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ABSTRACT: In many rural areas land use patterns are shifting from agriculture or woodland to residential development. This is especially true in areas possessing significant natural amenities like the sweeping vistas, white-water rivers, and blue-ridged mountains of Southern Appalachia. As in-migration increases, decisions about land use can become heated as the “newcomers” square off with long-time residents. Understanding how various groups value both the land (as productive resource) and the landscape (as scenic amenity) can help address potential conflict when land use changes. Two independent projects in Watauga County, North Carolina, reflect attempts to understand perspectives on land use through an economic framework and to address land use change from an environmental perspective. Both projects reveal evidence of “last settler’s syndrome”—a tendency among individuals to place a high value on what initially attracted them to a specific place. Both also reveal situations of potential conflict when ideas about land use clash as well as situations for cooperation as various groups share values about land use.

The charming landscape which I saw this morning, is indubitably made up of some twenty or thirty farms. Miller owns this field, Locke that, and Manning the woodland beyond. But none of them owns the landscape. There is a property in the horizon which no man has but he whose eye can integrate all the parts, that is, the poet. This is the best part of these men's farms, yet to this their warranty-deeds give no title. —Ralph Waldo Emerson, Nature; Addresses, and Lectures¹

Land use decisions affect environmental conditions—for better or worse. In many rural areas land use patterns are shifting from agriculture or woodland to residential development. This is especially true in areas possessing significant natural amenities like the sweeping vistas, white-water rivers, and blue-ridged mountains of Southern Appalachia. As in-migration increases, decisions about land use can become heated as the “newcomers” square off with long-time residents. Understanding how various groups value both the land (as productive resource) and the landscape (as scenic amenity) can help address potential conflict when land use changes. Two independent projects in Watauga County, North Carolina, reflect attempts to understand perspectives on land use through an economic framework and to address land use change from an environmental perspective. The first project, an economic study, assessed whether there were differences across demographic groups as to their willingness to pay to protect the aesthetic value of the landscape or their willingness to accept some decreased level of aesthetic value. The second project involved working with a rural community to develop ideas for economic development that preserved local cultural and environmental conditions. Both projects reveal evidence of “last settler’s syndrome”—a tendency among individuals to place a high value on what initially attracted them to a specific place. Both also reveal situations of potential conflict when ideas about land use clash as well as situations for cooperation as various groups share values about land use.²

Last Settler's Syndrome and the Aesthetic Value in Land Use

In a 1996 study, William Riebsame and colleagues assessed perceptions on the changing landscape in the Colorado Mountains and identified what they called the last settler's syndrome where each new settler wants the area to remain as it was upon their arrival.³ For areas facing large influxes of in-migrants, the last settler's syndrome poses interesting questions about why a particular group seeks to settle in a specific place and the potential for land use ramifications. For example, Philip Graves and Donald Waldman contend that the migration decision of the retired depends more on local amenities and housing costs than productivity of labor in an area.⁴ Donald McLeod and colleagues further support this view by finding that in-migration to rural areas in Wyoming is driven by open space and environmental amenities.⁵

Riebsame and colleagues further note that the arrival of more affluent immigrants to an area heightens class distinctions. In addition, in-migration tends to increase property values, road congestion, the demand for community services as well as the need for additional infrastructure. Any of these impacts potentially raise environmental justice concerns if long time residents do not have the opportunity to participate as equal partners in making land use change decisions.

One difference between long-term residents and newcomers in rural areas is that long-time residents often focus on land as an agricultural-productive resource while newcomers view land mostly as a recreational-scenic amenity. In fact, Robert Ryan found that farmers and long-time residents responded more positively to scenes of domesticated farms and developed areas, whereas newcomers and non-farmers were more attracted to "natural" landscapes of rivers and woods.⁶ To tourists and newcomers, the "viewshed"—an area of land that is visible to the human

eye from a fixed vantage point—is often what attracts them to the area and hence what they want to maintain or improve. That newcomers’ decisions to move to the mountains relate to the ways they value the landscape is relevant to the projects we completed in western North Carolina.

This difference in perspective of the value of land (as either productive or aesthetic) is complex, however, as long-term residents also share an appreciation for the aesthetic value of the land. For instance, one study found that farmers and ranchers would often rather donate their land to conservation easements than sell their land for development by newcomers.⁷ Another report reveals that residents in areas of high population growth are willing to buy conservation easements to protect environmental amenities.⁸ Erickson and De Young found that Michigan farmers equally preferred pastoral farm field scenes and wooded, natural scenes.⁹ Generally, the body of work related to the last settler’s syndrome demonstrates that farmers are influenced by the economic necessity of maintaining ordered, agricultural land, but also have an intrinsic appreciation for nature and allow “unproductive” tracts of woodland on their property. In the projects described here, the long term residents’ decisions to stay in the mountains rather than move to other opportunities stem, at least in part, from the high value they place on the landscape.

Additional studies show that there are differences among various populations regarding land use control policies.¹⁰ More specifically, well established residents and those with economic interests in the area tend to support private management strategies while college graduates, wage earners, and those who value the county’s rural life style tend to support public management strategies.¹¹ This has significant implications for thinking about environmental justice in rural communities with strong support for both private property rights and a rural lifestyle, as is the case in Southern Appalachia.

Southern Appalachia Historical Context

The evolution of environmental justice from focusing on people of color (environmental racism) to encompassing environmental concerns facing the poor and underprivileged whites, places historical and contemporary events in Southern Appalachia squarely within the environmental justice frame.¹² Stereotypes of Appalachia are prevalent and persistent as the region continues to be popularly viewed as backward, violent, and hopeless.¹³ One result of these stereotypes is that, “the people of the southern mountains have always been ripe for development projects conceptualized and controlled from outside the region.”¹⁴ These stereotypes have also affected how the natives see themselves and relate their identity to others.

A native’s sense of identity derived from family and community narratives that shaped everyday discourse without being written down or otherwise transmitted formally; having to define and proclaim this identity to outsiders inevitably transformed it. Similarly, an unspoken code of reciprocity governed routine interaction among neighbors and kin. Intrusion from the outside—whether by bureaucratic invaders . . . or by government agencies in Raleigh or Washington, or by the infiltration of neonative settlers and tourists—forced natives to defend their communities either by articulating (and thus oversimplifying) rules and practices that had traditionally been embodied more in acts than in words or by redefining local identity as a kind of Appalachian ethnicity.¹⁵

Appalachian identity is well-entrenched in the region’s physical characteristics and its long and interesting settlement patterns. In his 2002 book, *Appalachia*, John Alexander Williams

well documents the European settler forays into the southern mountains beginning in the 1500s. He notes that by the 1930s, much of the land in the region had been severely degraded, precluding farming as a primary source of income. Those who had non-farming jobs as well as agricultural land were heavily impacted by the loss of non-agricultural work during the Great Depression.¹⁶ A subsequent exodus left 150 Appalachian counties with fewer people in 1970 than they had in 1920. This opened space in the region for “back to the landers” in the 1960s and 70s who sought escape from their contemporary society. These new arrivals moved toward the borders of Virginia, North Carolina, and Tennessee and eventually became “neo-natives.”¹⁷ Both true natives and neonatives disliked the next wave of newcomers, the residential tourists who “built new homes in the mountains, often perching them in unaccustomed place on ridgetops, driving up land prices, and polluting the night sky with high-wattage floodlights either because their contractors sold them on the idea or they found the quiet, dark mountain nights unsettling.”¹⁸

Throughout these transitions, the region has remained largely rural and poor. As Williams notes in summarizing mid-twentieth century economic assessments: “Even within the context of southern poverty, Appalachian farmers were poor.”¹⁹ Current development patterns in Southern Appalachia often pit wealthy developers against poor residents who are either farmers or whose families have historically been farmers, potentially reflecting environmental justice concerns with class and power. The situation is confounded, however, by the reality that “neo-natives” are often not economically disadvantaged, but do oppose new development. Additionally, traditional farming and/ or raising livestock in this region can be environmentally destructive and hence a land use shift to low-density residential uses may improve conditions in some cases.

The next section highlights research done in western North Carolina that reveals the tension, as well as the common ground, in perceptions about land use change between long-time residents (natives and neo-natives) and the latest stream of in-migrants.

Land Use Perceptions in Watauga County

Watauga County, North Carolina, is a rural county with a population of 45,000 people and a density of 137 people per square mile. About 21 percent of the population lives below the poverty line (some of the 21 percent are college students).²⁰ The terrain is rugged, with mountain peaks over 5,000 feet, and lush, with an average fifty inches of rain per year. This area has long been a tourist destination. Beginning in the earliest twentieth century the wealthy built resorts here, including Flat Top Manor, the summer home of cotton magnate Moses Cone, which is now part of the Blue Ridge Parkway. At the same time, there are families who have lived and farmed in this region since before the Revolutionary War. The area has seen tremendous growth since the 1970s, with concomitant changes in the demographic and economic character. Specifically, the percentage of land defined as “subdivision” has increased from 2.6 percent in 1980 to 10 percent in 2001.²¹ Additionally, the county has seen a shift from agriculture to tourism, recreation, and second homes. According to Lesley Bartlett and Jefferson Boyer the farming population decreased from 4,142 to 1,269 between 1970 and 1990 and by 1997 people outside the county owned 50 percent of all land parcels in the County.²²

These changes have ramifications for diverse aspects of the regional economy as well as the environmental health of the area. Migration to a rural area influences both the aesthetics of the region and the class structure, creating tensions among citizens.²³ In Watauga County there is

a visual cue reflecting the last settler's syndrome and perceptions of land based on its productive value or its aesthetic value. The long-time residents live in the lowlands, where they can grow crops and raise livestock, and gaze up at the mountains, while the newcomers build large homes on the mountaintops and peer down over the landscape. As Williams noted, this also reflects a site of tension among the natives, neo-natives, and newly arriving residential tourists.

As the population grows and diversifies in Watauga County, planners and elected officials have grappled with questions related to zoning and diverse aesthetic interests, including billboard removal and electrical generating windmills. In Watauga County, billboards have become an issue because some roads are designated scenic byways. Some citizens are opposed to this designation while other citizens have suggested removing all billboards from Watauga County roads.²⁴ In addition, wind energy has become an issue as many promote the idea of "green energy" while others feel that electrical generation windmills harm mountain views.²⁵

In Boone, the largest town in Watauga County, zoning laws were enacted in 2006 to protect scenic amenities by limiting development on steep slopes. The steep slope ordinance states:

The purpose and intent for creating the Viewshed Protection District is to preserve the scenic beauty and natural environment of Boone's hillside areas vital to preservation of a high quality of life and continued economic development. The district achieves this desired outcome by minimizing the visual impact of building construction and land development activities.²⁶

The debates over land use ordinances and zoning were extremely contentious and the potential change in land use patterns that the steep slope ordinance generated prompted a study to assess

preferences for land use among long-time residents and the more recent arrivals. To focus on differing land use preferences that may affect land use planning, two contingent valuation scenarios were developed; one using a “willingness to pay” framework and the other a “willingness to accept” framework. The scenarios addressed removing billboards and building electrical generation windmills. Both scenarios focused on changes to the mountain-view (landscape) amenity. Contingent valuation is a technique developed by economists to monetarily measure the benefits or costs to changes in natural amenities. The willingness to pay framework is used to monetarily measure the benefits of improving environmental quality (in this case improved mountain views through removing billboards). The willingness to accept framework assesses the compensation necessary to allow for a reduction in environmental quality (in this case the diminished views from building electrical generation windmills).

In the United States, since the 1965 Highway Beautification Act, municipalities have passed laws to remove billboards for aesthetic reasons. Some have argued that billboard bans infringe upon freedom of speech but, in *Metromedia, Inc. v. San Diego*, the Supreme Court ruled that a city may regulate aesthetics under its police power and generally ban outdoor signs for aesthetic reasons alone.²⁷ In North Carolina, a state ordinance requires that landowners must be compensated for the lost revenue if a municipality bans billboards. This explicitly assigns the property rights to the landowner making the willingness to pay method appropriate for assessing the perceived value of the amenity.

Electrical generation windmills present another local externality that can be perceived as harming mountain views. Demonstrating that some people do see this technology as a negative, Ladenburg and Dubgaard found that individuals are willing to pay higher electrical bills to site

coastal wind farms further from the coast.²⁸ This negative externality could lead to the NIMBY (not in my backyard) syndrome. Economists theorize that the NIMBY syndrome leads to inefficient allocation of resources because the external costs of a locally undesirable land use, or LULU, are borne locally by the neighborhood surrounding the facility, while the benefits are distributed globally throughout the economy.²⁹ This is a classic environmental justice issue as a wealthy backyard is less likely to be targeted for a LULU than a poor backyard.

Herbert Inhaber suggests that a politician's concern for remaining in office favors the default property right due to a reluctance to infringe upon perceived property rights when choosing a location for a LULU.³⁰ To address the problem of inefficiency and to encourage the placement of a LULU, those who receive the benefits could compensate the neighborhood around the site for bearing the external costs.³¹ When individuals perceive that the status quo defines the property rights then the willingness to accept method becomes an appropriate measure of compensation.³²

Although both scenarios applied in Watauga County focused on changes in mountain views, the billboard question focused on a perceived improvement from the status quo, requiring people to pay for this improvement while the electrical generation windmill question focused on a potential detrimental change from the status quo, with people receiving compensation for the change. These two scenarios provided a vehicle to test if preferences for maintaining the status quo of mountain views differ from preferences for change in those mountain views (i.e. removing billboards or adding windmills). In addition, the survey provided insight on how different groups perceive and value change in the mountain view *vis a vis* maintaining the status quo.

In 2005 a survey was mailed to 1,200 randomly selected residents in the county and 334 individuals responded. (For a more detailed description of the methods and results from this survey, see Groothuis.)³³ Relevant to the last settler's idea, 11 percent of the respondents retired to Watauga County, 31 percent report having ancestors who lived in Watauga County (suggesting they are long-time residents) and 13 percent rent their homes in Watauga County. When it comes to mountain views, 81 percent of all respondents say that they have scenic views that could be altered by billboards, windmills, or cell towers (another potential negative externality affecting the viewshed) on daily drives while 59 percent report that scenic views from their home could be altered by billboards, windmills, or cell towers.

Almost all respondents agree or strongly agree that mountain views are an important part of the quality of life in Watauga County. The only difference is that respondents with ancestors in the county are a little less likely to strongly agree with this statement. These results are consistent with the idea that long-time residents are more likely to value land as a productive resource for uses such as for agriculture or forestry with only secondary nonuse benefits of land as a scenic amenity. Retirees, however, view land mostly as a scenic amenity and not as a productive resource.

Residents with ancestors from the county are much more likely to consider land usage a private choice not to be regulated. Again, this possibly reflects a preference for the productive (agricultural) value of the land. When it comes to zoning, respondents with ancestors in the county are split down the middle as 47 percent agree that there should be zoning while 43 percent disagree. When the statement is that land-owners should be able to use their land any way they want, 64 percent agree with this statement. This suggests that residents with ancestors from the area believe land use is an individual choice, not a community choice.

Individuals who retire to the mountains, however, are much more likely to favor zoning. For individuals who retire to the mountains 82 percent favor zoning, while only 23 percent agree that landowners should use their land any way they want. This group clearly regards land use as more of a community choice. This potentially reflects a preference for the aesthetic value of the land, as no individual can unilaterally harm the landscape amenity if land use decisions are community decisions.

To further analyze land use preferences from various groups, the study assessed how likely a respondent was to say “yes” to removing billboards or to allowing electrical generation windmills in a viewshed. The study found that individuals are willing to pay to improve mountain views through removing billboards by paying a one-time assessment of \$55 on average and they require, on average, compensation of \$1.64 per month on electrical bills when the mountain views are harmed from building electrical generation windmills. Further, people with higher income require greater compensation for the windmill. Respondents who report homes with views are less likely to accept windmills and those who report drives with views are more likely to pay more to remove billboards. These results suggest that compensation and payments are more important to respondents whose views are most affected by billboards or windmills.

Focusing on the various groups shows that individuals who retire to the mountains are more likely to pay to remove billboards and less likely to accept windmills in the county. Mountain views are therefore an important amenity for those who choose to retire to Watauga County. Individuals who have ancestors in the county are less willing to pay to remove billboards and also less willing to accept electrical generation windmills in the county suggesting that the status quo in the mountains is important to this group. Overall the results suggest that conflict may arise between long-time residents and newcomers on some topics, such as removing

billboards, and this could have environmental justice ramifications if all residents are not adequately involved in making removal and payment decisions. Conversely, agreement may arise related to other topics, like discussing electrical generation windmills, reducing the potential for any environmental justice concerns.

EKCHO—Elk Knob Community Heritage Organization

Activities related to land development in the Elk Knob region of Watauga County offer additional insight into the conflicts that can arise between newcomers and long-time residents. Contrary to a common perception of quiescence in the face of change, there is a rich history of Appalachian communities resisting efforts that challenged traditional values or ways of life.³⁴ These were highlighted in the 1960s and 70s as grassroots groups organized to fight diverse forms of encroachment including recreation and second home builders. Continuing this history, in 2000 the Elk Knob area was the proposed site of a ski resort and/ or a gated residential community. Local residents were resistant to such significant change in their communities and sought assistance from staff at Appalachian State University and the Nature Conservancy to prevent large-scale development. Through easements and state purchases, residents transferred a large tract of land to the state creating Elk Knob State Natural Area in 2003. In 2005 the property became a state park and the residents began hosting an Elk Knob Headwaters Community Day to celebrate the park and the local success in preserving the landscape that they valued. This demonstrates the potential for finding common ground among long-term residents and organizations populated largely with newcomers who are not considered part of the community. This experience also clearly demonstrates that a connection to the land and an appreciation for

the land's aesthetic value is a core part of this community's identity. It did, however, take an external threat to make this explicit to outsiders.

In subsequent years, the group that planned and organized the Headwaters Community Day event began thinking about how to formalize its efforts and to make long-term plans to ensure local control over land use. Although the large projects proposed in 2000 were not accepted, developers continue to pursue other opportunities, and residents report that real estate agents knock on their doors with offers to buy land. In 2006 the Headwaters Community Day planning group approached the Sustainable Development Program at Appalachian State University and requested assistance with long term planning for the community. One of the authors (Cockerill) secured funding from Z. Smith Reynolds Foundation to hire a part time coordinator to work with the community to formalize their efforts into a non-profit (501 c 3) organization with a mission of promoting land preservation as a means of community development. Between 2007 and 2009 the community group gelled into EKCHO—Elk Knob Community Heritage Organization—and received its non-profit status. The planning phase for EKCHO was based on ideas from participatory development which, “values parity between participants and research/ professionals. The outside professional facilitator is recognized as being a necessary catalyst, but there is a shift in the locus of power during the development process.”³⁵ In the initial project phases, the Sustainable Development Program staff and the part time organizer directed most activities. They coordinated establishing a Board of Directors populated entirely with individuals from within Elk Knob communities, who represent both natives and neo-natives. As the Board of Directors coalesced, those individuals took on more and more responsibility for the group's operations and when grant funding ended in 2009 EKCHO

was functioning independently. While not an explicit goal, this effort did support environmental justice principles for ensuring self-determination for rural, poor communities.

EKCHO has hosted several community-wide events focused on educating residents and visitors about the cultural and environmental value of the rural landscape. The group continues to organize the Headwaters Community Day as a celebration of local culture and the land. This festival features demonstrations of local trades and crafts (e.g. apple pressing, grist milling, making cornhusk dolls), live local music, and a potluck lunch. In 2009 the group won the L.E. Tuckwiller Award for Community Development at the Watauga County Farm-City celebration. EKCHO also secured funding to develop a public art project focused on land preservation and the rural landscape. Additionally, the group contributed to invigorating community discussions about restoring Winebarger Mill, which was the last working grist mill in the county when it closed in 2005. This mill has been featured in numerous works of art and media coverage over the years and would likely be a popular local attraction if restored. Because the mill is privately owned, EKCHO's non-profit status precludes them from working directly on restoration activities, but the Board encouraged community members to pursue restoration through other channels as an example of using local history to promote community development. In 2010, the Winebarger Mill Preservation Society, Inc. was established and held its first fundraiser.

In 2009 EKCHO conducted a community needs assessment and received 124 responses to their survey. When asked the open-ended question, "What do you value about your community?" the top three items that respondents mentioned were: small town/ rural, friendly people, and beauty. When asked about positive changes that they see in their community, the most common response was establishing Elk Knob State Park. The dominant negative change noted in the community was development/ growth with some specific notes about destroying natural

resources or destroying agriculture. This does reflect the spirit of the last settler's syndrome as the long-time residents are quite critical of efforts to change the status quo through new development. At the same time, members of the EKCHO Board of Directors recognize that change is inevitable and that the community is better served by being strategic in planning for change rather than waiting for change to be thrust upon them. Embedded in the impetus for creating EKCHO is the reality that if a single large landholder sells property to a developer, the character of the community will be altered. Therefore, working within the community to talk about alternatives, like easements or selling land to the State, seemed the most appropriate tack for EKCHO to take. EKCHO represents a transition from the single issue fight that has historically characterized grassroots movements in Appalachia to a community recognizing a need to have a more strategic focus that can address their development over the long term.³⁶

As the 2005 economic study shows, long-term residents are evenly divided on whether there should be zoning in the county. This divide is evident in the EKCHO experience. In 2008 the Board planned several workshops focused on land use planning to include information about land trusts and agricultural easements. Attendance at the first workshop was poor and comments from those attending reflected concern that the intent behind the workshop was to increase outside interference in private land management. In general, community residents continue to resist any efforts perceived as infringing on private property rights. Yet, land-owners were willing to work with the State Parks and with the Nature Conservancy in 2000 to protect land from development. Since then, Elk Knob State Park has increased its acreage through work with land trusts and outright land purchases, reflecting that landowners continue to be willing to place land in trust and/ or to sell it to the State to prevent development in this area. This seems to

enforce the idea that long-term residents do prefer the status quo reflected in both a lack of zoning and maintaining a traditional rural community character.

The Elk Knob experience mirrors an earlier effort in the Laurel Valley community of Watauga County. There, community members organized against the announced closing of their post office. The results of a needs assessment conducted in that community in 1997 found strong support for maintaining rural character and farmland protection. Interestingly, their results showed that newcomers were *more* likely than long-term residents to say that development threatened farmland. In the Laurel Valley efforts to plan for community centered development, the community council favored strict land use planning, but feared “backlash among the residents in the area, many of whom resist government interference with property rights.”³⁷

Conclusion

Land use change from agricultural or woodland to residential throughout the US poses environmental issues. In many cases it also presents an environmental justice concern when there is a strong differential in income and/ or influence between long-term residents and newcomers. To the rural poor in Watauga County, offers from wealthy developers can be enticing; but when residential development encroaches, it is often the long-term residents who lose their traditional ways of life. This is in part because when developers do gain land in these communities, there are few restrictions on what they may do with their property because the long-term residents are largely opposed to zoning or other land use restrictions. Through an environmental justice lens, this presents a complex scenario. Supporting traditional economic and cultural autonomy in

Watauga County would preclude zoning and/ or land use restrictions. Yet, this “status quo” will allow developers to continue to change the nature of these communities and in some cases to induce environmental harm.

The economic study results, as well as the EKCHO and Laurel Valley needs assessments, show that mountain views are important to all residents but acutely important to newcomers, especially individuals who retire to the region. More detailed data from the survey show that this group is willing to pay more than other groups to remove billboards and requires more compensation to allow windmills in their viewshed. The results also show that individuals who have ancestors from the county are more concerned with maintaining the status quo in regards to mountain views. This group is less willing to pay to remove existing billboards but also requires compensation to allow electrical generation windmills in the county. In particular, the household willingness to pay to remove billboards is found to be on average \$55. It, however, rises to \$840 for individuals who retire to the county and falls to \$9 for respondents who have ancestors in the county. These results show a divergence of preferences. In addition, the willingness to accept electrical generation windmills is found to be an average of \$1.64 per month. The monetary amount, however, rises to \$8.22 for individuals who retire to the county and rises to \$4.22 for individuals who have ancestors in the county showing a convergence of preferences.

These data help explain why residents in the Elk Knob region have standing offers for their land. The amenity “value” is higher in terms of dollars than the traditional or status quo “value.” However, the history of the area consistently shows that when their traditional land uses are challenged, local communities will organize and resist. The Elk Knob experience also seems to suggest a growing recognition that it only takes one large landholder in the community to agree to sell and the character of the entire region can change. Therefore, organizing for a longer-

term, more strategic approach to land use decision-making is being explored within the community through EKCHO. While there is still resistance to any perceived loss of property rights, the 2005 survey results on zoning offer some evidence that there may be increasing awareness that protecting the status quo of land use may require change in the status quo of land use *regulation*.

Additionally, the evidence presented here indicates that newcomers will not always be at odds with long-time residents. When there is agreement between groups, community planners would be wise to promote the harmonious relation so that when more contentious issues need to be confronted, both sides may come to agreement for the common good. In these cases when differing preferences create conflicts, attempts to identify common ground among various groups can potentially lessen the conflict. Building on a shared appreciation for the aesthetic value in their community may be a good place to begin building positive relationships. Establishing EKCHO is an attempt to use land preservation to enhance locally directed community development. More research and projects with such a focus could potentially alleviate both negative environmental impacts and environmental justice impacts from residential development in rural resort regions, benefiting both newcomers and long-term residents.

Our analysis further suggests that Elk Knob residents know their culture and their history but have not often articulated it. The development pressures have and continue to offer a catalyst to more formally and explicitly reflect on what they value in their community. While this does represent an external force influencing a shift in a cultural norm, it may also enable the community to be more resilient in the face of change and achieve greater opportunities for self-determination as development pressures continue. This includes an increased capacity to identify

those issues where long-term residents and newcomers might work together to protect land use traditions and the landscape they both value.

Notes

¹ Ralph Waldo Emerson, *Nature: Addresses and Lectures* (Boston: James Munroe and Company, 1849)

² Despite the fact that neither the economic study nor the community project included environmental justice principles in their original design, we recognize that issues of class, choice, and power are intertwined with aesthetic value and are relevant in complex ways to both projects. Specifically, any land use planning process should recognize environmental justice principles that relate to making policies that are free from discrimination and that recognize the right for individuals/ communities to participate as equal partners. At the same time, the economic study and community development project highlighted in this essay suggest that some environmental justice principles (i.e. ensuring economic and cultural self-determination) have the potential to perpetuate environmental harm in this region by precluding strategic land use planning.

³ W.E. Riebsame, H. Gosnell and D. M. Theobald “Land Use and Landscape Change in the Colorado Mountains I: Theory, Scale, and Pattern” *Mountain Research and Development*, 16, no. 4 (1996): 395-405.

⁴ Philip E. Graves and Donald M. Waldman, “Multimarket Amenity Compensation and the Behavior of the Elderly” *American Economic Review* 81 (1991).

⁵ Donald McLeod, Jody Woirhaye, and Dale Menkhaus, “Factors Influencing Support for Rural Land Use Control: A Case Study” *Agricultural and Resource Economic Review*, 28 (1999).

⁶ Robert L. Ryan, “Local Perceptions and Values for a Midwestern River Corridor,” *Landscape and Urban Planning* 42, no.2 (1998).

⁷ Dana Hoag, Chris Bastian, Catherine Keske-Handley, Don McLeod and Andrew Marshall, “Evolving Conservation Easement Markets in the West” *Western Economics Forum*, 4 (2005).

⁸ Seong-Hoon Cho, Steven T. Yen, J. M. Bowker, David H Newmark, “Modeling Willingness to Pay for Land Conservation Easements: Treatment of Zero and Protest Bids and Application and Policy Implications,” *Journal of Agricultural and Applied Economics*, 40 (2008).

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- ⁹ D.L. Erikson and R. DeYoung, "Management of Farm Woodlots and Windbreaks: Some Psychological and Landscape Patterns," *Journal of Environmental Systems* 22 (1993); quoted in Ryan, "Local Perceptions," 226.
- ¹⁰ Katherine Inman, Donald McLeod and Dale Menkenhaus, "Rural Land Use and Sale Preferences in Wyoming County" *Land Economics*, 78 (2002). Also Katherine Inman and Donald McLeod, "Property Rights and Public Interests: A Wyoming Agricultural Lands Study" *Growth and Change*, 33 (2002).
- ¹¹ Katherine Inman and Donald McLeod, "Property Rights and Public Interests: A Wyoming Agricultural Lands Study" *Growth and Change*, 33 (2002): 91.
- ¹² Julian Agyeman, *Sustainable Communities and the Challenge of Environmental Justice* (New York: New York University Press, 2005): 17.
- ¹³ Ronald D. Eller, "Foreword" in *Back Talk from Appalachia: Confronting Stereotypes*. Eds. Dwight B. Billings, Gurney Norman, and Katherine Ledford, K. (Lexington: University Press of Kentucky, 1999), ix-xi.
- ¹⁴ Susan E. Keefe, "Introduction: What Participatory Development Means for Appalachian Communities," in *Participatory Development in Appalachia: Cultural Identity, Community, and Sustainability*, ed. Susan Keefe (Knoxville: The University of Tennessee Press, 2009), 1
- ¹⁵ John Alexander Williams, *Appalachia* (Chapel Hill: University of North Carolina Press, 2002), 364.
- ¹⁶ Williams, *Appalachia*, 315.
- ¹⁷ Williams, *Appalachia*, 353.
- ¹⁸ Williams, *Appalachia*, 355.
- ¹⁹ Williams, *Appalachia*, 314.
- ²⁰ US Census Bureau, Watauga County North Carolina Fact Sheet 2006-2008.
- ²¹ Highland Mapping, LLC, "Forces of Change: Watauga County, North Carolina," report created for MountainKeepers (22 July 2003); 8-9.
- ²² Lesley Bartlett, and Jefferson C. Boyer, "Participation versus Mobilization: Cultural Styles of Political Action in an Appalachian County," in *Participatory Development in Appalachia: Cultural Identity, Community, and Sustainability*, ed Susan Keefe (Knoxville: University of Tennessee Press, 2009), 119.
- ²³ Peter B. Nelson, "Rural Restructuring in the American West: Land Use, Family and Class Discourses" *Journal of Rural Studies* 17 (2001).

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- ²⁴ Peter A Groothuis, Jana D. Groothuis and John C. Whitehead, “The Willingness to Pay to Remove Billboards and Improve Scenic Amenities,” *Journal of Environmental Management*, 85 (2007).
- ²⁵ Peter A. Groothuis, Jana D. Groothuis and John C. Whitehead, “Green vs. Green: Measuring the Compensation Required to Site Electrical Generation Windmills in a Viewshed,” *Energy Policy*, 36 (2008).
- ²⁶ Town of Boone, Unified Development Ordinance, Section 160 [b], 9-10
- ²⁷ R. Douglas Bond, “Making Sense of Billboard Law: Justifying Prohibitions and Exemptions,” *Michigan Law Review*, 88 (1990).
- ²⁸ Jacob Ladenburg and Alex Dubgaard “Willingness to Pay for Reduced Visual Disamenities from Off-Shore Windfarms in Denmark,” *Energy Policy* 35 (2007).
- ²⁹ Michael O'Hare, "Not on my Block You Don't: Facility Siting and the Strategic Importance of Compensation," *Public Policy* 25 (1977). Also Howard Kunreuther, Paul Kleindofer and Peter J. Knez. “A Compensation Mechanism for Siting Noxious Facilities: Theory and Experimental Design,” *Journal of Environmental Economics and Management*, 14 (1987).
- ³⁰ Herbert Inhaber, "Of LULU's, NIMBY's, and NIMTOO's," *Public Interest* 107 (1992).
- ³¹ O’Hare, “Not on My Block.” Also Kunreuther et al., “A Compensation Mechanism.”
- ³² Richard T. Carson, Nicholas E. Flores and Norman F. Meade, “Contingent Valuation: Controversies and Evidence,” *Environmental and Resource Economics* 19 (2001).
- ³³ Peter A. Groothuis, “Land Use Issues: The Last Settler’s Syndrome,” *Journal of Agricultural and Applied Economics*, 42 (2010).
- ³⁴ Stephen L. Fisher, “Grass Roots Speak Back,” in *Back Talk from Appalachia: Confronting Stereotypes*, eds. Dwight B. Billings, Gurney Norman, and Katherine Ledford, K. (Knoxville: University Press of Kentucky, 1999).
- ³⁵ Keefe, “Introduction,” 11.
- ³⁶ Fisher, “Grass Roots.”
- ³⁷ Bartlett and Boyer, “Participation versus Mobilization,” 128.