Keywords: environmental justice water

Scopus

EXPORT DATE:03 Jun 2020

Syme, G.J., Nancarrow, B.E., McCreddin, J.A.

7004292938;6602507172;6504582681;

Defining the components of fairness in the allocation of water to environmental and human uses

(1999) Journal of Environmental Management, 57 (1), pp. 51-70. Cited 158 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-0032869868&doi=10.1006%2fjema.1999.0282&partnerID=40&md5=be67438d7d3c39d09c4539a6ef41df59

DOI: 10.1006/jema.1999.0282

AFFILIATIONS: Australian Res. Ctr. Water in Soc., CSIRO Land and Water, Wembley, WA 6014, Australia

ABSTRACT: In many countries, water allocation has become increasingly controversial as competition has increased. This paper summarizes a research programme of seven studies over 10 years that has developed social psychological theories of justice, equity and fairness for application to the implementation and evaluation of water allocation decisions. Much of the research has been conducted in the context of the development of government sponsored water reform in Australia. This reform has emphasized the need for integrated approaches to water management which encourage efficiency of use through markets, and environmental sustainability through the introduction of environmental (in-stream) flows. The initial study tested the adequacy of equity and procedural justice theories to provide explanations about people's evaluation of decision-making in the context of water allocation. They were found to provide insufficient scope for the evaluations. Therefore, the second and third studies developed alternative universal fairness principles and adopted the fairness heuristic as a concept for judging the justice of individual water allocation decisions. It was found that the public's universal fairness principles in contrasting allocation case studies were relatively stable over a decade, and provide criteria for judging allocation decisions. Water was consistently seen as a public good; the environment was seen to have rights to water; and procedural issues were important in allocation decision-making. The most recent four studies have shifted to the local or situational fairness contexts. These four studies examined the justice or fairness principles that were appropriate for decision-making when irrigation communities were faced with possible decreased allocations to provide for environmental sustainability. Three studies were survey based, and one was an action research project to develop fairness-based rules for community management. The conclusion from these four studies was that local procedural justice issues, particularly those pertaining to public involvement for local people in decision-making, were significant determinants of judgements of the fairness of the decisions. Economic considerations had some importance, but were not the over-riding issues, and water markets were seen as unacceptable processes for water allocation or re-allocation. The research also provided evidence that self-interest is tempered by pro-social motivations such as fairness when making water-allocation decisions. Finally, it was evident that the public could make relatively complex judgements which used dimensions that go beyond the scope of traditional social psychological definitions of equity and procedural justice.

AUTHOR KEYWORDS: Community management; Equity; Fairness; Water allocation; Water markets

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Kallis, G., Gómez-Baggethun, E., Zografos, C.

8580877300;24175588700;6507452335;

To value or not to value? That is not the question

(2013) Ecological Economics, 94, pp. 97-105. Cited 130 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84882757363&doi=10.1016%2fj.ecolecon.2013.07.002&partnerID=40&md5=437c39ba00c0fff7bbe6c23eb11aef40

DOI: 10.1016/j.ecolecon.2013.07.002

AFFILIATIONS: ICREA and ICTA (Institute of Environmental Science and Technology), Universitat Autònoma de Barcelona, Spain;

ICTA, Universitat Autònoma de Barcelona, Spain

ABSTRACT: Should we reject money when we value nature? Like most environmentalists, ecological economists are increasingly divided on this question. Synthesizing political ecology with ecological economics, we argue that this way of framing the question is limited. We propose a reformulation of the question into "when and how to value with money?" and "under what conditions?" We recommend four criteria for a sound choice: environmental improvement; distributive justice and equality; maintenance of plural value-articulating institutions; and, confronting commodification under neo-liberalism. We call for due attention to the socio-political context within which a valuation is placed and the political goals it serves. The relevance of this framework is demonstrated by applying it to three practical cases: pollution damages, water pricing and payments for ecosystem services. © 2013 Elsevier B.V.

AUTHOR KEYWORDS: Commodification; Market-based instruments; Monetary valuation; Political ecology; Power

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Balazs, C.L., Morello-Frosch, R.

49661104600;6602511010;

The three Rs: How community-based participatory research strengthens the rigor, relevance, and reach of science

(2013) Environmental Justice, 6 (1), pp. 9-16. Cited 94 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84874370078&doi=10.1089%2fenv.2012.0017&partnerID=40&md5=343f927dddd2a01fad292a0bac900487

DOI: 10.1089/env.2012.0017

AFFILIATIONS: Environmental Science, Policy and Management, University of California, Berkeley, 130 Mulford Hall #3114, Berkeley, CA 94720, United States

ABSTRACT: In the last few decades, community-based participatory research (CBPR) has emerged as an important approach that links environmental health and justice advocates with research institutions to understand and address environmental health problems. CBPR has generally been evaluated for its impact on policy, regulation, and its support of community science. However, there has been less emphasis on assessing the ways in which CBPR (re)shapes and potentially improves the scientific enterprise itself. This commentary focuses on this under-emphasized aspect of CBPR - how it can strengthen science. Using two case studies of environmental health CBPR research - the Northern California Household Exposure Study, and the San Joaquin Valley Drinking Water Study - we posit that CBPR helps improve the "3 Rs" of science - rigor, relevance and reach - and in so doing benefits the scientific enterprise itself. © Copyright 2013, Mary Ann Liebert, Inc. 2013.

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Malcoe, L.H., Lynch, R.A., Kegler, M.C., Skaggs, V.J.

6603814226;7201633274;7004141062;6508252585;

Lead sources, behaviors, and socioeconomic factors in relation to blood lead of Native American and White Children: A community-based assessment of a former mining area

(2002) Environmental Health Perspectives, 110 (SUPPL. 2), pp. 221-231. Cited 84 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-0036224771&partnerID=40&md5=99a7365fadd56dd9488bd9fe9c69358b

AFFILIATIONS: Masters in Public Health Program, Univ. of New Mexico School of Med., Dept. of Family/Community Medicine, 2400 Tucker NE, Albuquerque, NM 87131, United States

ABSTRACT: Lead poisoning prevention requires knowledge of lead sources and of appropriate residential lead standards. Data are severely lacking on lead sources for Native American children, many of whom live in rural areas. Further, the relation of mining waste to blood lead concentrations (BPbs) of rural children is controversial. In collaboration with the eight tribes of northeastern Oklahoma, we assessed lead sources and their effects on BPbs for rural Native American and White children living in a former mining region. Venous blood lead, residential environmental (soil, dust, paint, water), and caregiver interview (e.g., hand-to-mouth behaviors, socioeconomic conditions) data were obtained from a representative sample of 245 children 1-6 years of age. BPbs ranged from 1 to 24 μg/dL. There were no ethnic differences in BPbs (p = 0.48) nor any patterns of excess lead sources for Native American or White children. Multiple linear regression analyses indicated that mean soil lead, mean floor lead loading, mouthing behaviors, caregivers' education, and residence in former mining towns were all strongly associated with BPbs. Logistic regression results showed mean floor dust lead loading &gt; 10.1 μg/ft2 (odds ratio [OR], 11.4; 95% confidence interval [CI], 3.5-37.3), and yard soil lead &gt; 165.3 mg/kg (OR, 4.1; CI, 1.3-12.4) were independently associated with BPbs ≥10 μg/dL. We also found strong interactions between soil lead and poverty (p = 0.005), and dust and soil sources (p = 0.02). Our findings indicate that soil and dust lead derived largely from mining waste pose a health hazard to Native American and White children, and that current residential dust lead standards are insufficient to adequately protect children. Moreover, our finding that poor children are especially vulnerable to lead exposures suggests that residential standards should consider interactions among socioeconomic conditions and lead sources if environmental justice is to be achieved.

AUTHOR KEYWORDS: Adverse effects-dust; Adverse effects-soil; Blood lead; Child; Child behavior; Community health planning; Environmental exposure; Environmental monitoring standards; Epidemiology; Lead poisoning; Mining; North American Indians; Rural health; Socioeconomic factors

DOCUMENT TYPE: Review

PUBLICATION STAGE: Final

SOURCE: Scopus

Sexton, K.

35596303500;

Cumulative risk assessment: An overview of methodological approaches for evaluating combined health effects from exposure to multiple environmental stressors

(2012) International Journal of Environmental Research and Public Health, 9 (2), pp. 370-390. Cited 65 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84857727325&doi=10.3390%2fijerph9020370&partnerID=40&md5=0cdb38e0e0d7a6dc992ede3b7e1417dc

DOI: 10.3390/ijerph9020370

AFFILIATIONS: Department of Epidemiology, Human Genetics, and Environmental Sciences, University of Texas, School of Public Health, Brownsville Regional Campus, 80 Fort Brown, Brownsville, TX 78520, United States

ABSTRACT: Systematic evaluation of cumulative health risks from the combined effects of multiple environmental stressors is becoming a vital component of risk-based decisions aimed at protecting human populations and communities. This article briefly examines the historical development of cumulative risk assessment as an analytical tool, and discusses current approaches for evaluating cumulative health effects from exposure to both chemical mixtures and combinations of chemical and nonchemical stressors. A comparison of stressor-based and effects-based assessment methods is presented, and the potential value of focusing on viable risk management options to limit the scope of cumulative evaluations is discussed. The ultimate goal of cumulative risk assessment is to provide answers to decision-relevant questions based on organized scientific analysis; even if the answers, at least for the time being, are inexact and uncertain. © 2012 by the authors; licensee MDPI, Basel, Switzerland.

AUTHOR KEYWORDS: Chemical mixtures; Combined health effects; Cumulative risk assessment; Environmental justice; Nonchemical stressors; Risk analysis

DOCUMENT TYPE: Review

PUBLICATION STAGE: Final

ACCESS TYPE: Open Access

SOURCE: Scopus

Butler, C., Adamowski, J.

56519153800;23569157800;

Empowering marginalized communities in water resources management: Addressing inequitable practices in Participatory Model Building

(2015) Journal of Environmental Management, 153, pp. 153-162. Cited 64 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84925514047&doi=10.1016%2fj.jenvman.2015.02.010&partnerID=40&md5=c00b22c3cc4e00cbcaf67aba38040912

DOI: 10.1016/j.jenvman.2015.02.010

AFFILIATIONS: Department of Bioresource Engineering, McGill University, 21111 Lakeshore Drive, Sainte-Anne-de-Bellevue, H9X 3V9, Canada

ABSTRACT: Within the field of water resource management, Group Model Building (GMB) is a growing method used to engage stakeholders in the development of models that describe environmental and socioeconomic systems to create and test policy alternatives. While there is significant focus on improving stakeholder engagement, there is a lack of studies specifically looking at the experiences of marginalized communities and the barriers that prevent their fuller participation in the decision-making process. This paper explores the common issues and presents recommended improved practices, based on anti-oppression, related to the stages of problem framing, stakeholder identification and selection, workshop preparation, and workshop facilitation. For problem defining and stakeholder selection, the major recommendations are to engage diverse stakeholder communities from the earliest stages and give them control over framing the project scope. With regards to planning the model building workshops, it is recommended that the facilitation team work closely with marginalized stakeholders to highlight and address barriers that would prevent their inclusion. With the actual facilitation of the workshops, it is best to employ activities that allow stakeholders to provide knowledge and input in mediums that are most comfortable to them; additionally, the facilitation team needs to be able to challenge problematic interpersonal interactions as they manifest within conversations. This article focuses on building comfortability with political language so that the systemic oppression in which existing participatory processes occur can be understood, thus allowing GMB practitioners to engage in social justice efforts. © 2015 Elsevier Ltd.

AUTHOR KEYWORDS: Anti-oppression; Group model building; Marginalized communities; Participatory processes; Stakeholder engagement; Water resource management

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Balazs, C., Morello-Frosch, R., Hubbard, A., Ray, I.

49661104600;6602511010;35551340400;7004434672;

Social disparities in nitrate-contaminated drinking water in California's San Joaquin Valley

(2011) Environmental Health Perspectives, 119 (9), pp. 1272-1278. Cited 49 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-80052311788&doi=10.1289%2fehp.1002878&partnerID=40&md5=69ce59afd546b6ad408ac2f847c6193c

DOI: 10.1289/ehp.1002878

AFFILIATIONS: Energy and Resources Group, University of California, 310 Barrows Hall, Berkeley, CA 94720-3050, United States;

School of Public Health, University of California, Berkeley, CA, United States;

Environmental Science Policy and Management, University of California, Berkeley, CA, United States

ABSTRACT: Background: Research on drinking water in the United States has rarely examined disproportionate exposures to contaminants faced by low-income and minority communities. This study analyzes the relationship between nitrate concentrations in community water systems (CWSs) and the racial/ethnic and socioeconomic characteristics of customers. Objectives: We hypothesized that CWSs in California's San Joaquin Valley that serve a higher proportion of minority or residents of lower socioeconomic status have higher nitrate levels and that these disparities are greater among smaller drinking water systems. Methods: We used water quality monitoring data sets (1999-2001) to estimate nitrate levels in CWSs, and source location and census block group data to estimate customer demographics. Our linear regression model included 327 CWSs and reported robust standard errors clustered at the CWS level. Our adjusted model controlled for demographics and water system characteristics and stratified by CWS size. Results: Percent Latino was associated with a 0.04-mg nitrate-ion (NO 3)/L increase in a CWS's estimated NO 3 concentration [95% confidence interval (CI), -0.08 to 0.16], and rate of home ownership was associated with a 0.16-mg NO 3/L decrease (95% CI, -0.32 to 0.002). Among smaller systems, the percentage of Latinos and of homeownership was associated with an estimated increase of 0.44 mg NO 3/L (95% CI, 0.03-0.84) and a decrease of 0.15 mg NO 3/L (95% CI, -0.64 to 0.33), respectively. Conclusions: Our findings suggest that in smaller water systems, CWSs serving larger percentages of Latinos and renters receive drinking water with higher nitrate levels. This suggests an environmental inequity in drinking water quality.

AUTHOR KEYWORDS: California; Drinking water; Environmental justice; Nitrate; Public health; Safe drinking water act; Social disparities; Water systems

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

ACCESS TYPE: Open Access

SOURCE: Scopus

Wilson, S.M., Heaney, C.D., Cooper, J., Wilson, O.

35616936300;7004288568;55471776000;36160049800;

Built Environment Issues in Unserved and Underserved African-American Neighborhoods in North Carolina

(2008) Environmental Justice, 1 (2), pp. 63-72. Cited 41 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-85005971429&doi=10.1089%2fenv.2008.0509&partnerID=40&md5=743d302246305f46cb85e93e27dbbe93

DOI: 10.1089/env.2008.0509

AFFILIATIONS: Institute for Families, University of South Carolina, Columbia, SC, United States;

Department of Epidemiology, University of North Carolina, Chapel Hill, NC., United States;

MDC, Inc., Chapel Hill, NC., United States;

West End Revitalization Association, Member of the National Environmental Justice Advisory Council (NEJAC), US Environmental Protection Agency, United States

ABSTRACT: Urban planning has focused on built environment issues in cities such as urban sprawl, availability of green space, and infrastructure for physical activity. However, in small southern towns, there are built environment issues which currently either are understudied or completely neglected by researchers. In this article, we describe the built environment issues that burden unserved and underserved communities of color in North Carolina. We use a case study of Mebane, NC to describe how neighborhoods of color in this small town have been impacted by environmental injustice through the denial of basic amenities, particularly sewer and water services, and overburdened by unhealthy land uses through inequities in the use of extraterritorial jurisdiction and annexation statutes. These planning inequities create public health risks for residents and nearby populations. © 2008, Mary Ann Liebert, Inc. All rights reserved.

AUTHOR KEYWORDS: annexation; basic amenities; built environment; communities of color; disparities; environmental justice; extraterritorial jurisdiction; infrastructure; land use planning; segregation

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Lowman, A., McDonald, M.A., Wing, S., Muhammad, N.

8624775000;7403019833;7103353536;24492314500;

Land application of treated sewage sludge: Community health and environmental justice

(2013) Environmental Health Perspectives, 121 (5), pp. 537-542. Cited 36 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84877060862&doi=10.1289%2fehp.1205470&partnerID=40&md5=1c8a3da1f3d5d3f187d31f10186d04ab

DOI: 10.1289/ehp.1205470

AFFILIATIONS: Department of Epidemiology, University of North Carolina, Chapel Hill, Chapel Hill, NC, United States;

Department of Community and Family Medicine, Duke University, Durham, NC, United States;

Concerned Citizens of Tillery, Tillery, NC, United States

ABSTRACT: Background: in the united states, most of the treated sewage sludge (biosolids) is applied to farmland as a soil amendment. critics suggest that rules regulating sewage sludge treatment and land application may be insufficient to protect public health and the environment. neighbors of land application sites report illness following land application events. objectives: we used qualitative research methods to evaluate health and quality of life near land application sites. methods: we conducted in-depth interviews with neighbors of land application sites and used qualitative analytic software and team-based methods to analyze interview transcripts and identify themes. results: thirty-four people in north carolina, south carolina, and virginia responded to interviews. key themes were health impacts, environmental impacts, and environmental justice. over half of the respondents attributed physical symptoms to application events. most noted offensive sludge odors that interfere with daily activities and opportunities to socialize with family and friends. several questioned the fairness of disposing of urban waste in rural neighborhoods. although a few respondents were satisfied with the responsiveness of public officials regarding sludge, many reported a lack of public notification about land application in their neighborhoods, as well as difficulty reporting concerns to public officials and influencing decisions about how the practice is conducted where they live. conclusions: community members are key witnesses of land application events and their potential impacts on health, quality of life, and the environment. meaningful involvement of community members in decision making about land application of sewage sludge will strengthen environmental health protections.

AUTHOR KEYWORDS: Biosolids; Environmental health; Environmental justice; Land application; Qualitative research; Sewage sludge

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

ACCESS TYPE: Open Access

SOURCE: Scopus

Williams, B.L., Florez, Y.

7404503075;6507270718;

Do Mexican Americans perceive environmental issues differently than Caucasians: A study of cross-ethnic variation in percepitons related to water in Tucson

(2002) Environmental Health Perspectives, 110 (SUPPL. 2), pp. 303-310. Cited 33 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-0036231881&partnerID=40&md5=0a80a3bca4652d5f07c952dc30ffa020

AFFILIATIONS: University of Arizona, College of Public Health, PO Box 245163, Tucson, AZ 85724, United States

ABSTRACT: Little is known about the environmental perceptions of our nation's Mexican and Mexican American population, especially in the area of water quality. We examined these perceptions to determine the extent to which Caucasians and Mexican Americans living in the Tucson, Arizona, metropolitan area differ in their perceptions of water quality-related risk, inequity, trust, and participation in civic activities. Ethnic variations in perceptions toward inequity, trust, and public participation were observed even when socioeconomic variation between Caucasians and Mexican Americans was controlled. However, significant ethnic variations in perceptions of water quality-related risks were observed only when socioeconomic variation was not controlled. Implications of these findings to environmental justice efforts in Mexican American communities are discussed.

AUTHOR KEYWORDS: Environmental equity; Environmental justice; Hispanic; Mexican American; Public participation; Risk perception; Water

DOCUMENT TYPE: Review

PUBLICATION STAGE: Final

SOURCE: Scopus

Butler, L.J., Scammell, M.K., Benson, E.B.

57191071221;8073446700;55979378800;

The Flint, Michigan, Water Crisis: A Case Study in Regulatory Failure and Environmental Injustice

(2016) Environmental Justice, 9 (4), pp. 93-97. Cited 28 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84986322667&doi=10.1089%2fenv.2016.0014&partnerID=40&md5=0db3fc6b9745dbc159aa5a1244fd07d7

DOI: 10.1089/env.2016.0014

AFFILIATIONS: Department of Environmental Health, Boston University School of Public Health, Medical Campus, 715 Albany Street, Talbot 4W, Boston, MA 02118, United States

ABSTRACT: The Flint water crisis highlights numerous regulatory failures related to federal drinking water regulation, interpretation, and enforcement. The events that unfolded in Michigan, from the initial utilization of a corrosive water source to provide Flint's drinking water to the inadequate response of numerous regulators, demonstrate how the Safe Drinking Water Act (SDWA) can be wrongly interpreted, implemented, and weakly enforced, leading to dangerous exposure to unsafe drinking water. Our objective is to discuss these regulatory failures in Michigan in 2014-2015 in the context of other reported incidents of U.S. cities with high levels of lead in drinking water. Like the people of Flint, many of the affected residents are living in economically depressed areas with high rates of racial minorities. The recurring trend of unsafe drinking water in communities with this demographic profile qualifies this as an issue of environmental injustice. © Copyright 2016, Mary Ann Liebert, Inc. 2016.

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Hoover, E., Renauld, M., Edelstein, M.R., Brown, P.

51963711800;56940579100;55921004000;56745285900;

Social science collaboration with environmental health

(2015) Environmental Health Perspectives, 123 (11), pp. 1100-1106. Cited 27 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84946058858&doi=10.1289%2fehp.1409283&partnerID=40&md5=33260e43ea56d1971cfc7806e8b06cfc

DOI: 10.1289/ehp.1409283

AFFILIATIONS: American Studies and Ethnic Studies, Brown University, Providence, RI, United States;

Department of Sociology and Anthropology, Northeastern University, Boston, MA, United States;

School of Social Sciences and Human Services, Ramapo College of New Jersey, Mahwah, NJ, United States

ABSTRACT: Background: Social science research has been central in documenting and analyzing community discovery of environmental exposure and consequential processes. Collaboration with environmental health science through team projects has advanced and improved our understanding of environmental health and justice. Objective: We sought to identify diverse methods and topics in which social scientists have expanded environmental health understandings at multiple levels, to examine how transdisciplinary environmental health research fosters better science, and to learn how these partnerships have been able to flourish because of the support from National Institute of Environmental Health Sciences (NIEHS). Methods: We analyzed various types of social science research to investigate how social science contributes to environmental health. We also examined NIEHS programs that foster social science. In addition, we developed a case study of a community-based participation research project in Akwesasne in order to demonstrate how social science has enhanced environmental health science. Results: Social science has informed environmental health science through ethnographic studies of contaminated communities, analysis of spatial distribution of environmental injustice, psychological experience of contamination, social construction of risk and risk perception, and social impacts of disasters. Social science-environmental health team science has altered the way scientists traditionally explore exposure by pressing for cumulative exposure approaches and providing research data for policy applications. conclusions: A transdisciplinary approach for environmental health practice has emerged that engages the social sciences to paint a full picture of the consequences of contamination so that policy makers, regulators, public health officials, and other stakeholders can better ameliorate impacts and prevent future exposure. © 2015, Public Health Services, US Dept of Health and Human Services. All rights reserved.

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Larson, K.L., Wiek, A., Withycombe Keeler, L.

7102155246;8583970000;55554038200;

A comprehensive sustainability appraisal of water governance in Phoenix, AZ

(2013) Journal of Environmental Management, 116, pp. 58-71. Cited 27 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84872230754&doi=10.1016%2fj.jenvman.2012.11.016&partnerID=40&md5=0eaa4bd4a46e597a19598a4bc512f7d5

DOI: 10.1016/j.jenvman.2012.11.016

AFFILIATIONS: School of Sustainability, Arizona State University, Mail Code 5502, Tempe AZ 85287-5502, United States;

School of Geographical Sciences and Urban Planning, Arizona State University, Mail Code 5302, Tempe, AZ 85287-5302, United States

ABSTRACT: In Phoenix, Arizona and other metropolitan areas, water governance challenges include variable climate conditions, growing demands, and continued groundwater overdraft. Based on an actor-oriented examination of who does what with water and why, along with how people interact with hydro-ecological systems and man-made infrastructure, we present a sustainability appraisal of water governance for the Phoenix region. Broadly applicable to other areas, our systems approach to sustainable water governance overcomes prevailing limitations to research and management by: employing a comprehensive and integrative perspective on water systems; highlighting the activities, intentions, and rules that govern various actors, along with the values and goals driving decisions; and, establishing a holistic set of principles for social-ecological system integrity and interconnectivity, resource efficiency and maintenance, livelihood sufficiency and opportunity, civility and democratic governance, intra- and inter-generational equity, and finally, precaution and adaptive capacity. This study also contributes to reforming and innovating governance regimes by illuminating how these principles are being met, or not, in the study area. What is most needed in metropolitan Phoenix is enhanced attention to ecosystem functions and resource maintenance as well as social equity and public engagement in water governance. Overall, key recommendations entail: addressing interconnections across hydrologic units and sub-systems (e.g., land and water), increasing decentralized initiatives for multiple purposes (e.g., ecological and societal benefits of green infrastructure), incorporating justice goals into decisions (e.g., fair allocations and involvement), and building capacity through collaborations and social learning with diverse interests (e.g., scientists, policymakers, and the broader public). © 2012 Elsevier Ltd.

AUTHOR KEYWORDS: Phoenix, AZ; Sustainability assessment; Urban systems; Water governance

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Schulz, C., Martin-Ortega, J., Glenk, K., Ioris, A.A.R.

57208528671;26648830100;16244931900;57202354100;

The Value Base of Water Governance: A Multi-Disciplinary Perspective

(2017) Ecological Economics, 131, pp. 241-249. Cited 25 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84987898828&doi=10.1016%2fj.ecolecon.2016.09.009&partnerID=40&md5=feff21e7207206f17c49eb5964b6b6ce

DOI: 10.1016/j.ecolecon.2016.09.009

AFFILIATIONS: School of GeoSciences, The University of Edinburgh, Drummond Street, Edinburgh, EH8 9XP, United Kingdom;

Social, Economic and Geographical Sciences Group, The James Hutton Institute, Craigiebuckler, Aberdeen, AB15 8QH, United Kingdom;

Land Economy, Environment and Society Group, Scotland's Rural College (SRUC), Peter Wilson Building, Nicholas Kemmer Road, Edinburgh, EH9 3FH, United Kingdom;

Sustainability Research Institute, School of Earth and Environment, The University of Leeds, Leeds, LS2 9JT, United Kingdom

ABSTRACT: Some scholars promote water governance as a normative concept to improve water resources management globally, while others conceive of it as an analytical term to describe the processes, systems and institutions around the management of water resources and water supply. Critics often highlight how specific water governance scenarios fail to deliver socially desirable outcomes, such as social justice or environmental sustainability. While water governance is often perceived as a technical matter, its conceptual and practical components are in fact based on multiple values that, nonetheless, often remain implicit. The present paper seeks to uncover this value base and discusses existing research on values from multiple perspectives, using material from economics, philosophy, psychology, and other social sciences. In different disciplines, values can be understood as fundamental guiding principles, governance-related values or as values assigned to water resources. Together, they shape complex relationships with water governance, which from an analytical perspective is understood as a combination of policy, politics, and polity. Introducing a new conceptual framework, this study seeks to provide a theoretical foundation for empirical research on water governance processes and conflicts. © 2016 Elsevier B.V.

AUTHOR KEYWORDS: Environmental values; Values; Water governance; Water values

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Campbell, C., Greenberg, R., Mankikar, D., Ross, R.D.

57201573583;57191358191;57191365266;57191361968;

A case study of environmental injustice: The failure in flint

(2016) International Journal of Environmental Research and Public Health, 13 (10), art. no. 951, . Cited 24 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84989181059&doi=10.3390%2fijerph13100951&partnerID=40&md5=254d9ead0a19c7267d8b4f2bb397145e

DOI: 10.3390/ijerph13100951

AFFILIATIONS: Department of Public Health Sciences, College of Health Sciences, University of Texas at El Paso, Room 408, 500W. University Ave, El Paso, TX 79968, United States;

National Nurse-led Care Consortium (NNCC), Philadelphia, PA 19102, United States;

Research and Evaluation Group, Public Health Management Corporation, Philadelphia, PA 19102, United States;

Las Cruces, NM 88001, United States

ABSTRACT: The failure by the city of Flint, Michigan to properly treat its municipal water system after a change in the source of water, has resulted in elevated lead levels in the city’s water and an increase in city children’s blood lead levels. Lead exposure in young children can lead to decrements in intelligence, development, behavior, attention and other neurological functions. This lack of ability to provide safe drinking water represents a failure to protect the public’s health at various governmental levels. This article describes how the tragedy happened, how low-income and minority populations are at particularly high risk for lead exposure and environmental injustice, and ways that we can move forward to prevent childhood lead exposure and lead poisoning, as well as prevent future Flint-like exposure events from occurring. Control of the manufacture and use of toxic chemicals to prevent adverse exposure to these substances is also discussed. Environmental injustice occurred throughout the Flint water contamination incident and there are lessons we can all learn from this debacle to move forward in promoting environmental justice. © 2016 by the authors; licensee MDPI, Basel, Switzerland.

AUTHOR KEYWORDS: Environmental justice; Flint water crisis; Lead poisoning; Water contamination

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

ACCESS TYPE: Open Access

SOURCE: Scopus

Cory, D.C., Rahman, T.

7007071269;55538084100;

Environmental justice and enforcement of the safe drinking water act: The Arizona arsenic experience

(2009) Ecological Economics, 68 (6), pp. 1825-1837. Cited 23 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-62349130995&doi=10.1016%2fj.ecolecon.2008.12.010&partnerID=40&md5=ee5f1a511ad32bb0034c8b7e830b8e05

DOI: 10.1016/j.ecolecon.2008.12.010

AFFILIATIONS: University of Arizona, United States

ABSTRACT: Environmental justice is concerned with 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. A wide variety of empirical studies have concluded that disparate-impact discrimination does in fact exist since minority and low-income communities are at disproportionate risk for environmental harm. In this paper we examine these issues in the context of enforcing the safe drinking water act (SDWA). Specifically, we focus on the association between race, income, and hazardous levels of arsenic concentration and analyze the broad equity implications of implementing the new arsenic regulation by examining the relationship between community-level exposure to arsenic and socioeconomic and demographic characteristics of the population in Arizona. The results provide no support for the contention that continued selective implementation and enforcement of the revised SDWA arsenic standard is likely to disadvantage minority or low-income groups disproportionately in Arizona. © 2008 Elsevier B.V. All rights reserved.

AUTHOR KEYWORDS: Arsenic standard; Environmental justice; Safe drinking water act

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Sadler, R.C., Highsmith, A.R.

35189632400;57204338691;

Rethinking Tiebout: The Contribution of Political Fragmentation and Racial/Economic Segregation to the Flint Water Crisis

(2016) Environmental Justice, 9 (5), pp. 143-151. Cited 19 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84992381798&doi=10.1089%2fenv.2016.0015&partnerID=40&md5=6c10a0bcd034e8d6e90be400b0b3181f

DOI: 10.1089/env.2016.0015

AFFILIATIONS: Division of Public Health, Michigan State University, 200 East 1st Street, Flint, MI 48502, United States;

Department of History, University of California, Irvine, Irvine, CA, United States

ABSTRACT: The water crisis that has embroiled Flint, Michigan, since 2014 is often explained via the proximate causes of government oversight and punitive emergency management. While these were critical elements in the decision to switch the city's water source, many other forces helped precipitate the crisis. One such force has been an enduring support for Charles Tiebout's model of interlocal competition, through which a region is presumed stronger when fragmented, independent municipalities compete for residents and investment. However, the Tiebout model fails to account for spillover effects, particularly regarding questions of social and regional equity. In this sense, the fragmentation of the Flint metropolitan region - supported through a variety of housing and land use policies over many decades - created the conditions through which suburbs were absolved of responsibility for Flint's decades-long economic crisis. Because of the Tiebout model's inability to address imbalances in population shifts arising from disparities in municipal services, Flint's more affluent suburbs continued to prosper, while Flint grew poorer and experienced infrastructure decline. Underlying this pattern of inequality has been a long history of racial segregation and massive deindustrialization, which concentrated the region's black population in the economically depressed central city. The Flint Water Crisis is thus a classic example of an environmental injustice, as policies were set in motion, which led to the creation of a politically separate and majority-black municipality with concentrated poverty, while nearby municipalities - most of them overwhelmingly white - accepted little responsibility for the legacy costs created by the region's starkly uneven patterns of metropolitan development. © 2016, Mary Ann Liebert, Inc.

AUTHOR KEYWORDS: land use; lead poisoning; public health; social justice; Tiebout Model; urban planning

DOCUMENT TYPE: Review

PUBLICATION STAGE: Final

SOURCE: Scopus

Mitra, A.K., Rodriguez-Fernandez, G.

7402543246;56811293500;

Latin America and the Caribbean: Assessment of the advances in public health for the achievement of the millennium development goals

(2010) International Journal of Environmental Research and Public Health, 7 (5), pp. 2238-2255. Cited 18 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-77954769384&doi=10.3390%2fijerph7052238&partnerID=40&md5=a644c256d2f779f1ee6db5f711391db7

DOI: 10.3390/ijerph7052238

AFFILIATIONS: Department of Community Health Sciences, The University of Southern Mississippi, Hattiesburg, MS 39406, United States

ABSTRACT: To improve health and economy of the world population, the United Nations has set up eight international goals, known as Millennium Development Goals (MDGs), that 192 United Nations member states and at least 23 international organizations have agreed to achieve by the year 2015. The goals include: (1) eradicating extreme poverty and hunger; (2) achieving universal primary education; (3) promoting gender equality; (4) reducing child mortality; (5) improving maternal health; (6) combating HIV/AIDS, malaria and other diseases; (7) ensuring environmental sustainability; and (8) developing a global partnership for development. Having been in the midway from the 2015 deadline, the UN Secretary-General urges countries to engage constructively to review progress towards the MDGs. This paper aims to evaluate advances in public health, with special reference to gender inequalities in health, health sector reform, global burden of disease, neglected tropical diseases, vaccination, antibiotic use, sanitation and safe water, nutrition, tobacco and alcohol use, indicators of health, and disease prevention in Latin America and the Caribbean region (LAC). The paper also identifies areas of deficits for the achievement of MDGs in LAC. © 2010 by the authors.

AUTHOR KEYWORDS: Global burden of disease; Inequality; Latin America and Caribbean; Millennium Development Goal; Public health

DOCUMENT TYPE: Review

PUBLICATION STAGE: Final

ACCESS TYPE: Open Access

SOURCE: Scopus

Katner, A., Pieper, K.J., Lambrinidou, Y., Brown, K., Hu, C.-Y., Mielke, H.W., Edwards, M.A.

6506556903;56825362600;36128476300;57191069462;23005064100;7005456415;7402850883;

Weaknesses in Federal Drinking Water Regulations and Public Health Policies that Impede Lead Poisoning Prevention and Environmental Justice

(2016) Environmental Justice, 9 (4), pp. 109-117. Cited 17 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84986322548&doi=10.1089%2fenv.2016.0012&partnerID=40&md5=a09f567a5f0c194772bf4e2ba12a0963

DOI: 10.1089/env.2016.0012

AFFILIATIONS: Environmental and Occupational Health Sciences Program, School of Public Health, Louisiana State University Health Sciences Center (LSUHSC), 2020 Gravier Street, New Orleans, 70112, United States;

Department of Civil and Environmental Engineering, Virginia Tech, Blacksburg, VA, United States;

Nontoxic Alternatives, Washington, DC, United States;

Department of Pharmacology, Tulane University School of Medicine, New Orleans, United States

ABSTRACT: The failure of the regulatory community to protect the residents of Flint, Michigan, from prolonged exposure to hazardous levels of lead in their drinking water has drawn public attention to long-acknowledged weaknesses in the implementation and oversight of the U.S. Environmental Protection Agency's (EPA's) Lead and Copper Rule (LCR). This rule defines the roles and responsibilities of water utilities in reducing consumer exposures to lead-in-water hazards. Despite this regulation, water-related lead poisoning cases have been documented in cities determined to be in regulatory compliance. This article presents preliminary results from an ongoing study that documents gaps and weaknesses in the rule and its implementation, oversight, and enforcement. We detail how the original intent of the LCR to protect public health has been undermined by inadequate lead-in-water monitoring and public education, as well as weak regulatory oversight and enforcement. We summarize how these issues contributed to the Flint debacle and are still being perpetuated today in other municipalities. Finally, we discuss how these factors may be thwarting the prevention of childhood lead poisoning in the United States, and contributing to disproportionate environmental burdens on low-income communities. This review is timely, in that it may prompt public involvement in the U.S. EPA's ongoing review and revision of the LCR. © Copyright 2016, Mary Ann Liebert, Inc. 2016.

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Maldonado, A., Collins, T.W., Grineski, S.E., Chakraborty, J.

56810599200;9246426900;11139615800;7101970433;

Exposure to flood hazards in Miami and Houston: Are hispanic immigrants at greater risk than other social groups?

(2016) International Journal of Environmental Research and Public Health, 13 (8), art. no. 775, . Cited 17 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84980322379&doi=10.3390%2fijerph13080775&partnerID=40&md5=2d9729f70a2dc3d8c1dc1b2bdc70d974

DOI: 10.3390/ijerph13080775

AFFILIATIONS: Department of Sociology & Anthropology, University of Texas at El Paso, El Paso, TX 79968, United States

ABSTRACT: Although numerous studies have been conducted on the vulnerability of marginalized groups in the environmental justice (EJ) and hazards fields, analysts have tended to lump people together in broad racial/ethnic categories without regard for substantial within-group heterogeneity. This paper addresses that limitation by examining whether Hispanic immigrants are disproportionately exposed to risks from flood hazards relative to other racial/ethnic groups (including US-born Hispanics), adjusting for relevant covariates. Survey data were collected for 1283 adult householders in the Houston and Miami Metropolitan Statistical Areas (MSAs) and flood risk was estimated using their residential presence/absence within federally-designated 100-year flood zones. Generalized estimating equations (GEE) with binary logistic specifications that adjust for county-level clustering were used to analyze (separately) and compare the Houston (N = 546) and Miami (N = 560) MSAs in order to clarify determinants of household exposure to flood risk. GEE results in Houston indicate that Hispanic immigrants have the greatest likelihood, and non-Hispanic Whites the least likelihood, of residing in a 100-year flood zone. Miami GEE results contrastingly reveal that non-Hispanic Whites have a significantly greater likelihood of residing in a flood zone when compared to Hispanic immigrants. These divergent results suggest that human-flood hazard relationships have been structured differently between the two MSAs, possibly due to the contrasting role that water-based amenities have played in urbanization within the two study areas. Future EJ research and practice should differentiate between Hispanic subgroups based on nativity status and attend to contextual factors influencing environmental risk disparities. © 2016 by the authors; licensee MDPI, Basel, Switzerland.

AUTHOR KEYWORDS: Environmental justice; Flood; Hazard; Hispanic or Latino; Immigrant; Vulnerability

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

ACCESS TYPE: Open Access

SOURCE: Scopus

Kolinjivadi, V., Gamboa, G., Adamowski, J., Kosoy, N.

55546290200;15131615700;23569157800;16022376900;

Capabilities as justice: Analysing the acceptability of payments for ecosystem services (PES) through 'social multi-criteria evaluation'

(2015) Ecological Economics, 118, pp. 99-113. Cited 17 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84938153579&doi=10.1016%2fj.ecolecon.2015.07.008&partnerID=40&md5=0e923e6d2cd4dc89cdb8c94f056f0adb

DOI: 10.1016/j.ecolecon.2015.07.008

AFFILIATIONS: Bioresource Engineering Department, McGill University, 21111 Chemin Bord-du-Lac, Ste-Anne de Bellevue, QC H9X 3V9, Canada;

Institut de Ciència i Tecnologia Ambientals (ICTA), Edifici Z ICTA-ICP, Universitat Autònoma de Barcelona, Cerdanyola del Vallès, Barcelona, 08193, Spain;

Integrated Water Resources Management Program, Bioresource Engineering Department, McGill University, 21111 Chemin Bord-du-Lac, Ste-Anne de Bellevue, QC H9X 3V9, Canada;

Natural Resource Sciences Department, McGill University, 21111 Chemin Bord-du-Lac, Ste-Anne de Bellevue, QC H9X 3V9, Canada

ABSTRACT: 'Payments for ecosystem services' (PES) is rapidly becoming a popular governance intervention within natural resource management to align land-use stewardship to conserve critical ecosystem services while simultaneously improving human well-being through the provision of incentives. This paper introduces two novel components for refining the legitimacy of PES in water resource management. Firstly, we broaden consideration of human well-being in PES beyond income effects by considering justice as the freedom or capability to 'do and be' whatever is desired. Secondly, this paper applies social multi-criteria evaluation as a decision-support framework to determine the acceptability and payment vehicle of PES within a set of alternative policy considerations for a complex ecosystem management decision. Through both technical and social evaluations of different management options against a set of criteria, we highlight the legitimacy that different PES designs may have for improving water quality and capabilities for well-being. © 2015 Elsevier B.V..

AUTHOR KEYWORDS: Capabilities approach; PES; Social multi-criteria evaluation; Water resources management

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Wutich, A., York, A.M., Brewis, A., Stotts, R., Roberts, C.M.

23981822300;8639695600;6603755078;55388911600;56323545700;

Shared cultural norms for justice in water institutions: Results from Fiji, Ecuador, Paraguay, New Zealand, and the U.S.

(2012) Journal of Environmental Management, 113, pp. 370-376. Cited 10 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84869879146&doi=10.1016%2fj.jenvman.2012.09.010&partnerID=40&md5=9561100d1c89c8a2d27b476e3c39b6f4

DOI: 10.1016/j.jenvman.2012.09.010

AFFILIATIONS: School of Human Evolution and Social Change, Arizona State University (ASU), PO Box 872402, Tempe, AZ 85287-2402, United States

ABSTRACT: It is widely agreed that current institutions are insufficient to meet global water challenges, and extensive institutional reforms are needed. To achieve effective local water management, institutional rules should be congruent with local cultural norms. Conversely, a major potential challenge is posed by tensions between institutional rules and local cultural norms for justice. We propose and demonstrate a new approach to cross-cultural analysis designed to investigate this tension, which can assess when local cultural norms are likely to facilitate or impede the acceptance of specific institutional rules. Using data from 238 respondents in five global sites (in Fiji, Ecuador, Paraguay, New Zealand, and the U.S.) analyzed using cultural consensus analysis, we find evidence of culturally-shared norms of justice in water institutions in at least six domains: a human right to water, water governance, water access, environmental stewardship, aspects of water markets, and aspects of water quality and health. Additionally, local cultural models across sites differed on only two topics: (1) ownership and allocation and (2) restrictions and enforcement. Indigenous heritage is the best single predictor of views on controversial institutional rules dealing with water restrictions/enforcement and ownership/allocation. This approach can help build effective water management solutions by identifying cases in which specific institutional reforms are congruent with local cultural norms (or not), and when those will matter most. © 2012 Elsevier Ltd.

AUTHOR KEYWORDS: Cross-cultural; Cultural consensus; Fairness; Institutions; Justice; Water

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Chakraborty, J., Collins, T.W., Grineski, S.E.

7101970433;9246426900;11139615800;

Environmental justice research: Contemporary issues and emerging topics

(2016) International Journal of Environmental Research and Public Health, 13 (11), art. no. 1072, . Cited 9 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84994527659&doi=10.3390%2fijerph13111072&partnerID=40&md5=f0058dd5b2e18d41827b868fbd5afaf3

DOI: 10.3390/ijerph13111072

AFFILIATIONS: Department of Sociology & Anthropology, University of Texas at El Paso, El Paso, TX 79968, United States

ABSTRACT: Environmental justice (EJ) research seeks to document and redress the disproportionate environmental burdens and benefits associated with social inequalities. Although its initial focus was on disparities in exposure to anthropogenic pollution, the scope of EJ research has expanded. In the context of intensifying social inequalities and environmental problems, there is a need to further strengthen the EJ research framework and diversify its application. This Special Issue of the International Journal of Environmental Research and Public Health (IJERPH) incorporates 19 articles that broaden EJ research by considering emerging topics such as energy, food, drinking water, flooding, sustainability, and gender dynamics, including issues in Canada, the UK, and Eastern Europe. Additionally, the articles contribute to three research themes: (1) documenting connections between unjust environmental exposures and health impacts by examining unsafe infrastructure, substance use, and children’s obesity and academic performance; (2) promoting and achieving EJ by implementing interventions to improve environmental knowledge and health, identifying avenues for sustainable community change, and incorporating EJ metrics in government programs; and (3) clarifying stakeholder perceptions of EJ issues to extend research beyond the documentation of unjust conditions and processes. Collectively, the articles highlight potentially compounding injustices and an array of approaches being employed to achieve EJ. © 2016 by the authors; licensee MDPI, Basel, Switzerland.

AUTHOR KEYWORDS: Air pollution; Energy; Environmental justice; Flood; Food; Green space; Health; Social inequality; Sustainability; Water pollution

DOCUMENT TYPE: Editorial

PUBLICATION STAGE: Final

ACCESS TYPE: Open Access

SOURCE: Scopus

Sansom, G., Berke, P., McDonald, T., Shipp, E., Horney, J.

57190837452;7003331063;7401593516;9745794400;12776884100;

Confirming the Environmental Concerns of Community Members Utilizing Participatory-Based Research in the Houston Neighborhood of Manchester

(2016) International Journal of Environmental Research and Public Health, 13 (9), art. no. 839, . Cited 9 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84983406019&doi=10.3390%2fijerph13090839&partnerID=40&md5=a801e353d5e8a97b8cb5a852c38044ba

DOI: 10.3390/ijerph13090839

AFFILIATIONS: Health Science Center School of Public Health, Texas A&M University, College Station, TX 78665, United States;

Department of Landscape Architecture, Texas A&M University, College Station, TX 77840, United States

ABSTRACT: In the last few decades, there has been an increase in community-based participatory research being conducted within the United States. Recent research has demonstrated that working with local community organizations, interest groups, and individuals can assist in the creation of, and sustainability in, health initiatives, adoption of emergency protocols, and potentially improve health outcomes for at-risk populations. However little research has assessed if communal concerns over environmental contaminants would be confirmed through environmental research. This cross-sectional study collected survey data and performed surface water analysis for heavy metals in a small neighborhood in Houston, TX, which is characterized by industrial sites, unimproved infrastructure, nuisance flooding, and poor air quality. Surveys were completed with 109 residents of the Manchester neighborhood. Water samples were taken from thirty zones within the neighborhood and assessed for arsenic (As), barium (Ba), cadmium (Cd), chromium (Cr), lead (Pb), selenium (Se), silver (Ag), and mercury (Hg). Survey results showed that the vast majority of all respondents were concerned over proximity to industry and waste facilities, as well as exposure to standing surface water. Barium was discovered in every sample and many of the zones showed alarming levels of certain metals. For example, one zone, two blocks from a public park, showed levels of arsenic at 180 (µg/L), barium at 3296 (µg/L), chromium at 363 (µg/L), lead at 1448 (µg/L), and mercury at 10 (µg/L). These findings support the hypothesis that neighborhood members are aware of the issues affecting their community and can offer researchers valuable assistance in every stage of study design and execution. © 2016 by the authors; licensee MDPI, Basel, Switzerland.

AUTHOR KEYWORDS: Community engagement; Disaster preparedness; Environmental equity; Environmental justice; Participatory-based research; Water quality; Water sampling

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

ACCESS TYPE: Open Access

SOURCE: Scopus

Bonds, E., Martin, L.

16424725900;55470563100;

Treating People Like Pollution: Homelessness and Environmental Injustice

(2016) Environmental Justice, 9 (5), pp. 137-141. Cited 8 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84992379401&doi=10.1089%2fenv.2016.0021&partnerID=40&md5=6a11b84199434a2bff15c1ebb1b445e2

DOI: 10.1089/env.2016.0021

AFFILIATIONS: Department of Sociology and Anthropology, University of Mary Washington, 1301 College Avenue, Fredericksburg, VA 22401-5300, United States

ABSTRACT: Achieving environmental justice does not only require the provision of clean air and water in all the places where people carry out their lives, it also necessitates access to the very spaces of the urban environment. Through our research based on interview and archival data in a small U.S. city, we demonstrate that homeless persons are often viewed as a kind of environmental contaminant that should be cleaned up or kept out, either through the passage and enforcement of ''civility codes'' that criminalize homelessness or through NIMBY movements that develop to prevent the establishment of homelessness services in particular areas. While such efforts fail to purge cities of the homeless, they do reduce the availability of homelessness services in certain areas and push homeless dwellings to the unseen fringes of communities. In this way, we show, when homeless people are viewed as a kind of pollution, city policies develop that diminish their access to the urban environment and the resources it provides. © 2016, Mary Ann Liebert, Inc.

AUTHOR KEYWORDS: criminalization; exclusionary zoning; homelessness; NIMBY movements; urban space

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Wilson, S.M., Heaney, C.D., Wilson, O.

35616936300;7004288568;36160049800;

Governance structures and the lack of basic amenities: Can community engagement be effectively used to address environmental injustice in underserved black communities?

(2010) Environmental Justice, 3 (4), pp. 125-133. Cited 8 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-78650734495&doi=10.1089%2fenv.2010.0014&partnerID=40&md5=2c17feddf6f5dfad3afa28ae8799d332

DOI: 10.1089/env.2010.0014

AFFILIATIONS: Institute for Families in Society, University of South Carolina, 1600 Hampton St., Columbia, SC 29229, United States;

Department of Epidemiology, University of North Carolina, Chapel Hill, United States;

West End Revitalization Association, Mebane, NC, United States

ABSTRACT: Many communities impacted by environmental injustice, including the disproportionate burden of unhealthy land uses and environmental hazards and lack of access to health-promoting infrastructure, can trace these disparities to inequities in planning, zoning, and community development. These inequities and infrastructure disparities occur in many places because of the way that governance structures, particularly municipal police powers, are applied differentially and how in some cases these legal structures drive segregation and the production of riskscapes. In this article, we will describe how municipal police powers have led to zoning and planning inequities particularly around the use of planning designations (specifically extra-territorial jurisdiction (ETJ) and joint planning agreements) in the state of North Carolina. These planning designations can create patterns of environmental inequality whereby some communities may have infrastructure disparities including a lack of basic amenities (e.g., sewer and water infrastructure, paved roads, good housing stock, and healthy ecosystem services). We will then discuss the work of the West End Revitalization Association (WERA), a community-based environmental justice organization located in Mebane, North Carolina, as an example of a community burdened by ETJ abuses and the lack of basic amenities which impacts community health. We will detail WERA's efforts to increase the participation of its residents in civic engagement through the use of the administrative complaint process and development and implementation of the community-owned and managed (COMR) approach. We will then discuss the deficiencies of the COMR approach and its utility in other community contexts. In addition, we will describe how federal statutes and legal structures have gaps that also lead to underserved communities not having basic amenities and how some federal laws do not adequately protect the health of communities with infrastructure disparities. Finally, we will discuss the utility and integration of WERA's community engagement model and principles into national environmental justice policy. © 2010, Mary Ann Liebert, Inc.

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Moran, S.

36764205200;

Cities, creeks, and erasure: Stream restoration and environmental justice

(2010) Environmental Justice, 3 (2), pp. 61-69. Cited 7 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-77954900577&doi=10.1089%2fenv.2009.0036&partnerID=40&md5=8bf34878523a515edeff08a1c02c3034

DOI: 10.1089/env.2009.0036

AFFILIATIONS: Department of Environmental Studies, Graduate Program in Environmental Science, State University of New York-Environmental Science and Forestry, Syracuse, NY 13210, United States

ABSTRACT: Stream restoration initiatives are examined using the framework of environmental justice. These projects seek to improve stream quality as well as provide benefits to communities. Restoration projects are engaging, educational, and they resonate with narratives of redemption. However, stream restoration projects have been located primarily in rural areas, despite the myriad benefits that might result from siting projects in urban areas. This article clarifies how environmental justice principles could be applied to stream restoration initiatives, and examines disparities in project locations in a single state, Pennsylvania, during the 1999-2004 time period. Several factors are identified to help account for disparities and missed opportunities, including: the relationship between nature, society, and injustice, the role of selected professions in the restoration endeavor, and the assumed linkages between ecosystem improvement and benefits to the community. Several alternative practices are proposed, and the potential benefits are discussed. Copyright 2010, Mary Ann Liebert, Inc.

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Qiang, Y.

36242248900;

Disparities of population exposed to flood hazards in the United States

(2019) Journal of Environmental Management, 232, pp. 295-304. Cited 6 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-85059300323&doi=10.1016%2fj.jenvman.2018.11.039&partnerID=40&md5=b172b52160267323f55b1c81ef4f854e

DOI: 10.1016/j.jenvman.2018.11.039

AFFILIATIONS: Department of Geography and Environment, University of Hawaii - Manoa, Saunders 416, 2424 Maile Way, Honolulu, HI 96822, United States

ABSTRACT: This study integrates publicly available datasets to provide a county-based assessment of socio-economic disparities of population exposure to flood hazards in the United States. Statistical analyses were applied to reveal the national trends and local deviations from the trends. Results show that approximately 21.8 million (6.87% of) U.S. population are exposed to 100-year-flood in 2015, and most of the exposure is near water bodies (e.g. ocean and rivers). Additionally, communities near water bodies are more responsive to potential flood hazards by avoiding residence in flood zones than inland communities. At the national scale, economically disadvantaged population are more likely to reside in flood zones than outside. At the local scale, economically disadvantaged population tend to reside in flood zones in inland areas, while coastal flood zones are more occupied by wealthier and elderly people. These findings point to an alarming situation of inland communities where people are generally less responsive to flood hazards and people in flood zones are in a lower economic condition. Using “hot spot” analysis, local clusters of disadvantaged population groups with high flood exposure were identified. Overall, this study provides important baseline information for policymaking at different levels of administration and pinpoints local areas where diversified and ad hoc strategies are needed to mitigate flood risk in communities with diverse socio-economic conditions. This study provides empirical evidence of socio-economic disparities and environmental injustice associated with flood exposure in the U.S. and offers valuable insights to the underlying factors. © 2018 Elsevier Ltd

AUTHOR KEYWORDS: Disadvantaged population; Environmental justice; Flood hazard; Population exposure; Socio-economic disparities; Vulnerability

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Garciá-López, G.A.

36149811400;

The multiple layers of environmental injustice in contexts of (Un)natural disasters: The case of Puerto Rico post-hurricane maria

(2018) Environmental Justice, 11 (3), pp. 101-108. Cited 6 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-85049129961&doi=10.1089%2fenv.2017.0045&partnerID=40&md5=85086dea2c77eae57abaecacb80c97f0

DOI: 10.1089/env.2017.0045

AFFILIATIONS: Graduate School of Planning, University of Puerto Rico, PO Box 23354, Rio-Piedras-San-Juan, 00931-3354, Puerto Rico

ABSTRACT: Hurricane Maria has had devastating impacts in Puerto Rico. Yet this catastrophe has not been felt equally by all. The vulnerability to impacts and ability to recover from hurricanes and other disasters are directly shaped by existing socioeconomic and racial inequalities. The situation post-Maria in Puerto Rico has been labeled a clear case of environmental injustice. This article documents the hurricane's nexus with environmental justice (EJ). It discusses EJ impacts related to toxic pollution, water, energy, and food, and connects these impacts intersect with multiple layers of pre-existing injustices. It then discusses how these impacts have been magnified by the national and federal government's inept and unjust responses, and by histories of unjust planning and colonial-neoliberal institutions. The article concludes with some positive outlooks of how the hurricane has also opened a window to "rethink" Puerto Rico and to self-organized initiatives for enacting a different, more just, and ecological country. © 2018 Mary Ann Liebert, Inc.

AUTHOR KEYWORDS: Colonialism; Just transition; Political ecology; Puerto Rico; Unnatural disasters

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Miller, D.S., Wesley, N.

24492321100;57189869670;

Toxic Disasters, Biopolitics, and Corrosive Communities: Guiding Principles in the Quest for Healing in Flint, Michigan

(2016) Environmental Justice, 9 (3), pp. 69-75. Cited 6 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84975504848&doi=10.1089%2fenv.2016.0016&partnerID=40&md5=d352ca93a8a5827aaa095b9d8136d638

DOI: 10.1089/env.2016.0016

AFFILIATIONS: Department of Sociology and Anthropology, Program in Disasters, Crisis and Emergency Management, Rowan University, 201 Mullica Hill Road, Robinson Hall, Glassboro, NJ, United States

ABSTRACT: The Flint water crisis occurs at a time when local and global social justice struggles seek to restore the rights of the individual through collective action. This article moves beyond traditional environmental justice arguments of race and class or even debating the rights and wrongs of the Flint water crisis to a more nuanced understanding of ongoing environmental toxic contamination in an age of increased risks, uncertainties, and biopolitics. As the Flint story unfolded in Congressional testimony, legislative hearings, and the media, the public learned of clandestine deals that resulted in the state-sanctioned heavy metal poison contamination of thousands. The Flint water crisis is representative of a form of violent assault against the citizen's health, civic trust, and personhood. Because technological disasters, including those that result in toxic contamination, tend to disrupt or permanently damage the social fabric of the communities where they occur, it is important that we understand how to restore a sense of community facilitation, the repair of social and cultural bonds. This article is not designed to bring forth new revelations of guilt or innocence. Rather, the article advances the environmental justice literature by bridging the knowledge gap in therapeutic justice in corrosive communities. It proposes a framework to serve as a catalyst for healing in a community suffering from toxic uncertainty caused by a shift from policies based on a reliance on rights-based politics to a more ominous notion of decision making rooted in biopolitics. Copyright © 2016, Mary Ann Liebert, Inc.

DOCUMENT TYPE: Review

PUBLICATION STAGE: Final

SOURCE: Scopus

Pulford, E., Polidoro, B.A., Nation, M.

57194265929;16745378600;25927373600;

Understanding the relationships between water quality, recreational fishing practices, and human health in Phoenix, Arizona

(2017) Journal of Environmental Management, 199, pp. 242-250. Cited 4 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-85019626069&doi=10.1016%2fj.jenvman.2017.05.046&partnerID=40&md5=e8cfe30aa6905471ec1d843cbe1b3251

DOI: 10.1016/j.jenvman.2017.05.046

AFFILIATIONS: School of Sustainability, Arizona State University, 800 Cady Mall #108, Tempe, AZ 85281, United States;

School of Mathematical and Natural Sciences, Arizona State University-West Campus, 4701 W Thunderbird Rd, Glendale, AZ 85306, United States;

Julie Ann Wrigley Global Institute of Sustainability, Arizona State University, PO Box 875402, Tempe, AZ 85287, United States

ABSTRACT: Across the United States, recreational freshwater fisheries are not only an important leisure activity, but can also provide a relatively inexpensive source of protein in local diets. However, recreational freshwater fisheries are generally not well-monitored in terms of fish consumption vs. catch and release, nor are all recreational surface waters regularly monitored for the presence of potentially harmful contaminants in water or fishes. In six urban lakes that support recreational fisheries in Phoenix, Arizona, a majority of surveyed anglers reported eating recreationally caught fishes, even though they thought the water might be polluted. Surface water samples collected from the six urban recreational fishery lakes showed varying levels of organic contaminants, including pesticides, polychlorinated biphenyls, polycyclic aromatic hydrocarbons, and phthalates. As many Phoenix urban recreational fisheries lakes and ponds are located in low income and high minority neighborhoods, the results of this pilot study could be used to inform urban fisheries management and other agencies of the potential need for fish consumption advisories, inform actions to improve water quality in urban lakes and ponds that support urban fisheries, and support further research and monitoring, in order to reduce potential risks to public health. © 2017 Elsevier Ltd

AUTHOR KEYWORDS: Environmental justice; Human health; Local governance; Recreational fishing; Sustainability; Urban water quality

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Perry, K.-K.Y.

26531913600;

"if we didn't have water": Black women's struggle for urban land rights in Brazil

(2009) Environmental Justice, 2 (1), pp. 9-13. Cited 4 times.

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DOI: 10.1089/env.2008.0541

AFFILIATIONS: Department of Africana Studies and Anthropology, Brown University, Providence, RI, United States;

Brown University, 155 Angell Street, Providence, RI 02912, United States

ABSTRACT: This article explores the relation between black women's quest for environmental justice and the struggle for urban land rights. Using ethnographic research conducted in Gamboa de Baixo, a coastal community in the center of Brazil's northeastern city of Salvador, I defend the claim that Afro-Brazilian religious thought has shaped blacks' relationship to the sea, and subsequently community politics defending their right to occupy the land alongside it. More important, we are able to understand black women's leadership in religious communities as intertwined with their central roles in building neighborhoods and fighting for material resources such as water necessary to sustain them. © Mary Ann Liebert, Inc. 2009.

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Dorsey, J.W.

8558479500;

Restorative environmental justice: Assessing brownfield initiatives, revitalization, and community economic development in St. Petersburg, Florida

(2009) Environmental Justice, 2 (2), pp. 69-78. Cited 3 times.

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DOI: 10.1089/env.2008.0546

AFFILIATIONS: Department of Environmental Science, Policy and Geography, University of South Florida, St. Petersburg, FL, United States;

226 Davis Hall, University of South Florida St. Petersburg, 140 7th Avenue, South, St. Petersburg, FL 33701, United States

ABSTRACT: Since the 1970s businesses have been leaving urban areas in order to build on cheaper real estate and/or to cluster in industrial parks. Many of these companies were polluting industries and their departure from previous locations, many times, left behind structures containing pollutants and hazardous waste in storage or in the local soil and water. These abandoned, idled, or under-used industrial or commercial facilities are called "brownfields." It is likely that residents and wildlife living in close proximity to these contaminated sites may have suffered adverse environmental impacts. Brownfield initiatives emerged from a movement seeking to reverse the tide of pollution production, inner city decay, and urban sprawl. Through brownfield redevelopment efforts across the nation, cities are being rejuvenated, and property owners are able to divest their environmentally impaired assets and reinvest in community economic development. Policies created by federal, state, and local governments are being implemented that clean up and recycle thousands of acres of contaminated property, leading to job creation, pollution prevention, and greenfield preservation. Restorative Environmental Justice (REJ) as a concept highlights the ethical value of widening the scope of corporate organizational culture to include residential stakeholders. Restorative environmental justice taps into the recovery and re-distributive components of brownfield redevelopment. The notion of restorative environmental justice provides opportunities for corporate decision-makers and public officials to rectify or ameliorate situations that disenfranchised or harmed particular communities in the past. Restoration of a community's economic and social viability and environmental quality is a form of reparation for previous systemic inequities. This article will assess the current status of brownfield initiatives, urban revitalization, environmental quality, social justice, collaborative decision making, and community economic development in St. Petersburg, Florida. Factors to be discussed include investments in enterprise zones, community redevelopment areas, job training, local housing, community advocacy, and collaborative efforts to raise the standard of living in disadvantaged neighborhoods and achieve some level of "restorative environmental justice." © Mary Ann Liebert, Inc. 2009.

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus

Salinsky, J.I.

57191073249;

Comparing the 2014-2016 Flint Water Crisis to the 1993 Milwaukee Cryptosporidium Outbreak

(2016) Environmental Justice, 9 (4), pp. 119-128. Cited 2 times.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84986325498&doi=10.1089%2fenv.2016.0011&partnerID=40&md5=defac8a3775f990ca19452dc1a89f933

DOI: 10.1089/env.2016.0011

AFFILIATIONS: University of Wisconsin-Madison, Department of Community and Environmental Sociology, 1450 Linden Drive, Madison, WI 53706, United States

ABSTRACT: Contrasting the 1993 Cryptosporidium parvum outbreak in Milwaukee to the 2014-2016 Flint Water Crisis through an environmental justice perspective examines how the cities' population demographics influenced the local, state, and national governmental responses and outcomes. In October 2014, the Flint Emergency Manager switched from Detroit's water system to the Flint River. Without corrosion controls applied, Legionnaires' disease cases increased, and childhood lead poisoning levels spiked twofold in Flint. In Milwaukee, the cryptosporidium outbreak impacted the five-county area serviced by Milwaukee Water Works. City officials shut down the contaminated treatment facility and began preventative measures. While the city of Milwaukee boosts a high minority population and low median income, Milwaukee's surrounding areas are predominantly white, and the median income is nearly double of the city. The socioeconomic makeup in the City of Flint triggered the government's denial of problems with the Flint River's water and the lack of response, thus demonstrating that the Flint Water Crisis is an example of environmental injustice. In many ways, Milwaukee's income and demographics parallel Flint. However, the distribution of cryptosporidium, where mainly white individuals became ill, influenced the recognition and long-term solutions applied. Comparing the origins of the crises and costs concludes that the populations shaped political responses. Thus, situational environmental injustice explains differential outcomes. The localized governmental response in Milwaukee and impacted population effectively ended the cryptosporidium outbreak. However, the state control in Michigan and inadequate coordination with other agencies have prolonged the Flint Water Crisis. Finally, long-term policies are suggested for Flint. © Copyright 2016, Mary Ann Liebert, Inc. 2016.

DOCUMENT TYPE: Review

PUBLICATION STAGE: Final

SOURCE: Scopus

Clark, K.

55484606100;

The Value of Water: The Flint Water Crisis as a Devaluation of Natural Resources, not a Matter of Racial Justice

(2016) Environmental Justice, 9 (4), pp. 99-102. Cited 1 time.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84986309681&doi=10.1089%2fenv.2016.0007&partnerID=40&md5=d288a8dc0d65ac0b94dccfc7dc9ad0a0

DOI: 10.1089/env.2016.0007

AFFILIATIONS: Department of Justice Studies and Public Policy, Auburn University-Montgomery, P.O. Box 244024, Montgomery, AL, United States

ABSTRACT: The Flint water crisis has garnered a great deal of political attention, as the impacts of political decisions to alter Flint's water supply have left many residents with mistrust of government and unusable water. This article reviews water issues in Michigan over the past 15 years to uncover whether the water crisis in Flint is an aberration or a continuation of water policies. In consideration of Michigan's state constitution, the federal Clean Water Act, and lawsuits that have already been filed in Michigan related to water issues, this article posits that what happened in Flint that led to systemic failure to protect public health was not a result of racial disparity. Water has consistently been devalued by the Michigan government, causing unmitigated pollution in rural areas before it was known in Flint. Michigan's government officials have a profound history in the devaluation of water and natural resources and have systematically undermined environmental protection for years. This article covers the incidents related to mismanagement and disregard for water as a public resource within Michigan to highlight Flint's water crisis as an environmental, rather than a racial, injustice. © Copyright 2016, Mary Ann Liebert, Inc. 2016.

DOCUMENT TYPE: Article

PUBLICATION STAGE: Final

SOURCE: Scopus