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# The Influence of Environmentalism on Attitudes Toward Local Agriculture and Urban Expansion

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*This article uses the New Ecological Paradigm (NEP) to examine attitudes toward local agriculture and land use issues in Santa Barbara County (SBC), California. To do so, we use data collected for the Central Coast Survey in 2010. Although our study has a narrow geographic scope, it has broad implications. Our results suggest that people with stronger pro-environment views support agriculture, and prefer it over urban expansion, but are also critical of agriculture's negative environmental effects. In addition, we find no significant differences between the traditionally pro-agriculture north and the traditionally pro-environment south SBC residents on key policy issues, which suggests that broad political divisions do not dictate attitudes toward rural–environment conflicts.*

**Keywords** agriculture, environmentalism, land use planning, Mumford, New Environmental Paradigm, NEP, urban–rural boundaries

## The Urban-Rural Perceptual Divide

Mumford's (1961) major contribution to early planning theory, *The City in History: Its Origins, its Transformations, and its Prospects*, characterizes the dependence of cities on their hinterlands, and the development of the urban landscape as

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increasingly separated from the rural environment. For Mumford, an illusion of complete independence from nature and the agricultural areas on which the city historically depended is fostered by the treatment of rural and urban landscapes in land-use planning.

Mumford shows that two planning systems developed of the modern city—one for cities and one for rural lands. These planning systems have different agencies, procedures, and remits for the management of rural and urban spaces (and natural landscapes) through their division and land-use zoning plans. Officials use different land-use strategies, planning tools, and policy instruments, with little integration across natural, rural and urban areas at the regional level; in effect, rural and urban landscapes are planned as opposites. Moreover, Mumford depicts the historical development of the city as one in which agricultural areas are lost as urban areas expand into the countryside.

Debate continues over the degree to which there is conflict between the urban and rural features of the contemporary society. Some scholars suggest that sociopolitical conflicts exist throughout the western United States (Salka 2001). Moreover, since the modern environmental movement emerged in the 1960s, conflict between environmentalists and the diverse agricultural communities reflects struggles over land use and conservation (Press 2002). In fact, the very book that helped to spark the contemporary environmental movement, Rachel Carson's *Silent Spring* (1962) was an attack on agricultural pesticides. Large-scale urbanism and the sprawl that has accompanied growth foster a profound disconnect between residents of cities and those of rural areas (Heynen, Kaika, and Swyngedouw 2006).

In this article, we investigate the extent to which an urban–rural perceptual divide exists among residents of Santa Barbara County (SBC), California, a county that has historically included a division between a pro-agriculture north and a pro-environment south (AFT 2007). It is also an agricultural county with extensive rural–urban boundaries that have generated conflict, and one result was the passage of an agricultural buffer ordinance in 2013.<sup>1</sup> Although environmentalists often call on the protection of farmland, the criticisms they direct at farmers and ranchers are far greater than the supportive statements they make. This gives us the basis for formulating hypotheses about the influence of environmentalism on attitudes toward local agriculture and urban expansion.

To test our hypotheses, we use data from the 2010 Central Coast Survey. We find that people with stronger pro-environment views support agriculture, and prefer it over urban expansion, but are also critical of agriculture's negative environmental effects. We also found that location and broad political divisions do not dictate attitudes toward agriculture–environment conflicts.

### **Environmentalism and Attitudes Toward Agriculture and Urban Expansion**

Farming raises a wide range of environmental issues, including pesticide contamination, biodiversity loss, soil degradation, air pollution, greenhouse gas emissions, excessive water use, and overgrazing. Environmental organizations and activists regularly take stands in opposition to farmers and ranchers. These debates are often the most intense when the focus is the agriculture/urban boundary or the conversion of agricultural land to residential development.

<sup>1</sup>See [http://longrange.sbcountyplanning.org/programs/ag\\_buffer/AgBufferordinance.php](http://longrange.sbcountyplanning.org/programs/ag_buffer/AgBufferordinance.php).

Many agriculture advocates support land-use laws that can strengthen the protection of rural lands. Their argument is that when farms and ranches are converted to housing, agricultural production declines, biodiversity suffers, energy use increases, and society suffers an aesthetic loss (McManus 2002; Thompson 2007). There are a number of planning tools that have been adopted in California to protect farms and ranches. Many counties have adopted land use elements such as urban growth boundaries (UGB) to contain development within an urban zoning scheme without threatening associated rural and natural areas (Kim 2013). As a planning element, a UGB is one way to manage unplanned growth and urban sprawl that has historically encroached upon agricultural and rural lands (James et al. 2013). In addition, California passed the Williamson Act to discourage the conversion of agricultural land to other uses by reducing property taxes on qualifying land. The state reimburses local jurisdictions for a portion of the taxes that farmers and ranchers would otherwise have to pay (Onsted 2010). Farmers and ranchers enroll in Williamson Act contracts for a period of 10 years. The Williamson Act has been an important land management tool for close to half a century, and has successfully contributed to the conservation of agricultural lands, open spaces, and rural communities throughout the state (Wetzel et al. 2012).

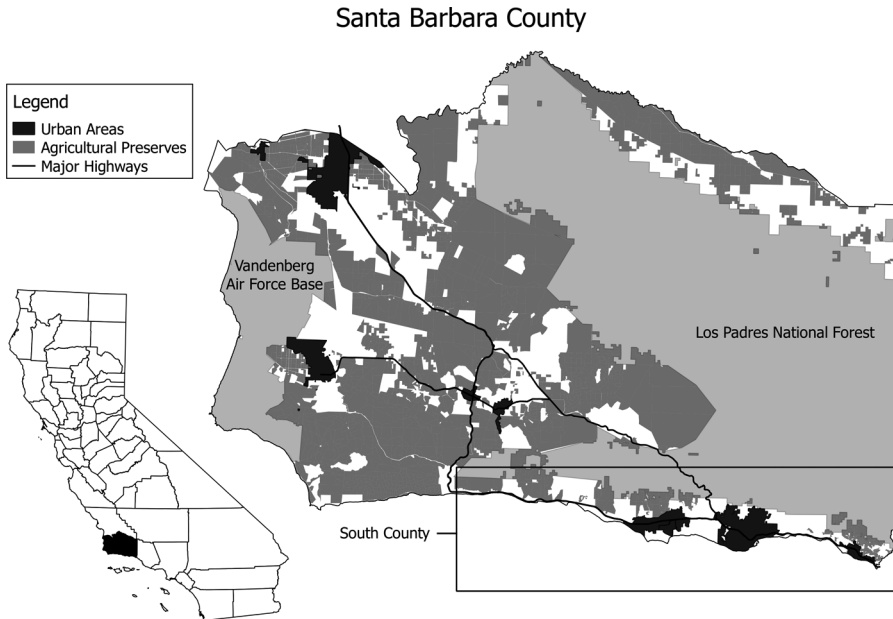
Research on public opinion regarding rural–urban issues generally falls into two groups. The first group reviews support for agriculture in general, and finds broad support for farmers, farming, and what is described as an “agrarian belief system” (Sharp and Adua 2009). This agrarianism has several elements—the belief that agriculture is a basic occupation on which all other people depend, the belief that agrarian life is satisfying and good, the belief in the virtue and inner nobility of farmers or yeomen, and the importance of family farms (Montmarquet 1989; Coughenour and Swanson 2002). Scholars show widespread support for these ideas, but they have also found that living in a rural area, growing up or living on a farm, and having ties with farmers are associated with higher levels of support for agriculture (Dalecki and Coughenour 1992). Visiting rural areas for recreation is also associated with support for farmers and farming (Willits and Luloff 1995; Sharp and Adua 2009).

The second group of studies focuses on specific agricultural issues and policies, including public opinion studies on the impacts of farming on soil conservation and water quality, as well as policies designed to preserve farms (Furusetth 1987; Molnar and Duffy 1988; Kline and Wichelns 1996; Harris and Bailey 2002; Sharp and Tucker 2005; Sharp and Adua 2009). According to these studies, living in a rural area, growing up or living on a farm, and having social contact with farmers are associated with support for farmers and trust in their ability to farm in environmentally friendly ways. Curiously, what most of these studies do not consider is the effect of people’s environmentalism on their attitudes toward farming and urban development.

### **The Case of Santa Barbara County, California**

SBC is an ideal area to study public opinion on conflicts over agricultural policies, land conservation, and urban development. Agriculture plays a major role in SBC in terms of resource use, employment and production. Figure 1 shows the agriculture and urban areas within SBC.

According to a 2007 census of agriculture, 41% of all land in the county is used for agriculture (U.S. Department of Agriculture [USDA] National Agricultural Statistics Service [NASS] 2009). In 2010, SBC agricultural production was valued



**Figure 1.** Map of Santa Barbara County showing urban and agricultural areas.

at \$1.22 billion, which placed it 13th of 58 counties in California. California is the most productive agricultural state in the United States (California Department of Food and Agriculture [CDFA] 2012). In terms of economic value, fruits, vegetables and nuts dominated (82%), with nursery products second (14%), and livestock, poultry and their products (along with apiary products) accounting for less than 3% of the country's agricultural production value (Santa Barbara County Agricultural Commissioner's Office [SBC ACO] 2011).

SBC's population is primarily urban. The 2010 Census reported a total of 152,834 housing units in SBC, of which 93.9% were in urban areas (87.9 inside urbanized areas, 5.9 inside urban clusters), and 6.1% in rural areas (U.S. Census Bureau 2012). Growth is a perennial topic in SBC, putting pressure for conversion of farmland and natural areas bordering urban populations. Since the 1950s there has been a steady conversion of farmland, especially prime farmland, to nonagricultural uses, mostly urbanization (Farmland Mapping and Monitoring Program [FMMP] 2013). Between 1954 and 2010 the urbanized area in SBC grew 554% from 9,600 to 62,762 acres, while prime farmland decreased 20% from 83,600 to 66,568 acres, and total farmland (including grazing land) decreased 12% from 801,689 to 706,934 acres.

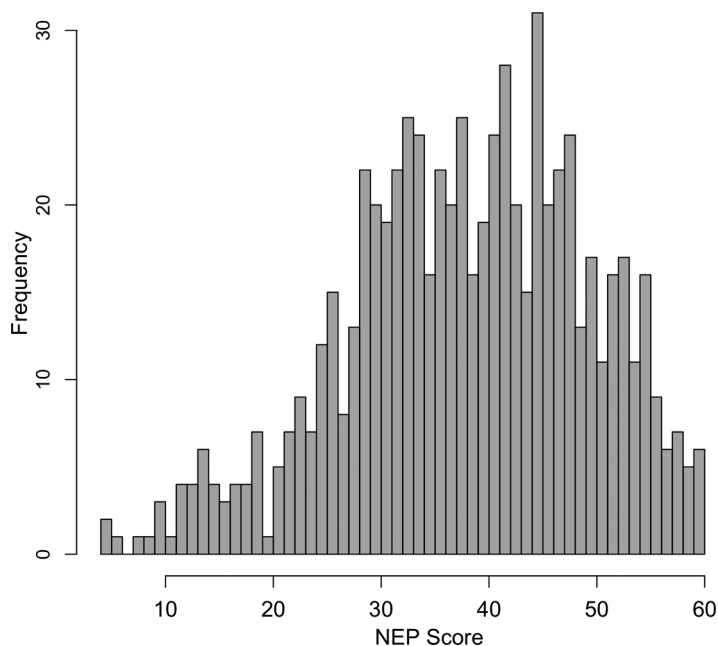
Disputes between environmentalists, farmers, and ranchers occur regularly in SBC (American Farmland Trust [AFT] 2007). One reason is that most of the county is divided from west to east by the Santa Ynez Mountain Range, which separates the more agricultural north from the more urbanized south. This division accentuates major political battles over open space and natural areas preservation, as well as agricultural practices affecting water quality, air pollution, and biodiversity. Given the geographical disconnect in this county, people tend to assume that there are large differences in public opinion between the two areas.

Based on our review of the literature and the situation in SBC, we propose two hypotheses: First, people with stronger environmental values are critical of many agricultural practices, but favor policies that prevent farms from being converted to housing. Second, people in southern SBC have stronger environmental values and less support for agriculture than people in northern SBC.

## Methods

To test our hypotheses, we use the Central Coast Survey, which was administered by telephone by the Social Science Survey Center/Benton Survey Research Lab at the University of California, Santa Barbara, between January 11 and March 1, 2010. Details of the survey are in the survey report (Cleveland et al. 2010). Participants were selected with random digit dialing of landlines, and respondents were limited to those at least 18 years of age. Interviews were conducted in both English and Spanish. In total, 2508 households were contacted, and 804 interviews were completed, a cooperation rate of 32%. As is common with telephone surveys, our sample slightly overrepresents older respondents and women. To make the descriptive frequency distributions more representative of SBC, we used age–gender weight based on 2010 U.S. Census data (U.S. Census Bureau 2012). We did not use the weights for the logit models.

The key independent variable in our analysis is the 15-item New Ecological Paradigm (NEP) Scale (Dunlap et al. 2000). The scale was originally published by Dunlap and Van Liere (1978), and was later revised as the New Ecological Paradigm Scale (Dunlap et al. 2000). The NEP has since become the most widely used survey



**Figure 2.** Distribution of New Ecological Paradigm Scale scores. This figure presents the distribution of NEP scores across the respondents in our survey. The median score was 39, the minimum score was 4, and the maximum score was 60.

measure of environmentalism (Hawcroft and Milfont 2010). The NEP was recently criticized by Amburgey and Thoman (2012), who argue that the index has five dimensions that should be used separately in any analyses. We choose to use the single index, rather than the five subscales (as do Bratt et al. 2014), because we need a single measure of environmentalism for our analysis.

The distribution of respondents' scores is shown in Figure 2. The scale ranges from 0 to 60 points, with higher scores indicating more pro-environmental views. In our survey, the NEP Scale had a Cronbach's alpha of .83, indicating a high reliability.

To assess the influence of people's environmental values on their views of agricultural policy, we analyzed responses to seven survey questions, which are our dependent variables. The first questions address public policies—(1) the Williamson Act, which provides property tax subsidies for farmers and ranchers to keep their land in agriculture; (2) charging lower water rates for agricultural use than for residential use; (3) requiring buffer zones around new residential developments that are adjacent to farmlands; and (4) two alternatives for building housing to accommodate SBC's growing population. The last question asks how people think farmers and ranchers treat our land, water, wildlife, and other natural resources. We describe these questions in detail in the following.

## **Results**

In this section we describe the distribution of answers to selected survey questions, and the results of estimating a set of models to examine variation in individual attitudes toward farmers, agricultural policy, and development.

### *Explanatory Variables*

We begin with the NEP scores, which are displayed in Figure 2. People in SBC hold a wide range of environmental views. The median NEP score of 39 indicates that the average respondent leans toward the environmentalist end of the spectrum. Contrary to stereotypes about differences between northern and southern SBC, the two regions are fairly similar. The South County mean is only 3 points more environmentalist than the North County mean, 40 versus 37. The difference is statistically significant, but relatively small.

The other explanatory variables in our analysis are intended to discover whether attitudes toward agriculture policies are influenced by personal connections with agriculture. We asked about proximity to farms or ranches, whether the farms or ranches had any negative effects on our respondents, and whether our respondents had friends or family in agriculture. The respondents' answers were likely to be based on some knowledge of agriculture, including their personal experiences. The questions were:

Proximity: "How close is your residence to the nearest farm or ranch?" [Less than 1 mile—32%; 1–2 miles—19%; 3–5 miles—19%; 5–10 miles—11%; >10 miles—12%; Don't know—7%]

Agricultural ties: "Are you or any of your family members or close friends in agriculture in any way, either as ranchers, farmers, or farm workers, or in jobs that do a lot of business with ranchers and farmers?" [Yes—35%; No—64%; Don't know—1%]



Negative agricultural impacts: “Do farms or ranches have any negative effects on people living at your residence? For example, dust or pesticide drift, noise, bad odors, or traffic? [Yes—14%; No—84%; Unsure—2%]

### ***Agricultural Policy***

About 75% of agricultural land in SBC is protected by the Williamson Act. The first of our agriculture policy questions was about the importance the Williamson Act: “In California, a law called the Williamson Act helps farmers by reducing their property taxes if they keep their land in agriculture. Do you think this is a good law or a bad law?” Our results show that SBC residents strongly supported the Williamson Act. Eighty-two percent said that it was a good law. Only 5% of residents opposed it. Another 3% indicated it was neither a good nor bad law, and 9% were unsure.

Our next question was about requiring buffers around new housing developments in rural areas adjacent to farms: “Some California counties require new housing developments next to agriculture to set aside buffers between housing and agriculture to protect farmers from the complaints of new home owners. Would you favor or oppose such a law in SBC?” Sixty-eight percent of respondents favored buffers to protect agriculture from complaints by new residential neighbors, 22% opposed them, 4% neither favor nor opposed them, and 7% were unsure.

Farms receiving untreated water in SBC are charged lower rates. We asked respondents about water prices for agricultural and other users:

“How do you think water prices should be set in SBC?

- Farmers should be charged lower rates for water than city dwellers and industry;
- Farmers should be charged the same rates for water as city dwellers and industry;
- Farmers should be charged higher rates for water than city dwellers and industry.”

A plurality of respondents, 44%, favored lower rates; 38% favored the same rates, 8% would charge farmers higher rates, and 10% said they had no opinion.

The next question was about urban growth boundaries: “Some people have suggested a new law that would make it harder to build more houses beyond the current boundaries of our cities and towns. The law would require that any new developments outside our current urban boundaries be put to a vote at the ballot box. New developments could only be built if the voters approved it in a county-wide election. Would you favor or oppose such a law?” With respect to our survey results, a majority of residents favored restrictions on urban growth; 62% supported a law that would make it harder to build more houses beyond the current urban boundaries; 28% opposed the law; 3% neither favored nor opposed it; and 8% were unsure.

Our last dependent variable is a question asking our respondents for their evaluations of the environmental behavior of farmers and ranchers:

“How do you think farmers and ranchers in SBC treat our land, water, wildlife and other natural resources?

- They are protecting our natural resources;
- They don’t have much effect on our natural resources;
- They are depleting our natural resources.”

Forty-eight percent of respondents agreed that farmers and ranchers were protecting our natural resources, 21% said that farmers and ranchers were not having much of an effect, and 13% that farmers and ranchers were depleting our resources; 18% were unsure.

Our first set of models examined attitudes towards agricultural policy—the Williamson Act, buffers between homes and agricultural land, firm urban boundaries, and lower water rates for farmers. We also examined individual perceptions of how farmers treat the land. All of these dependent variables were 3-point ordered scales, with the lowest category being negative (opposing the policy or thinking that farmers mistreat the land) and the highest category being positive (supporting the policy or thinking farmers care for the land). For each of these dependent variables we estimated an ordered logit, using the NEP and the agricultural experience variables as independent variables. The results are presented in Table 1.

We found that higher NEP scores were associated with higher support for policies to establish urban growth boundaries and urban–rural buffers, but also with less positive perceptions of farmers’ management of the land.

Respondents with ties to agriculture had more positive perceptions of farmers, and were more likely to support lower water rates for farmers. Respondents who have experienced negative side effects from local agriculture were more likely to have negative views of farmers, and oppose all of the policies that benefit agriculture except for the urban boundaries.

### ***Urban Expansion***

The other set of questions we analyzed were about options for building more housing in SBC. The first question was about building housing on “open space”: “Over the years several different plans for building housing in SBC have been proposed. Assuming the following three plans were the only alternatives, which would you most prefer?” Residents were presented with three hypothetical choices for a future development plan:

- Build higher density housing, such as multistory apartment buildings and condominiums, in undeveloped open spaces within existing city limits (“Build Up”).
- Build lower density housing, such as single-family homes, in undeveloped open spaces outside of existing city limits (“Build Out”).
- Do not build more housing (“Don’t Build”).

A small plurality of respondents preferred low-density housing (40%), followed by a preference not to build at all (33%), with high-density housing least popular (23%). There was a clear difference between North County and South County, with North County residents less supportive of high-density housing and more supportive of the “don’t build” option, while South County respondents were about evenly divided between these two options, with slightly more preferring high-density housing to not building at all. Latinos and lower income respondents were more supportive than other groups for building low-density housing in undeveloped open spaces, and were less supportive of high-density housing or not building.

The second question presented residents with the same three hypothetical choices, with one important exception: The development would take place on agricultural land rather than undeveloped open space. “What if instead of building in undeveloped open spaces, the plans called for building housing on agricultural land

**Table 1.** Influences of environmentalism and experience with agriculture on attitudes toward agricultural policies and farmers

Independent variables	Dependent variables					
	Williamson Act	Urban buffers	Urban boundaries	Water costs	Treatment of land	
New Ecological Paradigm Scale	0.01 (0.01)	0.04*** (0.01)	0.04*** (0.01)	0.003 (0.01)	-0.04*** (0.01)	
Agricultural proximity	-0.15 (0.12)	-0.01 (0.07)	-0.05 (0.07)	0.25*** (0.06)	0.05 (0.07)	
Agricultural ties	0.18 (0.33)	0.03 (0.20)	0.12 (0.19)	0.32* (0.18)	0.38* (0.20)	
Negative agricultural impacts	-0.64* (0.38)	-0.59** (0.26)	0.26 (0.27)	-1.03*** (0.26)	-1.56*** (0.27)	
Threshold low/middle	-3.12 (0.74)	0.02 (0.42)	0.70 (0.40)	-1.86 (0.41)	-3.29 (0.45)	
Threshold middle/high	-2.61 (0.73)	0.27 (0.42)	0.89 (0.41)	0.86 (0.39)	-1.79 (0.43)	
Number of observations	586	594	591	583	512	
LR $\chi^2$	5.55	26.89***	34.99***	33.25***	57.44***	

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ .

currently being used for farming? In that case, which of these three plans would you most prefer?” A clear majority of respondents across all ethnic, income, and political categories in both North County and South County oppose this type of development (59%), with a majority in each case supporting the “don’t build” option. This is consistent with the strong support for agriculture among our survey respondents.

The dependent variables examining development preferences for both questions were three category unordered questions (build up, build out, or don’t build). We estimated multinomial logits for responses to these questions, again using the NEP and the agricultural experience variables as independent variables, and normalizing all coefficients with respect to the “don’t build” option. The results are presented in Table 2.

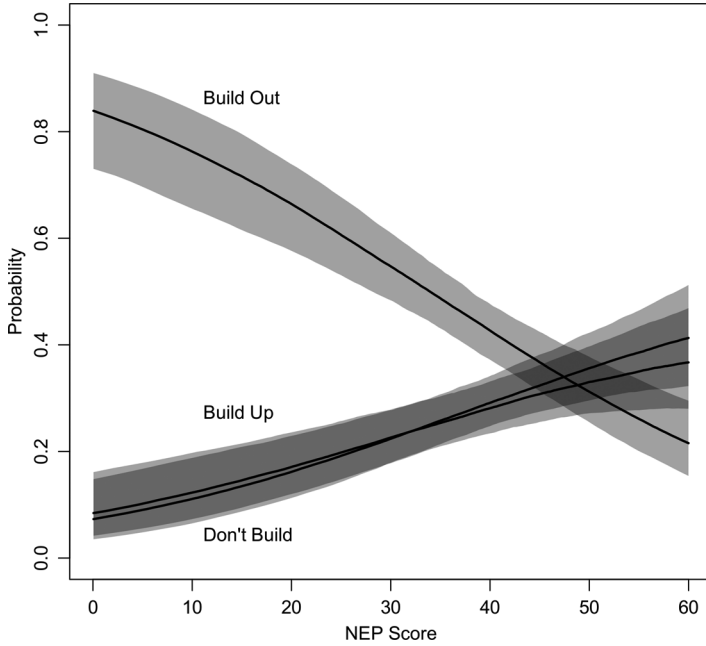
Individuals with higher NEP scores were more likely to favor the “don’t build” option over the “build out” option, for both open space and agricultural land. Individuals living closer to farms were more likely to favor the “don’t build” option over building single-family homes on agricultural land, and those with ties to the agricultural industry were more likely to oppose development on open land, as well as building single-family homes on agricultural land.

We also estimated the probability of selecting each of the three development options for open space (Figure 3) and agricultural land (Figure 4). Probabilities were calculated using Clarify (King, Tomz, and Wittenberg 2000), which takes multiple draws from the multivariate normal distribution defined by the coefficients and covariance matrix, calculates a probability for each draw, and then reports summary statistics for these probabilities.

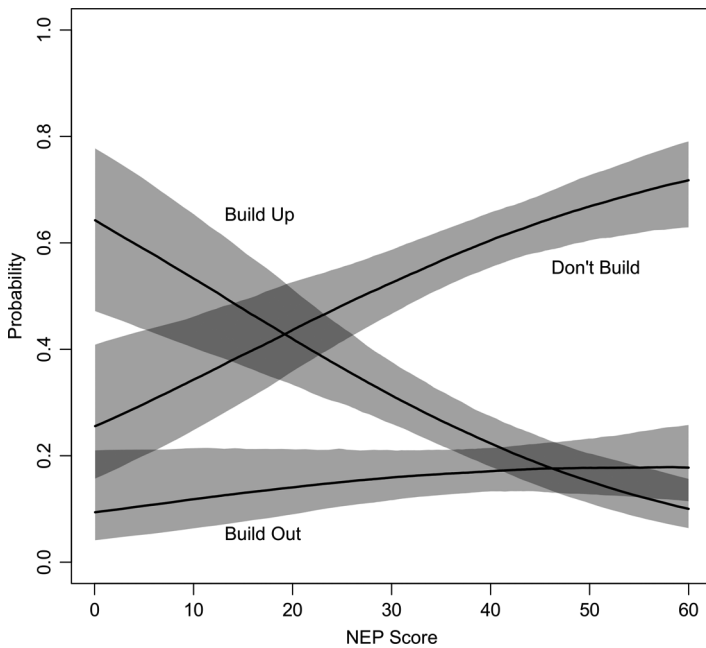
**Table 2.** Influence of environmentalism and experience with agriculture on development preferences

Independent variables	Development on open land		Development on agricultural land	
	Build up vs. don’t build	Build out vs. don’t build	Build up vs. don’t build	Build out vs. don’t build
New Ecological Paradigm Scale	−0.004 (0.01)	−0.05*** (0.01)	−0.01 (0.01)	−0.05*** (0.01)
Agricultural proximity	0.04 (0.08)	−0.02 (0.07)	0.05 (0.09)	−0.13* (0.08)
Agricultural ties	−0.41* (0.23)	−0.73*** (0.22)	−0.27 (0.26)	−0.52** (0.23)
Negative agricultural impacts	−0.35 (0.31)	−0.41 (0.29)	−0.22 (0.36)	−0.20 (0.31)
Constant	−0.02 (0.54)	2.53*** (0.48)	−1.25** (0.57)	−1.44*** (0.46)
Number of observations	603	603		
LR $\chi^2$	56.19***	38.82***		

*Note.* All coefficients are normalized with respect to the “don’t build” option.  
 \* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ .



**Figure 3.** Development preferences for open space by NEP scores. This figure presents predicted probabilities for a hypothetical case with all independent variables besides the NEP score set to their median values. Median probabilities and 95% confidence intervals are presented, calculated from 1001 simulations using draws from the covariance matrix of the coefficients.



**Figure 4.** Development preferences for agricultural land by NEP scores. This figure presents predicted probabilities for a hypothetical case with all independent variables besides the NEP score set to their median values. Median probabilities and 95% confidence intervals are presented, calculated from 1001 simulations using draws from the covariance matrix of the coefficients.

Figure 3 reveals that as an individual's NEP score increases, the probability of supporting the construction of single-family homes on open space (the "build out" option) declines rapidly. At the same time, the probability of supporting greater urban density or not building increases, with similar probabilities for both options. Figure 4 reveals a similar pattern for the "build out" option, but with opposition to development on agricultural land ("don't build") increasing rapidly to higher levels as the NEP score increases, with the probability of favoring the "build up" option remaining low.

## **Discussion**

To our knowledge, our use of the NEP represents one of the first efforts to explain public opinion on public policies governing agriculture. The NEP has been used to assess the extent of environmental worldviews (Steger et al. 1989; Mayer and Frantz 2004; Schultz et al. 2004) or to help explain pro-environmental behavior (e.g., Stern, Dietz, and Guagnano 1995; Clark, Kotchen, and Moore 2003; Kotchen and Moor 2007). It has also been used to explain risk perception (e.g., Traill et al. 2004; Slimak and Dietz 2006), and attitudes toward various environmental problems (Hunter and Rinner 2004; Palmgren et al. 2004). This is the first study that uses the NEP to help explain variation in attitudes toward agricultural policies.

The results supported our first hypothesis. People who scored more highly on the NEP were critical of farmers and ranchers in believing they were not protecting natural areas as strongly as they should. However, they were also more likely to favor buffers around new housing developments to protect farms, a strong urban boundary planning tool, and no housing development that encroaches on open space and farmland. They were more likely to favor the "don't build" option over the "build out" option, for both open space and agricultural land. Although they were also not more likely to favor giving farmers and ranchers help with their property taxes if they kept their land in agriculture (i.e., the Williamson Act), given that 82% of our respondents favored the Williamson Act and only 5% opposed it, it is fair to say that environmentalists overwhelmingly support this policy. These results suggest that environmentalists support agriculture because they view it as a better option than development, not because they value it per se.

What could explain this association between strong environmental attitudes and criticism of agriculture's environmental effects, and support for conserving farmland in opposition to urban expansion? One possibility is that respondents were differentiating between mainstream industrial agriculture and more environmentally sustainable local, alternative agriculture. There has been a dramatic increase in urbanites' interest in local food, and it is the smaller farms in and adjacent to expanding cities that tend to supply a disproportionate amount of local food via farmers markets, community-supported agriculture (CSAs), and local distribution hubs that are most threatened by expanding cities. People tend to assume that this local food is much better for the environment than food produced by large-scale industrial agriculture (Cleveland, Carruth, and Mazaroli 2015). Our survey respondents overwhelmingly supported local food, with 89 and 91% in North County and South County respectively seeing buying local produce all, most, or some of the time as important, and 42 and 51% in North County and South County respectively reporting purchasing local food once a week (Cleveland et al. 2010). Yet while there is a strong organic farming element and local food movement in SBC, it is relatively small, with sales of

USDA-certified or exempt organically produced commodities accounting for only 2.9% of total sales in SBC in 2012 (calculated from data in USDA NASS 2014), and in 2008 less than 5% of produce consumed in SBC was grown in the county, while 99% of the produce grown in SBC was exported out of the county (Cleveland et al. 2011). Large-scale conventional agriculture dominates SBC.

Our results provide only partial support for our second hypothesis. While SBC residents hold a wide range of environmental views, they lean toward the pro-environmental end of the spectrum in both northern and southern SBC, and a majority in both regions support not building on agricultural land. However, there is a clear difference regarding building on open space, with residents in the north less supportive of high-density housing and more supportive of the “don’t build” option, while those in the south are about evenly divided between these two options, with slightly more preferring high-density housing to not building at all.

## Conclusion

Our survey results suggest that people with stronger pro-environment views support preventing agricultural land from being converted to housing, but that they are also critical of agriculture’s negative environmental effects. While these findings are certainly of academic interest, they are also of practical political importance. The agricultural community and environmentalists are often at odds over a variety of policies. Yet there are clearly opportunities for alliances as well, and there is growing support globally including in the United States for urban and peri-urban agriculture that serves multiple functions, and for laws and regulations facilitating mutually beneficial relationships—for example, in Europe (Zasada 2011; Paül and McKenzie 2013), Australia (Ives and Kendal 2013), and Africa (Vermeiren et al. 2013). Our general findings from the survey indicate that the urban-perceptual divide is waning, and that alliances that cut across a region’s diverse landscapes are hopeful responses to strengthen the connection and linkage across agriculture and urban areas.

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