11-2018

Addressing Environmental Gentrification: Improving Environmental Health for Children and Youth without Displacement

Tania Schusler
Loyola University Chicago, tschusler@luc.edu

Amy Krings
Loyola University Chicago, akrings@luc.edu

Recommended Citation

Addressing Environmental Gentrification: Improving Environmental Health for Children and Youth without Displacement

Tania Schusler, PhD, Institute of Environmental Sustainability, Loyola University Chicago
Amy Krings, PhD, School of Social Work, Loyola University Chicago

RESEARCH BRIEF

ADDRESSING ENVIRONMENTAL GENTRIFICATION: IMPROVING ENVIRONMENTAL HEALTH FOR CHILDREN AND YOUTH WITHOUT DISPLACEMENT

Historically, low income communities and communities of color have borne the brunt of environmental pollution with limited access to environmental amenities. This has arisen, in part, due to marginalized communities' lack of access and influence in environmental decision making, as well as legacies of racial and ethnic housing segregation (Cole & Foster, 2001). Environmental justice concerns include the disproportionate placement and inequitable regulation of polluting facilities in areas populated by people who are poor and/or racial minorities (Bryant, 1995: Bullard, 1993; Mohai & Bryant, 1992; Lavelle & Coyle, 1992). The inequitable distribution of environmental pollution is especially problematic for children's wellbeing, because characteristics of the physical environment influence children's development (Evans, 2006; McLeod, 2017). Children living in poverty experience greater exposure to environmental toxins, noise, poor quality housing, inadequate green space, and other environmental factors that adversely affect psychosocial and physical development (Evans, 2004).

Low income neighborhoods and communities of color are not only disproportionately burdened by contamination, but their residents also have limited access to green spaces and parks. This phenomenon, termed "park poverty", has been attributed to a racialized process of city planning and park finance that has advantaged white, suburban communities (Byrne et al., 2007). The lack of access to green spaces and safe areas to play outside negatively impacts children's development and mental health, including an increase in hyperactivity (Markevych et al., 2014).

In response to these social problems, residents of contaminated communities and their allies have come together to promote environmental justice, which 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" (https://www.epa.gov/environmentaljustice; italics added). Community-based environmental justice groups across the United States and in Chicago have organized residents to hold polluters accountable and promote access to green space, fresh food, healthy housing, playgrounds, and other environmental benefits. Their work has helped to improve the health and well-being of many residents, including children and youth. Their successes, however, lead to a new concern: that their hard-won victories improving public health could contribute to gentrification and the displacement of the very residents they intended to benefit (Anguelovski, 2015). Furthermore, because gentrification leads to the possibility of displacement,

it poses serious threats to the emotional and academic wellbeing of children (Formoso et al., 2010).

This research brief aims to describe this dilemma and to consider how community members and policies might improve environmental amenities within contaminated communities without displacing existing residents. To this end, we will first introduce a concept known as *environmental gentrification*. We will then summarize some of the existing literature that explores the relationships between urban greening and brownfield redevelopment projects in relation to gentrification. Brownfields refer to properties where the presence or potential presence of a hazardous substance, pollutant, or contaminant may complicate the property's expansion, redevelopment, or reuse (https://www.epa.gov/brownfields/overview-brownfields-program). Our review of literature indicates that the degree of gentrification associated with sustainable development varies. Finally, we will suggest policies and strategies that community-based environmental justice groups and their members might consider in their efforts to promote environmental health, which in turn supports children's health, without unintentionally displacing people, including families with children.

ENVIRONMENTAL GENTRIFICATION

Gentrification refers to "the process through which reinvestment in urban neighborhoods leads to an inflow of residents of higher socioeconomic status than the original residents of the community" (Eckerd, 2011, p. 38). Environmental gentrification is a form of gentrification that happens when new

green or sustainable amenities attract and serve new eco-conscious, affluent residents. Environmental gentrification refers to situations "in which environmental improvements result in the displacement of working-class residents as cleanup and reuse of undesirable land uses make a neighbourhood more attractive and drives up real estate prices" (Curran & Hamilton, 2012, p. 1027). According to Checker (2011, p. 210), "while [environmental gentrification] appears as politically-neutral, consensus-based planning that is both ecologically and socially sensitive, in practice, environmental gentrification subordinates equity to profit-minded development."

Environmental gentrification can be controversial, in part because it can both benefit and burden existing residents, including children. For example, new investments can result in increased property values, upgrades in housing stock, neighborhood beautification, and increased community safety. All of these changes can be beneficial for youth and have been positively associated with educational attainment among adolescents living in gentrifying neighborhoods (Johnston, 2017). However, they can also lead to increased housing costs, decreased economic diversity, and displacement and/or exclusion of the very residents the green space was meant to benefit (Dale & Newman, 2009). If existing residents face higher housing costs, some could be forced to leave their communities, ending up in less desirable neighborhoods with similar "park-poverty problems" (Wolch, Byrne, & Newell, p. 235). Gentrification may also change the "character and flavor of that neighborhood" (Essoka, 2010, p. 304), and even residents not displaced may suffer the loss of their community

networks and culture (Newman & Wyly, 2006; Pearsall, 2012). This relocation can be particularly stressful for relocated children due to the loss of familiar physical environments and routines, changes in parents' and children's social networks, and decreases in parent well-being (Adam and Chase-Lansdale, 2002).

When neighborhoods that have contaminated brownfields and/or a lack of green spaces are proposed to host new sustainable development, their residents may face a paradoxical dilemma. As Checker (2011) asks, "must [residents] reject environmental amenities in their neighborhoods in order to resist the gentrification that tends to follow such amenities?" (p. 211). Or are there ways in which community organizations can support brownfield redevelopment and green spaces, without displacing existing residents, including families with children? To begin to answer these questions, we will examine predictors of environmental gentrification.

SUSTAINABLE DEVELOPMENT AND PREDICTORS OF ENVIRONMENTAL GENTRIFICATION

Only recently have researchers begun to examine whether sustainable development projects, including brownfield redevelopment and urban greening, contribute to gentrification. Not all studies find a gentrifying effect; yet several have documented an increase in the rate of displacement following such environmental improvements.

Brownfield Redevelopment and Displacement
Concerns about environmental gentrification have arisen in the context of brownfield redevelopment.

Such redevelopment can lead to positive outcomes such as reduced health risks, improved quality of life, increased property values, and changes in commercial and retail presence. Yet, because remediation and redevelopment can increase the costs of living in a neighborhood, it can reduce the availability of affordable housing and facilitate gentrification (Pearsall, 2012). In a review of recent research, we found some studies that link brownfield redevelopment to gentrification and others that did not find a relationship between the two.

- In an analysis of the impacts of brownfield sites after they are cleaned by the U.S. Environmental Protection Agency, Essoka (2010) documented that urban brownfield redevelopment displaced Blacks, Latinos, and the poor. While overall metropolitan populations increased or stayed the same for Blacks and Latinos over a 10-year period, their numbers decreased over the same period where local brownfield redevelopment occurred. Essoka's research suggested that brownfield redevelopment could contribute to gentrification within a host community, particularly when other characteristics (e.g., location proximity to the urban center, architecturally interesting housing stock) make a neighborhood's properties desirable.

- Gamper Rabindran and Timmins (2011) documented the in-migration of richer and more educated households to neighborhoods following the cleanup of highly contaminated

brownfields (i.e., Superfund sites). They did not, however, find a decrease in the number of residents who are racial minorities following cleanups. This suggests the possibility that higher income minority residents replaced lower income minority residents.

- Dale and Newman (2009) followed a brownfield redevelopment project in Victoria, Canada. Their findings demonstrated that the rate of gentrification increased despite substantial community involvement in the planning process and a requirement that the development include some degree of affordable housing. Neither the affordable housing type provided (single bedroom and bachelor units) nor new retail sites met the needs of lower income families. The authors concluded "livability without equity leads to gentrification of the retailscape and a shift to higher-income residents, forcing out existing lower middle and lower-income residents" (p. 679).

- In a mixed methods analysis of hazardous site cleanups in Portland, Oregon, during the 1990s, Eckerd (2011) found no relationship between the extent of gentrification that a neighborhood experiences and environmental improvement. He concluded that factors like varying land prices and a neighborhood's geographic location are more likely to invite gentrification than environmental clean up.

It is important to note that brownfield redevelopment alone is neither the only nor the most important factor leading to gentrification. It appears that land values increase when brownfield cleanups are driven by the goal of economic development, which tends to happen in strong real estate markets. When brownfield cleanup occurs in weak land markets, private investment does not necessarily follow (Howland, 2007). A strong predictor of neighborhood gentrification may be whether bordering neighborhoods are gentrifying (Eckerd, 2011). Other neighborhood characteristics such as proximity to the urban center and strong housing stock contribute to gentrification. None of the research that we reviewed regarding the relationship between brownfield redevelopment and gentrification focused upon the impacts of brownfield redevelopment on youth nor youth engagement in the issue. This suggests a need for future research.

Urban Greening and Displacement
Additional research has been conducted to determine if environmental gentrification is a consequence of urban greening projects that promote public green space. The term public green space "includes parks and reserves, sporting fields, riparian areas like stream and river bands, greenways and trails, community gardens, street trees, and nature conservation areas" (Roy, Byrne, & Pickering, 2012, as cited in Wolch, Byrne, & Newell, 2014).

- Dooling (2009) found that efforts in Seattle, Washington, to improve ecological functioning along rivers and streams were preceded by removal of homeless people who lived in

those areas, along with the services designed to assist them.

- In Hangzhou, China, innovative efforts were employed to address declining environmental quality and restore lost green space. These included demolishing factories for parks; retrofitting green space along canals, roads, and railway lines; and mass tree planting along city streets. While it appears that these efforts helped reduce the urban heat island, lessen flooding, intercept pollutants, and reduce wind speed, inequalities in access to green space remained and inflating property values could lead to displacement of low-income earners (Wolch et al., 2014).

- In Toronto, Ontario, the rate of gentrification increased following a community-led sustainable development project: "As for local initiatives within existing communities, they might inadvertently speed gentrification if efforts to protect accessibility are not also undertaken" (Dale & Newman, 2009, p. 679).

Thus, existing studies acknowledge the potential for gentrification and yet, perhaps because it is a slow process, have inconclusive findings regarding the certainty of its emergence. Nonetheless, global concerns that the sustainable city may displace industry and the working class clearly remain. As with research on brownfield redevelopment and gentrification, the literature that we reviewed examining urban greening as a factor exacerbating gentrification did

not address specific impacts on, nor the involvement of, children and youth. This indicates an important area for additional research.

PREVENTING DISPLACEMENT: COMMUNITY-BASED PLANNING AND ORGANIZING

The literature suggests that, although many definitions of sustainability explicitly reference social justice, in practice, concern for the environmental or ecological dimension of sustainability in cities has obscured the consideration of social equity (Curran and Hamilton, 2012; Dale and Newman, 2009; Quastel 2009). More insidiously, there were also cases in which urban greening was used as a tool to relocate or displace the poor, including people who are homeless (Dooling, 2009). Thus, we cannot assume that sustainable development will inherently bring about social or economic justice. In fact, "too often, the cleanup of industrial urban neighbourhoods and creation of new green space quite literally 'naturalises' the disappearance of working-class communities, as more attractive neighbourhoods become ripe for development" (Curran & Hamilton, 2012, p. 1028). In this section, we will examine how to promote sustainable development that explicitly includes social and economic equity. Key components include community-based planning and organizing.

Community organizing efforts would do well to involve children and youth in meaningful ways by which young people have the opportunity to influence decisions and make a real impact in their communities. Across the globe are inspiring examples of young people contributing to positive

environmental and social change (e.g., Chawla, 2002; Hart, 1997). In Chicago, the Little Village Environmental Justice Organization (LVEJO) offers one exemplar of youth engagement in environmental justice organizing. Youth volunteers contributed to victorious campaigns, including closing two outdated, coal-fired power plants in the predominantly Mexican-American neighborhoods of Little Village and Pilsen as well as advocating for the redevelopment of the Celotex Superfund site into a community-designed, city park called "La Villita." According to Fernandez (2015), an important distinguishing characteristic of LVEJO's youth development activities is its use of a structural racism framework that intentionally addresses racism as an important factor shaping youths' lives, examines youths' experiences in the context of racialized structures of power, and offers opportunities for collective action with leadership roles for youth. In another Chicago-based example, youth involved in environmental and social justice activism convened in a weekend summit organized by Sacred Keepers Sustainability Lab and discussed their interests, experiences with, successes, and barriers when it comes to influencing policies and programs in their schools, neighborhoods, and communities (Schusler, Krings, & Hernandez, 2018).[1]

In order to support youth in social and environmental justice organizing, it is essential that adults share decision-making power with young people. This can feel especially uncomfortable for adults familiar with being in control. At the same time, adults cannot completely step back and expect youth to carry out a campaign or project entirely on their own. Adults can navigate the complexity of shared decision making through varied approaches to structuring youth participation, supporting youth, valuing mutual learning, and communicating transparently to develop equitable relationships with young people (Schusler, Krasny, & Decker, 2016). Various resources (e.g., Driskell, 2002) provide guidance for adults on how to facilitate genuine youth participation. A social justice youth development framework described by Ginwright and James (2002) offers particular relevance to environmental justice communities. Its principles include analyzing power within social relationships, making identity central, promoting systemic change, encouraging collective action, and embracing youth culture.

With respect to preventing displacement, Dale and Newman (2009) argue that advancing equity begins in the planning process—local residents need a role in determining what development will look like in their neighborhood. In addition, "it is critical to question exactly who within our societies has access to urban spaces that are considered to be sustainable or highly desirable and more livable" (p. 669). Community members' influence can, in some instances, prevent development that might not be seen as beneficial. For example, a park redevelopment project in Harlem, New York, purportedly intended to green the local environment and improve air quality, stalled when residents perceived that it was primarily a strategy for real estate development and gentrification. Residents asked who really stood to benefit from the project (Checker, 2011). Checker (2011) cautions community groups and residents to beware of "sustainable"

---

[1]This event was co-sponsored by the Center for the Human Rights of Children at Loyola University Chicago.

developments that "sideline questions of real political inclusion and justice" (p. 225). To help counter the risk of environmental gentrification, community groups also can organize to draw attention to housing affordability. For example, in New York City, a community organized to negotiate with landlords and prevent displacement through a local Displacement Watch (Newman & Wyly, 2006, p. 50).

Other scholars point to urban development strategies—which they term just green enough—that aim to realize the public health benefits of improved access to urban green space while avoiding the displacement of current residents (Curran & Hamilton, 2012, Wolch et al., 2014). For example, local nonprofits in Toronto, Ontario, influenced urban planners to prioritize the construction of landscapes that enabled urban agriculture and community gardens rather than taking a "rewilding" approach to ecological restoration (Newman, 2011). This connected ecological restoration to local concerns about food security, human health, and job creation. Similarly, Palamar (2010) contends that, unlike projects that focus on wild nature, limit human activity, and favor planning driven by technical experts, New York City's Green Guerillas community gardening program used principles of environmental justice "to develop innovative, authentically inclusive approaches to urban [ecological] restoration" (p. 281).

In order for community members to have a true voice in the planning process, however, planners and local stakeholders must be willing "to design green space projects that are explicitly shaped by community concerns, needs, and desires" rather than either conventional market-driven or ecological approaches

to urban design (Wolch et al., 2014, p. 241). This can be especially challenging and typically requires community activism, including "a willingness of local stakeholders to contest powerful real estate interests and mainstream environmental advocates" (Wolch et al., 2014, p. 241). It should be noted that in many cases planners and stakeholders are not willing to prioritize community concerns over real estate interests.

In certain contexts, residents have resisted displacement and remained in communities whose environments have improved as a result of public and private investments (Pearsall, 2012). For example, Curran and Hamilton (2012) describe that in one community, working-class residents were able to build alliances with gentrifiers to demand suitable environmental cleanup. This alliance allowed for continued industrial uses and the preservation of blue collar work, and explicitly avoided what they termed the "parks, cafes, and a riverwalk" (p. 1028) model of a green city. They suggest that this "just green enough" strategy resulted in toxic creek cleanup and green space development but avoided new rounds of speculative development. It should be noted, however, that community engagement does not always prevent gentrification. An analysis of three cases in Canadian cities demonstrated that both a city-led brownfield redevelopment project with high community participation as well as a locally led community- driven urban sustainability project sped the gentrification process (Dale & Newman, 2009).

POLICIES THAT CAN PREVENT DISPLACEMENT WHILE PROMOTING ENVIRONMENTAL HEALTH EQUITY

It is critical that local residents including youth, environmental justice advocates, planners, and policymakers intentionally address the risk of environmental gentrification through the design and implementation of proactive strategies and policies aimed at preventing displacement. Our preliminary literature review suggests the following as promising approaches:

- **Small-scale greening interventions** may offer more access to green space and pose less risk of displacement than large-scale projects that create a focal point for property development (Wolch et al., 2014).

- **Securing jobs for residents in conjunction with sustainable development** may reduce displacement by distributing local benefits, including income, to those whose rents may increase (Howland, 2007, Essoka, 2010). When businesses hire local residents, they can reduce displacement, strengthen community, increase tax revenue, improve public services, and decrease destructive behavior. Policy efforts that can help the benefits of brownfield redevelopment reach local residents include workforce training initiated by the public or private sector to prepare local residents for jobs that will become available through brownfield revitalization, training to improve local residents' job search and interview skills, financial incentives for businesses to hire local workers, and formal community/governmental agreements with businesses that require a proportion of employees to be hired from the local population. Both community participation and public sector involvement are also critical for brownfield redevelopment projects to benefit local community members (Howland, 2007).

- **Coupling sustainability projects with affordable housing policies and programs** can prevent displacement caused by increases in rent or taxation. For residents, these policies include housing trust funds, rent stabilization programs, financial incentives for homeownership, public housing, shared equity housing projects, and inclusionary zoning in developing neighborhoods to make units for low-income households (Newman & Wyly, 2006, Pearsall, 2012, Wolch et al., 2014). For local businesses, these policies include rent controls, requirements of local ownership and employment, and maintaining industrial land uses (Wolch et al., 2014).

Decisions related to the issues addressed above–development, job opportunities, and affordable housing–could be agreed upon and implemented as part of a community benefits agreement. In pursuing strategies to reduce displacement occurring alongside brownfield redevelopment and/or urban greening, at least three aspects are critical: (1) the power dynamics of urban planning politics, (2)

the important role of community activism including the voices of children and youth, and (3) the need to address gentrification concerns intentionally and proactively in planning processes and decisions.

CONCLUSION

Environmental contamination and limited access to green spaces disproportionately burden residents of low-income neighborhoods and communities of color. These environmental injustices negatively affect residents' health, especially that of children and youth. As environmental justice communities experience environmental improvements, a new risk arises: existing residents could be displaced as the neighborhood becomes more desirable to others with higher incomes. This phenomenon of "environmental gentrification" is more likely to occur following environmental improvements in the presence of other factors that also favor a strong real estate market. Although gentrification can bring some benefits, it also can push out the most vulnerable members of a community, disrupt the lives of children and youth, and degrade a community's social and cultural fabric.

This preliminary review of literature on environmental gentrification identified community-based planning and organizing as essential to prioritizing social equity within development initiatives, lest decision-makers prioritize economic gain or strictly environmental aims without attending to equity. To this end, the people most impacted by urban redevelopment, including youth, must be incorporated in planning processes. Inclusion on its own is insufficient to counter displacement; proactive policies also must be pursued. Promising policy-related strategies for

promoting environmental health equity without displacement include small scale greening interventions, securing jobs for residents in conjunction with sustainable development, and coupling sustainability initiatives with affordable housing programs. Such strategies should be designed in consultation with existing residents, including youth, and businesses to ensure that policies support local residents, prevent displacement, and promote positive health and other developmental outcomes for children and young people. Finally, more research needs to be conducted on the effects of environmental gentrification on children and youth.

REFERENCES

Adam, E. K. & Chase-Lansdale, P.L. (2002). Home sweet home(s): Parental separation, residential moves, and adjustment problems in low-income, adolescent girls. *Developmental psychology, 38, 792-805.*

Anguelovski, I. (2015). From toxic sites to parks as (green) LULUs? New challenges of inequity, privilege, gentrification, and exclusion for urban environmental justice. *Journal of Planning Literature*, *31*(1), 23-36.

Bryant, B. (Ed.) (1995). *Environmental justice: Issues, policies, and solutions*. Washington, DC: Island Press.

Bullard, R. D. (1993). *Confronting environmental racism: Voices from the grassroots*. Cambridge, MA: South End Press.

Byrne, J., Kendrick, M., & Sroaf, D. (2007). The park made of oil: Towards a historical political ecology of the Kenneth Hahn state recreation area. *Local Environment, 12(2), 153-181.*

Chawla, L. (ed.) (2002). *Growing up in an urbanising world.* London, England: Earthscan.

Checker, M. (2011). Wiped out by the Greenwave: Environmental gentrification and the paradoxical politics of urban sustainability. *City and Society*, *23*, 210–229.

Cole, L. W. & Foster, S. R. (2001). *From the ground up: Environmental racism and the rise of the environmental justice movement.* New York, NY: New York University Press.

Curran, W., & Hamilton, T. (2012). Just green enough: Contesting environmental gentrification in Greenpoint, Brooklyn. *Local Environment*, *17*, 1027–1042.

Dale, A., & Newman, L. L. (2009). Sustainable development for some: Green urban development and affordability. *Local Environment*, *14*, 669–681.

Dooling, S. (2009). Ecological gentrification: A research agenda exploring justice in the city. *International Journal of Urban and Regional Research*. *33*, 621–639.

Driskell, D. (2002). *Creating better cities with children and youth: A manual for participation*. London: Earthscan.

Eckerd, A. (2011). Cleaning up without clearing out? A spatial assessment of environmental gentrification. *Urban Affairs Review, 47*, 31–59.

Essoka, J. D. (2010). The gentrifying effects of brownfields redevelopment. *Western Journal of Black Studies*, *34*, 299–315.

Evans, G. W. (2004). The environment of childhood poverty. *American Psychologist*, *9*, 77–92.

Evans, G. W. (2006). Child development and the physical environment. *Annual Review of Psychology, 57, 423–451.*

Fernandez, M. (2015). Utilizing the non-profit sector to advance social and environmental justice. (Unpublished doctoral dissertation.) University of Illinois at Urbana-Champaign.

Formoso, D., Weber, N. R., & Atkins, M. S. (2010). Gentrification and urban children's well-being: Tipping the scales from problems to promise. *American Journal of Community Psychology*, *46*(3-4), 395-412.

Gamper Rabindran, S., & Timmins, C. (2011). Hazardous waste cleanup, neighborhood gentrification, and environmental justice: Evidence from restricted access census block data. *American Economic Review: Papers & Proceedings*, *101*, 620–624.

Ginwright, S., & James, T. (2002). From assets to agents of change: Social justice, organizing, and youth development. *New Directions for Student Leadership*, *96*, 27–46.

Hart, R.A. (1997). *Children's participation: The theory and practice of involving young citizens in community development and environmental care.* London, England: Earthscan.

Howland, M. (2007). Employment effects of brownfield

redevelopment: What do we know from the literature? *Journal of Planning Literature*, *22*, 91–107.

Johnston, W. R. (2017). Assessing the benefits of a rising tide: Educational attainment and increases in neighborhood socioeconomic advantage. *Social science research*, *62*, 335-349.

Lavelle, M., & Coyle, M. (1992). Unequal protection: The racial divide in environmental law. *National Law Journal, 15*(3), S1–S12.

Markevych, I., Tiesler, C. M., Fuertes, E., Romanos, M., Dadvand, P., Nieuwenhuijsen, M. J., Berdel, D., Koletzko, S., & Heinrich, J. (2014). Access to urban green spaces and behavioural problems in children: results from the GINIplus and LISAplus studies. *Environment International*, *71*, 29-35.

McLeod, D. (2017). Children's exposure to environmental toxins: Socioeconomic factors and subsequent effects on mental health and function. Research Brief, Center for the Human Rights of Children, Loyola University Chicago.

Mohai, P., & Bryant, B. (1992). Environmental injustice: Weighing race and class as factors in the distribution of environmental hazards. *University of Colorado Law Review, 63*, 921–932.

Newman, A. (2011). Inclusive urban ecological restoration in Toronto, Canada. In D. Egan, E. Hjerpe, and J. Abrams (Eds.), *Human dimensions of ecological restoration: Integrating science, nature and culture* (pp. 63–75). Washington, DC: Island Press.

Newman, K. and Wyly, E. (2006). The right to stay put revisited: gentrification and resistance to displacement in New York City. *Urban Studies*, *43*, 23–57.

Palamar, C. 2010. From the ground up: Why urban ecological restoration needs environmental justice. *Nature and Culture*, *5*, 277–298.

Pearsall, H. (2012). Moving out or moving in? Resilience to environmental gentrification in New York City. *Local Environment*. *17*, 1013–1026.

Quastel, N. (2009). Political ecologies of gentrification. *Urban Geography*, *30*, 694–725.

Schusler, T. M., Krasny, M. E., & Decker, D. J. (2016). The autonomy-authority duality in shared decision-making with youth. *Environmental Education Research*, *23*, 533–552.

Schusler, T., Krings, A., & Hernandez, M. (2018). Integrating youth participation and ecosocial work to advance environmental and social justice. Manuscript submitted for publication.

Wolch, J. R., Byrne, J., & Newell, J. P. (2014). Urban green space, public health, and environmental justice: The challenge of making cities 'just green enough.' *Landscape and Urban Planning*, *125*, 234–b244.