Unequal Protection: Environmental Justice and Communities of Color*. San Francisco: Sierra Club Books.

Gilliland, A. (2014) A Review of EPA's First Environmental Justice Analysis in Conjunction with a CERCLA Remediation Plan. Retrieved from http://www.americanbar.org/content/dam/aba/events/environment_energy_resources/2014/03/43rd-spring-conference/conference_materials_portal/12-gilliland_alexandra-paper.authcheckdam.pdf

Principles of Environmental Justice. Retrieved from: <http://ecojustice.net/DOCUMENT/Principles.htm>

Waneck, Gerald. 1983. "Special water issue: PCBs and Warren County." *Science for the People*.

Blog prompt: Explain environmental racism and environmental justice. Describe the birth of the environmental justice movement in Warren County. What were the main issues? How did the issues at hand constitute environmental racism? What environmental justice issues are there in the Duwamish and/or Portland Harbor superfund sites? Reference this week's reading on the Duwamish and what you know about Portland Harbor. In addition to these cases, describe the environmental justice implications of one additional contemporary case or situation that you are familiar with.

In-class discussions and activities: We used a PowerPoint (See Figure D) to guide discussion and small-group activities reinforcing key concepts. Though not visible in the attached images of the presentation, links to videos and webpages fill the presentation with engaging multi-media. First, we asked students to define environmental racism with examples from readings. We reviewed graphics that demonstrate how people of color are differentially impacted by environmental hazards and risks. We then discussed why this might be the case. Following discussion, we reviewed prepared points to reinforce or complement central issues. We asked a student to read a blurb from an environmental justice syllabus out loud. Based on this definitional and theoretical overview, we showed a series of short videos that demonstrate how environmental discrimination and struggles for justice have played out. This includes videos of: protests over the location of site to concentrate toxic contaminants (primarily PCBs) in Warren County in 1982 that sparked the environmental justice movement; Billy Frank Junior explaining the social movement in the 1970s sparked by Native Americans in the Pacific Northwest struggles to fish in their treaty-protected waters; contemporary struggles addressing farmworkers' exposure to pesticides, and Indian factory workers who suffered mercury poisoning. The last issue was exposed by an Indian activist who mobilized a movement using a rap song; the movement was crucial to the multinational company assuming responsibility to clean up the site. Our multimedia presentation led us to discussions of the meanings of environmental justice and community organizing in multiple contexts. An in-class activity followed this discussion. Students developed a community organizing strategy on an issue important to them, using these guidelines:

What is the problem or issue? Who is affected? Who might be your allies? Who will you work with to address the issue? What is the ideal outcome (GOAL)? Who has the power to make that goal a reality? What is your STRATEGY? What tactics will you use? Make reference to Si Kahn's Principles for Community Organizing (handed out for in-class review)

(From these principles) *"Start the process of strategy development by imagining that instant just before victory. Then, working backwards, do your best to figure out the steps that will lead to that moment."*

Student reflections: Crucially, we encouraged students to contextualize environmental racism as an ongoing, very current issue happening in their own communities, rather than a vague thing of years past or places far away. Reflecting on key course takeaways, one student wrote, "I learned that even though I had existing knowledge of events such as Love Canal- I mostly thought of those high profile cases as being in the past. With Flint and other tragedies, I have learned that we are still dealing with the dishonesty and corruption that we've always dealt with. Often exposure to contaminants or hazards affects different populations disproportionately."

Another student contextualized the course's content within a long history of environmental racism, and made fundamental connections between fights for social and environmental justice:

Environmental racism has a long history in the United States with wealthy white people in well-cared-for areas of cities and countrysides, while wastes are dumped and toxic industrial facilities sited along the homes of people of color and poor people (whom are more often people of color). ...People of color in this country have been oppressed by systematic racism in every form from

every authoritative agency and have been disempowered to fight for their own civil rights. Environmental racism is about civil rights--“It is unlikely that this nation will ever achieve lasting solutions to its environmental problems unless it also addresses the system of racial injustice that helps sustain the existence of powerless communities forced to bear disproportionate environmental costs” (Geiser and Waneck 1983). (Student blogpost)

Echoing the above blog post in a course evaluation, one student wrote, “I think that although instinctually I have connected class issues with environmental issues for a long time, this course has really provided me with some tangible connections between equity and the environment. We were able to learn about how some communities of people have been disproportionately affected by issues such as air and water qualities and how equity is still a fairly new consideration in urban planning and public outreach. I appreciate the critical thinking lens that we used to dissect many of these topics.”

Such normative lessons extended to students’ lives beyond the classroom. One student shared that part of being a student of sustainability means taking an ethical stance, and acting on it. For example, when asked what he had learned from disciplines outside his own department, he replied, “Having the courage to go and talk to or facilitate a group of strangers. The class taught me that when you have a true concern about something that it is natural to share and discuss your concern with anyone.” Helping students connect with their communities facilitates a long-term reinforcement of applied interdisciplinary learning objectives.

When asked if students imagined themselves doing anything differently in the future after having taken the class, one replied: “I will definitely be involved with the Portland Harbor Community Action Group. The class has given me a sense of belonging to my neighborhood.” Far beyond the requirements of the course, students became involved in the process of river clean-up. As her final project, one student produced a bilingual flier to be used by activist groups (See Figure C). A year after the course had ended, another student wrote a play to raise awareness. Another became a leader in a Portland Harbor Community Coalition during the course, and several remain active three years later.

Figure C. Student project: Bilingual river education flier

How did our river get this way?

1890's-1920's - City sewer, harsh industrial chemical waste, World War II related production of ships all were dumped directly into the river.

1927: Willamette water can't support aquatic life

1944: River below Oregon City completely devoid of oxygen

1965: Less than 100 wild Chinook salmon reach Willamette Falls

1993: Up to 80 percent of fish sampled in Willamette have deformities

2000: Federal government lists Willamette River as Superfund site (There's no money in the Superfund anymore)

2010: Early Actions, Uplands Cleanup begins


2016: EPA's Proposed Clean-Up Plan published on: **June 8th, 2016**

➤ **Public Comment begins (ENDS Aug 8th, 2016)**

Fall 2016- EPA's Record of Decision (ROD) to come out

2017: Clean Up to Begin


➤ Community should actively monitor during Clean Up



Source: Environmental Protection Agency (EPA)

Our River, Clean River

The Willamette River's Future
Depends on Oregon Residents



Source: City of Portland

Who contaminated our river?

The Portland Harbor was contaminated by industrial waste, sewage dumping, wood treatment plants, chemical storage, and rain water runoff for over 100 years. The EPA has found over 150 potentially responsible parties and they will all have to split the costs of cleaning up the river. **Some of them have created the Lower Willamette Group.** The list of LWG members is below:

- Arkema Inc. - Bayer CropScience, Inc. -
- BNSF Railway Company - Chevron U.S.A., Inc.
- City of Portland - EVRAZ
- Gunderson LLC - Kinder Morgan Liquids Terminals
- NW Natural - Phillips 66 Company - Port of Portland - Siltronic Corporation - TOC Holdings Co. - Union Pacific Railroad Company

DID YOU KNOW?

The bottom of the Willamette River is still FULL of harmful contaminants.

On June 8th 2016, the Environmental Protection Agency published its cleanup proposal. By law, the general public has the right to submit comments and ask questions in person, by email, or in writing to make sure the clean-up is done right.

The ONLY time you can submit your feedback to the EPA about how the clean-up will happen is June 9 - Aug 8th 2016.

LOOK inside for more info...

"Citizens must be vigilant to ensure Willamette River contaminants are removed correctly..."

-Travis Williams,
Willamette River keepers, 2015

¿Cómo se limpiara el Río?

La EPA ha propuesto una combinación de dragado de 1,8 millones de pies cúbicos (de los 33 millones afectados), tapado, y bastante recuperación natural. Sin embargo, los ciudadanos pueden ayudar a cambiar esta decisión para obtener una limpieza más eficaz.



Dragar: Eliminación de sedimentos contaminados del fondo del río y de los bancos

Ventajas: Con un equipo eficaz, los contaminantes se eliminan físicamente y el peligro de una nueva contaminación en caso de desastre natural o erosión se elimina.

Desventajas: Algunos equipos esparcen todavía más a los contaminantes, el desbordamiento de los camiones que transportan productos químicos tóxicos podría contaminar nuestras calles.



Water	
Sand (over placement allowance)	
Sand Layer (incl. Potential Wing)	
Existing Sediment	
Caping Sediment	
Max PCB Conc. 2 ppm	
Max PCB Contaminated Thickness 6 inches	

La Tapa de San Jacinto

Limpieza del Río Fox

Tapar: Cubrir los sedimentos contaminados con varias capas de material limpio (arena, piedras, cemento).

Ventajas: Un poco más rápido, necesita menos equipo, Cuesta menos, menos perjudicial para las comunidades, es posible que sostenga el ecosistema nuevo.

Desventajas: Se requiere mantenimiento de por vida, los contaminantes permanecen, la tapa puede dañarse y exponer los contaminantes, los materiales nuevos pueden alterar el hábitat.

Recuperación Natural: Dejar que la naturaleza siga su curso. Esperar a que las partículas orgánicas que llegan al río se establezcan y cubran el sedimento contaminado con el tiempo

Ventajas: Bajo costo **Desventajas:** Los contaminantes permanecen en el sedimento y afectan a los peces, plantas, vida silvestre y las personas de forma indefinida. No hay garantías de que suficientes partículas se asentarán.

¿El río sigue contaminado?

Si, aquí están sólo algunos de los contaminantes que aún viven en el río:

PCBs – Sustancias cancerígenas. Se encuentran en el aceite y están prohibidas desde los 1970's.

PAHs – Sustancias con base de petróleo. Son productos de la combustión de petróleo, madera, y carbón.

DDTs – Productos químicos utilizados en la agricultura: pesticidas, dioxinas/furanos, y también metales como el mercurio

Riesgos de Salud – alto riesgo de cáncer, enfermedades del riñón y del hígado, problemas del desarrollo (autismo, el TDAH) y problemas de audición, problemas reproductivos, y más ...

¿Quién tiene mayor riesgo?

- Población sin hogar, nuevos inmigrantes, Niños
- Mujeres embarazadas & Bebés que toman pecho
- Cualquier persona que pesca y se expone a los sedimento.



Source: Department of Fisheries, Western Australia

¿Cómo entran los contaminantes al cuerpo humano?

Por medio de la BIOACUMULACIÓN:

- (1) Desecho industrial y urbano entra al agua y se deposita en el fondo.
- (2) Los organismos que viven en el fondo lo comen, y a través de la cadena alimentaria, los contaminantes se concentran más y más en los peces.
- (3) Los seres humanos que comen estos peces reciben dosis más altas de contaminantes debido



¿Ha sucedido esto antes?

¡Sí! Podemos aprender mucho de nuestros vecinos en Seattle, WA. Visita el sitio web de la Coalición de Limpieza del Río Duwamish para aprender más: duwamishcleanup.org | 206-954-0218

Lecciones de la limpieza en el río Duwamish

- Los residentes fueron perseverantes al hablar por sí mismos
- Buscar a la comunidad y formar coaliciones crea formas ideales para **participar** y lograr reunir comentarios de personas diversas (diferentes idiomas, en comentarios de video, redes sociales, reuniones, etc.)
- **¡Lo barato sale caro!** La ciudad de Seattle tuvo que limpiar el río dos veces en algunas áreas, ya que optaron por la "oferta más barata" en cuanto a la tecnología de limpieza.

¿Qué puedes hacer TÚ?

Del 9 de junio- 8 de Agosto 2016 es la única vez que los residentes pueden hacer oír su voz. Este derecho está protegido por la ley. Usted puede asistir a una reunión, llamar, enviar correo electrónico, o escribir una carta a la EPA o PHCC. ¡Ellos deben escucharlo!

EPA: Alanna Conley, Coordinadora de Acción Social
conley.alanna@epa.gov | (503) 326-6831
<http://www.epa.gov/region10/portlandharbor>

Reuniones Públicas: Junio 24th y 29th, Julio 11th & 20th

Community Advisory Group (CAG)

Portland Harbor CAG at (971) 303-9742
portlandharborcag@gmail.com

Public Meeting: June 21st

DEQ - Marcia Danab, Coordinadora de Acción Social
(503) 229-6488

Matt McClincy, Coordinador de Control de Fuentes de Contaminación (503) 229-5538

Portland Harbor Community Coalition – (PHCC)
(503) 662-2590 | <http://ourfutureriver.org>
ourfutureriver@gmail.com

Figure D: Unit 2 PowerPoint Presentation



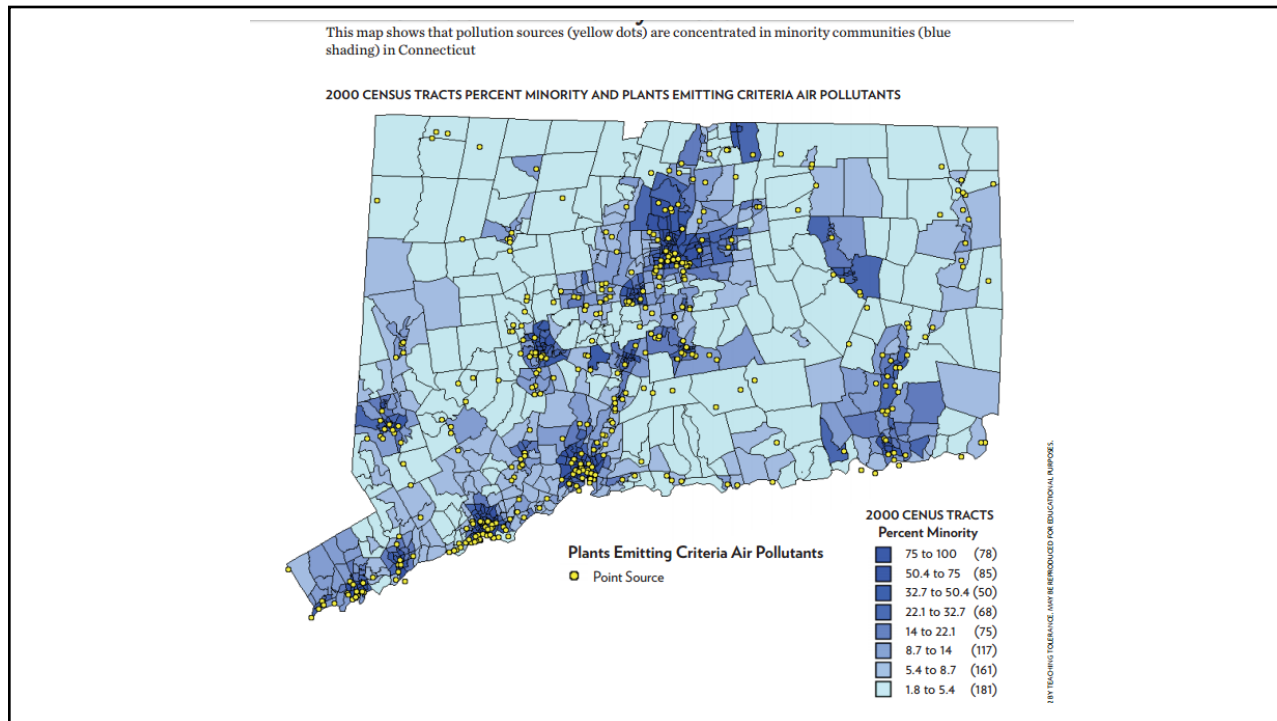
Environmental Justice and Community Organizing

1

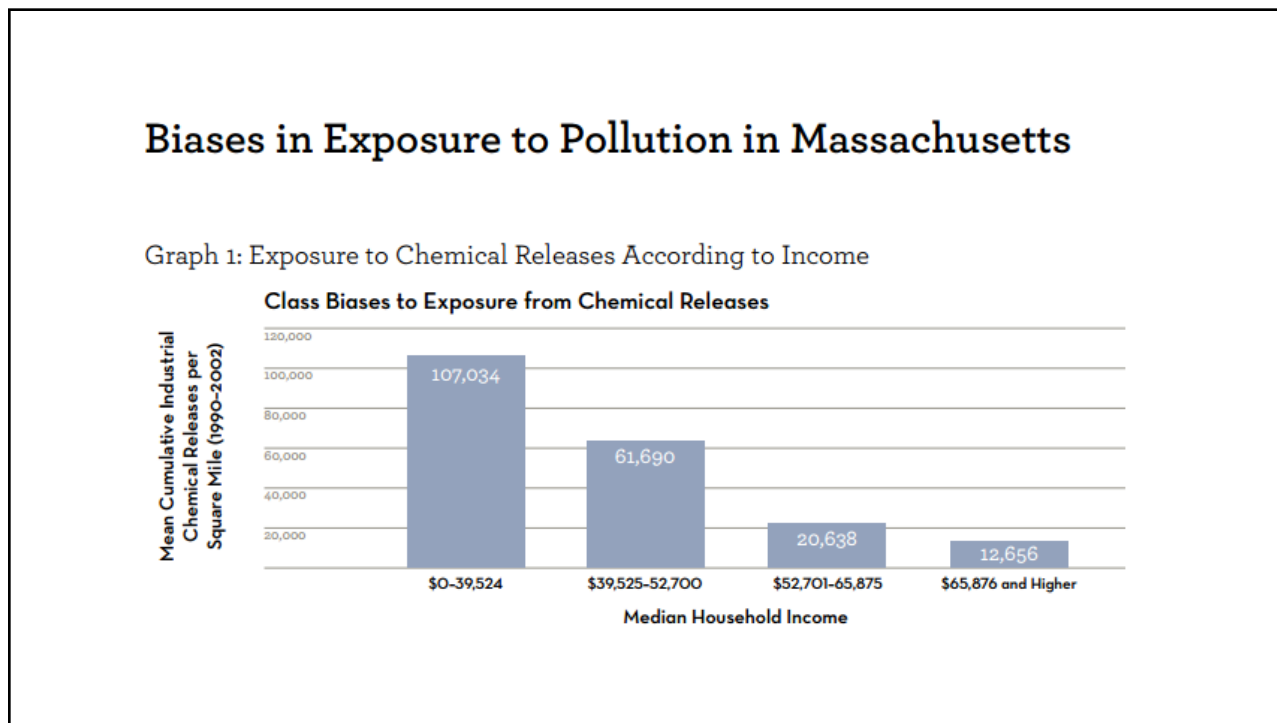
Discussion question:

What is environmental racism?

2

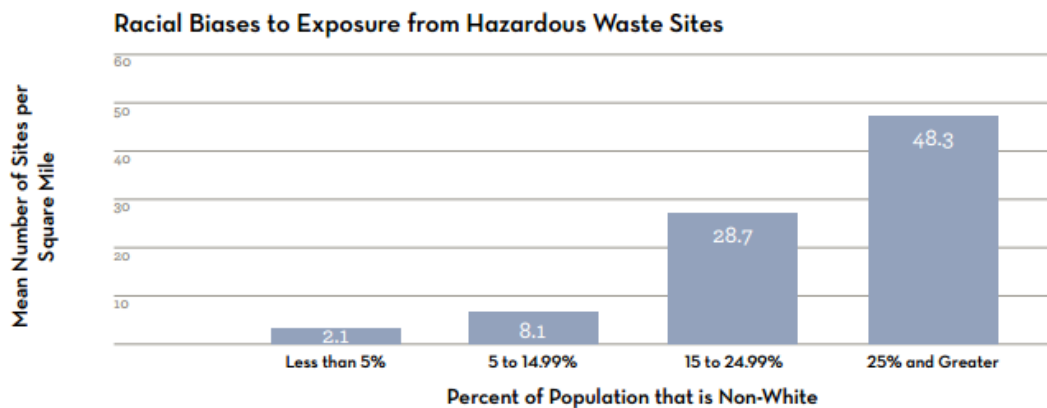


3



4

Graph 3: Exposure to Hazardous Waste Sites According to Race



5

Discussion question:

Why might people of color disproportionately experience environmental risks and hazards?

6

Key issues

- Racism
- May have less clout with the government bodies that make decisions about where to locate power plants, processing facilities and waste sites because of less economic/political power
- May be targeted because may be less politically connected, so less likely to protest or influence outcomes
- Poverty/marginalization might exacerbate risks (e.g. not being able to afford bottled water in Flint/lack of alternatives to industrial employment/inability to afford treatment)

7

Blurb from EJ syllabus

We will consider the proposition that people of color and socio-economically disadvantaged individuals, whether residing in urban or rural communities, bear a disproportionate burden of environmental pollution and its health consequences. Studies suggesting that people of color have environmental burdens imposed upon them unfairly due to over-siting of industrial plants and landfills in their communities and from exposures to pesticides and other toxic chemicals at home and on the job will be reviewed and analyzed. Consideration will be given to the viewpoint that there exists within the United States, as well as globally, a pattern of environmental inequity, injustice and racism. Furthermore, we will evaluate the contention that underlying this pattern is an historical failure on the part of interest groups, particularly the mainstream environmental movement, to provide a vision and strategy to address environmental racism and injustice.

8

Video: PCB Protests in Warren County, 1982



<https://www.youtube.com/watch?v=1iCxb0BYjgI>

9

Video: Activist speaks on Warren County Protests





<https://www.youtube.com/watch?v=8YJJ2OQ3zSs>

10

Environmental Justice in Movement – foundational concepts, history and translation

- Concepts of “environmental racism” and “environmental justice” arose from this specific struggle by a community of African-Americans resisting the siting of a hazardous waste landfill in their community.
- Integrated concepts and tactics of civil rights and environmental movements
- Soon embraced the experiences of other racial and ethnic minorities in the United States and globally and broadened its initial focus on waste site location.

11





Californians for Pesticide Reform

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Environmental Justice



- Everyone in California is not affected equally by pesticides: certain communities, especially farmworkers, bear the brunt of greater risk of and greater illness from pesticide exposure.
- Farmworkers in California - over 700,000 and mainly people of color - live and work on the front lines of a toxic barrage and experience more reported acute pesticide poisoning cases than any other segment of California's population.

12

Abstract – “Environmental Justice: Evidence from Superfund cleanup durations”

This paper investigates the extent to which cleanup **durations** at Superfund sites reflect demographic biases incongruent with the principles of Environmental Justice. **We argue that the duration of cleanup, conditional on a large number of site characteristics, should be independent of the race and income profile of the neighborhood in which the site is located.** We explore whether cleanup durations are related to neighborhood demographics.

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Video: Frank's Landing Nisqually River Nov 1965



<https://www.youtube.com/watch?v=5uFSnYQXeEc>

14

Video: Nisqually tribal member, Billy Frank Junior explains grassroots campaign for Native fishing rights



15

Music video: 'Kodaikanal Won't': Mobilizing to Demand Clean-up of Toxic Mercury Site, India



<https://www.youtube.com/watch?v=nSal-ms0vcl>

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Pollution

Unilever settles dispute over mercury poisoning in India

Company has agreed to provide an undisclosed ex-gratia payment as part of deal to end dispute over poisoning allegations at factory in Tamil Nadu

AFP

Wednesday 9 March 2016 11:57 EST

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● This article is 1 month old

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Save for later



Indian activists hold placards during a protest outside the Hindustan Unilever company's office in Mumbai, in June 2015. Photograph: Punit Paranjpe/AFP/Getty Images

The Indian arm of global consumer giant Unilever on Wednesday said it had reached a deal with hundreds of former employees to end a long-running dispute

17

Environmental Justice - honing definitions

- Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.
- EPA has this goal for all communities and persons across this Nation. It will be achieved when everyone enjoys:
 - the same degree of protection from environmental and health hazards, and
 - equal access to the decision-making process to have a healthy environment in which to live, learn, and work.

18

Community Organizing



19

In-class activity: Develop a community organizing strategy to address an issue you think is important.

- What is the problem or issue? Who is affected? Who might be your allies? Who will you work with to address the issue? What is the ideal outcome (GOAL)? Who has the power to make that goal a reality? What is your STRATEGY? What tactics will you use? Make reference to “Si Kahn’s Principles for Community Organizing.”
- *Start the process of strategy development by imagining that instant just before victory. Then, working backwards, do your best to figure out the steps that will lead to that moment.*
- Present your strategy to the class

20



Examples of community organizing

21

Video: Coalition of Immokalee Workers “A Penny more per Pound” campaign



https://www.youtube.com/watch?v=VURs-rsi_KQ

22

Video: Coalition of Immokalee Workers Targets Wendy's for Rejecting Fairer Standards for Farmworkers



<https://youtu.be/kxkjiwMvZQo>

23

Understanding “Organizing”: Coalition of Immokalee Workers Organizing Campaign

- **Problem:** Low wages, poor labor conditions and abuses of farmworkers
- **Goal:** Raise wages, improve conditions
- **Strategy:** Target end-consumers with a broad campaign: fast food-chains (Not growers)
- **Tactics:** Catchy strategic slogan “a penny more per pound”. Develop “fair food” platform across the food chain. Involve university organizations to make demands of fast food chains on their campuses. Organize boycotts. Create/circulate short videos. Stage public marches.
- **Target:** Taco Bell, Fast Food Chains

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Community Organizing in Portland

25



OPAL

ORGANIZING PEOPLE / ACTIVATING LEADERS

email address

Our Mission:
 OPAL Environmental Justice Oregon builds power for Environmental Justice and Civil Rights in our communities. We organize low-income communities and people of color to achieve a safe and healthy environment where we live, work, learn, play and pray. We strive to create opportunities for meaningful participation in decision making.

26



Apply Today for Organizers-In-Training

April 27, 2016 | 0



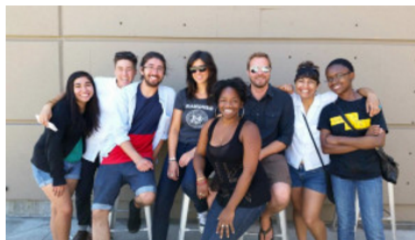
Organizers-In-Training is now accepting applications for our Summer 2016 cohort! [Click here to download the application.](#) Email completed applications and essays to OIT@opalpdx.org **before 6pm May 27, 2016.**

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This year's program will begin June 27th and close September 2nd.

We're looking for emerging activists and organizers who want to sharpen their analysis, broaden their skills, and deepen their connection to social justice. Our program helps participants learn to build movements, grow bases of support, and win campaigns. We're hoping to build a cohort of emerging young leaders from communities of color and low-income: people who often lack access to these opportunities. **OPAL is cultivating the next generation of agitators for social justice – if that's you, or someone you know, then now is the time to apply!**

OITs become connected to the movement for Environmental Justice in Portland – meeting key figures in the local fight for racial, economic, and social justice along the way. OITs have gone on to work on ballot issue and candidate campaigns, become staff organizers for causes in Portland and beyond, **and have even run for office – and won!**



To prepare OITs for real-world organizing, we apply a broad, challenging curriculum based in racial, social and environmental justice, including **training on critical race theory, social movement strategy, and narrative-based organizing.** Speakers and presenters from our region's rich

28



The Portland Harbor Community Coalition (PHCC) is a group of individual community members, community of color organizations, conservation organizations, environmental justice organizations, higher educational institutions, and Native organizations, all invested in the outcome of the Willamette River's Superfund site cleanup.

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Portland Harbor Community Coalition

Mission:

- To raise the voices and build capacity of the local community-based Environmental Justice communities, ensuring these communities are able to influence the final outcome of the Portland Harbor Superfund cleanup process. Environmental Justice (EJ) communities in this case are defined as those most disproportionately at risk of negative health impacts from Willamette River contaminants.

Goals:

- Create a more inclusive, equitable community-based clean-up process by actively engaging environmental justice communities in early and meaningful decision-making.
- Work with partners and municipal collaborators to assess, develop, and deliver equitable and engaged services advancing triple-bottom-line justice.
- Engage youth from environmental justice communities in this process
- Catalyze thoughtful discussion, analysis and implementation of environmental, economic, and social justice issues surrounding the Portland Harbor Superfund site through community events, media, and education.
- Support EJ communities to use their stories and statements to advance their priorities on equitable involvement, public health, and sustainability in the cleanup process, and to speak up if the record of decision and cleanup plan do not reflect community priorities.

30

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