Environmental Justice, Health and Sustainability - An Urban View

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People of color by millions live and work in polluted environments and bear brunt of nation’s pollution problem.

- All do not have access to clean air, clean water, environmentally safe schools, clean workplace, open space and waterfronts with amenities.
- Exposures, health risks are greater
ENVIRONMENTAL JUSTICE

- Government has done little to correct.
- Inequitable environmental enforcement
- 1982 in Warren County, N.C., 500 protested PCB landfill. Term environmental racism was coined.
- In 1986, United Church of Christ publishes Toxic Waste and Race documenting that 3 of 5 African Americans, Latinos live in communities with unregulated waste sites.
Environmental Racism

- Civil rights analysis of environmental decision making.

- Discrimination in the enforcement of laws, deliberate targeting of COC for toxic waste disposal, permitting of polluted facilities in overburdened communities, exclusion of POC from staff and boards of mainstream enviros, decision making boards, commissions and regulatory bodies. Problem is global.
Environmental Racism

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Environmental Justice Framework

- Challenges current environmental protection paradigm in addressing environmental inequities, disparate impact, unequal protection.

- Seeks to prevent environment threats before occur by supporting the Precautionary Principle approach to approving new chemicals.

- Incorporates other social movements seeking to stop harmful practices involving housing, land use, zoning, economic disinvestment, infrastructure decline, industrial production, health, sanitation.
Community-Based Activism, Collaboration Thru EJ Networks

- Networks provide communication and shared strategies at the local and national levels to:
  - Support local, national initiatives /campaigns.
  - Connect organizing to broader EJ movement.
  - Develop new generation of grassroots leaders, professionals, and green jobs.
  - Advance women leaders who have emerged as their communities are threatened.
Mobilizing Nationally --
Environmental Leadership Summit

- 1991: Grassroots mobilization culminated in the Summit in Washington that drew 300 delegates and 1,000 participants from the grassroots, major environmental groups, foundations and government.

- Delegates recognized commonality that cut across geography, race, ethnicity, and culture. They left Washington with a draft of 17 Principles of Environmental Justice and a mandate to organize regional and national networks to democratize environmental decision making and empower communities of color to speak, act for themselves.
Forcing Government Accountability

- **June 1992**: EPA issues Environmental Equity Report, assessing the concerns and demands of its new, non-traditional, constituency, including a controversial power analysis.

- **June 1992**: EPA issues Farm Worker Protection Regulations

- **June 1992**: EJ Delegation goes to Rio Earth Summit

- **September 1993**: EPA establishes the National Environmental Justice Advisory Council (NEJAC)
President’s Executive Order

- **February 1994**: President issues Executive Order on EJ, directing agencies to develop new policies, procedures to address disproportionate burden of pollution.

- **February 1994**: NIEHS hosts Interagency Symposium on Health Research and Needs to Ensure EJ, attended by 1,100, including 400 EJ advocates who stress importance of community involvement in the scientific research agenda. Scientists agree on critical need to address disparate environmental exposures leading to escalating health disparities.
1996: EPA expands RCRA Public Participation Rule to empower communities to become involved in permitting process; incorporates EJ into NEPA requirements.


1996: President issues Executive Order on Indian Sacred Sites, protecting Native religious sites.

1999: Institute of Medicine, NIH, publishes Environmental Justice: Research Needs
Issues Are Inter-Connected

- Environmental sustainability is a human right: Equal enforcement, civil rights and Title VI, land rights, sovereignty, reparations, globalization, food security.

- Children’s Environmental Health: asthma, lead, pesticides, pre-natal exposures passed to next generations.

- Toxics and Waste: hazardous, radioactive, military toxics sites, schools and toxics, pollution of air, water, land.

- Land Use, Planning & Zoning: suburban sprawl & smart growth, brownfields redevelopment, gentrification & displacement.
Resolution Requires Collaboration With New Allies

- Climate Change / Climate Justice
- Alternative Energy Sources: renewables, sustainable energy, green jobs.
- Green Chemistry and Pollution Prevention
- Sustainable Development
- Transportation Equity
- Worker and Occupational Health & Safety
China’s Environmental Health Challenge

Do Genes Predispose You to Lead Poisoning

More Health Risks from Phthalates
WE ACT builds community power that improves environmental health, policy and protection in communities of color and low-income communities.

Emerged in 1988 out of community struggles re: North River sewage treatment plant and diesel pollution.

Programs: Environmental Health and CBPR, Government Accountability, Youth Leadership Development, Community Organizing and Education, Sustainable Development.

Part of national, global EJ Movement
Asthma Hospitalizations Rates by ZIP Code
Children Aged 0-4, Manhattan, 2000

Source: NYC Department of Health SPARCS 2000 data on Asthma Admission Rates for children ages 0 to 4 years.

Map prepared by West Harlem Environmental Action, Inc. (WE ACT) with the Columbia Center for Children's Environmental Health (CCECH), using ESRI ArcView® GIS v3.1.1. If you have any questions or concerns, please contact the WEACT GIS Mapping Specialist, Carlos M. Jusino, at (212) 561-1000, ext. 307.

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Northern Manhattan Profile

- 7.4 sq. miles; over 620,000 residents; 86% of whom are African-American and Latino.
- Median household income is $16,000.
- Multiple environmental exposures.
- Non-attainment area for Clean Air standards.
Key Determinants Of Health

- Race, class, income, environmental injustice.

- Access to health care, environmental, occupational exposures, important contributors

- Doctors McCord and Freeman found in study: African American man in Harlem less likely to live to age 65 than man in Bangladesh.

- Concluded that contributors to excess mortality were excessive exposures to environmental pollutants, dilapidated housing, and over crowding.
Urban Environment Has Special Characteristics

- Over saturation of communities with multiple sources of environmental toxicants in congested spaces;
- Co-existence of residential and industrial sites as a result of imprudent land use decisions;
- Lack of documentation of most environmental health risks in urban communities;
- Existence of effects of multiple and cumulative exposures and synergistic effects;
- Little environmental enforcement and compliance activity in communities of color.
Components of Our Environment

- The environment has three interacting components: (1) natural (2) built and (3) social environment that are interconnected in a way that policies and practices initiated in one area, inevitably affect the others and, ultimately, people’s health, safety, and well being.

- In the urban environment, land use and building design decisions are de facto public health decisions.
The Built Environment Is An Exposure Of Interest Which Distinguishes Urban Health

- Studies link the built environment and people’s health.
- Densely populated urban areas face range of indoor & outdoor environmental risks.
- Building characteristics, land-use patterns, transportation choices & urban design decisions present opportunities and barriers to minimizing these risks.
- Not only public health – but air pollution, outdoor recreation, heat-island effect, climate change – all are influenced by what is built and how.
Environmental Justice Focus on Science

- Realized that evidence-based campaigns moved policymakers, empowered residents.
- Important tool and dynamic-- science and technology.
- Has great impact on our ability to develop safe, sustainable communities.
- Lack of scientific literacy, information, data, and context was serious void contributing to systemic exclusion of communities of color from decision-making.
- Demanded health studies to assess environmental exposures or residents living in polluted areas.
NIEHS Seeds Environmental Health Partnerships To Address EJ Research Needs

- Need to respond to the disproportionate burden of pollution across communities, impacts of multiple and cumulative exposures, special concerns of susceptible populations, i.e. children, immuno-compromised, elderly.

- Scientists, community leaders agreed: work in partnership to prioritize research needs, get data, assess environmental exposures, test interventions to influence public policy and involve community in informing the research agenda.
Issue of EHP, guest edited by WE ACT, published April, 2002
Fostering Community-Academic Partnership

- The partnership between WE ACT and the NIEHS Center at Columbia and the Columbia Children’s Center for Environmental Health began in the mid 90s with two goals:

  (1) studying the relationship between community-level environmental exposures and environmental health outcomes and

  (2) translating those findings into policy changes that create equity in environmental decision making and environmental protection.
COMMUNITY-BASED PARTICIPATORY RESEARCH

- Research findings communicated to broader community—so they can effect needed changes in environmental and health policy to improve existing conditions.

- CBPR seeks to build capacity and resources in communities, and to ensure that government agencies and academic institutions better understand and incorporate community concerns into their research agendas.

- Collaborative, co-learning process that stresses systems development, community capacity building, and balancing research and action (Israel et al, 1998) CBPR has achieved particular prominence in the U.S. in the field of environmental health
IF YOU LIVE UPTOWN, BREATHE AT YOUR OWN RISK.
Diesel bus fumes can kill.

West Harlem Environmental ACTion
WE ACT for Environmental Justice.
Achievements: Building Community Capacity

- Trained 200 residents in Environmental Health Leadership trainings

- Community-driven research on air pollution: *Diesel Exhaust Exposure Among Adolescents In West Harlem* (PI: Dr. Northridge)

- *Airborne Concentrations of PM2.5 and Diesel Exhaust Particles On Harlem Sidewalks* (PI: Dr. Kinney)

- WE ACT youth trained as field technicians
Environmental Health Leadership Graduates
Primer for *Human Genetics, Environment & Communities of Color: Ethical and Social Implications*, compiled by WE ACT
Columbia Children’s Environmental Health Center Findings

Mothers and Newborns Study: 720 pairs living in Harlem and the South Bronx over 8 years.

- High prenatal exposure to certain PAHs (found in diesel exhaust) increase likelihood of children’s allergic response to cockroach, mouse and dust mite allergens as measured by known predictor (IgE) at 2 years of age.

- 4% babies born with DNA damage from PAHs which can increase cancer risk.
Study Shows Prenatal Exposure To Pollutants Has Effects On Newborns

- Prenatal exposure to PAHs alters structure of babies’ chromosomes. 1st study to show that environmental exposures during pregnancy to such pollutants can cause increase in abnormalities of fetal tissues.

- Prenatal exposure to 2 household pesticides transferred readily to fetus, reduced birth weight by 6.6oz.
Prenatal combined exposure to air toxics from diesel exhaust and second hand smoke is more detrimental to fetus than either exposure alone and resulted in reduced birth weight and head circumference, both of which are linked to health and learning problems in childhood.

Government regulation has immediate positive effects for children’s health. 1st study to show benefits from 2000-2001 EPA ban on home use of diazinon and chloropyrifos (pesticides).
Press conference launching “Breathe At Your Own Risk”
5 of 6 Diesel Bus Depots Located Above 96th Street

- Campaign drew attention to factors such as zoning and cost of land – frequently cited by the MTA to justify the location of 1/3 of the city’s bus fleet being housed in Northern Manhattan neighborhoods that experience asthma at 3 to 5 times the rates of other Manhattan neighborhoods.
Center Findings Achieve Legislative Aims on Diesel

1) The Diesel Emission Reduction Act of 2006. A.11340 (Grannis et al) / S.8185 (Marcellino et al)—This bill, which was signed into law, will reduce the public’s exposure to diesel, by requiring all NYS owned heavy duty vehicles working on state contracts to use the best retrofit technology.

Local Law 77 requires use of ultra low sulphur diesel and best available technology for non-road vehicles in city construction.

Also there is a new state mandate for NYC to adopt best available technology for pollution control on school buses.
“Conversion of NYC’s bus fleet to clean diesel and installation by the EPA of permanent air monitors in Harlem and other hot spots were among outcomes for which the partnership’s research and policy work was given substantial credit.”
Residents Lives, Health, Behavior Shaped By Exposure To The Built Environment

- Urban sites linked to the natural world: use of water, energy to effects on clean air, rivers, and wildlife.

- Studies link the built environment and people’s health. Residents in densely populated urban areas face range of indoor / outdoor environmental risks.

- Building characteristics, land-use patterns, transportation choices, urban design decisions present opportunities and barriers to minimizing these risks.

- Air pollution, outdoor recreation, heat-island effect, climate change – all and more are influenced by what is built and how.
Harlem faces a clear challenge:

- Will the significant investment in the 125th St. corridor (over $829 million in loans to businesses via the Empowerment Zone) help solve the neighborhood’s health and environmental problems, or help exacerbate them?
Urban Investment Can Spark Environmental Improvement by Responding Creatively To Local, Regional, Global Environmental Conditions

- The current cycle of renewed investment in cities follows years of abandonment fueled by federal housing, transportation, segregation, and economic policies that encouraged growth of suburbs and left urban areas riddled with vacant lots; contaminated, abandoned industrial sites; deteriorating housing, noxious land uses, and pollution.

- Zoning and land use procedures do not protect public health, community character, and quality of life. Instead, zoning was created to aggregate land uses, especially noxious ones. Those uses tend to locate where there is cheaper land in communities of color and low income, and zoning perpetuates the inequity.
Greening An Urban Community Thru Community-Based Planning

- Development planning should include the needs of the community and the environment early in the process.
- Environmental Racism has resulted in the exclusion of people of color and low income from decision making processes, and advisory bodies that take positions regarding our communities.

- WE ACT works to develop community planning processes, trainings and resources that empower residents to participate in decision making that affects community sustainability.

- Development in Harlem's 125th Street corridor can bring the community healthy air, clean and efficient transportation, pedestrian-safe streets, parks and trees, and more efficient use of resources.
Owners, developers, builders and tenants receive tangible benefits like energy savings from lower heating, cooling, ventilation and lighting costs, lower maintenance effort and costs, reduced water usage.

- Benefits: higher worker productivity with lower absenteeism and turnover.

- Improved health, greater sense of well-being, reduced neighborhood noise and light pollution, and improved behavior in institutional settings.
WE ACT EJ Center of NY—
Green Building In Planning Stage

- Townhouse in Hamilton Heights Historic District to be renovated into WE ACT EJ Center of NY. The 6-floor, 7,100 sq.ft. building will achieve a LEEDs gold rating.

- Center will showcase environmentally sustainable design techniques, products, materials that can be replicated by other homes, workplaces.

- Space dedicated to community training, youth leadership development, strategic collaboration for movement building and collaboration.
Broader Social Benefits: Reducing Our Carbon Footprint

- Smaller streams of solid waste and water.

- Reduce rising heat levels from climate change which discourages outdoor exercise and brings more smog, an additional respiratory health threat.

- Lower use of fossil fuels and accompanying production of global warming gases.

- Reduced air, water and ground pollution, and preservation of biodiversity.
Developing Access To The Waterfront: *Harlem On The River*
WE ACT Coordinates Community Visioning Process For Waterfront

- In partnership with Community Board 9, WE ACT got the city to hold off on awarding a 30-story hotel on Harlem’s waterfront until the community visioning plan was complete.

- Two years of educating electeds and community mobilization resulted in the city agreeing to build the community-identified waterfront park which will open late Spring.
WE ACT has developed and incubating a new 501 ©(3) organization to develop stewards for the park, raise funds where needed and develop programming to ensure community benefit from a park located along the Hudson River.

- Board is composed of 15 community-based organizations.
Lion’s Share, Fair Share Campaign
Victory Leads To Community-Led Redevelopment of Former Marine Transfer Station (MTS)

- WE ACT organized the 40-group Northern Manhattan EJ Coalition to advocate for a new city solid waste plan that is equitable.

- City agrees to allow WE ACT to coordinate a community visioning process for the MTS and offers revenue sources for the rebuild.
Columbia University Grabs 5 Million Sq. Ft. of West Harlem
Columbia University’s 30-year Expansion: 
*Mobilizing, Negotiating West Harlem’s Future*

- 7 acres of academic, student housing, bioresearch facilities.
- Eminent domain to usurp 1,800 jobs, 120 household units.
- Zoning change underway from manufacturing to mixed use.
- Six-month public review of hearings started.
- WE ACT holds Environmental Seat on West Harlem LDC, formed to develop, negotiate Community Benefits Agreement.
- WE ACT providing leadership, organizing, and resources.
- WE ACT assessed EIS and trained residents to testify on relevant issues, and pursuing litigation strategies.
**Go Green East Harlem Initiative:**
Collaborative Community-Based Effort

- Goal is to create healthy, vital East Harlem:
- Break pattern of environmental injustice.
- Identify community’s unique challenges.
- Support targeted agenda focused on 6 areas:
  1. Public health & Asthma
  2. Parks & Open Space
  3. Sustainable Business
  4. Farmers Markets & Healthy Eating
  5. Green Building
  6. Transportation
Go Green – For Sustainable Growth – Leveraging Collective Resources

- 48-member multi-sector steering committee seeks improvements thru neighborhood partnerships and programs, legislative change, policy reform.

- WE ACT is member of steering committee and co-chairs Parks / Open Space committee, and member of Transportation and Green Building working groups.
Campaign For NY’s Future: PlanYC:
Ensuring Implementation of Mayor’s Sustainability Plan

- Two EJ groups (WE ACT and UPROSE) on mayor’s 18-member Sustainability Advisory Board.
- Campaign has 80 groups promoting the plan to the public, media, and elected officials.

**Goal is to address 3 projections:**

1. NYC will get bigger by 1 million by 2030.
2. Infrastructure will age (water tunnels, energy grid).
3. The environment will be at risk: air quality, climate change, rising sea levels, hotter temperatures.
10 Goals For Creating Sustainable City Over Next 25 Years: 2030

1. Increase affordable, sustainable housing units.
2. Add transit capacity to improve travel times.
3. Ensure all within 10-minute walk of a park.
4. Ensure long-term reliability of water network.
5. Reach *good repair* on roads, subways, rails.
6. Provide cleaner, more reliable power by upgrading energy infrastructure.
7. Cut global warming emissions by + 30%.
8. Achieve cleanest air of any big city in U.S.
9. Clean up all contaminated land (brownfields sites)
10. Open 90% of waterways for recreation by preservation and reducing water pollution.
Mayor Has 2 Years To Begin Over 120 Initiatives By End Of Term

WE ACT has short / long-term scope of work:

- Build grassroots base of support / momentum for understanding and implementation of initiatives.
- Mobilize residents to educate city / state electeds and media.
- Conduct media campaign to mainstream / alternative press.
- Assess PlanYC on incentives / tax credits beneficial to EJ communities on green buildings, energy conservation, building retrofits that keep housing affordable.
- Ensure educated base of EJ support to hold next administration accountable.
- Develop study with Earth Institute to assess scenarios that could impact “border communities” regarding congestion pricing plan.
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