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Clear the Air provided research, financial and technical assistance in the writing of the report. This report was made possible with funding from The Pew Charitable Trusts. The opinions expressed in the report are those of the authors and do not necessarily reflect the views of The Pew Charitable Trusts.

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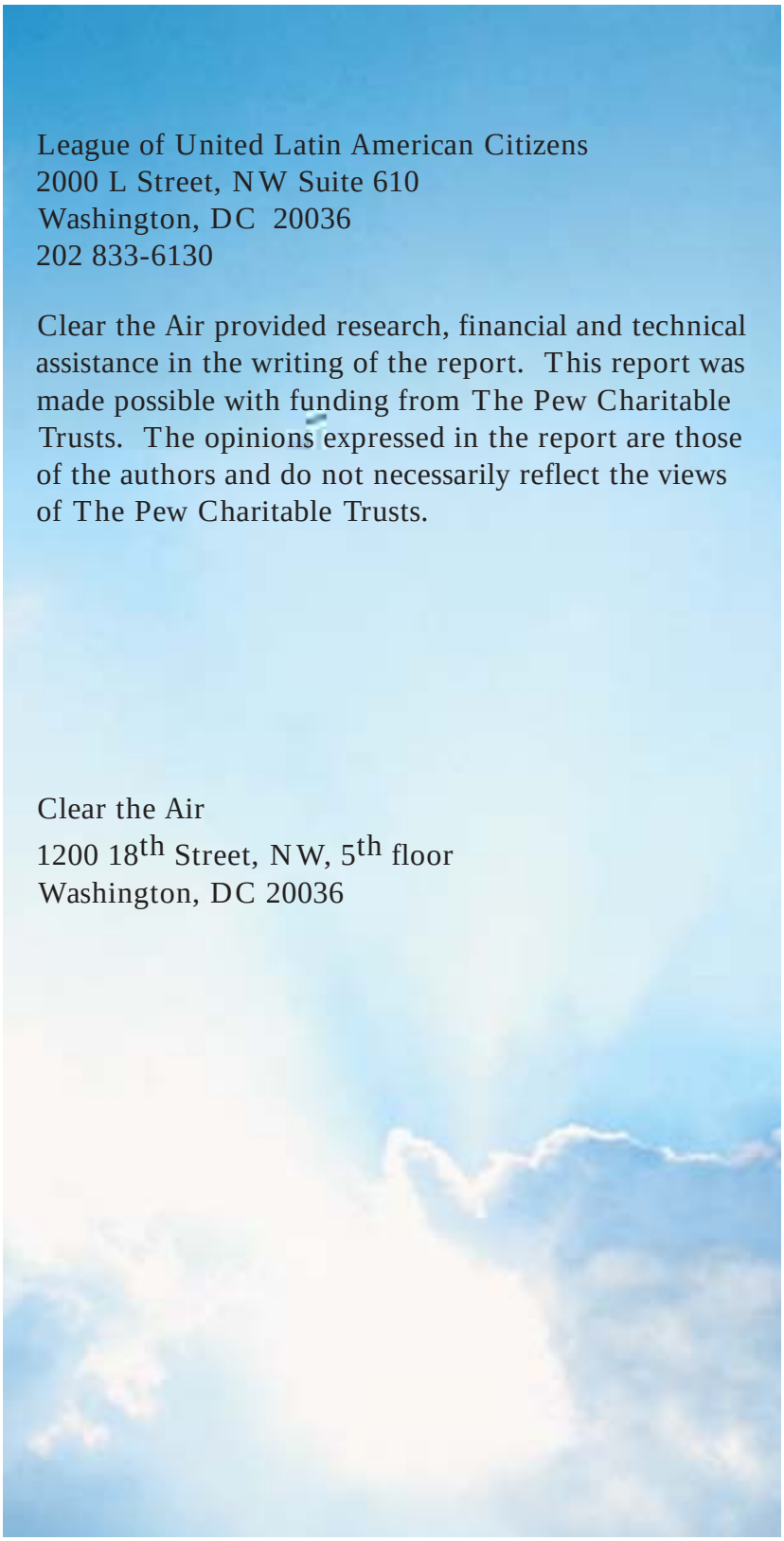
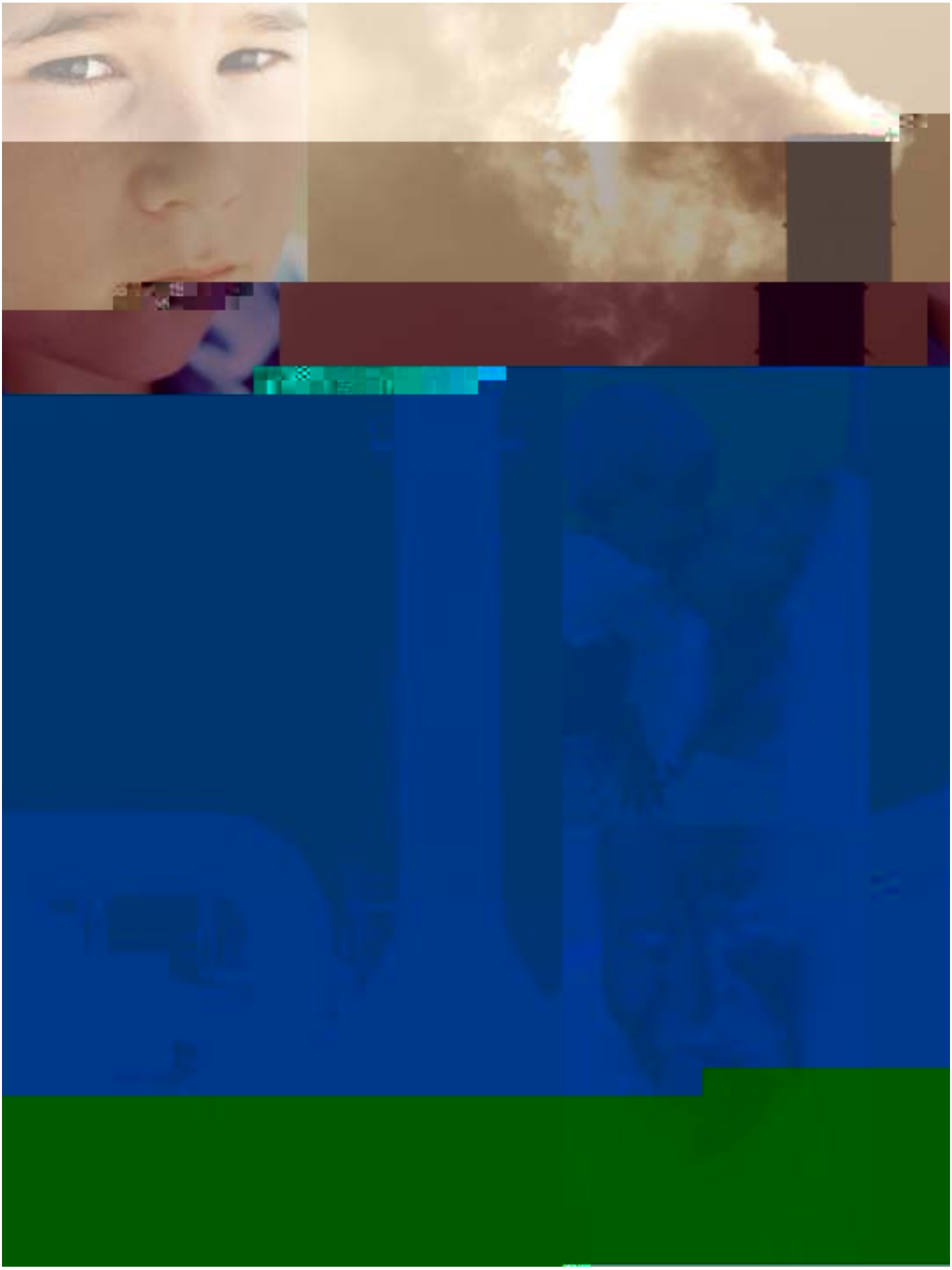




Hispanic families suffer serious health effects caused by air pollution. Studies show that the very air breathed by Hispanic Americans is likely to be harmful to their health.[1] Latino children and adults living in polluted areas are more likely to suffer adverse health effects, such as asthma attacks. For many, the situation is worsened by a lack of health insurance and by language barriers.

million uninsured people.[5] Poverty and uninsured rates are even higher for Spanish-speaking Hispanics.

Power plant emissions of mercury contaminate fish, posing a major health threat to the Latino community. 1.3 million Hispanics nationwide actively participate in fishing as a recreational, social, or family activity.[6] However, much of the Latino community is unaware that invisible toxic chemicals, such as mercury, PCBs and pesticides, might be present in the water that they fish in or in the fish that they eat. In a number of studies it has been shown that Latino sport and commercial anglers catch a variety of sportfish and consume fish more frequently, than white consumers. At the same time, Hispanics and other minorities are less likely than whites to be aware of fish consumption advisories.

Global warming could seriously affect the health, economic and social well being of Hispanics.[7] Warming of the planet together with more drought conditions in some regions and flooding in others could induce crop failures, famines, flooding and other environmental, economic and social problems.[8] At highest risk are communities that have the fewest technical and social resources.[9]

Hispanics are regularly excluded from federal research activities and data collection efforts. The exclusion of Hispanics from these critical national data systems means that environmental health issues affecting Hispanics are going undocumented. Although many Latino communities are in close proximity to power plants, they have the least amount of representation with the health researchers who inform our nation's policymakers.

The EPA must ensure environmental justice for Hispanics. In 1994, President Clinton issued Executive Order 12898, "Federal Action to Address Environmental Justice in Minority Populations and Low-income Populations." The Executive Order directs federal agencies to pay attention to the environmental and human health conditions in minority and low-income populations with the goal of achieving environmental justice by making certain that such populations are not subjected to a disproportionately high level of environmental risk. However, the EPA has not identified populations addressed in the Executive Order, nor developed criteria for determining disproportionately impacted communities, thereby prohibiting the Agency from implementing the Executive Order as it was intended.

Recommendations

Though the nation's clean air laws have succeeded in reducing air pollution over the last few decades, more must be done.

Together, we in the Latino community should challenge our policymakers, media in both Spanish and English, and elected officials that serve us to recognize the significance of air pollution from power plants and other sources, the harm it is having on the health of our families, and to stand up and demand action to reduce air pollution.

This report demonstrates that, as a community, we must call upon our leaders to do the following:

- Strictly implement clean air laws. Aggressive enforcement is essential to protect our communities. Power plants and other pollution sources must reduce their emissions of smog- and soot-forming pollutants as quickly as possible in order to enable communities to meet national air quality standards. In addition, EPA must require all power plants to reduce their mercury emissions to the maximum extent possible using the latest technology by 2008 as required by current law.
- Close the Clean Air Act's 30 year-old loophole for old, dirty power plants and require all coal-fired power plants, both new and old, to comply with modern emission control standards.
- Require power plants to reduce their carbon dioxide pollution.
- Include Hispanics in health research that provides the basis for critical national data systems.
- Urge EPA to develop a comprehensive strategic plan to ensure appropriate training is provided, clearly define the mission of the Office of Environmental Justice, determine if adequate resources are being applied to environmental justice, and develop a systematic approach to gathering information related to environmental justice.

Our Shifting Borders

Changes in Hispanic/Latino Demographic Patterns and their Environmental Justice Implications

by Dr. Cecilio Ortiz-García

The confluence of social justice considerations and environmental concerns has brought home the realization that minority communities across the United States disproportionately bear the impact of environmental risks associated with a number of human activities. In fact this paradigm arguably has risen to a prominent place on the United States environmental policy agenda in the last 20 years. Riding on the coattails of the first and second waves of environmental concern in the United States and the Civil Rights Movement, this "third wave" of American environmentalism[10] has concentrated on:

- The relationship between the location of LULUs (Locally Undesirable Land Uses, including landfills, incinerators and other polluting industries) and the environmental health of minority populations,

- The exclusion of politically unorganized communities of color from the environmental policy process, and

- The exploration of a whole array of factors that make minority populations vulnerable to environmental injustices.

Analysis has expanded to show that minority communities often do not equally enjoy the benefits associated with environmental enforcement and are consistently left out of environmental decision making.

These developments in the area of environmental policy have fueled the growth of what is now called the Environmental Justice Movement (EJ). Over the years, EJ has entered the public policy arena at all levels of the governmental apparatus, raising awareness over the relationship between environmental policy and social justice issues.

In 1994, President Clinton issued Executive Order 12898 directing federal agencies to make EJ considerations a priority, and in 1995 the Environmental Protection Agency promulgated its Environmental Justice Strategy delineating the agency's EJ program. Moreover, EJ has opened the door for grassroots

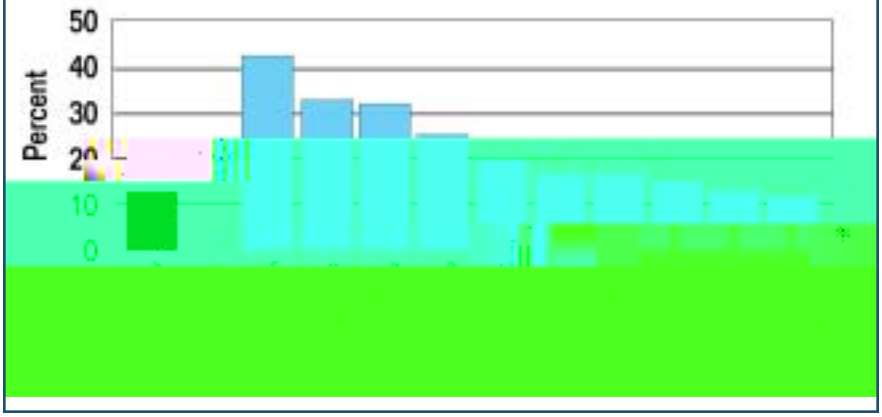
The largest Hispanic/Latino population in the United States according to the 2000 Census lives in "maritime ring" or "border" states (California, Texas, New York, Florida, Illinois, Arizona, New Jersey, Colorado and Washington). Recent census data has begun to present a different picture that points to a significant demographic shift in the population to places other than border or maritime ring states (see graph right).[19]

The states with the largest change in the number of Hispanic/Latino residents between 1990 and 2000 are shown right.

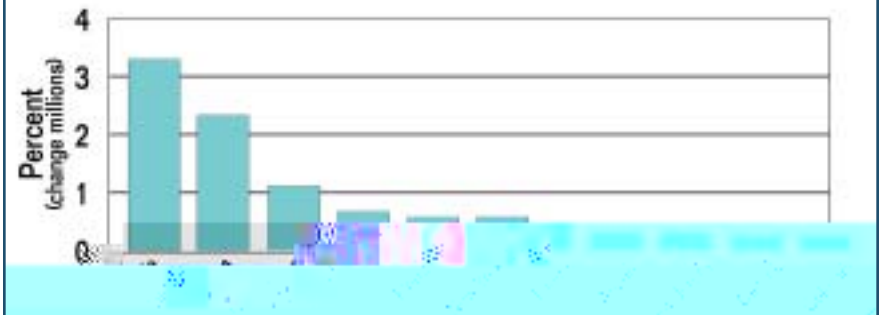
Two notable additions to this list, namely Georgia and North Carolina, begin to paint a picture of the changing Hispanic/Latino demographic landscape. Furthermore, the graph (right) shows the ten states (North Carolina, Arkansas, Georgia, Tennessee, Nevada, South Carolina, Alabama, Kentucky, Minnesota and Nebraska) with the highest changes in proportion of their Hispanic/Latino residents in that same decade, demonstrating the shifting nature of our borders.

These states are emerging as new "border states" where Hispanic/Latino populations are quickly adapting to existing social, economic, political and environmental conditions. But, are these new states equipped

Percent of Population that is Hispanic/Latino: United States and Ten States with Largest Proportion of Hispanic/Latino Residents, 2000



Change in Number of Hispanic/Latino Residents between 1990 and 2000: Ten States with Largest Change



Change in Proportion of Hispanic/Latino Residents between 1990 and 2000; Ten States with Largest Change

The Latino community is threatened by:

• **Exposure to multiple environmental threats.** Occupational exposure to chemicals, indoor air pollution and contaminated drinking water put the Latino community at risk. These exposures, in combination with exposure to outdoor air pollution, make Hispanics overall more susceptible to health risks.

• **Poverty.** More than 20 percent of Hispanics (including 30 percent of Latino children) are living in poverty. This level of poverty affects housing choices and whether families are able to afford medical insurance. In general, this community has limited access to health care; Hispanics with limited English proficiency are among the most underserved.

• **Lack of information.** Surprisingly, little is known about the impacts of environmental pollution on Hispanics. The Latino community is essentially excluded from federal research and data collection activities because the methods used to collect the information do not adequately sample Latino subgroups.

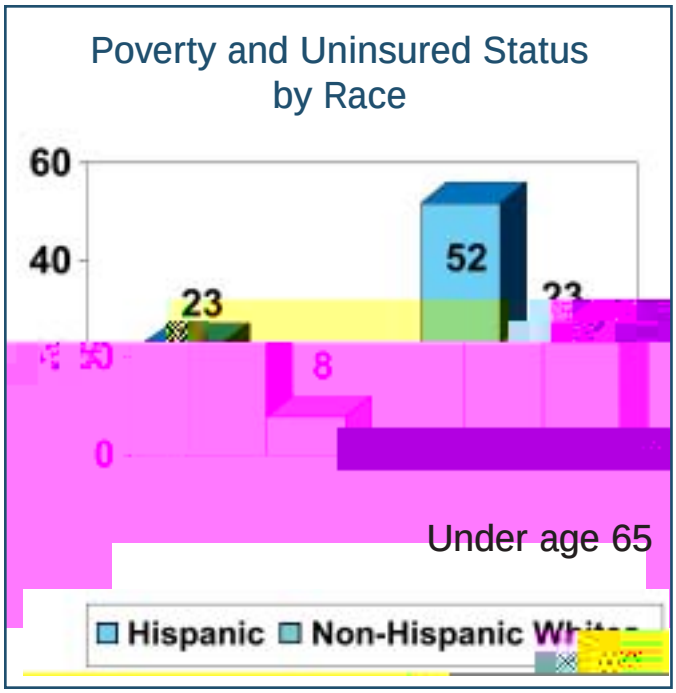
Hispanics are disproportionately suffering from the health effects caused by air pollution, such as asthma. Much of the reason is due to a lack of insurance because of low socio-economic status, combined with barriers to health care that include a lack of linguistically and culturally responsible medical facilities. Approximately 20 percent of Hispanics who forego health care do so because of language issues. Those with limited English proficiency are among the most underserved, making them the most susceptible to health complications from the power plant-produced pollutants.

A March 2003 report released by the Robert Wood Johnson Foundation found that 18.5 million or 52 percent of all Hispanics under the age

Lack of Data Collection Means Impacts on Latino Health Go Largely Undocumented[21]

A number of national health data collection systems exist to assess the health of the U.S. population. Policymakers use the collected information to respond to health and environmental problems. Unfortunately, Hispanics are regularly excluded from federal research activities and data collection efforts. The methods used to collect the data neither require the identification of different ethnic groups nor collect enough data on Hispanics so that the information can be broken out into different ethnic subgroups. Field researchers, not trained interpreters, typically conduct interviews. According to the General Accounting Office, no existing database currently provides accurate, complete and available information on the entire Latino population, including subgroups, residing in the U.S.[22]

The U.S. Department of Health and Human Services has 21 national data collection systems. Seventeen of the 21 do not collect enough data on Hispanics for the information to be broken out by subgroup. Six do not collect any data on Hispanics. Only one, the National Vital Statistics System, collects data for all Latino subpopulations. The exclusion of Hispanics from these critical national data systems means that environmental health issues affecting Hispanics are undocumented. Many Latino communities live in close proximity to power plants and in turn have the least amount of representation with the health researchers who inform our local and national policymakers.



of 65 did not have health insurance coverage in 2001–2002.[23] Hispanics represent 25 percent of the total number of uninsured people in the country, a disproportionate number when compared with the total percentage of the Latino population, which stands at 13 percent.[24]

Latino Families Face Health Problems from Air Pollution

The Latino community is an ethnically diverse population, representing approximately 17 different groups. According to the 2000 U.S. census, 66.1 percent of Hispanics residing in the U.S. are of Mexican descent, 14.5 percent are from Central and South America, nine percent from Puerto Rico, four percent from Cuba and over six percent of other Latino origins.[25] These distinctive subgroups are important because there is considerable variability within the Latino population in terms of where people live, their income and even their susceptibility to disease, among other factors.

Power plants populate the eastern seaboard, where they can be found in or next to every single major metropolitan city. In the Midwest, dozens of these coal-burning power plants are located in the middle of heavily Latino communities. The same is true for power plants in the Southwest — specifically in Arizona, New Mexico and Colorado.

The air in Latino communities violates air quality standards. More than half of the U.S. population (55 percent) lives in areas with unhealthy levels of ozone or particle pollution.[26] Hispanics make up 13 percent of the U.S. population. In 2002, 71 percent of Hispanics lived in counties that violated federal air pollution standards for one or more pollutants.[27] The map on the opposite page presents the counties that are in "non-attainment" for federal air pollution standards and the percent of the county population represented by Hispanics.

Latinos are exposed to high levels of particulate matter pollution. More than 13.5 million Latinos, or 35 percent of the Latino population, live in areas that violate the federal air pollution standard for particulate matter (either PM_{10} or $PM_{2.5}$).[28]

Latinos are exposed to high levels of ozone pollution. More than 19 million Hispanics, or 50 percent of the Latino population, live in areas that violate the federal air pollution standard for ozone.[29]

Smog, Asthma, and Hispanics

Pollution from power plants, cars and trucks, construction equipment, and other sources form particulate matter, ozone smog and air toxics. Some particulate matter is emitted directly as soot; however, the most dangerous particles are formed when the sulfur dioxide gas from power plants and other sources is transformed into tiny acidic sulfate particles in the atmosphere. All of these pollutants have been associated in some way with respiratory hospitalizations, lost school days due to asthma attacks, low birth weight, stunted lung growth and even infant death. In particular, the incidence of asthma in the Latino community is reaching epidemic proportions.

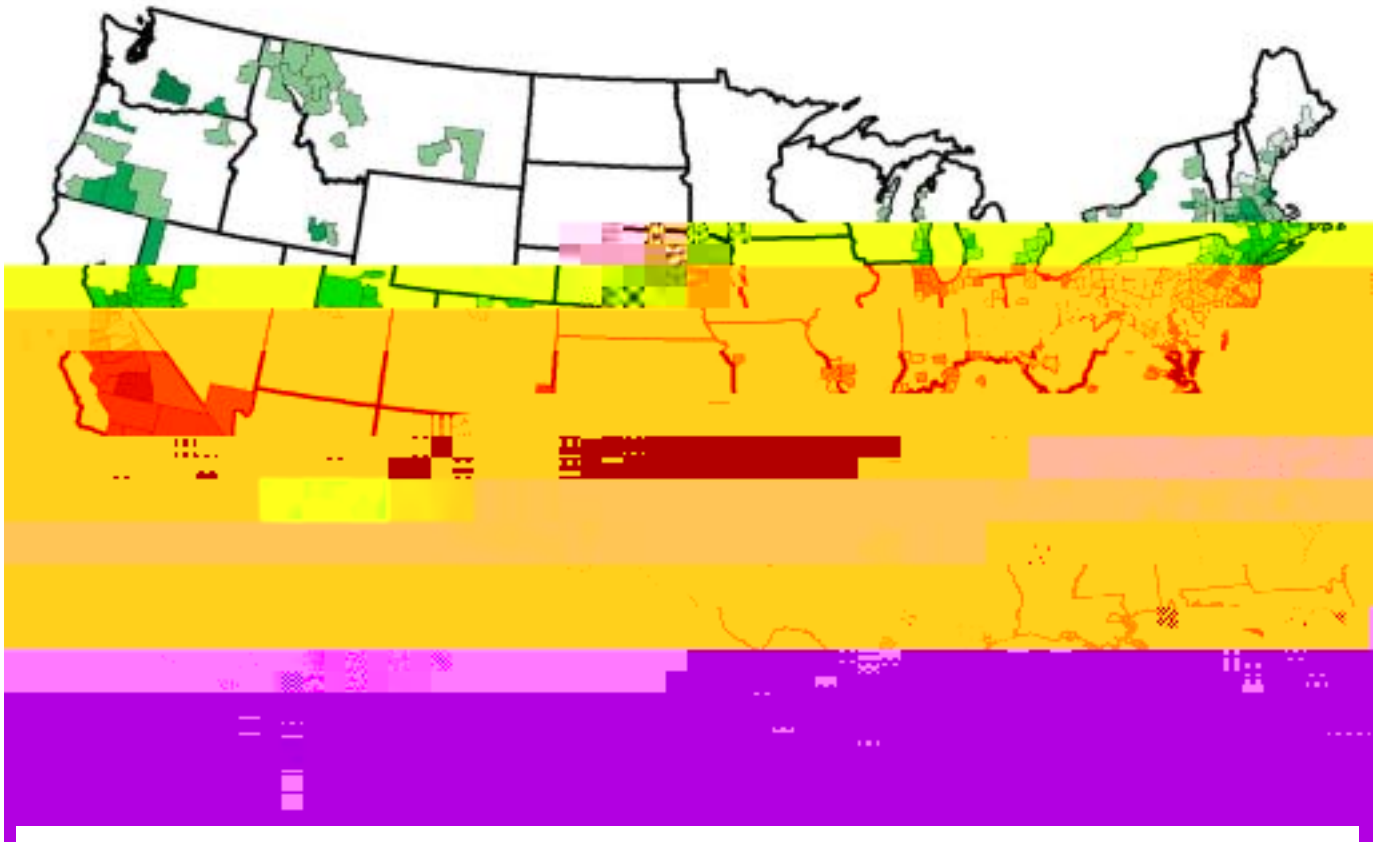
Asthma is the most common chronic disease among children.[30] Between 1980 and 1994, the prevalence of asthma increased 74 percent among children five to 14 years of age.[31]

The incidence of asthma in children of Latino mothers is two-and-a-half times that of non-Latino white children.[32] A recent study found that Hispanic, African-American, and Asian/Pacific Islander mothers experienced higher levels of air pollution and were over twice as likely to live in the most polluted counties compared to white mothers.[33]

The highest rates of asthma in the U.S. have been reported among inner city Puerto Ricans. As many as 20 percent of Puerto Rican children aged six months to 11-years-old are afflicted – a greater percentage of children than any other ethnic group.[34] In Chicago, a health survey of six communities found that 34 percent of Puerto Rican children (aged 0 –12) had been diagnosed with asthma compared to 20 percent of non-Hispanic white children in the same communities.[35]

The age-adjusted asthma mortality rate for Hispanics between 1990 and 1995 was 15.3 per million people. Puerto Ricans had the highest mortality rate from asthma of any ethnic group (40.9 deaths per million people). Mexican-Americans had the lowest mortality rate among the Latino groups (9.2 deaths per million people).[36]

Percent of Population in Non-Attainment Areas Represented by Latinos



Asthma rates in minority children overall are doubling every ten years. The New York Department of Health reports levels of asthma of up to 30 percent in minority populations of children.[37]

When ozone levels were high, the rate of hospitalization for African Americans and Latinos was twice that of whites over the time period studied. Latinos and African Americans without health insurance were admitted to the hospital more than those with insurance, which reflects the lack of access to preventative health care by the uninsured.

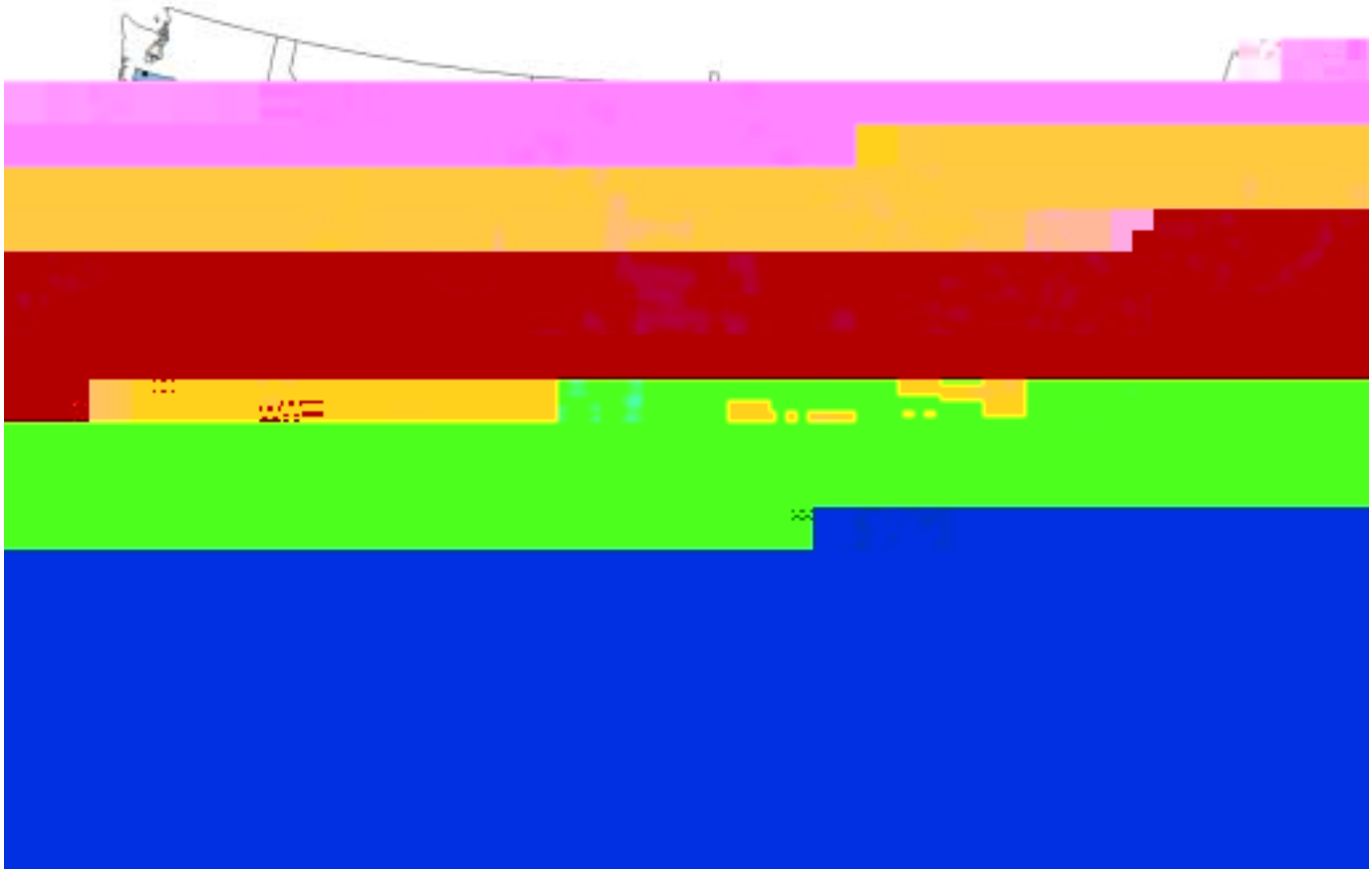
Air Pollution and Children

Emergency room visits for asthmatic children are strongly linked to ozone levels. Especially during the summer months, daily hospital admissions and emergency room visits increase as ozone levels increase. These trends have been shown in the U.S., Mexico and Canada.[38, 39]

While scientists have documented that children are generally more susceptible to ozone pollution than adults, asthmatic children are more vulnerable and some subgroups of asthmatic children appear to have heightened susceptibility. A recent study suggests that asthmatic children born preterm and/or with low birth weights are at greater risk from ozone exposures.[40,41] Affluence may play a role as well; children in homes without air conditioners suffered higher exposures than those in homes with them because air conditioners are effective in reducing indoor ozone levels.[42]

A growing body of evidence supports the potential association between ozone and premature death in adults.[43] A Mexico City study links exposure to ozone and nitrogen oxides to infant death.[44] The study also found that the relationship between air pollution and infant death was even stronger when particulate matter levels were considered in the analysis.

The children's health study in California suggests that particulate matter may slow lung function growth in children. Children examined in a dozen communities near Los Angeles experienced a three to five percent relative reduction in lung function growth between the most polluted and least polluted cities as a result of exposure to particulate matter.[45] When children moved to communities with cleaner air, lung function growth rates increased.[46r levels were didy twasmesLaj7dnthkmerawron



sories for king mackerel. The U.S. Food and Drug Administration (FDA) also has issued a consumer advisory for pregnant women, women of childbearing age, nursing mothers and young children. These groups are advised not to eat swordfish, tilefish, shark and king mackerel because of high mercury levels.[61] In July 2002, an independent committee of food safety advisors convened by FDA recommended that consumption advisories also be issued for canned tuna. In March 2004, the FDA issued a new advisory adding canned albacore tuna to the list of fish that should not be eaten more than once a week by sensitive populations. Canned "chunk light" tuna was added to the list of fish that should not be eaten more than twice a week by these populations.[62] However, the Special Supplemental Nutrition Program for Women, Infants and Children, which provides food assistance to low-income women, infants, and children who are at nutritional risk, provides canned tuna fish in their food packages.

Research suggests that Latino anglers tend to believe that consuming fish poses few risks, unless the fish are visibly sick or there are obvious sources of water pollution. According to one study, which specifically evaluated Latino anglers, participants were not aware that toxic chemicals – such as mercury, PCBs and pesticides – might be present in the fish, let alone that those chemicals could affect their health.[63]

A number of studies show that Latino anglers eat a variety of sport-fish and eat fish more frequently than white consumers.[64] At the same time, Hispanics and other minorities are less likely than whites to be aware of fish consumption advisories.[65] State-sponsored advisories are minimally effective because of their limited distribution and complex wording. Advisories are often distributed with fishing licenses, which not all anglers obtain. In one study, only 30 percent of Latino anglers were licensed, and the state agencies made little effort to share advisory information with unlicensed anglers.[66] Also, advisories are usually written in English, which Spanish-speaking anglers may not be able to translate. Thus, Latino anglers and their families may unknowingly consume contaminated fish.

Health Effects of Mercury

Methylmercury interferes with the development and function of the central nervous system. Pre-natal exposure from maternal consumption of fish can cause later impairments in children. Infants may appear normal during the first few months of life but later display subtle health effects, such as poor performance on neurobehavioral tests, particularly on tests of attention, fine motor function, language, visual-spatial abilities (e.g., drawing) and memory. These children will likely have to struggle to keep up in school and might require remedial classes or special education.[67]

Children and developing fetuses are most vulnerable to mercury exposure. Fish tainted by methylmercury consumed by the mother passes through the placenta to the developing fetus. Mercury exposure prior to pregnancy is as critical as exposure during pregnancy because mercury is stored in tissues and is slowly excreted from the body. The first weeks of pregnancy also represent a critical time for fetal development. Nursing mothers, pregnant women, women of childbearing age (i.e., 15 to 44 years of age) and children should avoid mercury exposure.[68]

Greenhouse Gases and Global Warming

Global warming could seriously affect the health,

economic and social well being of Hispanics.[69] Changes in the Earth's atmosphere are occurring due to the buildup of greenhouse gases. As shown below, power plants account for nearly 50 percent of carbon emissions emitted from fossil fuel use in the U.S.

Warming of the planet together with more drought conditions in some regions and flooding in others could induce crop failures, famines, flooding and other environmental, economic and social problems.[70] At highest risk are communities that are the most exposed and have the fewest technical and social resources.

with global warming, more catastrophic fires may occur, especially when combined with an increase in forest flammability from logging.

Increases in Infectious Disease. A warmer climate means that more areas of the U.S. will be hospitable to insects and the diseases they spread (like malaria, St. Louis encephalitis, Lyme disease, and Dengue fever) and rodents (carriers of the hanta virus). The map below shows areas of the U.S. that may see increases in the incidence of Dengue fever cases. Many of these diseases cause flu-like symptoms and can be treated when caught early. El Niño and La Niña events also influence the spread of diseases by increasing the habitat range of vectors like mosquitoes. For example, vector-borne diseases are expected to increase, at higher elevations, in particular diseases such as malaria and dengue fever in Brazil, Peru, Bolivia, Argentina, and Venezuela.

At the World Climate Change Conference in Moscow in September 2003, scientists said that nearly 160,000 people die each year from side effects of global warming ranging from malaria to malnutrition. The scientists from the World Health Organization and the London School of Hygiene and Tropical Medicine predicted that this number could double by 2020 and that children would be the hardest hit. In addition, most deaths would be in developing nations in Africa, Latin America and Southeast Asia, which would be hardest hit by the spread of malnutrition, diarrhea and malaria in the wake of warmer temperatures, floods and droughts.[73]

Global Warming Impact on Latinos

children lived in poverty compared with 9.4 percent of white non-Latino children.

Puerto Ricans have the highest poverty rate of all Latinos. In 1998, 31 percent of Puerto Ricans lived in poverty, followed by Mexicans (27 percent), Central and South Americans (20 percent) and Cubans (14 percent).

These high poverty rates indicate that such communities and families are more likely to have poor access to health insurance and medical care. As noted above, the potential health impacts of climate change include increased prevalence of infectious disease such as Dengue fever and West Nile virus, more heat-related stress and illness, and more asthma attacks from higher levels of ozone smog.[76, 77] These diseases can be fatal when not treated, particularly for seniors and people with compromised immune systems. Unfortunately, individuals without health insurance will be hit the hardest; the uninsured rate for English-speaking Latinos is one and a half that of whites.[78] For Spanish-speaking Latinos, the uninsured rate is nearly four times greater than that of whites.[79]

Global Warming Impacts on Latin America

Power plants operating today are the number one industrial source of several major air pollutants, including carbon dioxide which is a major cause of global warming. The Intergovernmental Panel on Climate Change (IPCC) special report on regional impacts of climate change has also predicted specific impacts of global warming on South America.[80]

Mexico will have warmer and drier conditions – a shift in weather patterns which is expected to add further hardship to an agricultural economy already stressed by low and variable rainfall.

A case study in Belize, looking at a range of temperature and precipitation changes on maize, red kidney beans, and rice production, concluded that Belizean farmers might well see their livelihoods destroyed as a result of reduced rainfall and increased temperatures.

Under current climate conditions in Latin America, banana crops are already adversely affected by flooding. Increases in storm frequen-

Case Study

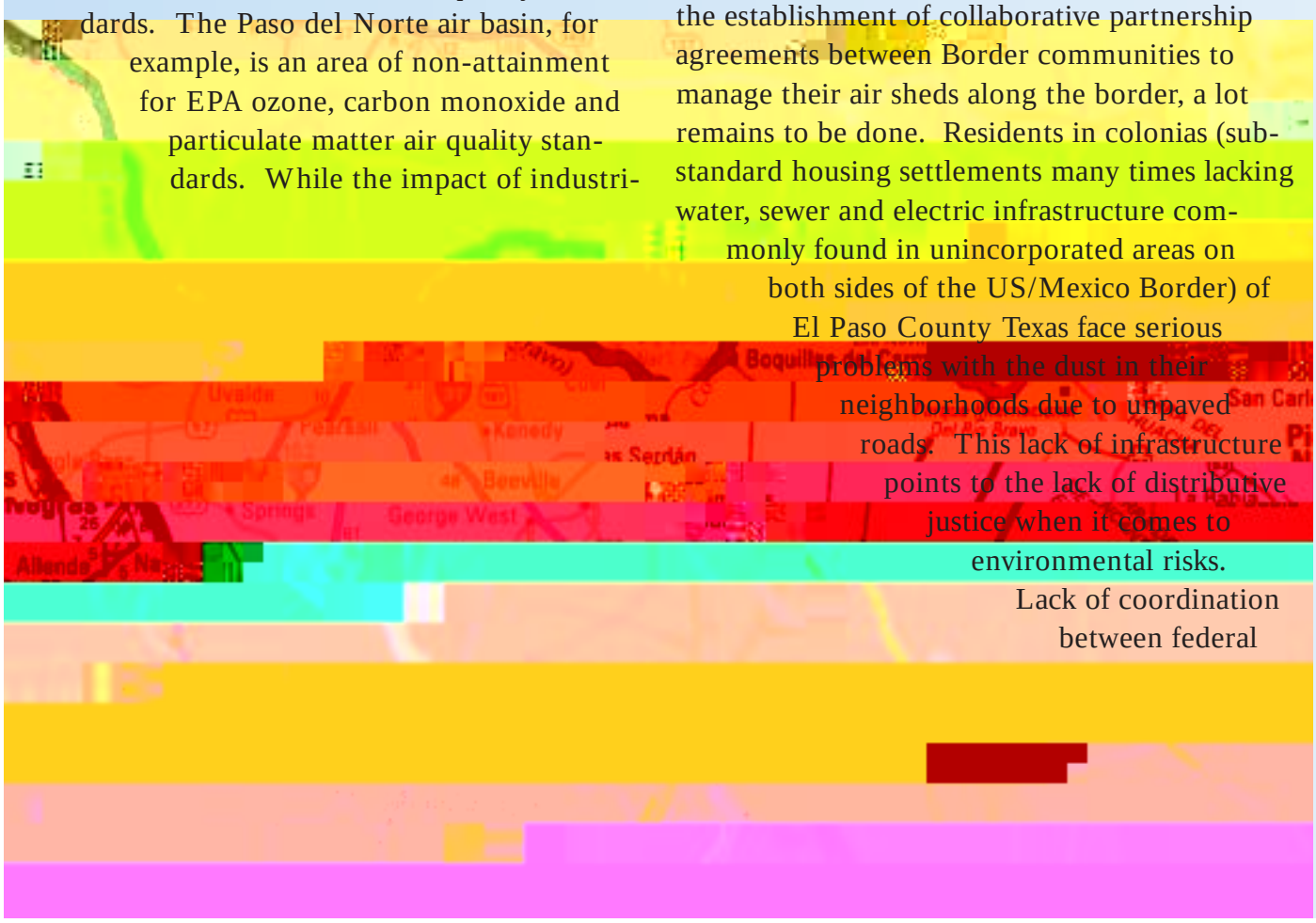
U.S./Mexico Border Air Quality

by Dr. Cecilio Ortiz-García

Assistant Professor at University of Texas-Permian Basin, Odessa, Texas.

The U.S./Mexico border faces a number of environmental challenges of significant magnitude. Air quality issues, in transnational settings such as this one, represent some of the most complex environmental issues involving climate, geography, economics, politics and environmental justice, just to name a few. Large numbers of border residents reside in areas of non-attainment under both Mexican and American environmental air quality standards. The Paso del Norte air basin, for example, is an area of non-attainment for EPA ozone, carbon monoxide and particulate matter air quality standards. While the impact of industrial emissions associated with the Maquiladora industry (US multinational companies that set subsidiary operations in Mexico) are significant other sources also contribute to poor air quality at the U.S./Mexico border (i.e., unpaved roads, idling lines of cars and diesel trucks sitting for hours at a time at the international bridges, the burning of debris including tires in the brick-making process in Ciudad Juarez).

While significant progress has been made in the establishment of collaborative partnership agreements between Border communities to manage their air sheds along the border, a lot remains to be done. Residents in colonias (sub-standard housing settlements many times lacking water, sewer and electric infrastructure commonly found in unincorporated areas on both sides of the US/Mexico Border) of El Paso County Texas face serious problems with the dust in their neighborhoods due to unpaved roads. This lack of infrastructure points to the lack of distributive justice when it comes to environmental risks. Lack of coordination between federal



agencies at the international bridges when it comes to the flow of goods and humans is a factor in the amount of border traffic. In fact, research shows the international bridges are hot spots for the accumulation of "bad ozone" affecting the border population.[81]

The industrial activity and population boom the border has seen in the past 20 years is rapidly outstripping the electrical generation capacity of the area. It is estimated that between 2001 and 2011 the border will need an additional generating capacity of approximately 60,000 megawatts for ten Mexican and U.S. states that comprise the border.[82] While a number of NGO's and other policy actors continue to press for the use of renewable energy sources as part of the mix of energy sources, reality suggests most of this electricity will be generated by the fossil fuels utilized by thermoelectric plants. Conservative estimates suggest that this increase in emissions from thermoelectric plants will dump 56,000 additional tons of NO_X, 83,000 additional tons of SO_2, and 144,000 additional tons of CO_2 a year on an air basin already at risk.[83] The consequences and impact on human health, the environment and other natural resources such as water sources could be disastrous.

Despite this bleak picture, binational institutions are reaching out in a more formal fashion to address these issues. In 1993, leaders in El Paso-Juarez region along the Texas-Mexico border, with help from the Environmental Defense Fund, established the Paso del Norte Air Quality Task Force to inform the international community about air quality problems and to initiate joint pollution reduction projects. The task force's binational activities included working with Juarez officials to improve Mexican vehicle inspection and maintenance programs and to set up emission diagnostic centers and training programs for mechanics to help them comply with Mexican environmental laws. Mexican instructors were trained at University of Texas-El Paso and Colorado State University and, in turn, trained more inspectors in Mexico.

The task force also has worked with federal agencies to speed up the use of alternative fuel vehicles and address traffic congestion at border crossings. The task force further recommended the creation of an International Air Quality Management District to provide a method to conduct local activities including data collec-

Case Study

Hispanics Fighting Power Plant Pollution in Illinois

As Hispanic residents of Chicago, Gladys and Miguel Martinez understand the effects of power plant pollution firsthand. Highlighted in an article in the Chicago Reader they explained that all three of their children suffer from asthma and occasional pneumonia. For a time, Michael, their four-year-old was going to the emergency room twice a week.[85]

Their case is not unique for residents living near power plants. Research by the Harvard School of Public Health showed that the Fisk and Crawford power plants, located in predominantly Latino neighborhoods of Chicago, cause 40 premature deaths, 2800 asthma attacks, and 550 emergency room visits [86]

Case Study (cont.)

local environment were all power generation plants operated by the Puerto Rico Electric Power Authority (PREPA). The EPA suggests that that year as much as 10.4 million pounds of toxic releases could be attributed to PREPA's power generating plants. Puerto Rico's programs of economic development, which at one time afforded the island accolades as "America's Showcase in the Caribbean" for most of the '50's and '60's with Operation Bootstrap, continue to demand the need for major infrastructure investments that are now tolling a hefty price on the island's environment. This put public administrators and policymakers dealing with environmental protection on the island in the precarious position of having to face the quintessential environment vs. development paradox.

These infrastructure investments started to threaten the very life of the last forest areas inside the city of San Juan. Lately, there has been an emphasis on the importance urban vegetation can have directly and indirectly on local air quality. From temperature reduction to removal of air pollutants and the reduction building energy use, thus reducing emissions from power plants are some of the natural benefits of urban forests in metropolitan areas such as the city of San Juan. A 400-acre wooded area adjoining the University of Puerto Rico's Botanical Gardens became the target for destruction of an infrastructure project in the island. The Department of Transportation and Public Works eyed part of the forest for a section of Route 66 between the towns of Rio Piedras and Rio Grande. In addition, 17 construction permits had been issued by the planning board for sites within the forest's perimeters. The forest became the center of a debate between Senate President Charlie Rodriguez and Governor Pedro Rosello, who have different ideas about how the land should be used. A bill co-authored by Rodriguez designated the area for conservation as the Urban Forest of the New Millennium but was effectively killed by Rosello describing it as "having deficiencies."

An unlikely mixture of policy actors came to the rescue of the "lungs of San Juan." Professor Jose Molinelli, Department Chair of Environmental Sciences at the University of Puerto Rico, became the forest's staunchest supporter. Before the conservation bill was re-written, Molinelli made his case to legislators using aerial photographs, maps and hydrological charts that outline the forest's perimeters and the encroaching developments that surround it. He took over the media in educating the public about the natural air filtering effects of the forest and many of its other attributes. Furthermore, he joined forces with the U.S. Forest Service to develop a tree inventory of the forest. By utilizing his students in collaboration with Forest Service personnel, the university professor played a leading role in the development of scientific evidence about the ecological importance of the forest, and gained political momentum to present that evidence to the governor.

Ultimately politicians did what they did because it was politically expedient to do so, echoing the words of César Chávez captioned at the beginning of this segment. Puerto Rican civil society showed the potential of becoming an effective policy entrepreneur in the area of environmental protection by coming to the rescue of the urban forest. By developing linkages with intermediary sectors of society such as academia, these groups are opening their own space for effective policymaking increasing their level of protest and contestation against state projects considered harmful to the "garden" so emulated by Fernandez Juncos, and precious to all Puerto Ricans.

A National Solution to Power Plant Pollution

As this report has shown, air pollution from power plants and other sources imposes a serious public health and environmental burden on the Latino community and society at large. The nation's clean air laws have succeeded in reducing air pollution over the last few decades, but much more must be done.

Early in 2002, President Bush announced his version of a power plant clean-up plan called the "Clear Skies Initiative." This proposal, unfortunately, offers too little, too late. The "streamlining" of the existing Clean Air Act under this plan would result in more pollution being emitted than the Clean Air Act currently allows. In addition to weakening or eliminating portions of the Clean Air Act, the President's plan would delay pollution reductions by up to a decade from when they would occur if the Clean Air Act were simply enforced as written. Unlike other proposed plans to cleanup power plants, the Bush plan also fails to address emissions of carbon dioxide.

Enforce the Law, Don't Weaken It

Because the President's air pollution plan has garnered little support in Congress, the Administration is now seeking to implement "Clear Skies" through the regulatory process, essentially bypassing Congress. The Administration has:

- Finalized regulations which allow old, dirty power plants to avoid installing modern pollution controls when making life-prolonging modifications;
- Proposed weak regulations that would delay and dilute much needed reductions in toxic mercury pollution; and
- Proposed regulations governing transported air pollution that contain unnecessary delays and weak emission standards.

Each action is a rollback of the Clean Air Act.

First Step Backward: The Bush administration allows old, dirty power plants to stay dirty

On New Years Eve 2002 and Labor Day 2003, the Bush administration finalized two sets of regulations that essentially made obsolete a key provision of the Clean Air Act known as New Source Review. New Source Review is a provision designed to protect the health and welfare of local communities surrounding nearly 17,000 industrial facilities throughout the country, including power plants. These provisions kick in whenever industrial facilities make major modifications that substantially increase pollution, requiring installation of modern pollution controls.

When Congress passed the Clean Air Act more than 30 years ago, it gave existing facilities a "grandfather" exemption. This loophole allows older facilities to avoid modern pollution control standards on the theory that the old plants will "retire" and be replaced by new cleaner technologies. If the plants do not retire but remain in operation, they are required to install modern pollution equipment if they change or upgrade the plant in any way that significantly increases emissions. Consequently, the New Source Review pro-

gram is the primary backstop against disaster for many communities that face an unrelenting increase in toxic emissions.

The Bush administration's attempt to dramatically weaken this critical component of the Clean Air Act suffered a major setback recently when the U.S. Court of Appeals ruled that power plants and other industrial polluters cannot take advantage of these new regulatory loopholes. The court will continue to stay the effect of the loopholes pending litigation over its legality.

Second Step Backward: Mercury safeguards are delayed for more than a decade

The Bush administration also issued a mercury proposal that sets aside more than a decade of work to curb toxic mercury emissions from the largest unregulated source of mercury pollution, the electric power industry. In amending the Clean Air Act in 1990, Congress included mercury on a list of 188 hazardous air pollutants (HAPs) for which EPA was to identify sources and impose the most stringent control standards possible, known as Maximum Achievable Control Technology (MACT) standards.

In order to justify such stringent controls, EPA was required to undertake two studies of mercury emissions and other HAPs from power plants before deciding whether to impose MACT standards. After lengthy delay, EPA submitted the required reports to Congress in 1997 and 1998, and, on December 20, 2000, issued a formal finding that regulation of mercury from utilities is appropriate and necessary, thereby setting into motion the development of strong mercury standards.

However, in the summer of 2003, the Bush administration abandoned the consensus building process that EPA had set up to design the mercury regulations. Instead, the Administration began developing proposals that mirrored the President's Clear Skies proposal. The proposed regulations put forth in December 2003 allow for more than 600 percent more mercury pollution for the next decade than what EPA said was possible just two years ago.[88]

Third Step Backward: Lenient fine particulate rule means Americans will breathe unhealthy air for years to come

Finally, the Bush administration has proposed regulations dealing with fine particle pollution that fall far short of what is necessary to both protect public health and the environment. The reductions announced in EPA's fine particle transport rule also known as the CAIR proposal, are virtually identical to those envisioned in the President's air pollution initiative. EPA promises a six million ton reduction in sulfur dioxide, leaving unabated more than 3.2 million tons per year of emissions in the eastern U.S. This is in contrast to EPA's original Clear Skies "Straw proposal," which allowed only two million tons of sulfur dioxide to be emitted in the entire nation (At the request of the White House in 2001, EPA began to develop three-pollutant legislation that would couple nationwide caps on nitrogen oxides, sulfur dioxide, and mercury with the repeal most of the Clean Air Act requirements relating to power plant emissions). The Straw proposal would have coupled nationwide caps on nitrogen oxides, sulfur dioxide, and mercury with the repeal of all or most of the Clean Air Act requirements relating to power plant emissions. The additional sulfur dioxide will, by 2020, lead to an additional 4,000 avoidable deaths per year, and $34 billion per year in avoidable health damages.[89]

The Federal Environmental Policy Framework for Environmental Justice

As previously mentioned in this report, in 1994, President Clinton issued Executive Order 12898, Federal Action to Address Environmental Justice in Minority Populations and Low-income

Populations," to ensure such populations are not subjected to a disproportionately high level of environmental risk. In 1995, the EPA promulgated its Environmental Justice Strategy delineating the agency's EJ program. Executive Order 12898 and the EPA's Environmental Justice Implementation strategy have formally recognized EJ as a legitimate public issue and pushed it

Air of Injustice Report	Executive Order Language
• The air in Latino communities violates air quality standards. Hispanics make up 13 percent of the U.S. population, yet in 2002 more than seven out of ten Hispanics (71 percent) lived in counties that violated federal air pollution standards for one or more pollutants. That's compared to 58 percent of the white population. • Nearly every power plant has Latino neighbors. Thirty-nine percent of the Latino population lives within 30 miles of a power plant – the distance within which the maximum effects of SO2 from the smokestack plume are expected to occur. • More than 20 percent of Hispanics (including 30 percent of Latino children) are living in poverty.	1–101. Agency Responsibilities. Each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions, the District of Columbia, the Commonwealth of Puerto Rico, and the Commonwealth of the Marian islands.
• Exposure to multiple environmental threats. Occupational exposure to chemicals, indoor air pollution and contaminated drinking water put the Latino community at risk, making Hispanics overall more susceptible to health risks. The incidence of asthma in children of Latino mothers is two-and-a-half times that of non-Latino white children. In New York City, Latinos and African Americans are more adversely affected by air pollution as measured by the number of persons per day admitted to the hospital when ozone levels were high. The rate of hospitalization for these groups was twice that of whites over the time period studied.	1–103. Development of Agency Strategies. (a) Each Federal agency shall develop an agency-wide environmental justice strategy whenever practicable and appropriate, that identifies and addresses disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. [T]hat should be revised to, at a minimum: (1) promote enforcement of all health and environmental statutes in areas with minority populations and low-income populations:
• The Hispanic community is essentially excluded from federal research and data collection activities. The methods used to collect the information do not adequately sample Latino subgroups. The methods used to collect the data neither require the identification of different ethnic groups, nor collect enough data on Hispanics so that the information can be broken out into different ethnic subgroups. According to the General Accounting Office, no existing database currently provides accurate, complete and available information on the entire Latino population, including subgroups, residing in the U.S.	Sec. 3 -3. Research, Data Collection, and Analysis 3–301. (a) Environmental human health research... shall include diverse segments of the population in epidemiological and clinical studies, including segments at high risk from environmental hazards, such as minority populations, low-income populations and workers who may be exposed to, substantial environmental hazards. 3–302. (a) each federal agency, whenever practicable and appropriate, shall collect, maintain, and analyze information assessing and comparing environmental and human health risks borne by populations identified by race, national origin, or income. (b)... each Federal agency, whenever practicable and appropriate, shall collect, maintain and analyze information on the race, national origin, income level, and other readily accessible and appropriate information for areas surrounding facilities or sites expected to have substantial environmental, human health, or economic effect on the surrounding populations, when such facilities or sites become the subject of a substantial Federal environmental administrative or judicial action.
• Latino families love to go fishing. 1.3 million Hispanics nationwide actively participate in fishing as a recreational, social, or family activity In a number of studies it has been shown that Latino sport and commercial anglers catch a variety of sport-fish and consume fish more frequently than white consumers.[93]	Sec. 4–4. Subsistence Consumption Of Fish And Wildlife. 4–401. Consumption Patterns. Federal agencies, whenever practicable and appropriate, shall collect, maintain, and analyze information on the consumption patterns of populations who principally rely on fish and/or wildlife for subsistence.
Lack of information. However, much of the Latino community is unaware that invisible toxic chemicals, such as mercury, PCBs and pesticides, might be present in the water that they fish in, or even in the fish that they eat. Also, advisories are usually written in English, which Spanish-speaking anglers may not be able to translate. Thus, Latino anglers and their families may unknowingly consume contaminated fish. Studies have shown that Hispanics and other minorities are less likely than whites to be aware of fish consumption advisories.	4–402. Guidance. Federal agencies, whenever practicable and appropriate, shall work in a coordinated manner to publish guidance reflecting the latest scientific information available concerning methods for evaluating the human health risks associated with the consumption of pollutant-bearing fish or wildlife. Agencies shall consider such guidance in developing their policies and rules. Sec. 5–5. Public Participation and Access to Information (b) Each Federal agency may, whenever practicable and appropriate, translate crucial public documents, notices, and hearings relating to human health or the environment for limited English speaking populations. (c) Each Federal agency shall work to ensure that public documents, notices, and hearings relating to human health or the environment are concise, understandable, and readily accessible to the public.

some victories in recent years. Despite this, the highly technical and scientific nature of environmental issues consistently requires experts to legitimize community action from a scientific standpoint. It is in this light that the participation of multiple coalitions of policy actors such as academics, activists, and environmental policy issue networks becomes pivotal in winning EJ battles. The environmental future of these shifting borders, and the Hispanic/Latino communities that are making these states home, will depend in no small part on the effectiveness of environmental justice programs and policies that can provide healthy environments for these communities.

Air Pollution, Hispanics and Executive Order 12898

As illustrated opposite, the findings in this report should trigger an investigation by the EPA as mandated by E.O. 12898, as the language in E.O. 12898 clearly mandates the EPA take action to achieve environmental justice for low-income and minority populations.

Recommendations

Together, we in the Latino community should challenge our policymakers, media in both Spanish and English, and elected officials that serve us to recognize the significance of air pollution from power plants and other sources, the harm it is having on the health of our families, and to stand up and demand action to reduce air pollution.

This report demonstrates that, as a community, we must call upon our leaders to do the following:

• Strict implementation of clean air laws. Aggressive enforcement is essential to protect our communities. Power plants and other pollution sources must be required to reduce their

smog- and soot-forming pollution to enable communities to meet national air quality standards as quickly as possible. In addition, EPA must require all power plants to reduce their mercury emissions to the maximum extent possible using the latest technology by 2008 as required by current law.

• Close the Clean Air Act's 30 year-old loophole for old, dirty power plants and require all coal-fired power plants, both new and old, to comply with modern emission control standards.

• For the future economic and public health of our community, the government must take steps to address the threat of global warming by requiring power plants to reduce their carbon dioxide pollution.

• Hispanics must be included in health research that provides the basis for critical national data systems.

• The EPA must develop a comprehensive strategic plan, ensure appropriate training is provided, clearly define the mission of the Office of Environmental Justice, determine if adequate resources are being applied to environmental justice, and develop a systematic approach to gathering information related to environmental justice.

ENDNOTES

1. The terms Latino and Hispanic are used interchangeably throughout this report. As defined by the U.S. Census, origin can be viewed as the heritage, nationality group, lineage, or country of birth of a person or a person's parents or ancestors before their arrival to the United States. People who identify their origin as Spanish, Hispanic, or Latino may be of any race.
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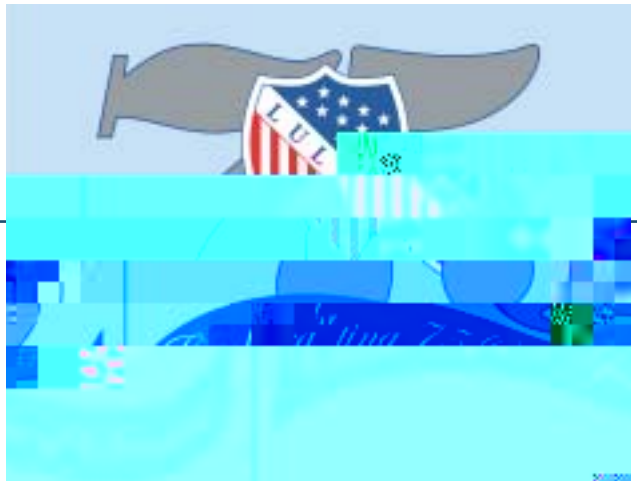

LULAC – A Proud History

Founded in 1928, LULAC is the oldest Latino civil rights organization. Over the last 70 years, LULAC has continued to grow and work hard to bring about many of the positive social, economic and political changes that Hispanic Americans enjoy today. No other Hispanic civil rights organization, with an all volunteer membership base can match LULAC's record of achievements and services to Hispanic Americans.

Today, LULAC represents not only Mexicans Americans from the Southwest, it also represents Hispanics in most of the United States, including Puerto Rico and Guam. Membership has expanded to include all men and women of Hispanic origin.

LULAC is the cornerstone of some of the most successful Hispanic national organizations. LULAC formed The American GI Forum (AGIF) to address the rights of Hispanic veterans. The Mexican American Legal Defense and Education Fund (MALDEF) as the legal arm of the Hispanic community. SER - Jobs for Progress, Inc., has trained, and retrained, and found jobs for thousands of Hispanic Americans. In addition, LULAC has developed thousands of low income housing units through the Southwest.

LULAC has become an important influence in national policy making with a permanent national office in Washington, D. C. While the many successes of LULAC should be celebrated, its work is far from over.

LULAC continues to work for the betterment of Hispanic Americans. It continues to fight discrimination, poverty, educational inequalities, disparities in political representation, the Hispanic student high dropout rate, immigration issues, language issues, Hispanic health issues, etc. LULAC will forever address those issues that impact the lives and future of all Hispanic Americans. It will continue to work to assure that future Hispanic American generations receive all the constitutional rights inherit by them as citizens of the United States of North America.

LULAC has fought for voting rights and full access to the political process, and equal educational opportunity for Hispanic children. The struggle has been long and difficult, but LULAC's record of activism continues to this day. LULAC councils across the nation continue to hold voter registration drives and citizenship awareness sessions, sponsor health fairs and tutorial programs, and raise scholarship money for the LULAC National Scholarship Fund. This fund, in conjunction with the LNESC (LULAC National Educational Service Centers), has assisted almost 10 percent of the 2.1 million students who have gone to college.