Rural Environmental Justice
Healthy Environments, Shared Decision-Making, and Sustainable Communities

At the 2009 National Rural Assembly, environmental justice (EJ) was raised as a critical issue for rural America. To explore these issues for the June 2011 Rural Assembly, telephone interviews were conducted with 22 representatives from government agencies, nonprofit organizations, academic institutions, and rural communities throughout the country. In addition, 20 responses to a national survey were received and compiled. The analysis and synthesis of these results provide the main content for this report.

History and Definition of the Field

According to African American Voices in Congress (www.avoiceonline.org) the Environmental Justice Movement emerged in the 1980s "in reaction to discriminatory environmental practices including toxic dumping, municipal waste facility siting, and land use decisions which negatively affected communities of color." The First National People of Color Environmental Leadership Summit, held in 1991, served to mobilize people of color around environmental and economic justice and health issues as basic civil and human rights. This was followed by Summit II in 2002. While toxics and polluting industries remained critical elements of the environmental justice agenda, they no longer defined the movement. Rather, environmental justice now encompasses: environmental sustainability; enforcement of legal rights; access to decision-making; and economic development to enable vulnerable, marginalized, and under-represented peoples to build healthy, resilient and powerful communities. In the rural context, this includes isolated, low-wealth communities with limited organization and influence over the factors that impact their well-being. Strategies needed to respond to these inequities include the critical tasks of building community institutions and leadership as a means of resilience against the immediate environmental and economic impacts of negative environmental conditions and prevailing structural discrimination.[1]

Rural environmental justice also encompasses the spectrum of access to natural resources, access to services for managing and benefiting from natural resources, participation in decision-making about them, as well as co-management and control/ownership of natural resources. It has taken some time for land issues of this type to be included under the environmental justice

"tent" because of the traditional focus on exposure to harmful toxins and also because practitioners who are focused on land, such as land conservationists, land managers, and rural residents, might not frame the issues in this way. But these issues are found throughout the country and they impact tribal and non-tribal communities' fair access to and control over land, water, and other natural resources that enable rural communities to control their environmental and economic futures.

The Terminology of Environmental Justice

Many individuals interviewed found the term "environmental justice" abstract, and sometimes politicized. One respondent writes, "EJ is a loaded term with complexity and implications that I believe presumptively handicap the specific issues sought to be advanced." A journalist covering rural issues states, "EJ sounds vaguely Democratic [in a partisan sense], and people might feel that they don't want to get involved in party politics." The term environmental justice also suggests polarization. An activist in Appalachia said, "In 'environmental justice', people hear the polarization between jobs and environmental agendas. People feel like they have to choose between jobs and their health, when in fact we are striving to achieve both jobs and health." Many interviewees alluded to the fact that limiting the analysis to "environment" risks missing the very integrated and multidimensional way in which problems present themselves in rural communities.

Some people may also simply not see themselves reflected in environmental justice. For example, white people may see the term as applying only to people of color. "Rural EJ is still invisible – if there is not a minority group, white people may not caste their issues as EJ," according to one California nonprofit leader. A respondent from the Pacific Northwest states, "Because of state demographics, often we are looking solely at income when determining disparate impact for rural communities, rather than at race."

An interviewee from the US Forest Service explained that many land managers in the Forest Service have interpreted EJ to mean low income minority populations as opposed to low income populations and minority populations. This strictly racial lens inhibits land managers from seeing and acting on environmental injustices in white communities. "We have a bureaucratic mentality around environmental justice ... rather than an orientation of looking broadly at an issue and understanding its impact on people." While this example speaks to a need to educate agency employees, it also speaks to the need for language that meets people where they are.

In summary, the definition of environmental justice offered here captures the multidimensionality of community issues and integration of: environmental and health impacts; access to benefits from natural resources,

decision-making and land-management decisions; and sustainable economic opportunities and strategies for resilient communities. As one staff member at a national organization for American Indians writes, "If we are talking about rural revitalization, opportunities for youth, natural resource conservation, economic development through agriculture, and addressing climate change impacts, I think there is a lot more synergy we can get behind." As one survey respondent captured, "We've developed a framework for our messaging that is values and solutions oriented, and rooted in the stories of particular people and places. It seems pretty basic, but it's actually a significant departure from previous communications approaches that have tended to start and end with all the reasons why we must stop the destruction caused by resource extraction."

Environmental Justice Issues

This section outlines some of the issues identified by respondents as priorities for rural communities. A detailed breakdown of the issues by region is presented in Appendix A: A Geography of Rural Environmental Justice Issues.

1. Environmental and Health Iimpacts

There are a number of specific issues directly linked to the extraction and utilization of natural resources that negatively impact water quality, air quality, contamination of land, and other resources critical to the well-being of rural communities. Water quality, for example, was rated the second most important issue and air quality the fourth most critical environmental justice issue in the survey. These issues vary significantly around the country, but tend to focus on the production of energy and food to meet regional, national and global markets.

The coal, gas and oil industries use a variety of methods to extract natural resources from the earth. Many of these methods present a very real and immediate threat to water quality and wildlife habitat in rural communities. Among the most negative of these practices are Mountaintop Removal (MTR), Hydraulic Fracturing (Fracking), uranium mining and offshore drilling, as illustrated by last year's Deepwater Horizon disaster in the Gulf of Mexico.

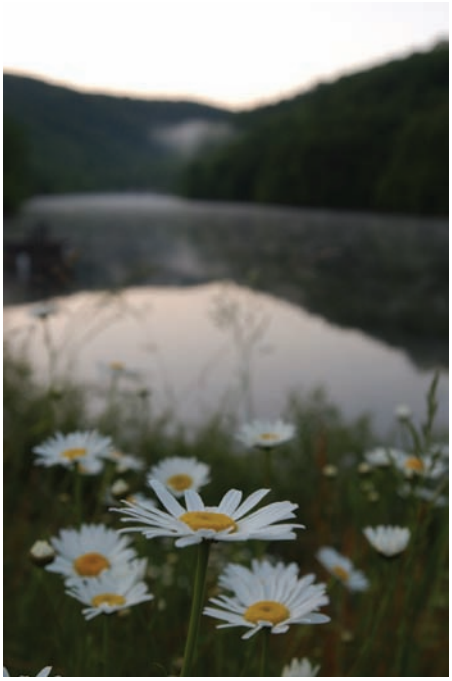
The concerns of EJ proponents come from the topological, ecological and hydrological transformation of the MTR [2] site and surrounding areas, including loss of forest cover, water contamination, etc. Additional concerns include the potential threat of environmental contamination from the storage of toxic waste generated by MTR and coal processing. Other concerns surrounding the mining and use of coal include: air pollution and the

Kentuckians for the Commonwealth (KFTC) focuses on education and awareness-raising to build community power. KFTC is leveraging the growing awareness about mountaintop removal for educational purposes,

"Our will won't end mountain top removal, but it will move us ahead. We can't pass legislation against mining in Kentucky, it won't pass. But we still fight because it gives us a platform to do the education."

KFTC also provides education about the true cost of coal by explaining the life cycle of coal, "Our coal in Kentucky goes up to a power plant in a community of color in Chicago. It's dirty and nasty where the coal is mined and it's dirty and nasty where it's burned. Some people call it the life cycle of coal; I call it the death march of coal."

Finally, KFTC helps communities share their stories with one another, "Once you win a small battle in your community, you share it with another community that's still fighting. It's about my story, it's about your story, and it's about us. I believe everyone should have clean water, don't you?"



contamination of water from a number of particulates and toxic materials (including sulfur, heavy metals, mercury, arsenic and coal ash) and the health of coal miners.

The main concerns surrounding fracking [3] are water usage (millions of gallons of water are used to fracture a well) and water contamination (fracking fluid is a proprietary mix of toxic chemicals, water and sand). Another concern is that methane and other toxic substances are released during the fracking process. A 2011 study by Duke University scientists found a link between fracking and water contaminated with natural gas so thoroughly that it can be set afire. [4]

Uranium mining is a dangerous occupation usually undertaken by members of underserved rural communities. Exposure to radioactive dust and gas has caused a massive increase in lung cancer in uranium miners. The uranium mining process contaminates local water supplies, releases radioactive gases and dust into the atmosphere, and leaves behind "tailings" which are radioactive and are often stored in an unsafe manner creating exposure risk to mine adjacent communities. Another concern related to nuclear power is what to do with nuclear waste. The safe storage or disposal of material that remains radioactive for millennium continues to be a challenge for the federal government and local communities. A prime example of the difficulties and potential hazards of storing nuclear waste can be seen in the controversy surrounding the Yucca Mountain disposal site in Nevada.

Confined Animal Feeding Operations (CAFO) [5] were also identified during the interviews as having significant negative impacts on the environment and health of neighboring communities. According to the Pew Commission on Industrial Farm Animal Production, current practices increase the number of antibiotic-resistant bacteria, contribute to air quality problems, pollute waterways with highly concentrated animal waste, and have had an overwhelming impact on the traditional socio-economic structures of rural farming communities. [6] Growing awareness of the environmental, health, and worker injustices in our food system has given rise to the food justice movement, which, along with other movements, has created a platform to begin changing the paradigm of food production in the U.S.

As summarized by one survey respondent, "The nation benefits from the resources that are drawn from rural communities... timber, petroleum products (coal, oil, gas), water, etc. We must manage those resources in a manner that maintains healthy rural communities and that fairly compensates rural people for these products. The bottom line must include the cost of protecting rural communities from harmful effects of extractive industries. To do otherwise means that rural people are subsidizing the cost of business for multinational corporations."

2. Climate Change

Rural, natural resource-dependent communities are particularly vulnerable to the effects of climate change. For example, climate change will increase the number of flood, drought, and fire occurrences worldwide. These communities are often those most closely linked to natural ecosystems for their economic, social and environmental well-being. People are losing traditional medicinal and food plants, and subsistence households are suffering from changes in resource populations and/or loss of species. Another example is in western fire-adapted ecosystems where the increase of frequency and intensity of wildfire, some believe due to climate changes, creates smoke problems that disproportionately affect rural communities. The smoke from these wildfires affects children, the elderly, and those with health issues more severely. The ability to manage these forests and the effects of smoke is critical to the ability of rural communities in these locations to sustain a healthy environment.

These communities should be actively involved in the adaptive management of these lands, especially given their proximity to forests, rangelands and other natural resources, and intimate reliance on associated ecosystem services that will be impacted by climate change. Although mitigation is essential to decreasing the effects of climate change, adaptation is the only response available for the impacts that will occur before mitigation can have any measurable effect. Adaptation focuses on helping natural and human systems adjust, or change, to accommodate altered conditions due to climate changes. [7]

Climate change creates an opportunity to work across agencies, sectors, and organizations to achieve some of the cross-sectoral collaboration that will eventually get at the complex issues that create rural environmental injustices. A tribal leader on environmental issues pointed out, "On climate change adaptation, we're working with a number of organizations – environmental conservation, natural resources; tribal and nontribal – and cutting across a lot of the lines that have been drawn because we see that there is common cause to working on the large scale impacts of climate change."

3. Renewable Energy Development in Rural Communities and Economies

Low-income and rural communities are hard hit by the rising cost of energy. One survey respondent pointed out that "In a time when 93 percent of Kentucky's electricity comes from coal, our homes, farms, and businesses are hard hit by the rising costs of coal fired power. People in our communities tend to live in homes that are not well insulated and have very old and inefficient appliances … In many cases the monthly electric bill is more than the cost of mortgage or rent." Similarly, "Energy on [Indian] reservations can cost as much as 10 percent above the national average due

to a lack of adequate transmission lines. During the winter in cold regions families on reservations may spend up to 70 percent of their total income on heating." [8] It is also worth mentioning that many households on reservations lack access to electricity. On the Navajo Reservation, for example, this applies to 30 percent of all households.

The kinds of incentives for increasing home energy efficiency made available to middle and upper income families through tax breaks and tax credits should also be made available to lower income households through means that are accessible to them. But the solutions must go beyond tax incentives and credits as many rural households may not earn enough income to pay taxes and therefore will not benefit from incentives or credits. Ensuring access to energy efficient heating systems is a critical policy needing support of federal and state governments to help rural residents transition from fossil fuels, create local markets for locally produced renewable heating projects, and reduce the pressure of high energy costs on limited rural family incomes.

Most often, renewable energy development is confined to either electricity or liquid fuels for the transportation sector; however, one-third of our national energy consumption is used to produce thermal energy. Using current technology and resources, renewable power and renewable transportation fuels are likely to increase costs per unit of energy. Most energy developers are chasing large-scale projects in order to capitalize on tax credits and opportunity created by regulation such as the Renewable Portfolio Standards at the state and federal levels. This scale of development often does not provide opportunities for rural entrepreneurs or rural economies to benefit from renewable energy.

In contrast, because of limited access to natural gas, rural residents and businesses are generally restricted to using more expensive heating fuel sources than urban residents. The Northeast consumes 84 percent of the nation's home heating oil and many rural residents across the West use either petroleum-based heating fuels (heating oil or propane) or electricity to provide space heat. Downtown business districts could be prime applications of district energy systems fueled by renewable sources to provide cost-effective building heat and cooling. In a lot of cases, communities could tap into locally-available fuel sources – such as biomass and geothermal – that could reduce energy costs for residences. In addition, many manufacturing processes – such as food packaging – and businesses – chicken houses and greenhouses – consume a significant amount of thermal energy in manufacturing goods; many of these businesses rely on expensive petroleum-based heating fuels to provide this process heat.

Promoting a 'renewable thermal energy' component of national energy policy could produce a more renewable future for rural communities and residents to utilize locally-available fuel and reduce energy spending. When

the fuel is produced locally, the combined effect of using local fuels and reduced spending could have a dramatic wealth capture impact for local and regional economies. For example, one report found that 75 percent of every dollar spent on heating oil leaves the local economy. A school spending $100,000 per year on heating oil is likely to reduce energy spending by a minimum of $50,000 by switching to wood-based fuels. If the fuel is procured locally, the fuel change could result in a cumulative $87,500 impact for the local economy by reducing spending $50,000 and contributing another $37,500 (75 percent of the remaining $50,000) to a local business.

Finally, alternative energy production represents multiple opportunities in rural America to leverage potential economic development and job creation through the green economy. For example, rural Indian tribes are exploring opportunities to tap clean energy potential (water, wind, and energy) to meet their own energy needs and provide jobs by providing energy for the rest of the country.

4. Access to Benefits from Natural Resources, Decision-Making, & Land-Management Decisions

In the South, African Americans have lost the majority of land they once owned. Much of this loss has been due to racial discrimination in government, both state and federal, agencies that has made it, at best, difficult and often impossible for Black landowners to access government services and programs intended to support landowners. One survey respondent writes, "Discriminatory practices across the entire spectrum of USDA, NRCS and other programs have affected famers of colors." In addition, a major factor in Black land loss is the overall decline in small-scale farming throughout the country. While this is a general trend, it has happened and is happening at a much faster rate for blacks than for whites. The number of U.S. farms operated by black farmers decreased by 97 percent between 1920 and 2007, during the same period, the number of farms operated by white farmers decreased by 66 percent.

Similarly, according to a tribal leader focused on agricultural issues, "in tribal communities, environmental justice is basic land management and access to conservation and land management programs … We're 50 years behind in our role and participation in USDA programs. We're behind the off-reservation communities in addressing basic land management issues."

In northern New England, large tracts of forestland are owned by non-local corporations. According to one resident, "When companies were locally-based, people in the communities worked for the companies, which managed to keep them vital over the long-term and also provided assistance and support for community priorities in the communities. Over the past 30 years, ownership of land and mills has been disconnected and ownership is held further away from communities or even the region, and there is no

Indian Land Tenure Foundation (ILTF) is working through the formal education system to raise broad based awareness about American Indian perspectives on land issues. "Lessons of Our Land" is a Head Start and K-12 classroom cross disciplinary curriculum focused on American Indian perspectives on land and contemporary land policy in California. The curriculum aligns California state academic content standards with American Indian culture, history, and lore, while addressing current land tenure issues at the core of the lessons.

investment in the community." Practitioners are finding that "community forest work is helping all of us to appreciate local ownership of forest resources as a way to give rural people a place at the table and give their voices strength and power they haven't formerly had."

A similar challenge faces rural communities across the American West; federal ownership of the land and a desire for administrative efficiency has biased access to the work and products towards large companies who are rarely owned locally. The disconnect between land tenure, access to the resource, and meaningful participation in public land decision-making further marginalizes rural communities from creating healthy, viable economies for the future.

In many rural areas landowners do not control the rights to the minerals, oil or gas beneath their property. Regulations regarding surface and mineral rights are complex, confusing and vary widely from state to state. This has created a situation in which many landowners do not have a say in how the resources in their community are extracted and often have little or no understanding of their rights. In such cases environmental and economic exploitation by resource extraction companies and mineral rights leaseholders is a primary concern, as land is cleared, roads built, and soil and water contaminated.

Rural residents often lack political representation that is truly representative. For example, in the South, according to a national nonprofit representative, "[There's a] stark difference between the agenda of people of color and the more affluent white folks representing them. [They have] no interest in promoting people of colors' agendas." This is particularly an issue for unincorporated rural communities, where residents are represented only by the county rather than the city and the county. One Tribal respondent stated, "We do not have any incorporated towns – so, we don't really have a voice on the Board of Supervisors. We are the underserved and non-represented rural community." In these communities, systems to ensure safe drinking water, wastewater treatment, sewage lines, storm drains, streetlights, and sidewalks are absent or inferior.

Access to decision-making about land use was the highest ranked environmental justice issue in the survey. Several respondents noted that the opinions of rural residents are insufficiently considered when decisions are made about public land access issues and impacts. Rural community members are often denied the opportunity to engage in federal consultative meetings because they are not held in rural locations. Weak political representation is reinforced by the fact that rural residents are more dispersed. Access to and the cost of transportation are often significant barriers, with the result that it is harder for rural people to organize, make their voices heard, and present a cohesive front to deal with issues. A foundation representative

stated, "They [corporations] target rural communities because they don't expect response and power from them."

There is also a lack of local control over the utilization of natural resources and the impacts on local economies. One respondent felt it was most important to advocate for the restoration of indigenous and Chicana/o land rights and common property resources.

Still others highlighted that land management decisions over public lands need to consider how they will impact the well-being of adjacent communities. Some rural communities want more than access to public lands; they desire co-management of these lands. This includes a range of decisions from forest management to dams that block salmonid passage and decrease quality of water and fisheries habitat. For example, wild salmon populations in the Northwest have reached critically low levels in recent years due to the extensive damming of the Columbia River and its tributaries and remediation efforts have been dubious at best. [9]

5. Access to Sustainable Economic Opportunities and Capacity Building

Tribal and non-tribal rural communities suffering from environmental injustices are more often than not communities lacking environmentally-sound economic options – environmentally harmful economic decisions in rural communities are usually made because there are few other alternatives.

"Until rural communities have alternatives to address their need for jobs and economic development, it is likely the same choices will continue being made," said an academic in the South. She goes on to say, "A lot of rural communities ask for landfills because they don't have money."

A leader in California adds, "It gets down to economic development – tribal governments bring in dirty industry because they need the jobs."

And finally, a Tribal leader states, "Although their neighbors and other tribes around them cuss them for allowing such things to happen, it was a mechanism they could create income from the resources they had."

Access to green jobs and other environmentally-sound economic alternatives opportunities was rated the third most important environmental justice issue in the survey. Growth in green jobs is an integral part of the strategy to reinvest and rebuild the American economy. These jobs – and the related training programs – need to be accessible to rural, low-income communities. Green job policies that fail to address the contribution afforded by our natural resources and the rural communities located near them will miss a critical opportunity. In addition to renewable energy development, energy conservation, and green product development, our green economy must support rural jobs that restore and steward our forests, rangelands, and watersheds. Taking advantage of these opportunities can provide rural communities with new pathways to sustainable growth, entrepreneurship, and

Eco-Action in Georgia is working with rural communities around the state to raise awareness about the precautionary principle, which states that if an action or policy risks causing harm to the public or to the environment, in the absence of scientific consensus, the action or policy is harmful. The burden of proof that it is not harmful falls on those taking the action. Adoption of the precautionary principle at the local level could create momentum to eventually push for adoption of it at state and federal levels.

The New Mexico Environmental Law Center (ELC) represents grassroots Navajo groups fighting in-situ leach uranium mining practices involving the injection of chemical into ground water, the sole source of drinking water. In spite of promises made by the extraction companies, ground water has never been returned to the same condition prior to mining. Ignoring the health and environmental impacts, mining permits and the practice of leach mining are approved by the Federal Nuclear Regulatory Commission (NRC) and upheld by the 10th Circuit Court of Appeals.

The Eastern Navajo Dine Against Uranium Mining (ENDAUM) has organized the people of Church Rock/Crown Point to fight these practices. ELC has provided legal assistance to present their case before the NRC and has connected them with the Southwest Research and Information Center, which has helped the community access research and understand the science necessary to put together the technical case. ELC is also contesting permits that are being considered by the State of New Mexico.

workforce development, while simultaneously enhancing the health of our forests, rangelands, and watersheds. [10]

Some organizations are discussing the manner in which the current administration is defining green jobs. One respondent said her organization was focusing on the creation of green jobs that would encompass the restoration of forested and agricultural lands, streams, rivers, and riparian areas and ecological management of lands that would provide new value streams such as the potential for multiple forest products. Respondents are interested in how the country can create training and employment opportunities that align themselves with agency priorities and reduce unemployment.

In the rural Midwest organized action defined as addressing environmental justice is not widespread, however, other movements overlap significantly with the concerns of environmental justice, such as the movement for competitive markets. While the frames for this movement are competition and control ("Who controls how food is produced?"), the issues – seed ownership and genetics; livestock ownership; CAFOs and poultry contract growers; use of pesticides; and local level production, harvesting, added value, and consumption, among others – are linked to environmental justice (as well as worker rights and food justice) issues. Other efforts in the food system present opportunities to create green and just jobs in a sector that has historically had poor labor and environmental practices.

Interviewees from Georgia to New Mexico to California pointed to building community capacity to organize as the most effective means for building power to address environmental injustices. Community power can also be significantly enhanced by building a pipeline of leadership in addition to organizing. Both interviewees and survey respondents emphasized the importance of using public processes, such as town hall meetings, city council meetings, and public hearings, to leverage change. According to a foundation representative, "It's about getting people organized to really use the mechanisms available. When communities organize and use public hearing processes, it can be really effective ... The ones that are organized are able to pack rooms with their stories and it does have an impact on public hearing officers and people who make regulations … There's no substitute for communities being organized and when they are, they have an impact."

Nodes of organized movement for rural environmental justice are vibrant in the Central Valley of California, Arizona, and in Native communities throughout the country, to name a few. Momentum in the rural South is growing through support provided by intermediaries like Clark Atlanta University's Environmental Justice Resource Center. Without the organizing focus and technical support from Clark on water issues, individual groups might have just focused on their individual wells. When groups work

together, they can turn to their regional EPA office to reinforce their efforts on a broader level.

Regardless of the region, land tenure, or environmental pressure affecting rural communities there is a common need to invest in building the organization and leadership of rural communities to address their future. When examining federal policy options it is critical to consider how federal programs, grants, and other assistance build capacity. Without strong local organizations the ability of rural America to create a future and economy that is environmentally just will be diminished.

Policy Goals and Opportunities

Overarching Context

Integration of policies and programs reflecting the interconnected nature of rural ecological and human systems is needed for effective and efficient public policy and investment. As one tribal representative put it, "Tribes are holistic communities with holistic problems and needs, but most programs and solutions are segmented. The needs aren't segmented, so the solutions can't be." This is the case for any rural community. The EPA has launched their new "Sustainable Communities" initiative through a process of Town Hall meetings to discuss problems and solutions. The process promises to establish an environment for collaboration, and potentially cross-agency collaboration, critical for addressing rural and tribal environmental justice issues in a holistic fashion.

Key to any policy effort will be to make environmental justice a relevant concept for rural communities by adopting language that rural people understand and see themselves in – from land managers to people in communities. One interviewee noted that leadership within the USDA has begun framing rural issues in terms of rural jobs and connections to the place and land that are ongoing and interrelated. This may be a model for reframing or adding to the current environmental justice language because "it is language that makes sense to people on the ground," according to a USFS interviewee, and because it concretely points to what rural jobs and rural wealth mean to people who live in the community.

Generally, there may be an opportunity at the EPA as current leadership recognizes the importance of environmental justice. The EPA is reviving President Clinton's 1994 executive order for each Federal agency to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States." Attention

of this nature may pave the way for the EPA to more fully and effectively implement and enforce the Clean Water and Clean Air Acts.

Potential Policy Solutions to Organize Around

Through the interviews and survey many specific ideas were raised suggesting ways that rural communities could address environmental justice issues in their communities. The following outline of goals and opportunities is provided to catalyze discussion, other ideas, and refinement and elaboration. We hope that the participants of the National Rural Assembly consider these and, from the grassroots, use these ideas to build an agenda that is relevant and useful to existing organizations and efforts, as well as to bridge to new rural allies who may not have considered environmental justice a rubric that applied to them.

1. Environmental and Health Impacts

Policy goals:

a) Organize a national campaign for an Environmental Justice Act
b) Establish state level, multidisciplinary task force to work with state and federal agencies to better inform each other and collaboratively address EJ issues

Policy opportunities:

a) Increase funding for EPA programs that benefit Tribes, including: Tribal Water Pollution Control, Clean Water and Drinking Water State Revolving Funds, and Clean Air Act section 103/105 grants to tribes, among others.
b) Support and pressure the EPA to follow the science and fully enforce the clean water act in regards to mountaintop removal mining.

2. Climate Change

Policy goals:

a) Give the United States Department of Agriculture (USDA) a key role in climate change policy and program implementation
b) Support a comprehensive approach to climate change adaption planning, organizational capacity building, and a collaborative approach for public agencies in climate change planning efforts
c) Support efforts of rural communities and organizations to engage in climate change adaptation planning, implementation and monitoring

Policy opportunities:

a) Invest in research that examines the social and economic impacts of climate change on rural, natural resource-dependent communities. Increase funding for Alaska Native Villages and other rural communities to conduct science and research activities critical to their specific locations and with consideration for normal daily activities.

b) Increase funding for the Department of Interior Climate Change Adaptation Initiative, specifically providing rural communities with financial and technical assistance and increasing the proportion available to the Bureau of Indian Affairs to build tribal capacity to plan and implement programs in the face of climate change.
c) Require and fund federal land management agencies to collaboratively develop, implement and monitor climate change plans and integrate them within resource management and forest management plans. Develop planning and management goals, outcomes and performance measures that land management agencies can use to monitor success in achieving specific outcomes.

3. Renewable energy development in rural communities and economies

Policy goals:

a) Support the development of a Renewable Thermal Energy component of national policy.
b) Promote the access of energy efficiency programs to rural constituents.

Policy opportunities:

a) Use a specific legislative vehicle to secure a hearing in both chambers regarding the absence of energy policy regarding renewable thermal energy and the wealth capture and generation opportunities for rural communities and economies.
b) Advocate for a shift in focus and program delivery within the Department of Energy to research and help facilitate implementation of appropriately-scaled district energy and combined heat and power systems in rural communities.
c) Engage in the development of a "Community Energy Program" with the Energy Title in the development of the next Farm Bill. The program would bring in funding and attributes from several successful programs such as the Renewable Energy for America Program (REAP) and the unfunded opportunities in the Community Wood Energy Program (CWEP).

4. Access to benefits from natural resources, decision-making, & land-management decisions

Policy goals:

a) Eligibility of Tribes, low-income and communities of color must be achieved through statutory amendments, annul authorizations, and administrative interpretations enabling access, such as changes in eligibility, reducing or waiving cost-share requirements, inclusion of non-federally recognized Tribes, etc. recognizing that "tax credits" do little to benefit low-income individuals.

PolicyLink is working with partners in California's San Joaquin Valley to help build capacity in rural unincorporated communities to engage in the political process to influence land use and planning decisions. Because these communities often do not actually appear on maps, PolicyLink is attempting to map them using satellite imagery and land use data. Finally, PolicyLink is documenting residents' stories to understand the perceptions and realities of basic services (e.g. safe drinking water, waste water treatment, sewer lines, and etc.) they are and are not getting. PolicyLink complements these stories with in-depth research to highlight the conditions under which residents in rural unincorporated communities live.

b) Increase emphasis on the local impacts of land management decisions of public agencies. This includes a range of decisions from forest management to dams that block salmon passage, to decrease quality of water and fisheries habitat, to closed roads for hunting.
c) Advocate state legislations to reinstate acequia self-governance and land grant councils.
d) Work towards economic policies and investments in rural communities that do not simply reproduce marginality, but enable rural communities to leverage resources accessible to them.

5. Access to Sustainable Economic Opportunities and Capacity Building

Policy goals:

a) Adapt urban models to fit rural and tribal realities. For example, New Market Tax Credits were intended for the urban sector, but are now being used for acquisition of community forests.
b) Provide subsidy for programs like on-bill financing to allow people unable to afford the cost of weatherizing their homes to borrow the funds to do it. The savings on their utility bills as a result of the weatherizing goes towards paying the debt.
c) Demonstrate how public lands-related rural jobs save money for agencies and improve the quality of life in rural towns.
d) Promote workforce training that provides durable and transferable skills to rural people and small business assistance to encourage local growth of rural restoration and stewardship oriented businesses, including biomass utilization and ecosystem services.
e) Create and include organizational capacity building in grant and technical assistance programs to ensure rural communities can organize for environmentally viable future. This should be considered in federal and state programs as well as those programs administered by the philanthropic community.

Policy opportunities:

a) Support funding for open-space acquisition and community owned forests in the Farm Bill.
b) Fully fund Community Development Block Grants and ensure they are flexible and their purpose broadened to include restoration on public and private lands. Tweak language of programs like CDBG to include natural green infrastructure, green jobs, etc.
c) Advocate for a five percent set-aside of the Weatherization program to serve Tribal governments and their citizens.
d) Support the Organization for Competitive Markets efforts to advocate for GIPSA (Grain Inspection, Packers, and Stockyard Administration) within USDA rules, which are dealing with issues of fair competition

in livestock and poultry markets, as well as fair and just treatment of the labor force connected to those markets.

e) The Rural Star Bill presents a significant policy opportunity. Last year it had bi-partisan support and would have made billions of dollars available for energy efficiency investments in homes, farms and businesses served by Rural Electric Cooperatives.

f) At a state level, passing a Renewable and Efficiency Portfolio standard that has strong provisions to benefit low-income households would benefit rural communities.

g) Promote CLEAN (Clean Local Energy Accessible Now) contracts that allow energy project owners to sell their electricity to utilities at a predetermined, fixed price for a predictable and extended period of time.

h) Create a national land and community capacity building grant program within the USDA land management agencies to ensure tribes, public land communities and private landowners have the ability to access, steward, and benefit from the management of these lands.

Conclusion

There is growing desire within and among communities to work together, partially rooted in the recognition that there are others in other places experiencing the same environmental injustices. According to a nonprofit employee in California, a grassroots activist she works with made the point, "There aren't very many of us here, we have to figure out how to work together. If we don't work together, we know we won't get anything done." Increased collaboration, coupled with the growing sophistication of groups to gather and share information, helps them overcome some of the isolation issues that define rural environmental injustice.

Acknowledgements

Thank you to the Technical Advisory Team and authors for offering their time, energy, and expertise to identify interviewees, help in understanding the issues, and review drafts of the paper. Without your assistance, this project would have been impossible to complete!

We wish to thank the following people for their contributions including identifying interviewees, helping us to understand the issues, and reviewing drafts – Danyelle O' Hara, Michelle Mosher, Ram Mosher, and especially our technical advisory team: Teri Blanton, Frank Sanchez, and Sacoby Wilson.

Environmental Justice Scan Team

Barbara Wyckoff
Danyelle O'Hara
Michelle Mosher
Dynamica Coaching & Capacity Building
1201 Atwood Rd.
Silver Spring, Maryland 20906
Ph: 301-367-2406
Bwyckoff1@earthlink.net
danyelle.ohara@earthlink.net
www.dynamica-online.com

Maia Enzer
Chad Davis
Sustainable Northwest
813 SW Alder Street, Suite 500
Portland, Oregon 97205
Ph: 503-221-6911
menzer@sustainablenorthwest.org
www.sustainablenorthwest.org

Environmental Justice Technical Advisory Team

Teri Blanton, Ketuckians for the Commonwealth
Frank Sanchez, Needmor Fund
Sacoby Wilson, University of South Carolina

Endnotes

1. The Environmental Protection Agency (EPA) defines the issue as: "Environmental justice is 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. Environmental justice will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work." (www.epa.gov/environmentaljustice/)

2. MTR is the practice of using explosives to remove up to 1,000 vertical feet of rock on the top of mountains to expose coal seams. The massive amount of debris created is then usually dumped in adjacent valleys.

3. Fracking is the process in which a fluid is injected into natural gas deposits in order to fracture the surrounding rock and release the gas for collection. Much of the controversy over fracking is centered on the Marcellus Shale, which includes parts of New York, Pennsylvania, West Virginia, Ohio and Maryland.

4. May, 2011 www.daiilyyonder.com

5. CAFO is the practice of housing large numbers of the same species of livestock in crowded buildings. Animals spend their entire lives being fed, grown and slaughtered in cramped and often unsanitary conditions. Specific regions of concern include chicken farming in Maryland and pig farming in North Carolina.

6. www.ncifap.org

7. "Climate Change Adaptation in Rural, Natural Resource-Dependent Communities", Rural Voices for Conservation Coalition, April 2010

8. Center for American Progress, January 27, 2011, http://www.americanprogress.org/issues/2011/01/native_opportunity.html

9. http://video.pbs.org/video/1891112523 5/18/11

10. "Rural Natural Resource Green Jobs", Rural Voices for Conservation Coalition, April 2010

Appendix A: Geography of Rural Environmental Justice Issues

Below are the regions (using EPA's regional classifications) represented in the 22 interviews and 20 survey responses, along with the environmental justice issues identified in each region. While not an exhaustive list of rural environmental justice issues, it does highlight the issues raised in the data collected. Where possible, the specific state(s) impacted by particular issues are indicated, however, interviewees and survey respondents did not always refer to specific states.

Because there was not an equal response representation from each state, we are unable to say which issues are the most important throughout the country. However, some of the key overarching rural environmental justice issues we heard about included: mountaintop removal and strip coal mining; uranium mining; hydraulic fracturing ("fracking"); oil (particularly off-shore) and gas drilling; toxic waste disposal; land access, use, planning, and control; climate change; Confined Animal Feeding Operations (CAFOs), other corporate agricultural practices, and access to competitive markets; and access to environmentally-sound economic opportunities. The overarching impacts of these activities include air pollution, impeded water access and water contamination, community stress, and economic instability, among others.

Region 1—New England

(Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, 10 Tribal Nations)

Key Issues

- Land use and land planning, environmental issues of rights, access, and voice at the decision-making table, as well as control through ownership (ME, NH, VT)
- A proposal to build high intensity transmission lines through rural New Hampshire to bring power from Quebec into northern U.S. cities will potentially impact the scenic beauty and tourism revenues (NH)

Region 4—Southeast

(Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, 6 Tribal Nations)

Key Issues

- Surface and groundwater contamination from CAFOs, particularly hog farms (NC)
- Community stresses related to odor caused by hog farms (NC)
- Landfills which start out non-toxic and often over time introduce toxins (throughout)

- African American land loss and, due to discrimination, difficulty in accessing state and federal support (technical and financial) for land retention and management (throughout)
- Air and water contamination, irreparable damage to natural environment from strip coal mining and mountaintop removal (KY, TN)
- Hydraulic fracturing (fracking) (throughout)
- See Gulf Coast issues below (AL, MS)

Region 6—South Central

(Arkansas, Louisiana, New Mexico, Oklahoma, Texas, 66 Tribal Nations)

Key Issues

- Gulf Coast clean up – disposal of toxic waste (LA)
- Loss of livelihood for fishers and shrimpers due to Katrina, Rita, and Gulf spill (LA)
- Land and livelihoods loss from receding Gulf coastline due to dredging of canals for oil/gas (LA)
- The impacts of climate change (coastal areas)
- Threat of uranium mining, nuclear waste contamination of water sources (NM, Navajo land)
- Uranium mining, contamination of water sources (TX)
- Dairy farms and contamination of water sources (NM, TX)
- Surface and groundwater contamination from CAFOs (OK – from CAFOs located in MO)
- Regional haze resulting from CAFOs (OK – from CAFOs located in MO)
- Mercury in water from coal power plants (OK)
- Native American water rights and treaties (NM, throughout)

Region 7—Midwest

(Iowa, Kansas, Missouri, Nebraska, 9 Tribal Nations)

Key Issues

- Access to agricultural markets (throughout)

Region 8—Mountains and Plains

(Montana, North Dakota, South Dakota, Utah, Wyoming, 27 Tribal Nations)

Key Issues

- Dams and other extensive land-based activities (SD and throughout tribal communities)
- Threat of uranium mining, contamination of water sources (SD, Navajo land)
- Uranium mining, contamination of water sources (UT, WY)
- Tribal access to land management programs (throughout)
- Access to agricultural markets (throughout)

Region 9—Pacific Southwest

(Arizona, California, Hawaii, Nevada, Pacific Islands, Tribal Nations)

Key Issues

- Large scale agriculture – pesticides, fertilizers, waste, and diesel exhaust pollute air and water
- Threat of uranium mining, contamination of water sources (AZ – permits issued in March 2011)
- Water – access to water and clean water (throughout)
- Native American water rights and treaties (CA, NV)
- Lack of political representation in unincorporated communities to ensure access to basic "healthy community" infrastructure, e.g. water, sewer, etc.
- Siting of "green energy" activities (wind turbines and large solar fields) (throughout)

Region 10—Pacific Northwest

(Alaska, Idaho, Oregon, Washington, Tribal Nations)

Key Issues

- Federal land management policies and how they relate to adjacent community well-being
- Access to public lands for fuel wood harvesting, hunting, fishing, and other traditional activities, as well as for green jobs
- Oil drilling – indigenous coastal communities would be severely impacted by a large oil spill, which could not be removed from under the frozen sea ice. Such a scenario would pollute important Native food sources. In addition, increased shipping associated with off-shore drilling could disrupt migration patterns, driving away seals, whales and walrus. (AK)
- Loss of subsistence fisheries and other resources, reduced wildlife habitat and specific populations, and loss of land due to the impacts of climate change (AK)