

SOURCEBOOK ON ENVIRONMENTAL JUSTICE AND PARTICIPATORY RESEARCH

PART ONE: ENVIRONMENTAL JUSTICE

INTRODUCTION

Welcome to the Pacific West Community Forestry Center (PWCFC) website on rural environmental justice. This site features a variety of information, resources, links, and networking tools. It is our hope that community organizers and community members, employees and leaders of non-profit organizations, and independent or university researchers will all find something of interest here. The site is still under construction, and we welcome your suggestions!

On this page, you can:

- trace the steps of the modern environmental justice movement
- find definitions of “environmental justice” and other terms
- determine whether researchers might be of use to your organizational or community mission, and how to structure relationships with them that leave community members in the driver’s seat
- read about successful examples of rural environmental justice work with the Pacific West Community Forestry Center (PWCFC)
- read about current laws on environmental justice
- learn which groups are seen as part of the environmental justice movement, and which are seen as allies
- connect to hundreds of other web sites for grassroots environmental justice groups, advocacy groups, funding organizations, and other community legal, environmental, and organizing resources
- learn about the latest terms connected with environmental justice and how you might apply them to your funding requests
- learn about the precautions to take when forming alliances with environmental, non-grassroots, or research organizations
- learn about connections between issues faced in rural and urban areas of the Pacific Northwest
- receive encouragement in your work and connect to others facing similar struggles

What is environmental justice (EJ)?

Definitions

The environmental justice (EJ) movement and the environmental movement are distinct, yet overlapping struggles. The modern EJ movement has its roots in the intersection of the Civil Rights movement and the environmental movement. While Civil Rights activists were struggling for basic human rights, environmentalists were working to preserve wilderness areas and conserve forests. These two movements did not begin to meet in the mainstream until the publication of Rachel Carson’s *Silent Spring* in 1962.

Carson redefined environment to include industrial farmlands, urban and suburban areas. She cited the dangers of chemicals used to kill agricultural pests, fungal predators, and competitive weeds—showing readers how these compounds poison entire systems as they work their way through the food chain. While Carson noted the vulnerability of humans in this chain of catastrophe, she did not make the explicit link to the increased vulnerability of low-income or minority populations, who are often targeted by chemical companies as powerless, forced to live and work in polluted environments, or have certain practices—such as subsistence fishing in polluted streams—that increase their vulnerability to environmental hazards.

The increasing importance of the environmental justice movement called environmentalists to redefine the term “environment.” No longer could the environment be a place preserved separate from human habitation. The new definition of environment had more in common with that of conservationists, such as Aldo Leopold and Rachel Carson, although many conservationists were unwilling to recognize the vital importance of people of color in the conservation movement. An environmental justice definition for the environment is broadened to the “place where we live, work, learn and play” (in Turner and Wu 2002). This encompasses urban and rural environments, labor and conservation issues, human beings and animals, and attests to the place of humans within an ecosystem. Inherent in the definition is a commitment to achieving sustainability so that all creatures—human, plant, animal, and bacterial—can survive and live healthy lives.

Contemporary definitions of environmental justice include:

- ◆ Senate Bill 115: “the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws and policies.”
- ◆ Environmental Protection Agency: “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies (<http://www.epa.gov>).
- ◆ Environmental Justice Principles, adopted at First National People of Color Environmental Leadership Summit, 1991: (Environmental Justice includes) protection from contaminants, the right to a clean environment, the right to participate in decision making, and a commitment to consume less resources. See http://www.toxicspot.com/env_justice/env_principles.html.

“Environmental Justice” in Practice:

Here are just three examples of the many lenses activists and scholars use to conceptualize environmental justice issues:

Public health: Environmental injustices that result in community-wide health problems, such as the lack of clean water for farmworkers, or the presence of contaminants in the soils of rural areas from past mining activities, are key public health issues. Interventions will be technical, relying on risk assessment, treatment, and prevention, as well as social, involving community organizing and information dissemination. Other EJ public health issues include social behavior and social pathologies related to environmental degradation. Greenberg & Schneider (1994) describe the high rates of violence in areas of urban New Jersey where there are high concentrations of Locally Unwanted Land Uses (LULUs) and Temporarily Obsolete Abandoned Derelict Sites (TOADS) (in Turner and Wu 2002). Similarly, centuries of destruction and alienation of the resources belonging to indigenous people have left Native communities with high rates of health problems and environmental contamination.

Civil Rights, race or racism: Environmental injustices associated with race involve two main categories of assumptions:

- (1) People of color negatively affect or disregard their environments. They are not environmentalists.
- (2) People of color—by virtue of their ethnicity, as well as their economic, and social status—are powerless to fight a negative situation. Therefore, companies can knowingly discriminate in the placement of polluting facilities, posing a greater risk to populations of color.

These lead to the exclusion of minority populations from environmental decision-making, and, often, the imposition of environmental burdens through pollution, health hazards, and lack of information. Interventions include community organizing, popular education, and network building for systemic change. Challenges include linking multiethnic groups, convincing groups of their entitlement and legitimate right to participate in the process to positively affect the lives of their communities, and making significant policy changes that improve the health and opportunities of all diverse groups effected.

Sovereignty: According to Zoltan Grossman, “...the most workable date for the founding of the (North American) Native environmental justice movement is 1492” (in Turner and Wu 2002). Environmental justice cannot be achieved without addressing past wrongs and nullified property rights. The taking of lands and resources, and the attempted cultural genocide that Native people have faced since the onset of colonization continues today in many forms. These include public lands policies that don’t include Native communities (recognized or unrecognized), hydroelectric re-licensing without examining the history of land ownership (within the framework of international treaty rights, if a treaty has not been made, the indigenous inhabitants still own the land), the siting of toxic chemicals on Native lands, exclusion from environmental decision making, and the barring of

traditional activities on lands now recognized as public (national forests, parks, and monuments). Native environmental justice activists work on re-gaining access to their lands, educating allies, protecting existing Native lands and cultures, maintaining and improving their government-to-government relationship, and gaining a say in environmental matters in their homelands. This lens overlaps with that of Civil Rights, race, or racism, but is distinct in its emphasis on retaining sovereignty.

All three lenses described above are used in defining and addressing environmental injustices. In 1991, the first national People of Color Environmental Leadership Summit was held in Washington, D.C. and participants released a list of Environmental Justice Principles, available at http://www.toxicspot.com/env_justice/env_principles.html. The principles attest to the right of all people to a safe and healthy environment, address the issue of environmental burdens on minority and low-income populations, and cite the unique concerns of Native sovereignty within the larger environmental justice struggle.

Environmental racism

Environmental racism is one aspect of the broader environmental justice movement. Under the rubric of environmental racism, disproportionate impacts are related primarily to race. Discrimination may be either intentional and specific, or institutional and structural. Rev. Benjamin Chavis Jr. of the National Association for the Advancement of Colored People (NAACP) defined environmental racism as the former: “racial discrimination in environmental policy-making and enforcement of regulations and laws; the deliberate targeting of communities of color for toxic-waste facilities; the official sanctioning of the presence of life-threatening poisons and pollutants in communities of color; and the history of excluding people of color from leadership in the environmental movement” (Griffey 2002).

Often beyond intentional targeting of communities of color is institutionalized racism—in which people of color continue to be marginalized because of the after-effects of oppressive policies (such as Jim Crow laws or the isolation of Native Americans to resource-poor reservations). Such factors repeatedly strand current generations of people of color in situations or areas where they cannot avoid environmental harms. One example is the lower cost of housing around chemical facilities. A low-cost housing project was built in one of these areas in Rodeo, California, and is inhabited primarily by people of color, who because of the after-effects of structural marginalization and intentional discrimination, are disproportionately represented in the low-income population living in the cheapest of subsidized housing.

Race in the Environmental Justice Movement

Looking at the history between race and the contemporary environmental movement, many environmental justice scholars site the importance of the 1982 resistance by the multi-racial, multi-class residents of Warren County, North Carolina to a proposed poly-chlorinated biphenyl (PCB) dump in their county. The community called upon Civil Rights leaders in their struggle, forever “racializing” environmentalism

(United Church of Christ 1987). Authors also list a host of other events linking race and environmentalism, including garbage workers' strikes in Memphis in 1968 and 1978/9 (Bullard and Johnson 2000) and unionization in the early 1900s (Taylor 1997).

Environmental Justice scholar Laura Pulido analyzes the emphasis on race within the contemporary environmental justice movement in her article "Development of the 'People of Color' Identity in the Environmental Justice Movement of the Southwestern United States" (Socialist Review 1996). She argues that creating a strong movement calls activists to isolate one element of their identity, such as race, gender, class, or occupation, to mobilize around. However, isolating race (or class, or gender, etc.) does not have to be permanent, but activists can use a people of color identity in larger national or regional struggles, and return to a single ethnic identity for local organizing (Pulido 1996:146).

Race has become particularly unifying for the environmental justice movement because it reacts to the political trend of de-emphasizing race while race remains an important societal factor, identifies a clear common experience, allows for the situationality described above, lets communities challenge environmental groups, agencies, and polluters simultaneously, and eliminates the shortcomings of a class-based identity. The Southwest is an ideal place in which to form a "people of color" identity because of the long history of multiculturalism and shared experiences of racism. However, organizing around race has multiple challenges, including:

- ◆ Overcoming historic antagonistic relationships between different racial minority groups.
- ◆ Giving credence to different experiences of racism, different forms of organizing, and different issues among minority groups.
- ◆ Breaking out of the oppressor framework that defines who is a person of color and who is not.
- ◆ Forging beneficial relationships with strong allies that may be white.

Race has become a defining factor in determining who is an environmental justice group, and who can become a member of an environmental justice network. According to organizer Jose Bravo in an interview with Voces Unidas, the newsletter of the Southwest Organizing Project (SWOP), "When we say environmental justice organizations we mean grassroots, people of color-led organizations. People working on environmental justice are people who actually live with this problem day in and day out, 24 hours a day—that brings a different perspective to the table than those whose environmental concern is from 9 to 5 and have multimillion dollar budgets." Similarly, membership policy for the Northeast Environmental Justice Network includes stipulations that the group must have majority people of color leadership and membership, and be sited in a low-income community or a community of color.

There is tangible animosity between many environmental justice organizations and mainstream environmental groups. Mainstream environmentalists have all too often neglected the concerns of minority and low-income communities by forwarding a definition of the environment as one far from communities of color. Tensions surfaced

with a 1990 letter to the Big 10 environmental organizations—Sierra Club, Natural Resource Defense Council, and others—from environmental justice leaders. At the second national environmental leadership summit, environmental organizations were taken to task for their actions since the letter. Several have taken steps to improve—including the Sierra Club, which has established environmental justice offices—but, like the governmental agencies—they are slow to show communities of color that they are truly committed to environmental justice concerns.

More than Equal Protection Under the Law

While laws may appear to serve all populations equally, existing conditions, specific practices, and a history of oppression can combine to make their impacts very different for different populations. According to John Powell, Executive Director of the Institute on Race & Poverty in Minneapolis, discrimination is subtler today than in the pre-Civil Rights era, but “laws and policies are anything but neutral in effect, even though they are racially neutral on their face” (8/2002:4). Resolving environmental injustices goes beyond ensuring equal protection under the law to inserting provisions for communities that may already be impacted, or stand to face greater consequences from the environmental burden.

In order to address some of these concerns, and to disseminate information to communities and groups on potentially useful laws and statutes, the Environmental Law Institute has released a useful handbook entitled “**A Citizen’s Guide to Using Federal Environmental Laws to Secure Environmental Justice.**” The text informs communities of a host of environmental laws administered by federal (particularly the Environmental Protection Agency), and state agencies that can be used to achieve mitigations or policy changes. The focus is on how to understand and combine statutes to address complex and cumulative environmental justice issues. The book acknowledges the problematic nature of the presence of multiple polluting facilities, of particularly sensitive populations such as children and the elderly, and of populations that depend on local natural resources that may be contaminated.

In their extensive bibliography of current Environmental Justice literature (2002) University of California Berkeley graduate students Robin Turner and Diana Wu analyze the different approaches to achieving justice within a framework of distributional justice, procedural justice, and entitlements. The distinctions are as follows:

- ◆ Distributional justice refers to the equal distribution of impacts and benefits among populations. However, providing each community with the same level of pollution denies inherent differences in lifestyle, consumption, and susceptibility.
- ◆ Procedural justice refers to the opportunity for fair and complete participation in all levels of decision making and planning. While the opportunity may be available for public participation, interventions including translation and training may be necessary to ensure the active participation of marginalized groups.

- ◆ Entitlements are stated universal rights to a clean and healthy environment, and/or to the resources necessary for health and well-being.

Achieving environmental justice through existing laws and regulations can be viewed through different lenses of how best to achieve justice. Correcting environmental injustices will require fair procedures, fair distribution, and an inclusive list of entitlements for communities. The precautionary principle, advanced by groups like Physicians for Social Responsibility, requires the analysis of potential risks before citing a facility or making an environmental decision. As such, the precautionary principle is a necessary element of achieving environmental justice.

Rural Environmental Justice

Environmental justice is often framed as an urban issue. Power plants or other polluting facilities are sited in predominately minority and low-income city neighborhoods having already dangerous concentrations of air, water and/or land pollution. Other injustices include a decline of investment in the inner city, and planning and zoning laws that reduce opportunities and quality of life for low income people and people of color. These are the subtle forms of discrimination mentioned by John Powell of the Institute for Race and Poverty.

The term “urban” itself is often used as a code for “black,” “minority,” and/or “poor.” The term “rural” varies in its meaning depending on where it is used. In the South, rural could refer to poor, minority farmers. In other parts of the country, it is often pictured as Caucasian farms and ranches. Elsewhere, it conjures imagery of production—timber, mining, and hydropower. It is important to be aware of these stereotypes, as they often underlie uses of the terms “rural” and “urban.” In addition, as uses of land, economy, and lifestyle have changed, U.S. Census definitions have also changed. Whereas rural once meant solely farming, forestry, fishing, mining and other natural resource related occupations, it now often means low-density residential or light industrial use.

Rural environmental justice issues are often overlooked because people are dispersed, silenced by lack of numbers, constitute historically marginalized communities, or travel from place to place for work. Rural populations at risk are minority as well as Caucasian, and they face increased environmental impacts because of where and how they live, employment, and their lack of information on environmental laws and organizations that could assist them. Environmental justice issues in rural areas are varied, serious, overlooked, and are inextricably linked—by natural resources, context, and history—to urban environmental justice concerns.

I. Chemicals

Rural and urban communities share a common environment, and the linkages between industrial contamination and rural health issues are becoming apparent. One clue has been the presence of persistent organic pollutants (POPs), including dioxins and other chemicals that bioaccumulate in animal fat and travel through the food chain. These substances have been found in the bodies of arctic fish and caribou, and in mother’s milk

among Native populations in Canada and in the United States in the Great Lakes region. Native people in Prince William Sound have stopped eating traditional foods because of an oil spill in the area. “This impacts not only our physical well-being but our emotional and spiritual lives as well,” said Patricia Cochran, director of the Alaska Native Science Commission, a group funded by the National Science Foundation to help incorporate traditional knowledge into scientific research. According to Cochran, Natives from every region of Alaska have been noticing more tumors, lesions, spots and sores on land and sea animals. Their concerns are being documented in a multi-year report funded by the US EPA, compiled by the Alaska Native Science Commission, and entitled the “Traditional Knowledge and Contaminant Project.” The persistence of these organic pollutants impacts all hunting and fishing populations—including non-Native tourist groups and commercial harvesters—, as well as rural farmers and any individuals that gather herbs or wild foods for either consumption or crafts.

Chemical contamination also begins in rural areas through abandoned mine and mill site pollution discharges, illegal toxic dumping, herbicide and pesticide spraying, brownfields, and inadequate water treatment. In the Pacific Northwest, populations that stand to be particularly affected include Latino farmworkers, brush harvesters, and forest workers, Native Americans, and Southeast Asian mushroom harvesters. Through a range of **participatory research** projects, and by granting small amounts of funds that groups can then leverage for greater support, the Pacific West Community Forestry Center works to inform, organize, and empower all of these groups. Inadequate attention to rural pollution by distant agencies, lack of information to the local population, and traditional rural lifestyles that include close contact with natural resources—through ranching, fishing, hunting, gathering, farm labor, family forestry, family farming, and wild foods and crafts subsistence—are particularly vulnerable to pollution. Future interventions will require:

- quantitative research into the location, frequency, and discharge of toxic sites, air and water quality measurements, and health surveys
- qualitative work in community organizing, linking with urban organizations and/or regional networks familiar with the types of discrimination (towards disempowered or dispersed affected communities), and the channels to achieving environmental remediation.

II. Land Use

A. Planning

Urban environmental justice activists have also turned their attention to city and regional planning, housing policy, community and economic development, and the availability of parks and greenspace. Often, the planning and zoning laws governing these elements disenfranchise communities of color by isolating them in urban developments while encouraging suburban infill and development on the fringe. This reduces opportunities and disempowers communities by excluding them from decision-making. Several cities around the nation, including Rochester, New York; Chicago, Illinois; urban

Maryland; and the San Francisco Bay Area, are taking steps towards involving communities, and combating gentrification and displacement. At a recent meeting of Bay Area environmental justice partners, one participant suggested that the environmental justice movement, with its stated emphasis on inter-group collaboration and fairness, might provide a model for “how to live together,” and end the racialization of urban sprawl—where white populations leave the inner city and take business opportunities and jobs with them.

Planning and zoning disenfranchisement, gentrification, and displacement are also key issues in rural areas. It is not recognized that both urban neighborhoods and rural communities have a strong sense of place. The Center for Race, Poverty, and the Environment defines displacement as when:

...low income and often people of color are forced to move out of their neighborhoods because rents become so high that they can't afford to pay them. This usually happens when services get better and people that make more money start to come in. As quality of life gets better, it gets harder for low-income folks to afford to stay in the community (9:1, 2002).

Unrecognized Native peoples, family farmers and foresters, and forestry, farm and mining laborers are some of the groups that face displacement in rural areas. As urban refugees flood to rural areas to retire, property values increase, making it difficult for locals to find affordable homes and property. With retirees and tourists come businesses and job opportunities that may not cater to the local population's culture or budgets. Forest Community Research and the Pacific West Community Forestry Center are able to gather and assess the community, county, and regional-level data needed to determine the degree of displacement, land ownership, renting, gentrification, and housing problems in rural areas. The two organizations look at specific populations to see who is being particularly affected and how to ensure that county or regional efforts will have equitable outcomes. They are involved in economic and community development projects that fit with the needs of the local population.

According to a Bay Area environmental justice activist: “(developers) come in, take resources, and develop the community for the city, but not for the communities.” If the word “city” is replaced by the terms “county” or “region,” this statement echoes the concerns of rural people. While tourism can be a viable part of an economic development strategy, it is important that the community remain a responsive home to its residents. On a visit to the Hopi reservation, a Pacific West Community Forestry Center associate found that one store was particularly successful because it not only bought items from local artists to sell to tourists, but also sold materials and tools that were specifically targeted towards locals. Similarly, the results of 31 case studies in 35 communities for the Northwest Economic Adjustment Initiative Assessment, a project of Forest Community Research and the Pacific West Community Forestry Center, showed that projects that targeted both locals and visitors were successful and embraced by the community.

Strategies to combat gentrification and encourage equitable development can be shared between rural and urban groups. By maintaining contact with urban groups and compiling a list of rural groups and environmental justice issues, the Pacific West Community Forestry Center hopes to build alliances between rural and urban coalitions for valuable knowledge sharing and the formation of powerful watershed-wide coalitions. Some urban solutions to gentrification and displacement that can be applied to rural areas include building affordable housing, rehabilitating dilapidated buildings, training residents to own co-operative businesses, raising community awareness, forming land trusts, and conducting community mapping efforts. Community-based research efforts can include creating an affordability index (identifying rent or mortgage as a percentage of household income), compiling homeowner rates, conducting a spatial analyses of race and poverty, writing a housing affordability plan, forming housing co-operatives (democratically resident-controlled housing), and investigating land use, zoning, and tax policies.

B. Participation

Environmental injustices related to land use in rural areas are also intimately connected to (1) the stakeholder community's ability to participate in decision-making, and (2) the community's feelings of entitlement to participate in the first place. The Pacific West Community Forestry Center supported the organization of Southeast Asian mushroom harvesters who had been left out of timber harvest planning on national forest lands where they harvest mushrooms—a cornerstone of their livelihood. The harvesters purchase permits from the national forest in order to harvest mushrooms, making them stakeholders in forest management decisions, a point the Forest Service has been slow to recognize. With the help of ally organizations like the Jefferson Center and the Quincy Library Group, a map was created that showed the remarkable overlap between timber sales and prime mushroom harvesting areas. It should be noted that these ally organizations made a concentrated effort to stay behind the scenes, maintaining the mushroom harvester community's ownership over the struggle, and facilitating community leadership during the process. Harvesters and allies presented the map to the Forest Service ranger unit, which subsequently recalled the timber sales and agreed to consult harvesters as stakeholders in future decisions. Without allies such as the Pacific West Community Forestry Center, the Jefferson Center, and the Quincy Library Group, the harvesters may have remained voiceless regarding a key element of their livelihood.

C. Privatization

Privatization of lands that were, and continue to be, tribal homelands is another long-standing environmental injustice with implications for cultural and community disruption. Privatization occurs through designating lands as “public” (i.e. national forests or parks, BLM land, etc.) and shifting management to state or federal jurisdiction; or transferring lands to a private individual or company. Barring access to traditional use areas makes Native people trespassers on traditional lands, curtailing cultural continuity.

In addition to the creation of national forests and other federal holdings on Native lands, private exclusive recreational and retirement developments have permanently displaced traditional economies. A host of agreements between national forests and tribes have taken initial steps toward remedying these issues, but have not addressed conflicts with private landholders, or the rights of unrecognized tribes. The Pacific West Community Forestry Center supports the work of the Maidu Cultural and Development Group, which represents a large, unrecognized northern California tribe facing all of these issues and working to implement traditional management on 1200 acres of national forest land. The Maidu Cultural and Development Group is also establishing networks with other tribes working towards similar goals.

The Pacific West Community Forestry Center also facilitated participation of associates in agency efforts to implement environmental justice. The Environmental Protection Agency, CALFED, and the Office of Planning and Research were three of the entities that held forums and meetings to gather information on environmental injustice from constituencies. Center associates brought the concerns of rural groups to the table.

CALFED is the consortium of federal and state agencies working to improve the environmental health of the Bay-Delta ecosystem, which provides drinking water to 20 million urban Californians, serves as a backbone of the inland and coastal fishing industry, and provides agricultural water for much of the \$8 billion California agricultural economy. CALFED has been criticized for its lack of attention to the concerns of the state's rural areas where the water originates. In addition, unrecognized and recognized tribes question the legality of agency ownership at all, since treaties were never established with the aboriginal inhabitants. Land was simply seized and privatized—whether privatization meant becoming agency land, public land, or individually owned property. “Where have the tribes been in the CALFED project?” asked Leslie Lohse of the Paskenta Band of Nomlaki Indians. “Many state agencies haven’t interacted with tribes and need to do outreach to tribes, and the federal trustees for Indian tribes (BIA, etc.) need to be at the table.” Even recognized tribes must struggle to keep agencies cognizant of the importance of the required government-to-government relationship, not to mention the work of unrecognized tribes to simply establish their place at the table.

D. Empowerment

Both rural and urban groups bearing environmental burdens or feeling the consequences of discriminatory policies are often disempowered, dispersed, or marginalized. A statement by Southwest Organizing Project staff warns:

Companies...prey on low income people and people of color. They look to cite their facilities where they figure they will encounter the least amount of resistance. Working class communities of color often lack the infrastructure, organization, and resources to participate in permit hearing requiring technical experts and attorneys.

In the experience of the Pacific West Community Forestry Center, this was true for mushroom harvesters in that the Forest Service was able to schedule timber harvests in prime harvesting areas because the group was not organized enough to provide comment and resist. Help from partner organizations and capacity building among harvesters disproved this misconception.

As such, empowerment of communities, groups, and populations is a key element of the environmental justice movement. Constituencies must believe in the righteousness of their cause, in their ability to affect change, and in the possibility of building alliances with other communities and with networks and organizations like the Pacific West Community Forestry Center, the Southwest Organizing Project, or the Indigenous Environmental Network. In order for environmental injustices to be eliminated, groups need to be empowered to advocate for systemic changes, and provide proactive alternatives. In *The Crisis of Color and Democracy*, Manning Marable offers the following definition of empowerment:

Empowerment is essentially a capacity to define clearly one's interests, and to develop a strategy to achieve those interests. It's the ability to create a plan or program to change one's reality in order to obtain those objectives or interests. Power is not a 'thing,' it's a process. In other words, you shouldn't say that a group has power, but that, through its conscious activity, a group can empower itself by increasing its ability to achieve its own interests.

Internationally, communities are becoming empowered and building the internal capacity to maintain their livelihoods. "People are organizing themselves all across the nation. They are standing up, fighting back and getting better at it every day," wrote Southwest Organizing Project staff.

III. Rural Environmental Justice: Summary

Environmental justice infractions commonly occur when a group with little political influence experiences decreased or contaminated resources, and/or negative cultural impacts. Some of the goals of a rural environmental justice movement are as follows:

- 1) Increase information, participation, and knowledge sharing between rural groups facing injustices.
- 2) Educate government agencies. Agencies are either unaware or unwilling to address the concerns of affected populations when resource allocation and management decisions are made.
- 3) Connect rural and urban issues and groups in order to build regional, issue-based, and/or statewide coalitions. In this way, tribes are not pitted against farm workers when water transfers are proposed,

strategies are shared, and groups reach an understanding of one another's concerns. Collaboration, albeit challenging, is the only way to create mutually beneficial alternatives. The strength and diversity of youth movements in environmental justice points to the increasing success of organizing across constituencies.

Solutions to Environmental Injustices

I. Participation

Public participation can facilitate solutions to many environmental justice problems, or, conversely, the absence of meaningful public participation often amplifies or creates environmental injustices. If decisions are made, such as where to site a power plant that will have emissions or whether or not to raise Shasta dam and flood cultural sites, without consulting with affected populations, environmental injustices will result. One of the participants at a CALFED environmental justice workshop said that, "environmental justice means inclusion." In order to know whom to include, agencies and companies must predict the effects of their proposed action on populations. Finding and contacting minority or low-income groups in the area can help to ensure that undue burdens are not inadvertently imposed. By investigating environmental injustices through the quantitative and qualitative approaches of gathering local data and facilitating community organizing, the Pacific West Community Forestry Center may be able to provide both information to affected groups, and data to agencies on who may be affected by their policies, and what mitigations or participatory strategies need to be undertaken to eliminate ill effects. Geographic Information System (GIS) mapping can be a helpful tool to predict where impacts will occur and who will be affected. Potentially affected communities should be part of the impact assessment and decision-making processes for the project, at the early stages. Affected groups need time and relevant information in order to be able to provide input into the evaluation of alternatives to the proposed project. If impacted populations are not allowed to participate in a meaningful way, participation becomes an environmental injustice in itself.

II. Precautionary principle

Scientific studies should help communities to understand their risks and options, disseminate important information, and document and legitimize little-heard concerns. Populations that subsist on fishing from the New River in Southern California, for example, are mostly Latino and have almost no information in Spanish about the actual toxicity of the water, which is an abnormal greenish color. These fishers have high levels of illness and nearby companies and farms may or may not be taking precautionary activities to make sure that the chemicals they put into the water do not affect people. The affected community has no way of knowing. Without adequate science, it is the people along the river who bear the burden of proving that there is pollution occurring and who become responsible for taking their own steps to mitigate possible dangers, i.e. by limiting how many fish they eat. While amazing examples of organizing within affected communities have occurred, and helpful networks like the Southwest Organizing Project

exist to help communities respond, issues of time, empowerment, fear, racism, and language are barriers toward accessing information, building community support, and approaching agencies and officials to make change.

The precautionary principle requires good science combined with good community participation because it requires the forecasting of environmental problems and building in precautions. A participatory process that includes potentially affected parties is key, even when an environmental clean-up effort occurs. Affected populations are often not informed either about contamination risks or the mitigation opportunities. Participation helps to elicit important information communities may bring to the table, including community -based risk assessments and effectiveness monitoring. Participation is also key to define the mitigation strategy that most effectively responds to the specific behavior/exposure dynamics of the populations at risk. Participation also empowers communities—the best insurance against environmental injustices. The Pacific West Center has been involved in supporting Latino Forest Workers to identify issues and questions, build capacity, and move toward participating in decisions that affect their livelihood.

III. Mitigation

Mitigation of environmental injustices can only be done effectively with community participation. People must be able to affect both the problems and the solutions that impact them, or mitigations will be inappropriate or inadequate. This requires, at a minimum, that the predicted and actual impacts of the project are re-evaluated and that mitigations or compensatory benefits are monitored for effectiveness during the life of the project.

A Brief History of Environmental Justice

The Civil Rights Act of 1964 provides the theoretical legal basis for intervening for environmental justice, but the Act itself is just one tool for environmental justice advocates. Carl Anthony of the Ford Foundation has called the environmental justice movement, “the next step of the Civil Rights movement.” The threads of history that led to the environmental justice movement go back much further, to colonization of Native people and African Americans, to the Civil War, to Hiroshima and issues surrounding nuclear testing since the 1930s, and to the development of pesticides post- WWII. “Environmental justice is part of a history of struggle,” according to one member of the Environmental Protection Agency (EPA) Region 9 environmental justice office. Please see the attached “**Time Line of Environmental Justice Events,**” distributed by the California EPA.

The modern environmental justice movement has diverse roots in a history of unionization, and organizing among different ethnic groups to address environmental problems. Important occurrences in the recent history of the movement include the discovery of abandoned hazardous waste beneath the working class community of Love Canal, New York; the 1982 struggle of residents of Warren County, North Carolina to oppose the siting of a poly-chlorinated biphenyl (PCB) dump; and growing awareness

over the dumping of toxic wastes on Native lands. These three issues and many others added to outrage around the emerging link between environmental problems, health disparities, and people of color.

In 1983 the Governmental Accounting Office released an eye-opening report stating that three of four hazardous waste facilities in the Southeast were in African American communities. Several Environmental Protection Agency cases and lawsuits throughout the 1980s, and the establishment of the Environmental Equity Working Group within the Environmental Protection Agency were also early influential occurrences. In 1987 the United Church of Christ published the groundbreaking study, "Toxic Wastes and Race in the United States." The study found that all non-whites experienced disproportionate impacts from hazardous waste, galvanizing leaders to not only work on local, place-specific issues, but also to stand in solidarity with other communities of color experiencing disproportionate impacts. Dr. Robert Bullard of Clark Atlanta University was instrumental in this study, and is considered to be one of the founders of the modern environmental justice movement. Beginning with a 1979 paper on an affluent African American community's attempt to block the citing of a sanitary landfill, Bullard also wrote *Dumping in Dixie* (1990).

The United Church of Christ's Commission for Racial Justice convened the first People of Color Environmental Leadership Summit in 1991 to respond to environmental racism, link grassroots struggles, and make agencies aware of environmental justice concerns. Over 500 organizations were represented and the summit resulted in a list of guiding principles for the Environmental Justice (EJ) movement. At the time of the summit, the movement was still defining itself, the issues, the constituencies, and the allies. The principles developed at Summit I, available at http://www.toxicspot.com/env_justice/env_principles.html, emphasize the importance of healthy communities and a healthy environment, particularly for people of color.

Environmental justice is also defined by the last three decades of environmental law, and built momentum in the 1990s with the passage of specific environmental justice laws and policies at the federal, state and local levels. The development of non-governmental advocacy groups and the maturation of diverse agency mandates and approaches for increased environmental justice participation continue to evolve around the country.

Environmental justice is also growing internationally. Non-governmental organizations and international networks like the Indigenous Environmental Network help to facilitate connections between groups and build resistance to common injustices. While it remains difficult to solidify domestic or even regional alliances, as more information on health and environmental issues has become available, concern has transcended borders. The youth coalition at the second national People of Color Environmental Leadership summit was particularly energetic on making links between countries. Significantly, the only resolution that was created and passed at the summit was one against the war and international militarism. The resolution portrays the War on Terrorism and impending invasion of Iraq as escalating "physical, economic, political and cultural violence against people of color, indigenous peoples, and third world

peoples,” intensifying violence against women, victimizing poor and working-class youth of color through drafting, diverting attention from domestic social and environmental priorities, and drawing on faulty misconceptions of U.S. history. For a full copy see link below.

Examples of Efforts Within the Modern Environmental Justice Movement

I. Rural Development Leadership Network

The Rural Development Leadership Network (<http://www.rdl.org>) is an independent degree program in which participants continue to do community-based work while earning their higher education degrees. RDLN self-consciously promotes environmental justice-related research and advocacy. Of the current group of participants, one student is researching bringing black history into the curriculum of Southern schools to reverse textbook racism. This black history education project may include an environmental history as told from a minority perspective—describing working on the land first as a slave and then as a freeholder, but still facing institutional racism within the U.S. Department of Agriculture. Another RDLN participant is involved in documenting a community-organizing project that followed a hazardous waste incinerator from impacted rural community to impacted rural community—never allowing it to locate anywhere that it could be hazardous to the local population.

II. Partnerships Providing Alternatives

Environmental justice activists are partnering with community groups, agencies, non-profits, and other organizations to end environmental injustices by developing project alternatives. This proactive approach includes using environmentally friendly technologies and incorporating environmentally and economically positive benefits for the affected community into the project’s design. For example, in Bayview-Hunters Point, a largely low income, African American area of San Francisco, community advocates have spearheaded an Alternative Community Energy project. With this project, organizers aim to educate community members on alternative energy, promote alternative energy for communities like and including their own, become leaders in the transition to alternative energy, and install 54 solar water heaters in local homes, and five photovoltaic systems in local homes and churches. Helping low-income and minority rural and urban communities become involved in cleaner systems of energy can be empowering, exemplary, and healthful. For rural farmworkers, solar powered water treatment devices could eliminate dependence on uncooperative water districts or agencies. Working with tribes to develop innovative water treatment strategies is an area where universities and tribes can partner to create outcomes that fit with tribal goals.

When providing alternatives to proposed actions, partners must research potential impacts, or demand that the project proponent help with this work, and offer alternatives specifying mitigations, rather than leaving these to the discretion of private companies or permitting agencies. If the project alternative is not incorporated wholly or partially into a revised project design, then it becomes a basis for negotiations about the mitigation package or about the community benefits package, binding conditions in the project’s

permits. For example, the Pacific Institute's Brownfields Program works in facing environmental injustices, integrating water and land clean up and recycling with community empowerment and employment. By helping the communities participate from the beginning of the process, and by sharing lessons that have been learned and precedents that have been set by other communities, communities are empowered to seek more beneficial outcomes as remediation programs are developed for brownfields sites in their neighborhoods.

III. Alliances with Universities and Research Organizations

Examples of university-community collaborations are increasing. One precedent-setting partnership is the Deep South Center for Environmental Justice, housed at the historically black Xavier University of Louisiana. Here, researchers, residents, and decision makers collaborate on programs and projects that promote the rights of all people to be free from environmental harm as it impacts health, jobs, housing, education, and quality of life. The university is close to both rural and urban nexuses of environmental injustice, and works to address health inequities in "Cancer Alley," the lower Mississippi River industrial corridor. For more information, see www.xula.edu/dscej. Other programs include the Environmental Justice unit at Clark-Atlanta University, led by Dr. Robert Bullard, and the University of Michigan program in Environmental Advocacy.

For many universities, environmental justice related work falls into different programs and disciplines. At the University of California, Berkeley, for example, students and professors are engaged with communities on environmental justice issues through the schools of Public Health, Social Welfare, Urban Planning, and Environmental Science and Policy. At Northern Arizona University in Flagstaff, Arizona, students in the Applied Indigenous Studies major are trained and then encouraged to return to their communities to do empowering, groundbreaking work for their tribes.

However, the collaboration between universities and community groups has a mixed history, due to imbalances of power and differing goals. Many communities are mistrustful because of past experiences with researchers who came into the community, took information and knowledge, and left the community with no benefits or further contact. Some proposed alliances with universities may have more to do with the old model of extractive research and less to do with community empowerment and assistance. Academics were taken to task at the second National People of Color Environmental Leadership Summit for their lack of real service to the movement. At a regional meeting of Bay Area environmental justice activists, one participant criticized the number of academics who were at the meeting, in contrast to the small number of community members, calling this the "gentrification of the movement."

Activists want researchers to know that the environmental justice movement is not a "think tank," but an active force taking on issues that are threatening the livelihood and survival of communities. Environmental justice issues are community based and require community-based solutions, including solutions that link specific communities across regions. University researchers can make fruitful partners for communities, and

even obtain important social data through observation and participatory research, but the research itself must be subordinate to community goals and overcoming environmental injustices.

The Pacific West Community Forestry Center has been involved in supporting a growing collaboration between the Maidu people and agency and university researchers entitled the Maidu Science Team. The team brings together Maidu practitioners with Western scientists to discuss the differences and commonalities between the two approaches to land management. The team will ultimately conduct treatments on the Maidu Stewardship Project, a pilot project on 1200 acres of National Forest land. The science team is a unique effort to increase communication between Western science and traditional knowledge holders. This collaboration places traditional ecological knowledge and Western science on equal footing as management approaches, begins key conversations about stewardship, and may result in long term research and study area designation for the stewardship project. Such a designation would provide the Maidu community with a land base.

The Pacific West Community Forestry Center is charged with providing partners and community members with research information that can be applied to local issues. As such, the PWCFC provides research for use by rural, resource-based communities, providing information to those engaged in fighting environmental injustices. Often, PWCFC work also includes community capacity building to help the group organize to define its goals and research questions. This work has been supported by the PWCFC with Latino forest workers and brush harvesters, particularly in Washington State, and with Southeast Asian mushroom harvesters in southern Oregon and northern California.

RESOURCES FOR ENVIRONMENTAL JUSTICE

Federal Memorandums

Appendix A: Executive Order 12898, 2/11/94, from President William Clinton

Focusing the attention of federal agencies on human health and environmental conditions in minority and low-income communities. Calling agencies to develop strategies and make achieving the EJ part of their mission. Giving minority and low-income communities greater opportunities for public participation in, and access to public information on, matters relating to human health and the environment. Mandates the creation of an Interagency Working Group on Environmental Justice, chaired by the EPA administrator and composed of the heads of various agencies. This group will develop guidance on identifying environmental injustices, hold public meetings, and assist in data and research coordination.

Appendix B: Christine Todd Whitman Memorandum, 8/9/01

Re-affirming the commitment of the EPA to environmental justice.

Appendix C: EPA Memorandum, 12/1/00

Analyzes statutory and regulatory authorities under the Resource Conservation and Recovery Act, the Clean Water Act, the Safe Drinking Water Act, the Marine Protection, Research, and Sanctuaries Act, and the Clean Air Act that are available to address EJ issues during (EPA) permitting.

California Senate & Assembly Bills

Senate Bill 115 (Solis, 1999)

Establishes the Office of Planning and Research as the coordinating agency in state government for environmental justice programs. The bill also requires the Cal EPA to develop a model environmental justice mission statement for boards, departments, and offices within the agency.

Senate Bill 89 (Escutia, 2000)

Requires the Secretary for Environmental Protection to create a Working Group on Environmental Justice to assist the Cal EPA in developing an interagency EJ strategy. The working group would include the Chairs of the State Air Resources Board, the California Integrated Waste Management Board, the State Water Resources Control Board, the Director of Toxic Substances Control, and others. The bill also requires the Secretary to convene an advisory committee by January 15, 2002 to assist the working group.

Senate Bill 828 (Alarcon, 2001)

This bill sets dates of completion and timelines for the formation of the working group delineated in Senate Bill 89.

Senate Bill 32 (Escutia, 2001)

Authorizes local governments to investigate and clean up small parcels of property contaminated with hazardous waste; requires the Cal EPA to conduct scientific peer review of screening values; and requires the development of a guidance document to help communities, developers, and local governments understand the complicated factors and procedures of cleaning up hazardous waste.

Assembly Bill 1553 (Keeley, 2001)

Requires the Office of Planning and Research to adopt guidelines for addressing environmental justice in city and county general plans, and to hold at least one public hearing both before and after the release of the draft guidelines.

Assembly Bill 1390 (Firebaugh, 2001)

Requires any air quality management district or air pollution control district with a population of one million residents or greater to spend at least 50% of their funds on reduced emission school busses, diesel mitigation, and/or the Carl Moyer program. The goal is to reduce air contaminants and public health risks in communities with significant exposure, including minority or low-income communities.

Agency Responsibilities

CALFED, <http://www.calfed.ca.gov>

Environmental Justice subcommittee co-chairs: Leslie Lohse, Martha Guzman

CALFED is a consortium of state and federal agencies working to heal and maintain the Bay Delta ecosystem. In response to concerns raised by urban and rural constituents, CALFED began the process of creating environmental justice guidelines to address and minimize or mitigate the impacts of CALFED activities on minority, tribal, and low-income people. To get public participation and feedback on how to integrate environmental justice into CALFED programs, CALFED representatives held five environmental justice forums around California. At the meetings, CALFED scientists described CALFED's work and goals, and solicited public opinion to identify impacts and priorities.

Attendees at these meetings were concerned with adequate consultation with tribes, CALFED's lack of attention to the North State watersheds, CALFED's degree of power to exercise eminent domain, and minority and low-income populations being overburdened by environmental problems without adequate information on the scope of the problems (i.e. fish contamination from mercury in the water affecting subsistence fishers). People also asked to be able to participate in the proposal review process when CALFED decision makers decide what activities to fund.

Following these forums, CALFED had established public advisory groups, is conducting an agency-wide environmental justice education and training effort, and recommends working with communities to identify potential impacts. However, the forums were often not well attended by community groups, so there was some disconnect between goals and actual outreach strategies. CALFED also established environmental justice contacts in each of the member agencies—a potentially valuable resource for community people—but these lists have not gone out to community groups.

Office of Planning and Research

<http://www.opr.ca.gov>

Contact: Heather Halsey, EJ Coordinator (916) 445-4831

- ◆ Workshops

The Governor's Office of Planning and Research is the state agency charged with implementing environmental justice programs and creating environmental justice guidelines for general plans for cities and counties. At their Sacramento Environmental Justice Fundamentals course, the focus was on getting agencies to talk to one another, and teaching people what environmental justice is and how it impacts their work.

- ◆ General Plan Guidelines

The Office of Planning and Research held a series of four environmental justice forums around the state during January and February, 2002. The primary goals of these meetings were to: create a network of environmental justice contacts at the community and local, state, and federal government levels; evaluate recent efforts to increase meaningful public involvement in governmental processes; and hold public

hearings on creating environmental justice guidelines for local general plans. Under Assembly Bill 1553 (Keeley, Chapter 762, Statutes of 2001) the Office of Planning and Research is charged with developing environmental justice guidelines for city and county general plans. These public hearings were to provide the necessary public input—prior to even drafting guidelines—for the process. Each forum also included a panel-led discussion regarding meaningful public involvement in governmental decision-making. A draft of the guidelines will be released to the public for a second review process in fall, 2002. The Office of Planning and Research received feedback on the forums, including calls for more in-depth outreach to communities and groups to increase participation, knowledge sharing, and input. See the Environmental Justice Forums Report Jan-Feb/02 for more information

California Department of Transportation (CalTrans)
Contact: Norman Dong, Office of Policy Analysis & Research,
Norman_dong@dot.ca.gov or (916) 651 6889

CalTrans has begun an effort to integrate environmental justice into its activities and policies. The goal is to ensure that there are no disproportionate adverse impacts resulting from their work, especially on minority and low-income populations, and that transportation services are equitably provided for all citizens. CalTrans issued a director's policy emphasizing meaningful involvement beginning in the early stages of transportation planning and continuing through construction and maintenance. CalTrans also published a booklet on public involvement and is offering grants of up to \$300,000 to promote context-sensitive planning to improve mobility and access for diverse communities. Eligible applicants include Regional and Metropolitan Transportation Planning Agencies, cities, counties, private and nonprofit organizations, community based organizations, and Native American Tribal Governments. Eligible projects emphasize serving low-income, minority, Native American, and other underserved communities, i.e. through identifying transportation needs and issues, demographic analysis, planning safety improvements, community revitalization, cooperation between agencies and communities, bilingual services in public hearings, and promoting new technology and energy efficiency in transportation.

California Energy Commission
Contact: James Adams, Environmental Planner, jadams@energy.state.ca.us

The California Energy Commission has also formally voiced a commitment to environmental justice. Before citing a facility, the Energy Commission goes through a lengthy public participation and research process, in which they study demographics, conduct outreach, and do a comprehensive impact assessment.

California Air Resources Board
Contact: <http://www.arb.ca.gov>, Jerry Martin (916) 322-2990.

The Air Resources Board released its "Policies and Actions for Environmental Justice" in December. In the document, the Board recognizes the value of policy-level as

well as site-specific solutions, which are very important in rural areas. Since local air districts and land use agencies are directly responsible for regulating air pollution, issuing permits and citing new facilities, the Board plans to work with local districts to develop tailored remedies to reduce emissions, exposures, and health risk. By getting people in communities suffering from air pollution to participate, the Board can gain an understanding of the pollution's impact on the community and identify existing community resources—like local knowledge—to mitigate the problem locally. In order to meaningfully include community members (especially low income people and minorities), the Board makes the best information accessible. Getting good information is a problem in rural areas, where abandoned mines are not tested and people are generally unaware of cumulative pollution in soil and water. The Air Resources Board also plans to educate communities on the public process. This is key for rural populations and anyone wary of acronyms and legalese. The Board promises to make staff available to attend community meetings and become familiar with community issues, and increase information through the school system (a center of rural life).

California Environmental Protection Agency

<http://www.calepa.ca.gov>

The Cal EPA has developed comprehensive environmental justice and participation guidelines over the last decade and been at the forefront of training other agencies in understanding environmental justice and developing similar policies. The Cal EPA also offers an Environmental Justice Small Grants Program that funds community-level efforts. When the EPA approaches a community, protocols direct agents to hold roundtables and constituency meetings to bring affected parties and institutions together to discuss issues. In this way, all sides participate and there is an opportunity to reach a consensus-based decision. Getting people talking to one another and to the agency, the EPA tries to link environmental, economic, and social concerns. According to EPA literature, participation is a two-way street with the community, a mutual exchange. In this vein, the EPA recognizes community knowledge, which is key in rural areas where people—whether they are family ranchers or Native groups—often have a lot of knowledge about their environments. The EPA has published a document on effective federal consultation and collaboration with Native American tribes and makes special efforts to contact populations who are hard to reach, which is also very important in rural areas. The EPA also recognizes that even a group that represents a small percentage of the total population can experience a disproportionately high impact if they are dependent—for subsistence or cultural use on the resources—such as fish or oaks—that will be affected.

Complying with the National Environmental Policy Act (NEPA) requires EPA to identify potential affects of its actions by consulting with affected communities. This is the *precautionary principle*, the EPA maintains a general list of groups to contact in an area when there is a potential for high impacts, so even if the population is dispersed (as in a rural location), the EPA still knows how to reach people—through civic organizations, labor unions, religious groups, etc. These networks are key in rural areas

for outreach and information dissemination. The EPA also calls for GIS mapping tools to identify potential environmental justice issues. GIS is valuable in rural areas, to pinpoint where impoverished populations meet affected areas, since this can be hard to conceptualize in a dispersed landscape.

See <http://www.calepa.ca.gov/EnvJustice/> for information on the Interagency Working Group for Environmental Justice and External Advisory Committee for Environmental Justice.

General Accounting Office (GAO)

The GAO has found that some companies tended to overestimate the number of jobs their polluting facilities would provide to poor communities, and the number of jobs tended to diminish over time. The findings may bolster claims by environmental justice advocates that the economic benefits of waste treatment and other industrial plants are often overshadowed by pollution and other threats to poor communities.

At the behest of Reps. John Conyers (D-Mich.), Jesse Jackson Jr. (D-Ill.), Nancy Pelosi (D-Calif.), Jose Serrano (D-N.Y.) and Maxine Waters (D-Calif.), the GAO looked at 15 facilities—nine non-hazardous waste-related sites, three hazardous waste disposal sites, two chemical plants and one concrete plant—in nine locations and asked them to provide information on jobs and other contributions they had provided to their surrounding communities. The number of full-time jobs ranged from four to 103 per facility, with nine sites having 25 jobs or less. Salaries ranged from about \$15,000 to \$80,000 per year, GAO said. But for four of the facilities, officials had overestimated job creation. For instance, Michigan's Genesee Power Station early on had predicted creation of 30 jobs, but only 25 were provided; Exxon Mobil estimated it would provide 50 jobs in Louisiana but only ended up with 40; Natural Resources Recovery estimated between 15 and 40, also in Louisiana, but only came through with six; and Safety-Kleen Inc. estimated 55 jobs in California but only provided 22, according to GAO. Officials from some of the 15 companies had also claimed a ripple effect of job creation from their plants, but GAO did not verify such claims.

Moreover, the agency found, jobs at some of the facilities dwindled over time. A chemical waste plant in Kettleman City, Calif., saw its jobs shrink from 200 in 1990 to 103 this year, and a similar site in Buttonwillow, Calif., went from 110 jobs in 1987 to 23 this year. A New York fertilizer facility had 80 jobs in 1993 but just 39 in 2002. GAO noted: "Officials from the two facilities in California told us that the changes resulted from a decreased demand for the facilities due to a reduction in the amount of waste generated by a more environmentally conscious public." About half the facilities provided information on where their employees lived, and for the most part employees lived in the same county if not the same immediate community as the site where they worked. Most of the facilities—10 of 15—identified other contributions they made to their communities, including volunteer work such as organized cleanups, infrastructure improvements such as a new water drainage system, and financial help to schools, universities, community groups and other organizations. Three facilities set up a

foundation or a fund to disburse such aid, in one case only after a community group took legal action.

Information on property values was not available for most of the communities where the facilities were located, although some residents at least claimed losses due to the proximity of the polluting plants, GAO said. In the South Bronx, where six of the 15 surveyed sites were located, property values appeared to have increased due to expanding economic development and the rising cost of housing in Manhattan. Finally, six of the 15 facilities claimed they took advantage of tax incentives or subsidies to locate where they had. For the House members who commissioned the report, the GAO findings were evidence that polluting plants are not necessarily helping nearby residents by providing jobs. See <http://www.gao.gov>

California Biodiversity Council

The Biodiversity Council—an organization of the leaders of 38 natural resource agencies—held an environmental justice meeting in February 2003. The meeting offered agency leaders basic information on environmental justice and why it is important, gave examples of work being done through a series of case studies, and presented opportunities for local, state, and federal agencies to get involved. The meeting goals were to raise awareness and expose leaders of resource agencies to environmental justice, with the hope that they would see EJ as a new dimension to their work with communities. The meeting touched on urban, water, rural, and forestry issues and their associated EJ concerns.

Although the Biodiversity Council does not have the ability to mandate actions, and organizers don't want to raise false expectations re: the impacts of this meeting, the event has the potential to positively impact the EJ movement by educating agency heads. Although benefits will be difficult to track, agency heads may be making choices (funding or otherwise) in the future, where they may draw on the knowledge, examples, and contacts gained during this meeting.

Policies in other states (from EJ Fundamentals Course Resource Guide)

Arkansas: State law limits the concentration of high impact solid waste facilities, partially in response to environmental justice concerns.

Connecticut: “Environmental Equity Policy” (1998) established to insure that low-income communities do not bear a disproportionate share of environmental pollution, and have equal access to environmental benefits.

Georgia: Beginning in 2001, the Regional Transit Authority's Transportation Improvement Plan includes a benefits and burdens analysis regarding environmental justice

Louisiana: In a State Supreme Court decision—*Save Ourselves, Inc. et al. vs. Louisiana Environmental Control Commission, et al.* (1984)—citizens living in a low-income, minority community challenged a permit for a hazardous waste disposal facility. Now, before a state agency issues a permit, it must determine that adverse environmental

affects have been avoided, that there is a positive cost-benefit analysis, and there are no alternative sites that would offer more environmental protection.

New Hampshire: Department of Environmental Services established an Environmental Equity Policy in 1994.

New Jersey: Department of Environmental Protection issued three administrative orders and a regulation regarding environmental equity. These affect permitting issues, public involvement, and the use of alternative dispute resolution.

New Mexico : Isleta Pueblo: Residents of the Isleta Pueblo Indian Reservation have the authority to designate water quality standards in order to protect religious and traditional uses of water. A section of the Rio Grande falls under their jurisdiction. The Federal Appeals Court upheld their right to dictate high water quality standards in the *City of Albuquerque vs. Browner* (1996), which forced the City of Albuquerque to modify their wastewater effluent into the river.

New York: St. Regis Mohawk Tribe: Maintains a Performance Partnership with the EPA, creating a core level of environmental protection, with “particular attention to environmental equity concerns.”

Texas: The Environmental Equity Program (established 1993) has created a State and Tribal EJ Advisory Panel that does outreach and dispute resolution, and encourages public participation.

Advisory Committees and Ad Hoc Networks

The Farm Worker Network for Economic and Environmental Justice

Coordinates the health and environmental work of farmworker groups. Contact Maria Sanchez (509) 547-5616 or mariafwn@msn.com or Carlos Marentes (915) 532-0921 or carlosfwn@aol.com.

Environmental Health Coalition

Research, advocacy, empowerment around environmental health and social justice. See <http://www.environmentalhealth.org> or call (619) 235-0281.

Southwest Organizing Project

Community organizing, resources for capacity building, interventions in situations of environmental injustice. <http://www.swop.net>. 211 10th St., S.W., Albuquerque, New Mexico, 87102-2919. (505) 247-8832.

Asian Pacific Environmental Network

Southwest Network for Environmental and Economic Justice

Tri-Valley CAREs: Communities Against A Radioactive Environment
Information, forums. See www.trivalleycares.org.

The National Environmental Justice Advisory Committee (NEJAC)

As the national advisory committee on environmental justice to the EPA, NEJAC drafted a “model plan for public participation.” They focus on getting the input of minority, low-income, indigenous, and agricultural worker populations, and on identifying specific ways to ensure that the concerns of impacted communities’ are meaningfully incorporated into process, reports, and recommendations.

<http://www.epa.gov/oeca/ej/nejac>. 202 564 2598. environmental-justice-epa@epa.gov.

The Environmental Justice Coalition for Water

<http://www.ejwatercoalition.org>

Contact: Amy Hui, ahui@svtc.org.

The Environmental Justice Coalition for Water (EJCW) is a network of rural and urban environmental justice, environmental, community-based, regional, and national groups working to address water issues and impacts on low-income and minority groups, and on presenting a collective voice to bring environmental justice issues into water policy. The EJCW is a citizen’s network that grew out of a desire to strengthen CALFED’s commitment to environmental justice.

Groups that are part of the EJCW include ArcEcology (a Bay Area alternative technology resource for communities), the Mothers of East Los Angeles, the Mono Lake Committee, the Sierra Club, the Silicon Valley Toxics Coalition, the Los Angeles and San Gabriel Rivers Watershed Council, Heal the Bay, Literacy for Environmental Justice, Environmental Defense, the Southern California Watershed Coalition, Forest Community Research, the Maidu Cultural and Development Group, the Elem Indian Colony, the Urban Creeks Council, the United Farmworkers, the Environmental Water Caucus, the Bayview/ Hunters Point community, and the Planning and Conservation League.

Among the issues the EJCW works on are the lack of representation on water boards, and the absence of meaningful outreach to get that participation. The EJCW tries to link local environmental justice efforts to state level policy and management.

Alliance of Forest Workers and Harvesters

A multicultural organization promoting social, environmental and economic justice for non-timber forest product workers and harvesters in the Pacific Northwest. See <http://www.matsiman.com.g>

National Network of Forest Practitioners, <http://www.nnfp.org>. Cultural Diversity Program

In March, 2002, the NNFP Cultural Diversity Working Group held the first in a series of training workshops to explore the intersections between forestry and environmental justice. For more information, see the May 2002 NNFP Newsletter and contact Cultural Diversity Program Coordinator Nanda Shewmangal @ 401-273-6507 and nanda@nnfp.org

Gamaliel Foundation

Organizing institute working to build an interracial, multi issue network for regional accountability. Currently a coalition of 44 organizations in 14 states and in Kwa Zulu Natal and the eastern provinces of South Africa. See <http://www.gamaliel.org> or call (312) 357-2639.

Central Valley Partnership

A collaborative of nine nonprofit partners and four nonprofit support agencies that works on building capacity, community organizing and training, economic development in immigrant communities, ESL instruction, immigration legal services, information and referral, legal advocacy, and social services. See <http://www.citizenship.net>.

Physicians for Social Responsibility

A network of physician-activists concerned with social responsibility. The Environment and Health Program provides resources for patients, health care providers, and the general public on environmental health hazards, and does advocacy, lobbying, and education.

Contact Susan T. West, Director of Environment and Health Program (202) 667-4260, ext. 224, or <http://www.psr.org>.

Community Coalition for Environmental Justice

The Community Coalition is a network of rural and urban groups that provides information and resources on community organizing around EJ issues in rural areas. The coalition has hosted economic and environmental summits and has a valuable booklet of proceedings available.

Contact Matt at 105 14th Ave, Ste 2-D, Seattle, WA 98122, or by phone at (206) 720-0285.

Rural Organizing Project

Located in Oregon, this network of rural groups is an important model for a less centralized network. Visit the web site at <http://www.rop.org>, or contact Marcy, the founder, at (503) 543 8417.

Nindakin: People of Color for Environmental Justice

Nindakin was founded in 1991 by a group of UC Berkeley students. They offer statewide advocacy for underrepresented groups facing environmental injustices. E-mail cpotter@nature.berkeley.edu for more information.

Ecojustice Network

<http://www.ipc.org/envjustice/org/>

Indigenous Environmental Network

An environmental alliance of grassroots indigenous peoples working to strengthen, maintain, and respect the traditional teachings and the natural laws, the Network does advocacy, international coalition building, conferences, and mobilization

of groups. See <http://www.ienearth.org>, or call (218) 751 4967, or write to PO Box 485; Bemidji Minnesota, 56619-0485.

International Indian Treaty Council

Organization offering leadership development, international advocacy for indigenous people, human rights monitoring of indigenous populations, technical assistance, coalition building, organizing, education, and advocacy for indigenous groups in the United Nations. See <http://www.treatycouncil.org>, write to 2390 Mission St., Suite 301, San Francisco, CA 94110, or call (415) 641-4482.

California Indian Basketweavers Association (CIBA)

<http://www.ciba.org>

California Indians for Cultural and Environmental Protection (CICEP)

Star Route Mesa Grande, San Ysabel, CA 92070, or by phone at (619) 782-3703.

Helpful Organizations

Center for Environmental Health

Policy, research, information, support for communities fighting environmental injustices. See <http://www.cehca.org>, or call (510) 594-9864.

Highlander Center

Courses, information, popular education, resources, history, participatory research. See <http://www.highlandercenter.org>.

Nuclear Information and Resource Service

Tracks the citing and transport of nuclear wastes and its effects on communities. See <http://www.nirs.org>.

Urban Habitat

Publications on resisting gentrification. See <http://www.urbanhabitat.org>.

Literacy for Environmental Justice

Education, youth leadership development. Write 6220 3rd Street, San Francisco, CA 94124, call (415) 508-0575, or e-mail info@lejyouth.org.

Movement Technology Institute

Providing technological assistance, information, and services (including GIS mapping) to social justice non-profit organizations. See <http://www.movementtech.org> or call (207) 749-1606.

Environmental Law Institute

Training, information, research, policy, action. See <http://www.eli.org> or call (202) 939-3800.

Environmental Defense

New searchable website at <http://www.scorecard.org> that relies on government databases to provide information on toxic chemical health effects in specific zip codes. Organizing, advocacy, environmental justice programs, see <http://www.environmentaldefense.org>.

Center for Health, Environment, and Justice

National non-profit providing information to organizations fighting pollution. See <http://www.chej.org>.

Californians For Pesticide Reform

See <http://www.pesticidereform.org>.

National Environmental Trust: Children's Environmental Health Campaign

Write 1609 Derby St., Suite B, Berkeley, CA, 94703, or call (510) 843-0549.

Maniilaq Association: Environmental Program, Native Services Department

Contact Francis Chin at fchin@maniilaq.org or (800) 478-3312, ext. 7639.

Connecticut Coalition for Environmental Justice

GIS specialists for environmental justice concerns. Contact Mark Mitchell at Mark.Mitchell@environmental-justice.org.

GreenAction for Health and Environmental Justice

See <http://www.greenaction.org>.

Clean Water Action

EJ Solutions

Urban Habitat

Organizing, education, and action to build environmental and social justice in the San Francisco Bay Area, with special attention to housing issues. Housing policies developed at urban habitat can address displacement and gentrification in rural areas. See <http://www.urbanhabitat.org>.

Our Mother's Place: Native American Health and the Environment

This organization provides a model of operating within a holistic vision of health, the environment, and rebuilding after centuries of discrimination. American Indian

Health and Family Services of Southeast Michigan, Inc. Located at 4880 Lawndale, Detroit, MI 48210.

National Center for Human Rights Education

Southwest Research and Information Center

New Mexico Environmental Law Center

The Environmental Justice and Health Union

Information on funding opportunities, training, research, policies, events. Fosters partnerships to eliminate environmental disease in poor minority communities in the United States. See <http://www.ejhu.org> or call (510) 594-9864.

Centers for Disease Control

Involved in tracking environmental disease. Funding and information. See <http://www.cdc.gov>.

Washington State University Center for Social and Environmental Justice

Support for developing and sustaining community groups. See <http://www.libarts.wsu.edu/csej>.

Pan American Health Organization

Studies on health and social welfare. See <http://www.paho.org>.

Alliance for Sustainable Jobs and the Environment,

Advocates for corporate responsibility and labor empowerment and sustainable development in the Pacific Northwest and on the North Coast of California
1125 SE Madison Portland, Ore 9721 (503) 736 9777 See <http://www.asje.org>
(California Chapter, P.O. Box. 3536 Eureka, Ca. @ asje@asje.org)

American Friends Service Committee

Works with immigrants and farm workers for humane working conditions, safe housing, affordable health care, and recognition for hard work. Does general social justice and humanitarian service through a variety of programs, including the Rural Economic Alternatives Project, the Pan Valley Institute, the Proyecto Campesino Farm Labor Program, and the American Indian Youth Program. There are offices in Sacramento, Visalia, Stockton, and Fresno. See <http://www.afsc.org>
California Rural Legal Assistance

Provides advocacy, education, empowerment, and legal services for farm workers and the rural poor. Offices line the east and west sides of the Central Valley are as far north as Marysville and as far south as El Centro. For the Arvin, office, contact Mirella

Lopez at (661) 854-5993. For the Delano office, contact Gil Flores at (661) 725-4350. For other contacts and more information, visit <http://www.crla.org>.

Center for Community Action and Environmental Justice

Offers assistance, leadership development, and training. See <http://www.ccaej.org>, or contact Penny Newman at (909) 360 8451, or by writing to PO Box 33124, Riverside, CA 92519.

The Northwest University Institute for Policy & Research.

Fresno Coalition Against the Misuse of Pesticides.

Jefferson Center

Convenes multicultural and multilingual exchanges to identify and ameliorate root causes of environmental and social injustices in the contingent natural resource labor sector of the Pacific Northwest and California. Contact Beverly Brown, P.O. Box. 279, Wolf Creek, Ore. 97497, (541)-955-9705 or See <http://www.jeffctr@internetcds.com.g>

American Public Health Association: <http://www.apha.org>.

Society for Public Health Education: <http://www.sophe.org>.

Pesticide Action Network

Latino Issues Forum: <http://www.lif.org>.

U.S. Public Interest Research Group

Information on public health nationwide. See <http://www.uspirg.org>.

National Center for Environmental Health

Communities for a Better Environment

Organizing, leadership development, legal and research advocacy for disproportionately polluted communities. Write 1611 Telegraph Ave., Suite 450, Oakland, CA 94612.

Literature and Website Resources

Books and Booklets

“The Quickening of America” addresses community activism and grassroots advocacy. The Department of the Interior, Bureau of Reclamation booklet entitled “The Decision Process.”

Planning and Conservation League handbook: “A Citizen’s Guide to Affecting Change in Your City.” <http://www.pcl.org>

“Building Upon Our Strengths. A Community Guide to Brownfields Redevelopment in the San Francisco Bay Area ” Urban Habitat Program, P.O. Box 29908 Presidio Station, San Francisco, CA, or (415)-561-3336

“Brownfields Redevelopment: Meeting the Challenges of Community Participation” (ISBN 1-893790-02-9, May/2000) 654 13th St. Preservation Park, Oakland, Ca. 94612, <http://www.pacinst.org>

The Hewlett Foundation’s Guide for partnering with diverse communities. See <http://www.Hewlett.org>

The Institute for Sustainable Communities’ guide to participatory and sustainable community planning.

The National Environmental Justice Advisory Council (NEJAC) EJ guidelines for the EPA See <http://www.epa.gov/oeca/ej/nejac>

Environmental Justice and Environmental Racism: An Annotated Bibliography and General Overview, Focusing on U.S. Literature, 1996-2002. Robin Turner and Diana Wu: Berkeley Workshop on Environmental Politics, Institute of International Studies, University of California, Berkeley.

Articles

Massachusetts Institute of Technology, Projections: Journal of Planning. Issue 3:2, Planning for Environmental Justice. Contact Gregg Macey, Editor—Projections MIT Journal of Planning; Department of Urban Studies and Planning; 77 Massachusetts Avenue; Cambridge, MA 02139.

“What are Environmental Justice and Environmental Racism?” (Including interview with Robert Bullard): <http://www.ejnet.org/ej/>

“Environmental Liberty and Social Justice for All: How Advocacy Planning Can Help Combat Environmental Racism,” by Simmons Buntin, November 1995.

“Environmental Justice: Grassroots Activism and its Impact on Public Policy Decision Making,” by Robert D. Bullard and G. S. Johnson. *Journal of Social Issues* 56(3): pgs. 555-578.

“American Environmentalism: The Role of Race, Class, and Gender in Shaping Activism 1820-1995. *Race, Gender, and Class* 5(1): pgs. 16-62.

“The Coincidental Order of Environmental Justice.” In *Justice and Natural Resources*, edited by Kathryn M. Mutz, G.C. Bryner, and D.S. Kenney. Island Press: Washington, D.C.

Online Resources

- Youth Principles of Environmental Justice: www.ace-ej.org/youthprin.htm.
- World Health Organization report with global estimates of environmental disease: <http://www.who.int/peh/burden/burdenindex.htm>.
- Community Resources Toolkit created for the National Leadership Summit on Eliminating Racial and Ethnic Disparities: <http://www.omhrc.gov/summit/>
- Community Air Monitoring Tools from Communities for a Better Environment: http://www.cbecal.org/action/community_tools0602.htm.
- California Urban Water Management Practices: <http://www.cuwcc.org>.
- Rocky Mountain Institute: <http://www.rmi.org>.
- Michigan State University Environmental Justice Database: <http://www.msue.msu.edu/msue/imp/modej/masterej.html>
- Fighting Environmental Racism Bibliography: <http://www.egj.lib.uidaho.edu/egj01/weint01.html>
- “Wildfire and Poverty: An Overview of the Interactions Between Wildfires, Fire-Related Programs, and Poverty in the Western States,” see www.upa.pdx.edu/CWCH/
- Southern California EJ Listserve: contact Luis at lcabrales@ecovote.org.
- Public Citizen is circulating a declaration on keeping water public. See www.citizen.org.

Internet Sites with GIS (Geographic Information System) Capabilities for Environmental Justice Purposes

<http://intranet.epa.gov/gis/twg/techno.htm>
http://gis.com/whatisgis/related_links.html
<http://intranet.epa.gov/oeca/oecj/ejmapper/>

EPA Databases

http://www.epa.gov/enviro/index_java.html

South Central Oklahoma Environmental Justice Resource Center

<http://www.ecok.edu/~polsci/envrjust/ejlinks/ejlinks.html>

The National Center for Health Statistics

http://www.cdc.gov/nchs/about/otheract/gis/gis_home.htm

OECA’s EJ Webpage

<http://es.epa.gov/oeca/main/ej/index.html>

Region 2 Environmental Justice Program

<http://www.epa.gov/r02earth/community/ej/poltoc.htm>
Region 6 Environmental Justice Index Methodology
<http://www.epa.gov/earth/r6/6en/xp/enxp4a1.htm>
EDF's scorecard homepage
<http://www.scorecard.org/>
Odden's site (Fascinating World of Maps and Mapping, > 11.500 Cartographic Links)
<http://oddens.geog.uu.nl/index.html>
Geographic Information Science Center at UC-Berkeley
http://www.gisc.berkeley.edu/http://intranet.epa.gov/gis/twg/twg_maps.htm
America's factfinder (population, housing, economic, and geographic data of US Census)
<http://factfinder.census.gov/servlet/BasicFactsServlet>
Neighborhood Knowledge Los Angeles (Data & Maps about communities in L.A.)
<http://nkla.sppsr.ucla.edu/>
Geotracker (Public water wells and leaking fuel tank sites in California)
<http://geotracker2.arsenaultlegg.com/disclaimer.htm>
GIS Day 2001 (Grassroots event for schools, businesses, and the general public)
<http://www.gisday.com/>
American Indian Lands Environmental Support Project
<http://es.epa.gov/oeca/ailesp/>
ESRI
<http://data.esri.com/data/online/quickmap.html>

Additional Environmental Justice Resources

(from the **Environmental Justice Fundamentals Course**)

National Environmental Justice Advisory Council (NEJAC) Fact Sheet

<http://es.epa.gov/oeca/oej/nejac/>

Executive Order No. 12898

<http://www.epa.gov/docs/oejpubs/execordr.txt.html>

EPA Guidance for Addressing Environmental Justice in Reviews Conducted Pursuant to Section 309 of the Clean Air Act, August 1999 - Applies to EPA staff who review the actions of other federal agencies, and includes what to look for in an EJ analysis. http://es.epa.gov/oeca/ofa/ej_nepa.html

Guidance for Addressing Environmental Justice Under the National Environmental Policy Act (NEPA), December 10, 1997 - the Council on Environmental Quality's guidance for federal agencies on incorporating EJ into NEPA

<http://www.epa.gov/oeca/main/ej/docs/epafin.pdf>

Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses, April 1998 - Highlights important ways in which EPA-prepared NEPA documentation may help identify and address EJ concerns
<http://es.epa.gov/oeca/ofa/ejepa..html>

CEQ NEPA Guidance on Environmental Justice
<http://www.epa.gov/oeca/main/ej/docs/epafin.pdf>

Draft Memorandum on Integrating Environmental Justice into EPA Permitting Authority, July 18, 1996 - Richard Lazarus, Member, Enforcement Subcommittee, NEJAC
<http://es.epa.gov/oeca/oej/nejac/pdf/0796.pdf>

Brochure on the Model Plan for Public Participation - Developed by the national Environmental Justice Advisory Council as guidance for any organization or agency that addresses public participation
<http://es.epa.gov/oeca/oej/nejac>

United Church of Christ, Commission for Racial Justice, 1987, Toxic Wastes and Race in the United States - A National Report on the Racial and Socioeconomic Characteristics of Communities with Hazardous Wastes Sites, Executive Summary

Guidelines and Principles for Social Impact Assessment, December 1993 - Prepared by the Inter-Organizational Committee on Guidelines and Principles for Social Impact Assessment

To find information on U.S. Census Bureau poverty levels:
<http://aspe.hhs.gov/poverty/01poverty.html>

Financial Resources

(CALIFORNIA) Cal Trans grants of up to \$300,000 for context-specific transportation planning. Contact Norman Dong at the Office of Policy Analysis & Research, Division of Transportation Planning, at Norman_dong@dot.ca.gov; or (916) 651-6889.

(NATIONAL) The EPA offers a variety of grants for EJ groups and projects. See the agency web site at <http://www.epa.gov>.

(REGIONAL) The Pacific West Community Forestry Center works through research and dialogue, and can offer resources and funding to assist rural EJ groups in the Pacific Northwest and the Sierra Nevada. Contact Center Director Katie Bagby at (530) 284-1022. Kbagby@FCResearch.org

(AMERICAN INDIANS) The Seventh Generation Fund is a Native-controlled organization that offers grants for ecosystem protection, traditional knowledge development, sustainable community building, native youth programs, protecting sacred sites, Native arts, and the networking of indigenous peoples. Visit the web site at <http://www.7genfund.org/native.html> or write to PO Box 4569; Arcata, CA 95518.

(AMERICAN INDIANS) Honor the Earth is sponsored by the Indigenous Environmental Network and offers grants to Native American organizations fighting to protect their lands from pollution and degradation. See <http://www.honorearth.com>.

Bullitt Foundation, <http://www.bullitt.org>.

Beldon Fund, <http://www.beldon.org>.

Impact Fund, <http://www.impactfund.org>.

Progressive Technology Project, <http://www.progressivetech.org>.

Norman Foundation, <http://www.normanfdn.org>.

San Francisco Foundation, <http://www.sff.org>.

PART TWO:

HOW CAN RESEARCH HELP?

PARTICIPATORY RESEARCH AND ENVIRONMENTAL JUSTICE

INTRODUCTION:

What is participatory research?

Participatory research is a collaborative approach to research that emphasizes the importance of community guidance of, and participation in, the research process. Participatory research has roots in two traditions—one of “action research,” a form of research dedicated to specific changes within a larger system, and the other of larger social change, embedded in the popular education and emancipatory work of Paulo Friere in Brazil, and the Highlander Center in the United States.

Participatory research has three overlapping components: the collective investigation of problems by the constituency and the researcher; the collective analysis of the issues by the researcher and the constituency, including looking for underlying structural causes; and collective action to solve the problems. In participatory research, the community is empowered through a process in which researchers and community members come to the table as equal participants to examine and address multifaceted problems. The researchers’ role in participatory research may be that of a facilitator. Participatory research calls for the researcher to work extensively in the field with the

constituency, adopt appropriate attitudes, behavior and rapport, and recognize the value and validity of indigenous technical knowledge.

In all these elements, participatory research challenges the dominant paradigm of doing research, in which the researcher is the knowledge-holder, and creates questions about the community that may have little to do with immediate community concerns. As such, the community receives no benefit from the research—either by working through the research process, or applying the research to create a helpful outcome. Engaging in participatory research forces researchers and communities to address difficult questions of power relations, and the emphasis is on collaboration, the community, and the research process.

Most groups facing environmental justice issues do not come to the table knowing their questions and with the data. The first response from community groups dealing with environmental justice problems is often emotional and reactive—anger, frustration, and a feeling that there is “nowhere to turn.” Researchers can help community members translate local knowledge and concerns into research questions about the impact of a proposed project or policy on the affected community. Community-based participatory research around impact assessment and mitigation is transformative and empowering for the following two reasons:

- Currently, project proponents have enormous latitude to define and implement impact analysis and a “perverse incentive” to do it poorly or not at all. Communities that take the latitude about whether to do or not do environmental justice impact analysis away from the project proponents are empowered because they begin shifting “the burden of proof” back to where it belongs—on the shoulders of the project proponents.
- If impacted communities take the initiative of developing how to do environmental justice impact analysis by formulating their own assessments, they become proactive rather than reactive about their futures. The impacted communities rather than the project proponents begin defining and “elevating the bar” for what are acceptable versus unacceptable EJ impacts and mitigations.

The scope and goals of the research to be approached from a participatory framework should be defined collaboratively, and for the purpose of empowering local communities to undertake scientifically defensible assessments of local impacts. “Local impacts” could include environmental, economic, health, or social baselines and trends, stressors, and the effectiveness of existing, proposed or possible mitigations. Partnerships between environmental organizations, scientists, impacted communities and their allies are often needed. If key partners are missing, the impact analysis process is unlikely to have the desired outcomes.

How Researchers Can Help with Environmental Justice Concerns: Working with Communities to Document Undue Burdens

Both urban and rural communities facing environmental injustices already suffer disproportionate burdens associated with an institutional permitting structure that treats each environmental problem as new. From the affected communities' points of view, it is an environmental injustice to assume that additional environmental damages would be unrelated to current conditions and isolated from the legacy of untreated environmental problems in an area. Environmental assessment starts unfairly because communities facing environmental injustices are already suffering from cumulative environmental degradation—little of which has been documented in an effective way. Nor are the interrelationships from multiple environmental stresses understood even if they are well documented. When ecological and economic poverty are combined, the “burden of proof” for proving “undue environmental burdens” typically shifts to the victims, instead of being borne by project proponents. Chronic economic dis-investment and cumulative environmental degradation can become vicious downward spirals for both urban and rural areas.

Documentation of “undue burdens” is what triggers environmental justice mitigation obligations. Data is used to define the scope and nature of the impacts that the mitigation is supposed to “mitigate to insignificance” or to compensate for. Constituencies need to be able to formulate and to undertake assessments that accurately depict the cumulative insults of chronic disinvestments, institutional disenfranchisement, and ecological degradation that diminish their communities. In addition to being accurate and relevant at the community level, assessments must be scientifically defensible to survive an almost certain power struggle between the impacted communities and the project proponent, over whose and what information should become the basis for documenting and mitigating environmental injustices.

Environmental justice representatives and others often advocate for:

- public science and public disclosure.
- specific governmental policies that require decision-makers to incorporate “the precautionary principle” into permitting, environmental analysis and public funding for infrastructure and facilities that affect areas inhabited by minority and low-income populations. The precautionary principle rest on three basic principles: (1) taking precautionary measures even if cause an effect relationships are not fully established scientifically, (2) the proponent of the activity rather than the public, should bear the burden of proof, and (3) the process of making environmental decisions must be open, informed and democratic and must include potentially affected parties and involve an examination of the full range of alternatives—including no action.

- Given the twin burdens of pollution legacies and proof, it is not surprising that environmental justice groups seek to restore ecological and hydraulic functions to degraded lands and waters and to advocate for using natural processes and community scale technology to solve pollution problems wherever and whenever possible. This approach needs to be supported by a wide coalition of watershed groups, public-interest politicians, environmental groups, anti-pollution groups, social justice groups, public-interest scientists, etc.
- Both urban and rural groups need better information on institutional processes and more community-accessible and user-friendly science and technology for undertaking community-scale assessments and impact analyses.
- Environmental justice groups need the means to share expertise from one region to another, as well as the means to develop a shared understanding of the impacts of decisions for other urban and rural communities facing environmental injustices.

Specific questions need to be answered to determine community-scale impacts from a proposed project. At the meeting of the Environmental Justice Coalition for Water in Los Angeles, California, beginning questions included:

- How are cumulative and future costs and benefits defined and allocated?
- Who owns the knowledge?
- Who makes the decisions?
- Who gets the work?
- What does the community benefits package look like for the range of alternatives that are being analyzed?
- What alternatives are missing?
- Is there enough information to make a decision, and how is the “precautionary principle” applied to uncertainties?

Allies and partners

Because environmental justice encompasses environmental issues, social justice issues, and sustainability concerns, environmental justice practitioners have found it useful to divide the groups involved into lists of allies and partners.

Allies are typically groups that are not directly environmental justice populations. Allies work on environmental justice issues and furthering the environmental justice movement through research, and/or through supporting environmental justice groups financially, organizationally, or politically. An example would be the Pacific West Community Forestry Center, which has targeted funds and time toward environmental justice concerns. Forest Community Research, another ally, maintains office space for the Maidu Cultural and Development Group, a group directly dealing with environmental injustices.

Partners are environmental justice groups like the Maidu Cultural and Development Group, the Mothers of East Los Angeles, the Alliance of Forest Workers and Harvesters, the United Farmworkers, or the California Indian Basketweavers Association. These groups are fighting environmental injustices daily. We call them partners because of the necessity of working together when there are many smaller groups with similar causes. Partnering together for positive change is a proactive stance to take on environmental justice concerns.

Environmental – Environmental Justice Partnerships

Many ad hoc groups are engaged in the evolution of the relationship between environmental groups who monitor the enforcement of environmental laws and policies and environmental justice groups who seek equitable treatment in the enforcement of environmental laws and policies. The following section explores some of the similarities and differences between environmental issues and environmental justice issues, and successful areas of overlap pioneered by proactive groups.

In a 1996 article entitled “A Winning Hand? The Uncertain Future of Environmental Justice,” author Christopher Foreman Jr. wrote that minority populations are “...often acutely suspicious of mainstream environmentalism, believing the urban poor a more endangered species than spotted owls.” He follows with a quote from Whitney Young, executive director of the National Urban League, who “bluntly advised postponing the war on pollution until ‘after the war on poverty is won.’ ” In the last decade, increased documentation of environmental racism has showed a clear connection between environmental pollution, racism, and poverty. Those with the least resources often bear the heaviest burden of environmental problems.

Environmental justice groups tend to arise in opposition to specific projects in already overburdened communities. Some environmental justice groups come to broaden their focus to reducing the environmental burden everywhere instead of displacing pollution on another community elsewhere. While NIMBY (Not in My Backyard) was the earlier slogan for environmental justice activists, this has transformed into NIABY (Not in Anybody’s Backyard). According to one Bay Area-based environmental justice activist, “We need to work to create more space, rather than fighting for the spotlight or a piece of the pie. Development needs to happen together.” This is true for rural and urban groups, as they link together to deal with watershed-wide issues related to the allocation of water and power, and the management of natural resources at the headwaters and at the delta.

Pollution prevention may be where environmental justice advocates find the most explicit common ground with environmentalists. Both see the importance of environmentally friendly technologies and natural resource conservation, since preventing pollution obviates the need for distributing it equitably.

The Korean Youth and Community Center (KYCC) in Los Angeles, joins many groups working in the area of overlap between environmental and environmental justice issues. They have a contract with the Los Angeles Dept. of Water and Power to distribute and install low-flow toilets in low-income communities. To accomplish this, the KYCC

employs a range of people from the local community, providing local jobs and teaching job skills while reducing water pollutant loads through water use efficiency. In a similar combination of community development and environmental advocacy, a partnership between the Mono Lake Committee, a rural environmental group, and the Mothers of East LA created an environmental education program that helps barrio youth understand where their water comes from and why water conservation and environmental conservation is important. Participants in the youth-based restoration program at Mono Lake made the connection, saying that “Mono Lake is part of the ‘hood.” The program also expands the social justice horizons of urban youth brought to the Sierras. “It teaches kids how to be human, and how to protect their natural resources,” said Elsa Lopez of the Mothers of East LA.

Environmental Defense, a well-known environmental organization, has an office of environmental justice in Los Angeles as part of its Living Cities program. The environmental justice office works on equal access to clean and green parks, schools, and playgrounds; increasing the mobility of people without access to cars; and making sure that development projects don’t adversely impact low income or minority communities. When the Staples Center expanded into the surrounding poor community, Environmental Defense helped local residents negotiate a community benefits package that included local hiring, an on-site training center; and a pledge of money for parks. Based on their success in Los Angeles, Environmental Defense issued some guidelines to other environmental groups who are working to solve both environmental and environmental justice problems:

- 1) Involve local people; help them gain power, voice, and access.
- 2) Turn “barriers” into assets through carrot-and-stick negotiation tactics with project proponents. Environmental justice work is a mutual education process. This raises the effectiveness of communities and advocates and the business-development community.
- 3) For the Staples Center, the community benefits package required an up-front investment of legal financial and technical resources, but this investment will lead to greater and more long-term investments into the environmental and economic and social health in the affected community.

**Researcher-Environmental Justice Partnerships:
A Profile of the PWCFC’s Environmental Justice-Participatory Research Program**

At the Pacific West Community Forestry Center, researchers are linking people and information in order to help affected rural people define policy issues and to elevate rural environmental justice concerns to policymakers and natural resource programs. This

involves compiling and disseminating resources, identifying institutional barriers and programmatic opportunities, and publicizing key legal and administrative precedents. Helping communities to format their concerns within the institutional contexts and decision-making labyrinths that can potentially address them is called “setting up the administrative record.” Establishing an administrative record is an essential first step for “legitimizing concerns” and for “getting a place at the table” in decision-making venues such as the National Environmental Policy Act (NEPA). Helping communities conduct research that is responsive to community concerns includes getting the information needed for establishing legal and administrative standing, and for documenting special needs and undue burdens.

Instead of creating new programs, Center researchers have focused on inserting equity and environmental justice concerns into the already open (if not receptive) public participation windows in existing programs. For example, the desire among Maidu people (a landless, unrecognized tribe) to regain control of a land base on which they could apply traditional knowledge, was channeled into the Forest Service Stewardship Pilot Program. In 1998 the Maidu received a stewardship pilot project and became the only Native American pilot of the 22 initial projects selected by the Forest Service. Now the Pacific West Community Forestry Center (which did not exist when the Maidu first obtained the pilot project) supports Maidu knowledge gathering and participatory research for the Maidu Stewardship Project.

Forest Community Research, with partial support from the PWCFC, recently completed a large-scale assessment of the Northwest Economic Adjustment Initiative (NEAI)—the economic development component of Clinton’s Northwest Forest Plan that channeled federal funds to communities in Oregon, Washington, and Northern California to help offset the economic and social affects of cutbacks in the timber industry. This study took a multi-leveled approach, and included an institutional analysis, regional comparisons, and community-level case studies. The community case study methodology was used to document the community context, existing problems, changing socioeconomic trends, and the affects of federal interventions. Researchers spent roughly two weeks in each community, conducting in-person and phone interviews, compiled relevant census data, reading historical accounts, and reviewing project proposals that were funded by NEAI monies. The case studies have been useful for outsiders and community members alike to learn about the suite of issues facing timber-dependent communities, begin to understand the challenges of transitioning to a more diversified economy, and increasing the communication of shared concerns and innovative solutions between communities dealing with similar problems.

During the analysis of the case studies, differences in access to NEAI Programs by different groups—such as Native American tribes—was noticed and evaluated. Tribes appeared to be more successful at receiving and implementing NEAI funds when they were internally organized to access the program and externally connected to governments and the larger community. However, many issues that were specifically tribal changed the nature of the NEAI process with tribes. For example, tribes are sovereign governments, so they often had pre-existing relationships with agencies and did not need

to go through the Community Economic Revitalization Team (CERT) process that distributed NEAI funds. However, when they did enter the process, important connections were made with other groups. In order to make the CERTs more responsive to tribes, groups lobbied to include a Native American representative on the California team. In addition, the creation of a Native American Community Coordinator position in northern California was also key to networking tribes and helping them to access the funding process.

The case study methodology and analysis used in the NEAI project can be applied to the research questions emerging from the environmental justice movement. Environmental justice issues are complicated, and often involve multiple underlying, structural problems, as well as multiple causes and effects. They require an investigative, multi-dimensional case study methodology to illuminate the range of issues, provide important background information for decision-making, and offer an important cadre of information that may head-off conflicts and leverage benefits among communities. For example, the Hupa tribe on the Trinity River in northwestern California has been struggling with decreased salmon runs for several years. When farmland is retired down stream, more water is available in the river and the salmon population is sustained. However, when farmland is retired, farm workers lose their jobs. Through case studies and community-based research, the two equally burdened populations will be able to learn about one another and meet to create collaborative solutions. In addition, voters and decision makers can rely on case studies to provide a comprehensive explanation of issues—so that decisions reflect the concerns of both farmworkers and Native people, not just one or the other.

For more information on the case study approach and for case studies that included communities dealing with environmental justice issues, see Cave Junction, Oregon; Neah Bay, Washington; Hoopa, California; Warm Springs, Oregon; Forks, Washington; and Happy Camp, California; all in the “Assessment of the Northwest Economic Adjustment Initiative. For a copy of the assessment, go to <http://www.fcresearch.org>, or call (530) 284-1022.

Circuit Riding, Peer Learning and Communication

As in the Hupa/ farmworker example above, it is key for populations to learn about one another’s issues. If groups are not informed about the complex causes of their situations, and the complex effects of their decisions, they may make a choice that hurts another population, when a collaborative decision could be just as satisfactory, and build a stronger coalition between equally disadvantaged communities. Similarly, in the environmental justice mobilization occurring around the CALFED activities, or in the multi-state watershed movement, it is key to have communication and idea sharing between groups. While groups are mobilizing, developing their positions and finding each other for critical mass, the policy and decision making process rolls along, whether environmental justice groups are ready to engage or not.

Most government agencies interpret their environmental justice responsibilities as providing equitable notification, rather than an obligation to guarantee equitable

participation in decision-making. Therefore it is critical for environmental justice groups to have access to individuals who can act as watchdogs over public decision-makers and public decision-making. For example, large, entrenched water interests may not have the **broadest** public good in mind and may not welcome yet another constituency at the policymaking and decision-making tables. In the California water arena, circuit riders served an interim and critical facilitative leadership role by attending suites of meetings, noting the issues, players, and decisions at each meeting, and inserting pro-environmental justice language into the administrative record wherever possible. Circuit riders continue to serve as a link between environmental justice, environmental, and watershed groups so that grassroots activists can learn how they may more effectively work together on issues of mutual benefit, and where they most need to spend their limited time and resources to have the greatest positive impact.

Rural Environmental Justice Database Project

Databases exist listing the myriad urban environmental justice groups in California, but no databases are available on rural environmental justice groups. This is not because rural environmental justice issues do not exist, but, rather, because rural groups are dispersed, and may not be organized under the term “environmental justice.” The PWCFC is beginning work on a list of rural groups in the Sierra Nevada who are directly facing and/or working on environmental justice concerns. This list includes allies—groups supporting environmental justice groups and advocating for equitable policies, public involvement processes and laws—and partners— environmental justice groups directly dealing with environmental justice concerns. The following paragraph will offer a description of the initial efforts to map Sierra environmental justice groups.

The first question was “are there environmental justice issues in the Sierra Nevada?” and, through investigating census data and interviewing community members, we found the answer to be yes. Next, we asked what groups were affected and what the differences between the issues faced in rural areas and the issues faced in urban areas were. The latter question requires more time and investigation to understand the links between urban and rural issues, and the larger causes of both. The former question, regarding groups, will take networking, circuit riding, traveling, researching census data, and meeting with communities to define. Any researcher begins with a literature search—we asked, “What else has been written about rural environmental justice?” Being in a rural area ourselves, research libraries are difficult to access, so we turned to computer articles and databases. Some resources are listed above in the “resources” section. After finding documents and reading about publicized cases of rural environmental justice, the next question narrowed our focus to, “How does it apply to our area?” Some rural environmental justice issues we considered included property values that are increasing beyond the average income in the area to cater to outside buyers, decreased river flows that impact fishing, ranching, farming, and other traditional uses upstream, and herbicide spraying on private or public lands that impacts watershed health and local subsistence users.

Bringing the lens to focus on the rural Sierra Nevada, there were a variety of ways to approach the search for rural environmental justice groups and issues. Here is a list of five approaches that are being considered:

- area-based: focusing on a specific region (i.e. Tahoe Basin) or a region type (i.e. headwaters communities)
- issue-based: focusing on a particular issue, i.e. pesticides, workers, lack of participation, hazardous waste
- resource-based: focusing on a certain resource, such as air, water, soil, traditionally hunted fish/game, traditionally gathered plants, the impact of laws on an important resource
- policy-based: looking at a specific policy, i.e. regarding water transfers or the Northwest Forest Plan
- race: where are the different groups in the Sierras? Are there particular issues associated with particular ethnicities? Why is there a lack of ethnic diversity? What makes people of different ethnicities less comfortable in these rural areas? Why was there historically more diversity here (African Americans, Asians, Hispanics)?

These approaches led us to census data on the Sierra counties, research into previously completed studies, and conversations with our partners, including Jose Montenegro, who works on organizing Latino forest workers. Attending sessions organized by the Office of Planning and Research that targeted issues of participation raised the question of whether participation was more difficult in rural areas, and whether there were laws that fostered, rather than squelched, participation. We want to share the more positive statutes with rural populations so that they are aware of their rights and their opportunities to enter the process.

In order to make a change and mitigate environmental justice issues in rural areas, someone has to first identify the issues and the constituencies, and then make these visible to policy makers. This is one of the first times rural people have pushed to have environmental justice elevated in water policy; and pushed for public participation. We are on a cusp now. There is a limited amount of water and there are many uses—some new, some historical, and some carrying more monetary value than others. Low-income and minority groups are being impacted because they are subsistence users, they have historical user rights of cultural importance, and they often depend on working-class natural resource related employment for their economic solvency. We don't want to see Native Americans and farm workers pitted against one another regarding natural resource policies and environmental laws. Cultivating communication between rural and urban constituencies, rural and rural in different areas, and urban and urban, is key to reducing

feelings of isolation, creating important linkages, and forming a stronger, watershed-wide coalition to address the structural issues of environmental injustice. Our goal is to create a landscape of environmental justice issues and affected communities in rural California, and to link the rural and urban components across the state for watershed-wide solutions

Current issues and upcoming events

The Environmental Justice Coalition for Water is a collaborative of community based-organizations and individuals that was founded in 1999 in response to CALFED. Members meet, discuss their water issues, and collaborate. The coalition's steering committee is largely Bay Area-focused and trying to expand. The goal is to build the local community capacity of individuals and organizations to serve their constituents, and also to form a statewide coalition. The coalition is still working to get CALFED to include environmental justice requirements in their review process. The coalition has become a clearinghouse for environmental justice related water issues, and members are working on an educational and policy paper—a blueprint. To become involved with any of these aspects, including Assembly Bill 2534 for implementation of the EJ component of Proposition 40, or to learn about the next meeting, visit <http://www.ejwatercoalition.org>.

Coming soon:

- **A summit between urban and rural EJ groups, hosted by the Environmental Justice Coalition for Water and the Pacific West Community Forestry Center**
- **A conference on minorities and natural resources entitled Just Forests, and scheduled for May, 2003 at UC Berkeley.**
- **The World Forestry Congress will convene in Ontario, Canada, in September, 2003. The Pacific West Community Forestry Center has submitted a paper on Civic Science and will be leading that discussion.**

For rural groups interesting in participating in these and other upcoming events, the Pacific West Community Forestry Center may be able to provide technical and financial resources to help groups develop:

- ◆ Capacity building and peer learning activities
- ◆ A summary of regional concerns
- ◆ Recommendations for agency responses to environmental justice activities
- ◆ A calendar of important upcoming events, state or congressional bills affecting environmental justice, and meetings
- ◆ Case studies
- ◆ An expanded list of environmental justice groups, including data on unrecognized tribes in the Sierra region