

Journal of Rural and Community Development

Political Ecology of Culture Clash: Amenity-Led Development, Vulnerability, and Risk in Coastal North Carolina

Author: Candace K. May

Citation:

May, C. K. (2019). Political ecology of culture clash: Amenity-led development, vulnerability, and risk in coastal North Carolina. *The Journal of Rural and Community Development*, 14(3), 23–47.

Publisher:

Rural Development Institute, Brandon University.

Editor:

Dr. Doug Ramsey

Open Access Policy:

This journal provides open access to all of its content on the principle that making research freely available to the public supports a greater global exchange of knowledge. Such access is associated with increased readership and increased citation of an author's work.



**BRANDON
UNIVERSITY**
Founded 1899



Political Ecology of Culture Clash: Amenity-Led Development, Vulnerability, and Risk in Coastal North Carolina

Candace K. May

South Dakota State University
Brookings, South Dakota, USA
candace.may@sdstate.edu

Abstract

The current study contributes a political ecology of culture clash approach to the research on amenity-led development (ALD) in coastal areas. Coastal areas are characterized by high population growth, yet are prone to natural disasters, which are projected to increase as coasts erode, and seas rise and warm. Collaboration between newer and longer-term residents on hazard mitigation measures is increasingly important, but the ALD literature is replete with conflict, divisions, and increased vulnerability. The current study applies concepts from two lines of ALD scholarship, the culture clash literature and political economy approaches, to a case study of a traditional commercial fishing community undergoing ALD in North Carolina. Findings demonstrate that newer and longer-term residents share a concern for environmental harm, but misunderstandings and sense of place differences fuel conflict, while broader drivers of coastal development shape the landscape of vulnerability and risk. A significant contribution of this study is the exposition that ALD is not environmentally or politically neutral. There are significant consequences for environmental integrity, social vulnerability, and risk and hazard mitigation measures in who wins and who loses from culture clash politics, which belie the viability of cooperation based on common ground. However, making the terrain of politics visible reveals allies and resources for improving resilience and sustainability.

Keywords: Culture clash; sense of place; politics of place; amenity-led development; enclosure; rural gentrification; rural restructuring; political ecology

1.0 Introduction

This manuscript is based on data documenting the everyday experiences of residents at the Beach, a traditional North Carolina fishing community undergoing amenity-led development (ALD) as part of broader rural, coastal restructuring processes. Amenity-led development involves population growth from in-migration for enjoyment of natural amenities, rather than job opportunities, and economic development predicated on repurposing the use of natural resources for recreational lifestyles rather than commercial livelihoods (e.g., Marcouiller, Deller, & Green 2005, Power, 2005; Robbins, Meehan, Gosnell, & Gilbertz., 2009; Ulrich-Schad & Qin, 2018). Scholarship on the effects of ALD on coastal communities and ecosystems in the US is extremely important given high rates of population concentration and growth, which increase socio-ecological vulnerability and hazards. Coastal areas comprise 10% of the total land of the United States, but

roughly 40% of the total population (National Oceanic and Atmospheric Administration [NOAA], 2013). Approximately 80% of population growth between 2000 and 2015 occurred in coastal states, with 29% in shore-adjacent counties (National Ocean Economics Program [NOEP], 2016). Between 1979 and 2010, population density in coastal-adjacent counties increased by 39 %, with a projected increase of an additional eight percent by 2020 (NOAA, 2013) and 50% by 2100 (Melillo, Richmond,& Yohe, 2014). Population growth in coastal North Carolina [NC] grew by 92% between 1970 and 2010 and is expected to increase by an additional 10% by 2020 (NOAA, 2013). According to Crawford, Bradley, & Marcucci (2013), this growth is largely due to in-migration with new housing built in proximity to natural amenities rather than job opportunities.

Coastal areas in general, and coastal NC in particular, are prone to natural disasters; hurricanes and flooding are frequent and costly, and risks are estimated to increase as coasts erode and seas rise and warm. Increased risks of hazards in high growth, amenity-rich areas require collaboration between newer and longer-term residents and or compliance with hazard mitigation measures. However, the ALD literature is replete with conflict, divisions, and increased vulnerability. The current study incorporates primary concepts from two lines of ALD scholarship, the culture clash literature and political economy approaches. Differences in sense of place and environmental concern and behavior from the culture clash literature and the connection between politics of place, enclosure, and gentrification from political ecology are applied to a case study of ALD at the Beach—a traditional fishing community in the Inner Banks region of North Carolina. Findings demonstrate that newer and longer-term residents share a concern for environmental harm, but misperceptions and misunderstandings fuel local conflict, while broader drivers of coastal development shape the landscape of vulnerability and risk. A significant contribution of this study is the exposition that ALD is not environmentally or politically neutral; there are significant consequences for environmental integrity and social vulnerability in who wins and who loses from culture clash politics.

2.0 Literature Review

ALD is often perceived as an effective tactic for rural revitalization (Galston & Baehler, 1995, Hamilton, Hamilton, Duncan, & Colocousis, 2008). The higher levels of education and higher incomes of amenity migrants are typically associated with revenue and job growth, such as higher education levels, higher incomes, and a desire to buy or build higher valued dwellings compared to longer-term residents (Crawford et al., 2013; Safford & Hamilton, 2012; Thompson, Johnson, & Hanes 2016; Ulrich-Schad & Qin, 2018; Winkler, 2013). Thus, ALD is thought to increase the tax base, create jobs in construction and leisure and hospitality-related sectors, and increase the human, social, and political capital of host communities (Power, 2005; Reeder & Brown 2005). Findings also often highlight the potential environmental benefits from amenity migrants' environmental awareness and place attachment (Jones, Fly, Talley, & Cordell, 2003; Kondo, Rivera, & Rullman, 2012; Matarrita-Cascante, 2017), civic engagement (Campbell & Meletis 2011; Krannich, Petzelka, & Brehm, 2006; Ulrich-Schad & Qin, 2018), and contributions to social and philanthropic support (Thompson, Johnson, & Hanes, 2016).

Other scholars note the rural gentrification aspects of ALD (Ghose, 2004; Gosnell & Abrams, 2011). The in-migration of people with more wealth and higher disposable incomes (Ulrich-Schad & Qin, 2018) increases the cost of living in

destination communities, resulting in inequality and spatial segregation (Crawford et al., 2013, Winkler, 2013). The increased demand for housing close to natural amenities increases land values, thereby decreasing the value of resource-dependent activities and/or increasing property values beyond the economic feasibility of maintaining resource-dependent industries and infrastructure (Ghose, 2004; Hettinger, 2004,; Winkler, 2013). For lower-income residents, improved access to infrastructure and services (utilities, roads, shopping, schools, health care) is mixed and often accompanied by higher taxes (Saint Onge, Hunter, & Boardman, 2007; Thompson et al., 2016). While ALD produces job growth, scholars note the insufficiency of low wage, often seasonal service job growth to meet the demands of increased costs of living (Saint Onge et al., 2007; Thompson et al., 2016).

In addition to patterns of inequality and spatial segregation, scholars are increasingly noting amplified risks and hazards in amenity-rich, but ecologically sensitive mountains (Collins, 2008), forests (Paveglio, Prato, Edgeley, & Nalle, 2016), and coastal areas (Collins, Grineski, & Chakraborty, 2018, May 2019). The knowledge sharing and cooperation needed for hazard mitigation are potentially complicated by economic and political divides between long-term residents with more knowledge and experience of local risks and hazards and newer residents who participate in civic and governmental organizations at greater rates. The tendency of amenity migrants to participate in civic and governmental organizations at higher rates than longer-term residents (Ulrich-Schad & Qin, 2018) restructures local community power relations (May, 2015; Robbins et al., 2009; Walker & Hurley, 2004). As formal governance arrangements are increasingly employed to solve local land use and collective action dilemmas, local, informal practices of negotiating differences based on norms and reciprocal obligations are replaced (Campbell & Meletis, 2011; Matarrita-Cascante, Stedman, & Luloff, 2010; May, 2013). The replacement of informal institutional arrangements depersonalizes relationships, delocalizes decision-making authority, and ultimately has the potential to marginalize and exclude groups with less wealth, disposable income, or time for formal political activities (May, 2015, Robbins et al., 2009; Walker & Hurley, 2004), which further reduces opportunities for knowledge sharing.

The current study synthesizes the focus on differences in sense of place and environmental concern and behavior from the culture clash literature with the connection between politics of place, enclosure, and gentrification in political ecology. Culture clash approaches to ALD have developed out of the confounding relationships between environmental concern and support for economic growth and development (Smith & Krannich, 2000). While amenity migrants and longer-term residents often both exhibit a concern for the environment, sources of environmental harm and whether and how to manage growth and development are often mixed (Farstad & Rye 2013; Safford & Hamilton, 2012; Smith & Sharp, 2005). Scholars have attempted to understand the relationship between environmental concern and economic preferences in amenity-rich areas by examining differences in sense of place. Sense of place is typically treated as a composite of two concepts, place attachment and place meanings, although aspects of identity, dependence, and satisfaction in relation to place characteristics are also often included (Brehm, Eisenhauer, & Stedman, 2013; Eaton et al., 2019).

Place meanings comprise the descriptive elements that identify what a geographically located, physical space is and what it should be used for, while attachment refers to the degree of emotional connection to a place (Brehm et al.,

2013). Conflict is produced when various groups in a community, such as long-term residents with natural resource-dependent livelihoods and newer, amenity migrants seeking natural resource-based recreational lifestyles, both exhibit place attachment but different place meanings (May, 2018). This conflict is fueled in part by a lack of traditional community attachments, such as strong social ties or kinship networks among groups (Brehm, 2007). Freudenburg (1986) noted that rapid population growth decreases ‘density of acquaintanceship’—the proportion of residents who are acquainted with one another—and as a consequence, the ability to control socially undesirable behaviors, the effectiveness of socialization practices, and provisions of public goods, such as care for the community’s weakest members or environmental protections. Changes in density of acquaintanceship are significant for environmental sustainability (Kondo et al., 2012) and hazard mitigation (Collins, 2008; Collins et al., 2018; May, 2019; Paveglio et al., 2016). For example, Gordon, Matarrita-Cascante, Stedman, & Luloff. (2010) found that development patterns related to amenity migration in amenity-rich, forested areas of Pennsylvania and Minnesota increased wildfire risk, but the collective action necessary for hazard mitigation was hampered by the conflict between newer and longer-term residents over differing conceptions of responsibility, knowledge, risk, and commitment.

Brehm (2007), Flint & Luloff (2005), and Jennings & Krannich (2013) noted that compatibilities in the attachment to the local natural environment may serve as the common ground necessary for cooperation on environmental problems. Matarrita-Cascante et al. (2010) found that time in the community for permanent residents, frequency of interaction for seasonal residents, and affinity for the natural characteristics of the area for both groups increased community attachment in five southern Utah communities. The underlying logic, informed by Wilkinson’s (1991) community field theory, is that a common ethic of place is sufficient to build the social cohesion necessary for collective problem-solving. As a result, prescriptions for culture clash often include the creation of opportunities and spaces for increased social interaction (Armstrong & Stedman, 2013; Jennings & Krannich, 2013; Ulrich-Schad & Qin, 2018) and collaborative, environmental education and management processes (Gordon et al., 2010; Paveglio et al., 2016) to develop the mutual respect and understanding necessary for social learning and collective action, if not agreement (Daniels & Walker, 2001).

In contrast to the focus on potential compatibilities produced by mutual place-related attachment and concern in contexts of ALD, political ecologists and political economists focus on how power is restructured and inequality is produced. Walker & Fortmann (2003) examined the politics of landscape, while Yung, Freimund, & Belsky (2003) focused on politics of place. From an interactionist perspective, Cheng, Kruger, & Daniels (2003) advocated a politics of place approach that centers on the nuances of the social and political contests that define what place meanings are significant, and how those meanings are created, protected, transformed, and destroyed. Political ecologists move beyond conflicts over place meanings to examine the distributional consequences of struggles to delimit control, use, and access to places and the ways larger power structures are challenged, transformed, or reproduced in the process (Hurley, 2013; Taylor & Hurley, 2016; Walker & Fortmann, 2003; Yung, Freimund, & Belsky, 2003).

Walker & Fortmann (2003) described how natural resource-based livelihoods were challenged by the rise of an amenity-based real estate economy based on idyllic visions of protected nature in Nevada County, California. In similar vein, political

economists have extended Logan & Molotch's (1987) growth machine thesis to ALD. Logan & Molotch (1987) described the growth machine as local growth promoters, realtors, politicians, developers, and landowners who endorse residential and commercial development of high-value properties based on 'exchange value' rather than the ecological and cultural components of 'use value.' Gramling & Freudenburg (2013) linked growth machine dynamics to the degradation of the Florida Everglades, and Winkler (2013) revealed how ALD produced patterns of uneven development, segregation, and inequality in a Minnesota lake area. Political ecologists link the consequences of growth machine dynamics to the political complexity of place to reveal the complicated relationships between amenity migrants and longer-term residents. For example, Hiner (2015), Grabbatin, Hurley, & Halfacre (2011), and Larsen & Hutton (2012) revealed how overlapping ideologies and behaviors create conflict but also the basis for cooperation, which can illuminate the processes and relations underlying the confounding results of culture clash studies. A political ecology of culture clash approach can illuminate how inequality, vulnerability, and environmental hazards and risks are produced and restructured under ALD to better inform targeted solutions.

3.0 Data Collection

This current study examined the political ecology of culture clash from the perspective of a traditional commercial fishing community undergoing ALD in the Inner Banks region of coastal NC through a case study design. Data collection techniques included a review of existing statistics, documents, and policies and field research consisting of observations and interviews. Qualitative methods provide valuable insight into context-specific perceptions, interpretations, and actions and behaviors, which generates analytical rather than broad generalizations to populations (Yin, 2014). As Marshall & Rossman (2006) explained, qualitative methods are useful to: delve in depth into complexities and processes; explore little known phenomena; and, explain where and why policy and local circumstances and practices complement or contradict each other. Also, as Yin (2014) points out, the case study design allows incorporation of a variety of data and data collection techniques, which increases potential validity through what Denzin (1970) called 'between or across method triangulation,' comparison and verification of data from multiple sources collected through multiple techniques. Between January 2007 and March 2011, federal and NC state fisheries and environmental legislation, policies, and statistics, fisheries meeting minutes, and DMF proclamations, stock status reports, and issue papers were reviewed. Although in and out of the field between 2007 and 2013, four consecutive months—May through August of 2009—of participant observation in fishing communities and pure observation during public fishery meetings conducted by the DMF (7) and NMFS (1) were completed. Forty semi-structured formal interviews were conducted with commercial fishers (22), coastal residents (9), and, scientists, administrative personnel, and user-group representatives serving on fishery committees (9).

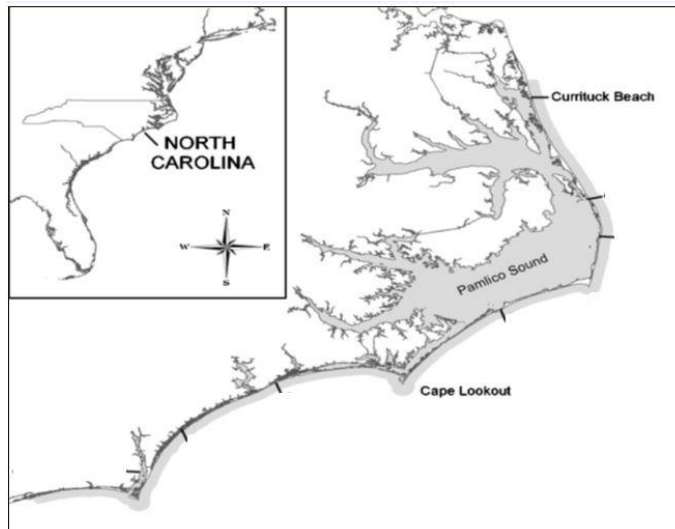
Interview participants were recruited through a purposive sampling technique to maximize information requirements regarding fishery management (Berg, 2007). A semi-structured interview guide was used to maintain consistency across participants while allowing exploration of issues important to participants beyond the interview protocol questions (Lofland, Snow, Anderson, & Lofland, 2006). Interviews lasted an average of 1 hour and 46 minutes, with a range of 30 minutes to 3.5 hours. The sample consisted of eight women; all but one interviewee, who

was African American, were white. The average age of interviewees was 61, with a range of 27 to 86. The gender, age, and racial composition of the sample is comparable to fisher demographics in the region (see Tables 1 and 2). Informal interviews (86) in coastal communities across NC and at meetings occurred throughout the study for cross-comparative and verification purposes (Rubin & Rubin, 2005), as well as to increase diversity (37 women) and to bolster sample size among a population shy of formal consent forms and tape recordings. Elements of grounded theory and ethnography were incorporated in an iterative process of research and analysis as discussed by Charmaz & Mitchell (2001). Collection and analytic coding of data occurred according to themes associated with community change and development, interactions among community members, resource user groups, and fishery management participants, access to resources, and political participation and processes in fisheries management.

3.1 The Context: Rural Restructuring in Coastal North Carolina

The Inner Banks [IBX] is a relatively new label used since 2005 by realtors and developers marketing the region as an alternative to the Outer Banks [OBX] (Deaton, Chappell, Hart, & O’Neal, 2010). Whereas the OBX refers to the portion of the barrier islands extending from Currituck Beach to Cape Lookout, the IBX consists of the mainland coastline internal to and surrounded by the barrier islands (see Figure 1). The IBX comprise 3,000 miles of shoreline situated along the estuarine waters of the Albemarle-Pamlico Estuary System [APES], the second largest estuary in the US and a significant draw for ALD. Between 1990 and 2010, the 20 coastal counties of NC grew between 10 and 77%, while the overall population of NC increased by 31% (Deaton et al., 2010). Six ocean-adjacent OBX counties experienced the greatest increases in population with a range between 41 and 77%. However, even historically sparsely populated IBX counties experienced growth rates between 10 and 21% (Deaton et al., 2010). Crawford et al. (2013) found that development in the IBX region after 1990 was 36% greater than the period between 1975 and 1989, suggesting that the primarily rural IBX region acted as an outlet for development pressure in the OBX.

Figure 1. The Coastal Region of North Carolina.



Source: Modified from McClellan, Read, Cluse, & Godfrey (2011: 242).

Coastal population growth in NC occurred concurrently with the economic restructuring of commercial fishing, fostered by depressed commercial seafood prices, consolidation of commercial fishing firms into larger but fewer fishing firms, and the general contraction of the commercial fishing industry. For example, between 1996 and 2012, shrimp imports more than doubled (5.28 to 10.87 million pounds) (NOAA, 2014); NC shrimp prices declined from an average of \$2.54 per pound to \$2.17 (\$1.48 adjusted to 1996 dollars) (North Carolina Division of Marine Fisheries [NCDMF], 2013); and, the number of NC commercial shrimpers decreased by 47% (NCDMF, 2017) while the quantity of shrimp caught per shrimper more than doubled from 6,082 to 13,039 pounds per firm (NCDMF, 2013). While historically ranking in the top 10% of seafood producing states across the country, NC commercial fisheries ranked first in decline in the South Atlantic region in 2008 as a result of declining industry participation and infrastructure (National Marine Fisheries Service [NMFS], 2010). Commercial fishing-related industries declined by 57% between 1996 and 2012 (NMFS, 2010). Fish houses decreased by 30% between 2000 and 2006, with an additional loss of nearly 10% by 2011, primarily in the IBX region of the state (Garrity-Blake & Nash, 2012).

As commercial fishing activities and industries waned, recreational activities and associated development waxed. In 2008, there were more than 2 million recreational fishers in NC waters, of which 1.1 million were from outside the state (NMFS, 2010). Recreational fishing licenses were not required in NC before 2007 (Crosson, 2010), but trends in the growth of recreational fishing are discernable from national statistics. Between 2000 and 2008, recreational fishing increased by 65% nationally and 69% in the South Atlantic region (NMFS, 2010). NC is second in the South Atlantic region and sixth in the nation for recreational fishing expenditures and second in the nation for total recreational fishing trips and number of participants (NOAA, 2015). Recreational use of fisheries and coastal population growth were complemented by new residential and associated commercial developments, such as retail, lodging, dining, and exclusive recreational services along coastal creeks, rivers, and sounds (Waterfront Access Study Committee [WASC], 2007). Much of the development relied on converting commercial fishing docks, fish houses, boat building and supply services, and seafood processing plants and more informally accessed landings, creeks, and community harbors to non-commercial purposes (Garrity-Blake & Nash, 2007, Garrity-Blake & Nash, 2012).

3.2 The Case: Amenity Led Development at the Beach

This manuscript is based on data documenting the everyday experiences of residents in a small IBX community undergoing ALD as part of broader rural restructuring processes. The “Beach” as locals call the community, similar to the IBX region in general, has historically supported a robust small-scale commercial fishing industry. The majority of the approximately 4,000 commercial fishers in NC represent small-scale fishing firms, typically consisting of one or two people on boats classified as small (27% are less than 19 ft. in length) or medium (70% are between 19 and 38 ft. in length) (Hadley & Wiegand, 2014). These fishers fish close to home in the coastal, estuarine waters in search of primarily crab, flounder, and shrimp, which they harvest via crab pots, nets, or trawl according to the season or availability of fish (Hadley & Wiegand, 2014). According to interviewees, until the 1990s, most of the households at the Beach identified as commercial fishing firms and the community supported three fish houses. Since the mid-1990s, small-scale commercial fishing activities and infrastructure have contracted under the weight of market competition

from imported seafood, weather-related events, and population growth and development pressures.

At the time of data collection, approximately 20 of 500 households worked in the fishing industry, one fish house had closed with the death of the family matriarch, and another had transitioned to recreational services, a sailboat marina and club was opened, and three gated communities were in development. Similar to fishers across the IBX, the commercial fishing fleet at the Beach is greying; the average age of local fisherpeople in the IBX is 53 years (Hadley & Wiegand, 2014). Interviewees lamented the lost opportunities for younger generations to earn a living by fishing and often spoke of actively discouraging young people from entering the fishing industry. Long-time fishers are increasingly supplementing their traditional pluri-active livelihoods (Salmi, 2009) with longer periods outside the industry, while others are permanently transitioning out of the industry to work on ferry boats, construction, or in the recreational service sector. Many fisher families were moving out of the community and away from the coast.

Table 1: *Demographic Characteristics of the Beach and Surrounding Area*

	Block Group	County	NC	US
Population	1,170	47,575	9.6 mil	308.7 mil
Households	517	19,941	3.7 mil	132 mil
Housing Density/mile ²	17	58	89	90
White, Non-Hispanic	95.8	66.2	64.9	63.3
Poverty	26.0	21.0	17.5	15.4
Unemployed, Civilian Labor Force	9.2	16.0	7.2	9.7
Median Household Income	42,159	40,429	46,334	53,046
Mean Household Income	55,433	51,449	63,707	73,487
Some College or Higher, 25+ years	54.0	49.0	58.0	58.0
Labor Force, Agriculture, Forestry, Fishing and Hunting, and Mining	17.6	7.3	1.4	1.9

General demographic characteristics for the Beach are best represented at the block group level detailed in Table 1¹ (U.S. Census Bureau, 2013). The people of the IBX have traditionally been among the most socially vulnerable in NC. In a report by the US Climate Change Science Program (Titus et al., 2009), four of the five counties in the Inner-Banks region were classified as economically distressed in 2008, characterized by high unemployment rates and low average household incomes. This is demonstrated in Table 1 by the higher unemployment rates and lower incomes for county compared to the state. The data in Table 1 also show inter-county variation based on proximity to the waterfront. The Beach has higher incomes but greater inequality (differences between mean and median household incomes) and higher poverty rates than the county. These data represent the characteristics of newer in-migrants with higher incomes and education, as well as the opportunity structure of a rural area dependent on natural resource-based livelihoods. Nearly 18% of the Beach population is employed in agriculture, forestry, fishing and hunting, and mining occupations (see Table 1), which require less schooling but are more vulnerable to market fluctuations and environmental circumstances, resulting in greater economic insecurity.

Table 2: *Demographic Characteristics of IBX Commercial Fishers and NC Recreational Anglers*

	APES Commercial Fishers (Hadley & Wiegand, 2014)	NC Recreational Anglers (Stemle & Condon, 2016)
Population	1,106	948,541
White	98.0	90.0
Some College or Higher	30.0	79.0
Median Household Income	\$30,001–\$50,000	Over \$75,000

In contrast to the economic vulnerability of natural resource dependent populations, Crawford et al. (2013) found in-migrants in the area to have higher incomes, higher property values, and newer housing than local populations. The data in Table 2 capture the general differences between fishery dependent and amenity seeking groups in the IBX. While NC recreational fishers typically have higher incomes and education levels than the general population (Stemle & Condon, 2016), the incomes and education levels of commercial fishers in the APES region are typically below state averages (Hadley & Wiegand, 2014). For comparative purposes, the average household income in NC is \$63,707, and 58% of the population has some college or more (U.S. Census Bureau, 2013).

¹ Demographic data do not exist for the Beach; it is a populated place located within, but nearly 100% coterminous with the geographic boundaries of the block group identified here. Block groups are the smallest geographic unit for which the U.S. Census Bureau provides data.

3.3 Culture Clash, Strangers, & the Politics of Enclosure

The rural restructuring processes in coastal NC are partially captured by the following quote from a long-term seasonal-turned-permanent resident of the Beach. He said:

The original people down at the beach—especially now that the commercial fishing industry is not as viable as it was—are selling their land that has been in their families for 150 years. You see the gradual decline of the people that were originally here.

However, the quote above does not capture the nuance of the politics of place, which belie a smooth transition from commercial livelihoods to recreational lifestyles based on impersonal market dynamics of supply and demand. The process of rural restructuring is personal and political between groups within and external to the community, with significant material and political consequences for socio-ecological vulnerability. The following documents culture clash factors related to concern for the environment and sense of place across groups which manifest as politics of place that reproduce and reinforce growth machine politics driving coastal gentrification, processes of enclosure, and enhanced socio-ecological risk.

Culture clash: Beachers, strangers, and fishers. The culture clash thesis is predicated on differences in environmental concern and support for development and growth across groups classified by time or resident status in a community. The groups at the Beach are classified based on affiliations with the fishing industry. Residents involved in or with a family heritage associated with the fishing industry are referred to as fishers, part-time and seasonal residents with amicable relationships with fishers are referred to as Beachers, and residents regardless of time or resident status with a low density of acquaintanceship with fishers are referred to as Strangers. While fishers represent an artificially constructed group to reflect the traditional fishing heritage of the community, Beachers and Strangers are terms used by and derived from study participants at the Beach.

Fishers and many non-fishers at the Beach see themselves as a tight-knit community. A fisher resident explained, “We’re all family down here even though we’re not all kin to each other. Everybody knows everybody. Anybody gets into trouble out there, everybody goes to try to help.” A long-time seasonal visitor turned permanent resident said, “We lived down there for 22 years, and we never had a lock; never had a key.” Feelings of security and trust were demonstrated by frequent comments about not locking doors among community residents. A long-time season visitor and second home owner said, “We don’t lock the house because we are friends with everybody, and they are going to look out for me.” A newer resident said, “If you respect them they will be the first people to look after you.” Many Beach residents described local commercial fishers as crisis first responders. A long-time resident said, “They will put their lives at danger to save the lives of anyone else on the water, instantly. They don’t even think twice about it.”

In the context of ALD induced population change, residents of the Beach described two types of non-fisher residents, Beachers and Strangers. Although the Beach has traditionally been a commercial fishing community, second home ownership, tourism, and recreational fishing, boating and hunting have always been popular in

the area. A native, non-fisher resident explained that, “Back in the 50s, all those cottages down here, you knew everybody. There were two dance halls down here. Mostly, we call them Beachers, came down here from Rocky Mount and Wilson and Williamston.”

Beachers, amenity-seeking, seasonal residents have historically been a fixture of the community, and many have transitioned to permanent residents. A local fisherman’s wife explained, “Many Beachers “have been coming down here for generations because their parents had places down here.” A long-time Beacher and current full-time resident explained how he had been coming down to the Beach for 66 years. He said, “I just fell in love with the place. My children have grown up coming here too.” Another long-time Beacher explained that he was introduced to the area by his wife and her parents. He said, “Since the early 50s I been coming down here. I wasn’t raised here now. She came a lot before I did because she came with her mom and dad.” The relationship between fishers and Beachers has historically been quite amiable. An often-recounted narrative explains how Beachers offered their homes as a sanctuary to the locals during hurricanes. In the words of a fisherwoman in her 80s:

“There is a piece of land up towards the old hills; it is higher ground. There has never been water over the old hills, never. . . . There were some cottages down there that belonged to people that had a little bit more money than the people that were raised here on the river that would come down here in the summer months. They always opened their houses and told the people to go there and stay when the winds started blowing.”

The designation of Stranger differentiates newer residents based on respect for local fisher livelihoods and density of acquaintanceship rather than length of time in the community or seasonal or permanent resident status. Stranger is a relatively new term used at the Beach. Interviewees discussed how they used to know everyone in the community, but increasingly there were people they did not know and rarely saw. Some elusive residents were seasonal homeowners. The number of seasonal homes in NC grew, primarily in coastal areas, by 42% between 2000 and 2010, which is the 14th highest rate in the US (U.S. Census Bureau, 2010). Others were simply absent from or moved swiftly through common community areas, such as the local convenience store, which was the center of community relations. For example, a fisher described non-fisher residents as “kind of aggravating, but 99% of them were good people. They’d sit there and talk to you just like they know you all your life.” In contrast, Strangers were seen as aloof and intolerant of local livelihoods. Another fisher added that:

There’s a lot of people from different places moved down here. Some of them know what the deal is and some of them don’t care as long as they can get you out of the business. There’s some good people that’s moved into here. The guys that come in the store here—they know what it is because they talk to them—you know, the crowd, the boys that fish and whatnot. Well it’s always been that way. You got some that think they’re beyond everybody.

As a native, non-fisher resident stated, the general perception is that “the [Strangers] cause a lot of problems for the fishermen because they try to control and change the community.” A newer Beacher resident explained, “Most people move here because it is different from where they are coming from, lifestyle’s better, air is cleaner, the people are nicer” but many of the Strangers “can’t totally shuck away that deal of having to take control and try to change the place.” The control and changes sought by Strangers manifested as a culture clash with local residents over differing conceptions of environmental harm, which corresponded with differences in sense of place—beliefs about the purpose of a place that define how, by who, and when natural resources should be used.

Perceptions of environmental harm. A significant source of culture clash at the Beach was demonstrated by differing conceptions of environmental harm. Non-fisher residents were more likely to criticize commercial fishing activities for damage to the ecological basis of amenity lifestyles, while fisher residents emphasized the damage to the ecological foundation of fisher livelihoods from coastal development and industrial pollution. Local fisher residents consistently reported feeling persecuted and attacked for depleting fish populations, harming iconic marine animals such as sea turtles, and destroying habitat. A local fisher resident said, “They don’t want you trawling. That is all I heard since I was growing up. These people come from up the country come down here and say, you trawlers should have to quit; you’re killing all the fish.” A local fisherwoman said, “They don’t want crab pots there. They don’t want you setting nets there. They don’t want you dragging for shrimp and crabs. They think you’re catching it all.” A long-time Beacher supported these accounts. She said, “I always considered it was the big (commercial) boats come in here and take all the fish out of here and the little ones were hurt—taken out with the nets.” Concern for the environmental consequences of commercial fishing inspired some non-local residents to become involved in state fishery politics. A Stranger discussed how she became involved in fishery politics in the 1980s out of concern for commercial overfishing. She said, “I wrote editorials to the paper because I was disgusted about the fishing. . . . I got involved in it to where I was called by [Governor] Basnight and invited to several [fishery] meetings.”

In contrast, many fisher residents pointed out non-commercial fishing sources of harm to the environment. A retired fisher who left the community for alternative employment opportunities explained how Strangers often expressed concern about commercial fisher interactions with sea turtles but failed to recognize the detrimental effects of recreational activities. He said, “Yachts go by doing 30 miles an hour and they chop more sea turtles with their propeller wheels than shrimp nets ever kill.” A retired fisher resident explained how fisherpeople are blamed for destroying the fishery, while the effects of industrial phosphate mining upstream of the community are ignored. He said, “I mean it’s helped people with hard working jobs and all. But . . . It’s not helped the water people or the water either.” Coastal development was a major theme in discussions of environmental concern with fishers. A fisher with fishery management experience discussed the effects of increased residential development on the health of the fishery. He said, “It’s just too much population, too much pollution, too much runoff from Texas Gulf, from Raleigh and other places like that. It’s just slowly killing it.” However, beyond environmental concerns, fisher and non-fisher native residents held favorable views of amenity migration and

development at the Beach. A fisher-by-way of family expressed views common across the community when she said:

They bring money in. I mean it helps [the local store owner] out. If they didn't shop with her it would be bad on her. It would hurt everybody if they didn't come around. They buy land, they have to have a house built, a pier if they are on the water or bulkhead if they are on the water. We need sewer here—that would help too. They say after they have [city] water here for so long that eventually they would bring sewer in if more people would build.

Fisherpeople simply believed that, as a fisherman's wife said, "There's things they can do to make it better." She explained further that, "They need to have laws that they don't build so close to the water. They also need to check into the sewage treatment stuff and make sure they aren't overflowing into the water."

Sense of Place (attachment implied). Perceptions of environmental harm at the Beach were strongly related to differences in sense of place. Fisherpeople were concerned about the environmental consequences of development and pollution on the ecological foundation of their livelihoods, habitat and fish populations. Strangers and a few Beachers were concerned about the consequences of commercial fishing activities for recreational and leisure activities. A common perception among fishers at the Beach was that fisheries management closed rivers and portions of the sound to night-time shrimp trawling "because the people complained about the trawlers dragging at night keeping them awake." In addition to the sounds, Strangers were reported as upset with the sights of commercial fishing at the Beach. A recent example provided by fisher residents involved a newer regulation banning trout lining. A local fisherwoman explained what trout lining is and the local controversy. She said:

Up until this year we could trout line. We can't even do that now. They (Strangers) say we are messing up their view of the water. What the people don't understand that haven't lived here long enough or don't understand it is if we set out lines it is just a crab line with eel or bull lip onto it. We have to start at daylight and just as soon as that sun comes up and a shadow forms—like a shadow of your boat or whatever—the crabs quit biting. So what, 10 am or 9 am they quit biting, we take up our mess and come home. We can't even do that this year because they said it messes up their view of the water.

According to local fishers, the desire of newer residents for unobstructed views and soundscapes was irrational. Fishers expressed exasperation at what they perceived as hypocritical treatment of their livelihood activities. A local fisher exclaimed, "They aren't complaining about the speed boats or the jet skis." A fisherman's wife added, "If you live out on the highway there is traffic and you live in a city there are sirens and patrol cars. Get used to it!"

A Case of Misunderstanding & Miscommunication? A common proposition among ALD scholars is that increased interaction among residents can dispel or smooth over real or imagined differences in perceptions that feed culture clash circumstances. In some respects, this is true for residents of the Beach. Beachers and fishers with a higher density of acquaintanceship respect and accept each other; they look out for each other and help each other in times of need. Furthermore, many residents of the Beach described the source of much of the culture clash between fishers and Strangers as stemming from misinformation and misunderstanding. A fisherwoman said:

People that just moved down and built new houses. They just don't understand what is going on. All they know is that they hear a boat out there this morning. We got to make a living just like the rest. We got to eat just like the rest.

Many local fishers reported that they rarely had conflicts with non-fisher residents, but when they did it involved a lack of knowledge about fishing regulations. As one local fisher said:

The only thing is—and it is not even a conflict—I saw a guy trying to go into where my nets were and I said man there's a net setting there. You see those buoys? They're clearly marked. Nine out of ten of them do not realize the difference between a crab pot buoy and a net buoy.

According to a local commercial fishing association president, lack of knowledge about rules and regulations on the part of newer coastal residents is one of the biggest problem facing commercial fishers. He explained:

They just don't know any better. You know they'll grumble about and say this guy hasn't lifted his nets out in two weeks. I ask what color the buoys are. They say I didn't look at that. . . . That person calls me up and says they are pink buoys. I say well pink are recreational. She was so mad at the commercial fishermen but it was a recreational fisherman doing it.

Marine law enforcement officials also reported during fishery meetings that most of the complaints they received about commercial gill nets were based on a lack of understanding of fishery rules and regulations. A marine patrol officer explained, "A lot of conflicts are handled by return calls explaining rules and regulations . . . A lot of the complaints are by people that do not realize the laws." In these cases, improving circumstances for interaction among community members could create the conditions to build the mutual trust and understanding necessary to improve community relations.

However, in many cases, natural resource-based conflict is entrenched, based on deeper ideological beliefs concerning the appropriate use of resources and/or trajectory of economic development, which are often beyond the scope of conflict mediation strategies. During the research period of this study, fisheries managers reported several failed conflict mediation attempts. Recreational resource users were

lodging complaints of conflict with commercial fishers over space and gear, but not attending scheduled reconciliation meetings. A fisheries representative explained the premise of one complaint. He said:

A (recreational) guide down there in New River was fussing about the guys nets. . . . That's what he makes his living from. He was setting nets where he could catch fish and that's why the guy running the guide service wanted to fish there because he knew there were fish there. It was all about territory. It wasn't about anything illegal.

Fisheries managers and scientists explained the lodging of complaints but lack of mediation attendance as a strategic attempt to accumulate evidence of commercial fisher provoked conflict, which could be used to reduce commercial access to fishery resources during fishery decision-making processes. In fisheries management, conservation of fish is a matter for science, while managing conflict and ensuring inclusive access to fishery resources by managing space and gear are a matter for politics. At public fishery meetings and in state legislative processes, recreational interest groups presented accounts of user group conflict as a barrier to inclusive resource access and coastal sustainability, while promoting the higher economic impact and ostensible sustainability of recreational fishing to support and encourage the transition to an amenity-based coastal economy.

Competition over territory reflects different beliefs about sense of place, which are ultimately rooted in material relationships. At one end of the spectrum, some amenity in-migrants see the sights and sounds of commercial fishing as incompatible with recreation and leisure. At the other end, the transition from productivist livelihoods to consumptivist lifestyles is seen as part of the larger trajectory of economic development and modernity. This was demonstrated by the comments of a recreational interest group member active on fishery management committees who intimated that commercial fishing was economically, technologically, and morally outmoded. He said:

I think one issue people aren't really looking at is population shifts from urban to extra-urban areas and coastal areas. As you get more and more people oriented toward the coastal regions of the state you are going to have more and more recreational fishermen. . . . we got to change our management strategies to meet that increased demand. The tourism draw, the willingness of people to spend money to have the opportunity to fish in a world class fishery. We have been too hung up on saving the commercial fishermen—sooner or later we have to look at the fact that things are changing. There are a lot of ways to provide food and eco-friendly fish farming.

From Culture Clash to Politics of Place & Enclosure. Culture clash over sense of place manifests in formal and informal politics of place that result in enclosure—acts to define or redefine exclusivity in access, use, and allocation of natural resources. At the Beach, fishers were increasingly restricted from areas and resources traditionally held and accessed in common. A fisher resident described an account where he:

...was out there hook and line fishing, wading out there into the river and a woman came out of the house raising cane at me. I weren't on nobody's land. The river doesn't belong to them; they think it does. People out there setting nets. They go out there and raise cane out at you; call the man onto you. It's not their water but they think it is just because they own that land and they don't really own the land to the water. You could walk along the beach front; it's always been that way. It's always been a thing where they can't really stop you from just walking across the beach. We used to do it all the time and people never said anything to you about it. Some of the crowd now they don't even want you looking at them much less walking across it.

Enclosure also happens on a broader scale through the conversion of commercial fisher communities and infrastructure to non-commercial purposes. A fisheries scientist, who serves on management committees as a representative described the consequences of amenity led-development and gentrification of commercial fishing communities. He said:

There has been a huge conversion of waterfront over the last four or five years because the prices that land and waterfront property in particular got to. . . . A lot of it changed hands—fishing piers were being sold for development; fish houses were being sold for development. Changes to communities—where there used to be old fish houses and old docks on the waterfront are now condominium developments and new houses. Where we used to fish are going to be developed—and that is happening all up and down the coast and inside as well—not just at the beach anymore.

The environmental and regulatory consequences of ALD represent further enclosures in the way resource use, access, and allocation are redistributed. The environmental consequences of ALD were described by a fisheries biologist. He said:

One of the bigger issues here. We're losing habitat left and right. That is something you will never get back. We can manage and do everything you want to these fish but if we don't protect this habitat area where the juveniles need to grow up . . . it will never produce the numbers of young it used to produce and so that is a net decline in overall productivity.

Decreases in fisheries productivity increase the emphasis on regulating commercial fishers for conservation purposes. The fisheries biologists explained that:

The fishermen are the ones always getting the burden of well we have do something and you're the one we see. We aren't coming back and saying well it was a bad idea to put that marina there we want you to take it out. That's not going to happen.

Pressure to regulate commercial fishers also stems from the active political involvement and recreational interest groups, who have greater relative power in fisheries governance processes (May 2015, 2016). Loss of common resources, waterfront access, and commercial infrastructure and increased regulations based on the decreased productivity of the fishery are enclosures, which reflect and reproduce the broader processes of rural restructuring.

Growth Machine Politics and Coastal Hazards. ALD is promoted by many coastal community members, businesses, realtors and developers, recreational interest groups, and politicians based on promises of economic growth and employment, which are bolstered by the broader economy. Recreation and tourism are the primary economic sectors in NC's ocean economy, which consists of businesses and jobs dependent on resource extraction or physical location on or near the ocean. Ocean dependent recreation and tourism provide 88% of employment and 55% of GDP (NOEP, 2015). In contrast, commercial fishing activities constitute 8% of GDP and 29% of employment for NC's ocean economy (NOEP, 2015). However, amenity-led development in NC does not necessarily increase sustainability or decrease vulnerability. As coastal habitat specialist explained:

The homebuilder's associations; the lobbyists for the developers are very strong. To get anything meaningful put into place at this time is very difficult. Especially when you're talking about a tax base, you're talking about jobs. Right now, unfortunately, the environmental community—the ecological aspects of a lot of this are taking second place to the need for these counties to find some way to produce financially. It's a tough balancing act.

The higher incomes and educational levels of amenity in-migrants are often examined for correspondence to environmentally protective attitudes in culture clash studies, but the environmental consequences of ALD are often overlooked. In many ways, coastal ALD in NC is associated with decreased sustainability and increased vulnerability to climate change related risks. Coastal population growth and development in NC contributes to loss of wetlands and coastal erosion. Deaton et al. (2010) reported that over 800 acres of wetlands are converted to urban land cover (buildings, asphalt, concrete, suburban gardens, and systematic street patterns) each year in NC as a result of coastal development. The conversion of wetlands to urban land cover not only increases the risk and costs of damage to the built environment but decreases the capacity of the natural environment to temper the consequences of rising waters and hurricane force winds for vulnerable coastal populations (Colburn & Jepson, 2012).

NC has experienced more weather-related billion-dollar damage events than any other state in the US in recent years (North Carolina Interagency Leadership Team [NCILT], 2012), with hurricanes causing some of the highest costs (e.g., Matthew caused \$10.1 billion in damages in 2016, Irene caused \$14.6 billion in 2011, and Floyd \$9.5 billion in 1999) (NOAA, 2017). Risks of coastal disasters are projected to dramatically increase as relative sea level rise (CCSP, 2009) exceeds six feet in some areas and extensive areas are inundated at one foot by 2100 (NOAA 2018).

Growth machine politics pose a significant barrier to coastal hazard mitigation and planning. In 2012, the NC General Assembly passed a four-year moratorium on the use of climate science related to sea level rise in coastal development and planning (HB 819, 2012). The moratorium was the outcome of political mobilization by local realtors, developers, government, and homeowners claiming to represent the 20 coastal counties of NC, many of which were native residents of their coastal areas. The group NC-20 (2012) expressed concern for the consequences of climate science informed policy decisions on individuals' ability to utilize and profit from private property. The NC-20 (2012) group viewed common environmental protection and hazard mitigation tools, such as state stormwater rules, homeowners' insurance, buffer and setback rules, and flood mapping as threats to private property rights. In the drive to protect individual rights over private property, vulnerability to risks and hazards were increased across the entire coastal region.

4.0 Discussion & Conclusion

Many scholars note the complexity of the social dynamics of culture clash that belie simple dichotomies based on place of origin or permanence or length of residence. At the Beach, the key defining characteristics of conflict groups were the density of acquaintanceship and tolerance for traditional livelihoods. Strangers were aloof and less tolerant of traditional fisher livelihoods. They were also more concerned about the effects of commercial fishing-related harm to marine wildlife and habitat, the foundations of amenity lifestyles. While Beachers were mixed, fishers expressed more concern for the effects of industrial pollution and coastal development on the natural foundations of fisher livelihoods. Diversity in environmental concerns in contexts of ALD reflect conflicts over sense of place. In many incidences, the clash between fishers and Strangers at the Beach was driven by competition over resources, particularly space for recreational activities and leisure pursuits, which were seen by some as incompatible with the sights and sounds of commercial fishing livelihoods. In other cases, the clash was rooted in ideological beliefs about economic development, which viewed traditional fisher livelihoods as outmoded. In either case, enclosure was enacted through politics of place in local interactions, regional development processes, and state-level policies, which reflected and reproduced rural restructuring in coastal NC. Importantly, ALD is not environmentally or politically neutral; there are significant consequences for environmental integrity and social vulnerability in who wins and who loses from culture clash politics.

The core of culture clash studies is Wilkinson's (1991) community field theory, which emphasizes a common ethic of place in providing a common ground for collective problem-solving. Studies of rural restructuring demonstrate that a common ethic of place is often lacking; while people may be similarly attached to a place, their notions of the purpose of the place may vary significantly, producing entrenched conflict (Robbins et al., 2009). In general, studies of the community field

and associated culture clash characteristics exclude more entrenched forms of conflict and the environmental consequences associated with inequality, power, and broader structural systems and processes, which restructure material relationships in ways that reduce sustainability and increase vulnerability. Examination of rural gentrification from a politics of place perspective illuminates divergent perspectives of environmental concern and sense of place in conflict over control of resources within communities, which reflect and reproduce the power relations underlying broader trajectories of change and development. The politics of place approach illustrates how amenity-led development, while perceived as more economically valuable, is not necessarily more sustainable than productivist livelihood orientations. As Robbins (2006) noted, the desire of amenity in-migrants for more access to environmental goods and services does not necessarily reflect greater knowledge about or concern for environmental integrity. Ultimately, amenity-led growth and development have the potential to destroy the very amenities fundamental to in-migration, while increasing social vulnerability (Kondo et al., 2012). A focus on politics of place allows for a more targeted approach to conflict mediation when conflict is superficial and primarily based on misperceptions, redistribution of resources and empowerment of the powerless when conflict is entrenched, or broader, more stringent policy work when environmentally destructive growth-machine dynamics are revealed. Importantly, making the terrain of culture clash politics visible reveals allies and resources for concerted efforts toward improved resilience and sustainability.

Acknowledgements

I would like to thank the people of ‘The Beach’ and other coastal communities, as well as the stakeholder representatives, scientist, and management professionals involved in North Carolina fisheries and coastal governance. This research would not have been possible without their contributions.

References

- Armstrong, A., & Stedman, R. C. (2013). Culture clash and second home ownership in the U.S. Northern Forest. *Rural Sociology*, 78(3), 318–45. <https://doi.org/10.1111/ruso.12010>
- Berg, B. L. (2007). *Qualitative research methods for the social sciences*. 6th ed. Boston: Pearson.
- Brehm, J. M. (2007). Community Attachment. *Human Ecology*, 35(4),477–88.
- Brehm, J. M., Eisenhauer, B. W., & Stedman, R. C. (2013). Environmental concern: Examining the role of place meaning and place attachment. *Society & Natural Resources*, 26(5), 522–38. <https://doi.org/10.1080/08941920.2012.715726>
- Campbell, L. M., & Meletis, Z. A. (2011). Agreement on water and a watered-down agreement. *Journal of Rural Studies*, 27(3), 308–21.
- Charmaz, K., & Mitchell, R. G. (2001). Grounded theory in ethnography. In P. Atkinson, A. Coffey, S. Delamont, J. Lofland, & L. Lofland (Eds.), *Handbook of Ethnography* (pp. 160–74). Thousand Oaks, CA: Sage Publications.

- Cheng, A. S., Kruger, L. E., & Daniels, S. E. (2003). “Place” as an integrating concept in natural resource politics: Propositions for a social science research agenda. *Society & Natural Resources*, 16(2), 87–104. <https://doi.org/10.1080/08941920309199>
- Colburn, L. L., & Jepson, M. (2012). Social indicators of gentrification pressure in fishing communities: A context for social impact assessment. *Coastal Management*, 40(3), 289–300. <https://doi.org/10.1080/08920753.2012.677635>
- Collins, T. W. (2008). The political ecology of hazard vulnerability. *Journal of Political Ecology*, 15, 21–43. <https://doi.org/10.2458/v15i1.21686>
- Collins, T. W., Grineski, S. E., & Chakraborty, J. (2018). Environmental injustice and flood risk: A conceptual model and case comparison of metropolitan Miami and Houston. *Regional Environmental Change*, 18(2), 311–23. <https://doi.org/10.1007/s1011>
- Crawford, T. W., Bradley, D. E., & Marcucci, D. J. (2013). Impacts of in-migration and coastal amenities on housing growth in coastal North Carolina, United States. *Population Space and Place*, 19(3), 223–38. <https://doi.org/10.1002/psp.1695>
- Crosson, S. (2010). *A social and economic survey of recreational saltwater anglers in North Carolina*. Morehead City, NC: North Carolina Department of Environment and Natural Resources, Division of Marine Fisheries.
- Daniels, S. E., & Walker, G. B. (2001). *Working through environmental conflict*. Westport, CT: Praeger.
- Deaton, A. S., Chappell, W. S., Hart, K., & O’Neal, J. (2010). *North Carolina Coastal Habitat Protection Plan*. North Carolina Department of Environment and Natural Resources, Division of Marine Fisheries.
- Denzin, N. K. (1970). *The research act: A theoretical introduction to sociological methods*. Chicago: Aldine.
- Eaton, W. M., Eanes, F. R., Ulrich-Schad, J. D., Burnham, M., Church, S. P., Arbuckle, J. G., & Cross, J. E. (2019). Trouble with sense of place in working landscapes. *Society & Natural Resources*, 32(7), 827–40. <https://doi.org/10.1080/08941920.2019.1568653>
- Farstad, M., & Rye, J. F. (2013). Second home owners, locals and their perspectives on rural development. *Journal of Rural Studies*, 30, 41–51.
- Flint, C. G., & Luloff, A. E. (2005). Natural resource-based communities, risk, and disaster: An intersection of theories. *Society & Natural Resources*, 18(5), 399–412. <https://doi.org/10.1080/08941920590924747>
- Freudenburg, W. R. (1986). The density of acquaintanceship. *American Journal of Sociology*, 92(1), 27–63.
- Galston, W. A., & Baehler, K. J. (1995). *Rural development in the United States*. Washington, DC: Island Press.
- Garrity-Blake, B., & Nash, B. (2007). *An inventory of North Carolina fish houses*. Report Number: UNC-SG-07-06. Raleigh, NC: North Carolina Sea Grant.

- Garrity-Blake, B., & Nash, B. (2012). An inventory of North Carolina fish houses: A five-year update. Report Number: UNC-SG-12-06. Raleigh, NC: North Carolina Sea Grant.
- Ghose, R. (2004). Big sky or big sprawl? Rural gentrification and the changing cultural landscape of Missoula, Montana. *Urban Geography*, 25(6), 528–49. <https://doi.org/10.2747/0272-3638.25.6.528>
- Gordon, J. S., Matarrita-Cascante, D., Stedman, R. C., & Luloff, A. E. (2010). Wildfire perception and community change. *Rural Sociology*, 75(3), 455–77. <https://doi.org/10.1111/j.1549-0831.2010.00021.x>
- Gosnell, H., & Abrams, J. (2011). Amenity migration: Diverse conceptualizations of drivers, socioeconomic dimensions, and emerging challenges. *Geojournal*, 76(4), 303–22.
- Grabbatin, B., Hurley, P., & Halfacre, A. (2011). 'I Still Have the Old Tradition': The co-production of sweetgrass basketry and coastal development. *Geoforum*, 42(6), 638–49.
- Gramling, R., & Freudenburg, W. R. (2013). The growth machine and the Everglades: Expanding a useful theoretical perspective. *Society & Natural Resources*, 26(6), 642–54. <https://doi.org/10.1080/08941920.2013.779205>
- Hadley, J., & Wiegand, C. (2014). *An economic and social analysis of commercial fisheries in North Carolina: Albemarle and Pamlico Sounds*. Morehead City, NC: NC Department of Environment and Natural Resources, Division of Marine Fisheries, License and Statistics Section.
- Hamilton, L. C., Hamilton, L. R., Duncan, C. M., & Colocousis, C. R. (2008). *Place matters: Challenges and opportunities in four rural Americas*. Durham, NH: Carsey Institute.
- HB 819: An Act to Study and Modify Certain Coastal Management Policies*. (2012). August 3. S.L. 2012-202. North Carolina General Assembly. Retrieved from <https://www.ncleg.net/Sessions/2011/Bills/House/HTML/H819v6.html>
- Hettinger, W. S. (2004). *Living and working in paradise*. London: Thames River.
- Hiner, C. C. (2015). (False) dichotomies, political ideologies, and preferences for environmental management along the rural-urban interface in Calaveras County, California. *Applied Geography*, 65, 13–27. <https://doi.org/10.1016/j.apgeog.2015.10.001>
- Hurley, P. T. (2013). Whose sense of place? In W. P. Stewart, L. E. Kruger, & D. R. Williams (Eds.), *Place-based conservation: Perspectives from the social sciences* (pp. 165–81). Netherlands: Springer.
- Jennings, B. M., & Krannich, R. S. (2013). Bonded to whom? Social interactions in a high-amenity rural setting. *Community Development*, 44(1), 3–22. <https://doi.org/10.1080/15575330.2011.583355>
- Jones, R. E., Fly, J. M., Talley, J., & Cordell, H. K. 2003. Green migration into rural America: The new frontier of environmentalism? *Society & Natural Resources*, 16(3), 221–38. <https://doi.org/10.1080/08941920309159>

- Kondo, M. C., Rivera, R., & Rullman, S., Jr. (2012). Protecting the idyll but not the environment: Second homes, amenity migration and rural exclusion in Washington State. *Landscape and Urban Planning*, 106(2), 174–82. <https://doi.org/10.1016/j.landurbplan.2012.03.003>
- Krannich, R. S., Petrzela, P., & J. Brehm, J. (2006). Social change and wellbeing in western amenity-growth communities. In W. A. Kandel, & D. L. Brown (Eds.), *Population change and rural society* (pp. 311–32). Dordrecht, Netherlands: Springer.
- Larsen, S. C., & Hutton, C. (2012). Community discourse and the emerging amenity landscapes of the rural American West. *Geojournal*, 77(5), 651–65. <https://doi.org/10.1007/s10708-011-9410-1>
- Lofland, J., Snow, D., Anderson, L., & Lofland, L. H. (2006). *Analyzing social settings: A guide to qualitative observation and analysis*. Belmont, CA: Wadsworth.
- Logan, J. R., & Molotch, H. L. (1987). *Urban fortunes: The political economy of place*. Berkeley, CA: University of California Press.
- Marcouiller, D. W., Deller, S. C., & Green, G. P. (2005). Amenities and rural development. In G. P. Green, S. C. Deller, & D. W. Marcouiller (Eds.), *Amenities and rural development* (pp. 329–36). Northampton, MA: Elgar.
- Marshall, C., & Rossman, G. B. (2006). *Designing qualitative research* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Matarrita-Cascante, D., Stedman, R., & Luloff, A. E. (2010). Permanent and seasonal residents' community attachment in natural amenity-rich areas: Exploring the contribution of landscape-related factors. *Environment and Behavior*, 42(2), 197–220. <https://doi.org/10.1177%2F0013916509332383>
- Matarrita-Cascante, D. (2017). Moving the amenity migration literature forward: Understanding community-level factors associated with positive outcomes after amenity-driven change. *Journal of Rural Studies*, 53, 26–34. <https://dx.doi.org/10.1016/j.jrurstud.2017.05.004>
- May, C. K. (2013). Power across scales and levels of fisheries governance: Explaining the active non-participation of fisheries in Two Rivers, North Carolina. *Journal of Rural Studies*, 32, 26–37. <https://doi.org/10.1016/j.jrurstud.2013.04.002>
- May, C. K. (2015). Politics of visibility: Competing for legitimacy in North Carolina fisheries governance. *Environment & Planning C: Government & Policy*, 33(6), 1484–500. <https://doi.org/10.1177%2F0263774X15614180>
- May, C. K. (2016). Visibility and invisibility: Structural, differential, and embedded power in collaborative governance of fisheries. *Society & Natural Resources*, 29(7), 759–74. <https://doi.org/10.1080/08941920.2015.1072257>
- May, C. K. (2018). Governing resilience through power: Explaining community adaptations to extreme events in coastal Louisiana. *Rural Sociology* <https://doi.org/10.1111/ruso.12252>
- May, C. K. (2019). Resilience, vulnerability, & transformation: Exploring community adaptability in coastal North Carolina. *Ocean & Coastal Management*, 169, 86–95. <https://doi.org/10.1016/j.ocecoaman.2018.12.007>

- McClellan, C. M., A. J. Read, W. M. Cluse and M. H. Godfrey. 2011. "Conservation in a Complex Management Environment: The by-Catch of Sea Turtles in North Carolina's Commercial Fisheries." *Marine Policy* 35(2):241-48.
- Melillo, J. M., Richmond, T. C., & Yohe, G. W. (Eds.). (2014). *Climate change impacts in the United States*. Washington, DC: U.S. Global Change Research Program. Government Printing Office. doi:10.7930/J0Z31WJ2
- NC-20. (2012). NC-20 - Twenty counties . . . one voice. Retrieved August 3, 2018, from <http://www.nc-20.com/successes.htm>
- North Carolina Division of Marine Fisheries. (2013). *Annual report: Big book of summary statistics*. North Carolina Division of Marine Fisheries, License and Statistics Section. Retrieved March 10, 2019, from <http://portal.ncdenr.org/web/mf/marine-fisheries-catch-statistics>
- North Carolina Division of Marine Fisheries. (2017). *Annual Report: Big Book of Summary Statistics*. Morehead City, NC: North Carolina Division of Marine Fisheries, License and Statistics Section.
- North Carolina Division of Marine Fisheries. (2010). *Fisheries Economics of the United States, 2008*. U.S. Department of Commerce, NOAA Tech. Memo. NMFS-F/SPO-109. Retrieved from <http://www.st.nmfs.noaa.gov/st5/publication/index.html>
- North Carolina Interagency Leadership Team. 2012. "Climate Ready North Carolina: Building a Resilient Future." Retrieved March 24, 2018 from: http://www.climatechange.nc.gov/Climate_Ready_North_Carolina_Building_a_Resilient_Future.pdf
- National Oceanic and Atmospheric Administration. (2013). *National coastal population report: Population trends from 1970 to 2020*. National Oceanic and Atmospheric Administration, Department of Commerce, developed in partnership with the U.S. Census Bureau. Retrieved from <https://coast.noaa.gov/digitalcoast/training/population-report.html>
- National Oceanic and Atmospheric Administration. (2014). *Imports & exports of fishery products, 1996-2012*. NOAA Office of Science and Technology, National Marine Fisheries Service, Commercial Fisheries Statistics. Retrieved March 10, 2014, from <https://www.st.nmfs.noaa.gov/st1/publications.html>
- National Oceanic and Atmospheric Administration. (2015). *Fisheries economics of the United States, 2015*. U.S. Department of Commerce, NOAA Tech. Memo. NMFS-F/SPO-109. Retrieved Nov. 27, 2018 from http://www.st.nmfs.noaa.gov/economics/publications/feus/fisheries_economics_2015/index
- National Oceanic and Atmospheric Administration. (2017). *Billion-dollar weather and climate disasters: Overview*. National Oceanic and Atmospheric Administration (NOAA) National Centers for Environmental Information (NCEI). Retrieved Nov. 27, 2018 from <https://www.ncdc.noaa.gov/billions/>
- National Oceanic and Atmospheric Administration. (2018). *Sea level rise viewer*. Office for Coastal Management. National Oceanic and Atmospheric Administration, United States Department of Commerce. Retrieved Nov. 27, 2018 from <https://coast.noaa.gov/digitalcoast/tools/slr.html>

- National Ocean Economics Program. (2015). *Market Data - Ocean Economy*. Middlebury Institute of International Studies at Monterey, Center for Blue Economy. Retrieved Nov. 27, 2018 from <http://www.oceaneconomics.org/Market/ocean/oceanEcon.asp>
- National Ocean Economics Program. (2016). *Population and housing*. Middlebury Institute of International Studies at Monterey, Center for Blue Economy. Retrieved July 15, 2017, from <http://www.oceaneconomics.org/Demographics/>
- Paveglio, T. B., Prato, T., Edgeley, C., & Nalle, D. (2016). Evaluating the characteristics of social vulnerability to wildfire: Demographics, perceptions, and parcel characteristics. *Environmental Management*, 58(3), 534–48. <https://doi.org/10.1007/s00267-016-0719-x>
- Power, T. M. (2005). The supply and demand for natural amenities. In G. P. Green, S. C. Deller, & D. W. Marcouiller (Eds.), *Amenities and rural development* (pp. 63–77). Northampton, MA: Elgar.
- Reeder, R. J., & Brown, D. M. (2005). *Recreation, tourism, and rural well-being*. Economic Research Report No. 38. Washington, DC: U.S. Department of Agriculture, Economic Research Service.
- Robbins, P. (2006). The politics of barstool biology: Environmental knowledge and power in greater Northern Yellowstone. *Geoforum*, 37(2), 185–99. <http://dx.doi.org/10.1016%2Fj.geoforum.2004.11.011>
- Robbins, P., Meehan, K., Gosnell, H., & Gilbertz, S. J. (2009). Writing the new west: A critical review. *Rural Sociology*, 74(3), 356–82. <https://doi.org/10.1526/003601109789037240>
- Rubin, H. J., & Rubin, I. S. (2005). *Qualitative interviewing: The art of hearing* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Safford, T. G., & Hamilton, L. C. (2012). Demographic change and shifting views about marine resources and the coastal environment in Downeast Maine. *Population and Environment*, 33(4), 284–303.
- Saint Onge, J. M., Hunter, L. M., & Boardman, J. D. (2007). Population growth in high-amenity rural areas. *Social Science Quarterly*, 88(2), 366–81. <https://doi.org/10.1111/j.1540-6237.2007.00462.x>
- Salmi, P. 2005. "Rural Pluriactivity as a Coping Strategy in Small-Scale Fisheries." *Sociologia Ruralis* 45(1/2): 22-36.
- Smith, M.B., & Sharp, J. S. (2005). Growth, development, and farming in an Ohio exurban region. *Environment and Behavior*, 37(4), 565–79. <https://doi.org/10.1177%2F0013916505275312>
- Smith, M. D., & Krannich, R. S. (2000). "Culture clash" revisited: Newcomer and longer-term residents' attitudes toward land use, development, and environmental issues in rural communities in the Rocky Mountain West. *Rural Sociology*, 65(3), 396–421. <https://doi.org/10.1111/j.1549-0831.2000.tb00036.x>

- Stemle, A., & Condon, M. (2016). *Socioeconomic survey of recreational saltwater anglers in North Carolina*. Morehead City, NC: North Carolina Division of Marine Fisheries, License and Statistics Section.
- Taylor, L., & Hurley, P. T. (Eds.). (2016). *A comparative political ecology of exurbia: Planning, environmental management, and landscape change*. Cham, Switzerland: Springer.
- Thompson, C., T. Johnson and S. Hanes. 2016. "Vulnerability of Fishing Communities Undergoing Gentrification." *Journal of Rural Studies* 45:165-74.
- Titus, J. G., Anderson, K. E., Cahoon, D. R., Gesch, D. B., Gill, S. K., Gutierrez, B. T., & Robert, E. (2009), Coastal sensitivity to sea level rise: A focus on the Mid-Atlantic Region. A report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research. Washington, D.C.: Government Printing Office, U.S. Environmental Protection Agency.
- U.S. Census Bureau. (2010). *Census 2010 Summary File 1 (Sf 1) 100-Percent Data*. U.S. Department of Commerce. Retrieved January 25, 2016, from <https://www.census.gov/data/datasets/2010/dec/summary-file-1.html>
- U.S. Census Bureau, American FactFinder. (2013). *2009–2013 American community survey*. U.S. Census Bureau's American Community Survey Office, Retrieved May 15, 2017, from <http://factfinder2.census.gov>
- Ulrich-Schad, J. D., & Qin, H. (2018). Culture clash? Predictors of views on amenity-led development and community involvement in rural recreation counties. *Rural Sociology*, 38(1), 81–108. <https://doi.org/10.1111/ruso.12165>
- Walker, P. A., & Fortmann, L. (2003). Whose landscape? A political ecology of the 'exurban' Sierra. *Cultural Geographies*, 10(4), 469–91.
- Walker, P. A., & Hurley, P. T. (2004). Collaboration derailed: The politics of "community-based" resource management in Nevada County. *Society & Natural Resources*, 17(8), 735–51. <https://doi.org/10.1080/08941920490480723>
- Waterfront Access Study Ccommittee. (2007). *Waterfront access study committee final report*. North Carolina Sea Grant and N.C. Coastal Resources Law, Planning and Policy Center. UNC-SG-07-03. Retrieved 13 April 13, 2010, from https://ncseagrant.ncsu.edu/ncseagrant_docs/products/2000s/wasc_final_report.pdf
- Wilkinson, K. I. (1991). *The community in rural America*. Westport, CT: Greenwood Press.
- Winkler, R. (2013). Living on lakes: Segregated communities and inequality in a natural amenity destination. *Sociological Quarterly*, 54(1), 105–29. <https://doi.org/10.1111/tsq.12002>
- Yin, R. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: Sage.
- Yung, L., Freimund, W. A., & Belsky, J. M. (2003). The politics of place: Understanding meaning, common ground, and political difference on the Rocky Mountain front. *Forest Science*, 49(6), 855–66.