

Environmental Justice and After-Disaster Planning

By Barbara L. Allen

A disaster can be thought of in three distinct event timeframes: before, during and after. While Craig Colten has addressed some of the omissions in FEMA and the state's pre-disaster planning, I would like to focus this essay on post-disaster issues and planning preparedness. For simplicity of presentation, I will break the problems down into five broad areas, all directly relating to environmental justice¹ concerns. The five areas are: 1) knowledge and trust, 2) debris disposal problems, and 3) equal access to rebuilding tools and repatriation. I sketch each of these issues below to open the discussion. Hopefully, as a group, we might be able to offer some actionable steps or policy solutions to address these systemic problems.

Environmental Science and Public Trust—A Bad History

After the hurricanes there were endless reports of flooding subsuming superfund sites and upending oil storage tanks. Turbulence in the rush of water from the lake into the city scraped about two feet of sediment from canal and lake bottoms, and re-deposited several decades of sediment in parts of the city. This effectively re-released old hazardous materials into the urban landscape. The black sediment, now present in the city, represents some of the worst years of Louisiana's toxic industrial practices and pesticide use, before the days of much regulation and enforcement.²

¹ The U.S. environmental justice (EJ) movement of the past several decades, a synergistic hybrid of traditional environmentalism and social justice concerns, has primarily focused on two issues: 1) the siting and expansion of hazardous facilities in poor and minority communities, and 2) the push for remediation, damages and/or relocation for poor and minority communities impacted by previous or on-going pollution. Louisiana has been at the forefront of this movement, providing important case studies (Allen, 2003; Roberts and Toffolon-Weiss, 2001) fighting a variety of injustices from hazardous waste generated by large concentrations of chemical plants to affordable housing built on superfund sites.

² My information on the cause and composition of the floodwaters was taken from two interviews: Wilma Subra, Self-employed environmental scientist, interviewed on

The black sludge that was deposited about the city dries and forms a cracked, greyish “moonscape”. Wilma Subra, an environmental scientist who has worked with many community groups in Louisiana was asked to sample in numerous sites around the metro area. She found elevated levels of heavy metals, arsenic being particularly high in 92% of her samples. In the lower 9th Ward, for example, arsenic was 74 times the EPA Standard after the flood.³ While this might seem very high, the state of Louisiana has different standards for arsenic: the same sample is only 2.5 times the state allowable limit, giving the appearance of being less toxic. She also found many toxic chemicals present that are associated with now-defunct polluting industries such as old creosote facilities, material re-deposited from the lakebed.

According to Subra, the problem with the material besides its toxicity was that it was very available and easily dispersed via skin contact and airborne pathways, and thus dangerous. The EPA and FEMA were reluctant to comment or act, according to Subra, as state officials were anxious to open up neighborhoods for citizens to return. Government agencies were simply hoping it would rain and the material would simply go away. It has rained and the sludge is still there—lots of it—and it is still very toxic. (Subra interview)

Six months after the hurricane I contacted public health officials and researchers and many were reluctant to talk. One that did talk asked that I not use their name but did make some interesting observations. Health officials are in a difficult position. A half a year after the devastation, only 25% of the city’s residents have returned. Publicity

January 25, 2006 at her office in New Iberia, Louisiana and Ivor van Heerden, coastal geologist, LSU Hurricane Center, interviewed on February 6, 2006 in Washington, D.C.

³ The environmental data that Wilma Subra and other scientists have collected in the aftermath of Hurricanes Katrina and Rita is available at <http://www.leanweb.org/katrina/katrinadata.html> (accessed 22 February 2006). Interestingly, the EPA website provides easy access to federal heavy metal standards, but the Louisiana Department of Environmental Quality (LDEQ) website appears to have a manual that one can download that is over 700 pages long and uses codes that are hard to interpret—in short one would have to be an environmental lawyer to decipher it.

regarding public health issues would deter such repatriation, particularly of families with children who have not returned in any large numbers to the city. The person also told me to peruse the state public health websites where the most prominent worries were still smoking and obesity—not Katrina.

Another issue with the various state public health agencies has been their complicity with industry in the past. There are numerous examples of this such as public health officials refusing to address elevated lead levels in children living near oilfield waste sites (Allen, 2004). More recently, the state cancer data collection agency, the Louisiana Tumor Registry, has been taken to court by citizens and medical researchers trying to obtain zip-code specific information for rare cancers (such as pediatric cancers) occurring in residents living near petro-chemical facilities. The state has fought for a decade not to make public location-specific cancer data, raising many questions among the citizens as to whose interests this agency serves (Allen, 2005).

Thus the public trust in their state public health system to distribute accurate information has been compromised by years of questionable behavior. Trust in the source of information is paramount in insuring full participation in any public health and remediation efforts. This may be compromised by past bad acts. For citizens, the source of scientific information is very important to its believability (Irwin et al., 1996).

Debris Disposal Problems

Another potential EJ issue related to Katrina's aftermath is where the debris that is being removed from New Orleans is being dumped. Debris is piled on the curbs and in the street to be removed by contractors. Some people are hiring workers to scrape the sludge from their property so it can be removed with the debris. The heaps of discarded material include: household waste, building products, cars, electronics, appliances, and the noxious sludge.

State maps of the allowable hurricane debris disposal areas show sites that were closed long ago for failing to meet federal standards. Although efforts were made to separate the waste into hazard categories to target environmentally sound removal these efforts were thwarted by the lack of leadership and a lack of sharing of information that has plagued the cleanup. Large out-of-state contractors, hired by FEMA for waste removal, would simply push the separated piles of debris together and cart them off to the dumpsite. Thus local efforts at environmentally sound clean up were not being adequately coordinated with the large corporate firms hired to remove debris. These sorts of local/non-local knowledge disconnects degrade the cleanup process and may create superfund sites of the future.

But this would not be first time a hurricane's refuse created a toxic zone. The Agricultural Street landfill in New Orleans was one of the main sites for waste from Hurricane Betsy (1965). The landfill had been closed years prior to that hurricane, due to complaints from local citizens. The mountains of waste generated by Betsy led to the emergency re-opening of the landfill. Fifteen years later HUD built affordable homes on the reclaimed landfill and sold them to African-Americans. In 1990 it was designated a superfund site with heavy metal concentration many time the EPA allowable levels for public safety. Government officials declared that "there was no apparent public hazard" to the citizens living on the site (Toffolon-Weiss & Roberts, 2005:87) It became a legendary EJ battle and the residents, citing health problems, are still fighting for relocation.

I received an email a few weeks ago from a high school student living in a rural parish west of New Orleans along the Mississippi River (an area EJ advocates have renamed Cancer Alley). About a month after Katrina an old landfill near her house began to receive waste and smelled really bad. She took samples of the "black ooze" to her chemistry class as a project and contacted the state Department of Environmental Quality, who told her that the landfill was only accepting construction waste and the smell she described was probably decaying gypsum board. She has contacted an independent scientist to help her analyze her sample. I suspect that her story will be

repeated many times across south Louisiana as these marginal waste sites fill of with a mixture of debris from homes and businesses ruined by the hurricanes.

Equal Access to Re-Building Tools and repatriation

As people were first allowed to come back to examine the damage to their homes, in some cases to clean the debris and search for what was salvageable, neither local, state or federal officials were recommending any protection. Finally, at the insistence of environmental groups, the EPA did tell residents not to come into to contact with the sediment and FEMA did hand out a list of recommended protective gear (masks, gloves, tyvek suits, etc.) to returning residents at the police checkpoints before they entered their devastated neighborhoods. Unfortunately, there was no place within 100 miles to buy any of these items, if the residents could have afforded them, and later non-profits began giving them out to residents as they returned.

While the wealthier homeowners hired people to clean and gut their homes, working class and poorer residents did the work themselves. Furthermore many of the immigrant workers brought in by large government contractors to remove the debris wore little or no protection (some by their own choice, masks dangling around their necks) as they cleaned. Unprotected cleaning and demolition was highly risky in much of the city (especially in the areas most heavily flooded and having the most sludge) and there was no electricity, no 911 system, no medical clinics, and no running water.

Cleanup information and assistance weren't the only tools needed. Fortunately, much of the housing stock in New Orleans was built appropriately for a floodplain. Many in the Lower 9th Ward, for example, were constructed of mold and rot resistant cypress, raised two to four feet off the ground on piers, and built to flood and drain.⁴ This neighborhood ranges in elevation from a low point of four feet below sea level to a high point of eight

⁴ From an interview with Elizabeth English on 'To the Point', National Public Radio, 13 January 2006.

feet above sea level closer to the river. The reason the area was so heavily flooded was because of a breach in the canal walls, not necessarily because of elevation.

Unfortunately “many of the houses that are good candidates for recovery have been labeled 52% or 56% damaged by FEMA.”⁵ In order to get a building permit and thus money from FEMA and your insurance company to rebuild, your house must have sustained less than 50% damage. According to one who has worked with ACORN,⁶ FEMA’s experts have not only overstated damage, but in some cases, they have allowed further damage to occur by inaction. For example, FEMA would declare 100% roof damage when in actuality the damage was very slight. This declaration meant that FEMA would not provide blue plastic protective material for the roof, allowing rain to further damage the property.

To challenge FEMA’s damage determination, a homeowner must be present in New Orleans and present evidence contradicting their damage determination. This is difficult as many of the residents are living in Houston or Atlanta and have no way to file a grievance. Furthermore assembling a counter-claim substantiating a differing technological assessment of their property is complicated and deters many poor owners. In adjacent, majority white, Jefferson Parish many neighborhoods have street after street of houses with a small FEMA trailer in every yard, enabling the owner to rebuild while living on site. There is no such evidence of this scale of activity in Orleans Parish. Many neighborhoods still have no electricity or water that they could connect to a FEMA trailer, even if they had one. Where will these residents live while repairing their homes?

⁵ From a phone interview I conducted with Elizabeth English on 17 February 2006.

⁶ ACORN is the acronym for the Association of Community Organizations for Reform Now, an umbrella group that supports community development in poor communities. LEAN, the Louisiana Environmental Action Network, is an umbrella from over 100 community groups in the state and has also been active in the outlying areas of New Orleans. The Natural Resources Defense Council (NRDC) is another national group active, particularly in protecting the wetlands and arguing for the toxic sludge cleanup.

Another issue is what happens when the residents of a community are dispersed and have difficulty forming a cohesive voice? This is one of the largest problems Katrina presents. Communities are asked to assemble a list of those willing to come back and rebuild in order to receive assistance. This task is much easier for wealthier residents who have internet access and other means of communication. The poor are at a definite disadvantage here and that disadvantage may mean that their neighborhoods do not get needed funding.

Conclusion

The hurricane, a natural disaster (which was also a social and technological disaster), provides an expanded environmental justice lesson for after-disaster planners. Social factors, such as race, class, culture and education level are important to consider when devising equitable aftermath strategies. Maybe it would be possible to garner ideas from previous EJ controversies.

My own research on the EJ movement in Louisiana has shown that the strongest citizens' groups have the following: 1) alliances with well-organized national and multi-national environmental and social justice groups; 2) have enrolled the support of activist and independent scientists and professional experts to work on their behalf, and; 3) are cross-class and multi-ethnic in composition (Allen, 2003). Alliances with national groups, such as ACORN and NDRC, are happening and the prominence of the problem in the media has insured wide visibility of the struggles of these displaced citizens. Slowly more scientists and independent experts are participating in the environmental debate on behalf of citizens who are not necessarily well-represented in the voices of corporate and government experts. The believability of information will be important in the rebuilding. It is also important that outside experts are heard so that state economic interests do not override community health. More could be done to engage citizens with scientists that are asking questions in concert with communities and trying to find answers to those issues that are most urgent from the citizens' standpoint. And lastly, heterogeneity of

the participants may not be possible at the community level given the segregation in New Orleans and this third factor may not be as applicable to post-disaster planning.

A broader vision of environmentally just after-disaster planning should include “building greater levels of social capital, food security, legal protections, and autonomous spaces [of action]” as well as building social networks and trust within disenfranchised communities.(Pellow & Brulle, 2005: 295). Many of these were notably absent in NOLA. Also important would be the quick integration of outside citizen-oriented help groups, building on their organizational and knowledge. And lastly, it is important that there are scientists, engineers, and other experts that can gain residents’ trust, answer their questions, and work on their behalf.

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