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# Impacting Agriculture and Natural Resource Policy: County Commissioners' Decision-Making Behaviors and Communication Preferences

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# Impacting Agriculture and Natural Resource Policy: County Commissioners' Decision-Making Behaviors and Communication Preferences


## Abstract

Elected officials at the local, state, and national levels play key roles in shaping the agriculture and natural resources (ANR) sectors through the development and implementation of ANR policies and regulations. As such, it has become necessary for members of the ANR community to understand the policy formation process and how to communicate effectively with elected officials about ANR policies and issues. However, little research has been conducted at the local level to examine how local elected officials (LEOs) interact with information specific to ANR policies to make decisions. This study was designed to assess the communication and information-seeking preferences and behaviors of LEOs that impact their decisions about ANR issues and policies. Of the sources of communication considered by LEOs when making ANR policy decisions, respondents in this study identified communication from farmers and ranchers as having the highest impact on their decision-making. This finding supports the use of farmers and ranchers as opinion leaders in impacting ANR policies. LEOs in this study also reported they would seek factual information from multiple sources to understand the positive or negative impact of the ANR policy before voting on the ANR issue.



## Keywords

agriculture and natural resources, communication, county commissioners, policymaking

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## Introduction

Elected officials at the local, state, and national levels create policies and make decisions that significantly shape the agriculture and natural resources (ANR) sectors (Effland, 2000; (Florida Farm Bureau, 2018; Salazar, 2015). As such, it is important that ANR organizations and individuals understand the policy formation process and are able to engage with elected officials (Effland, 2000). Policy engagement by ANR persons can be particularly productive at the local level as the local political environment is intended to be one in which community members can engage in the policy process through active citizenship more easily than at the national level (Lowndes, Pratchet, & Stoker, 2006; Pattie, Seyd, & Whiteley, 2004). Local policymakers (e.g. city and county commissioners) and state legislators make policy for specific localities, i.e., municipalities, counties, and states, thus positioning such officials to have significant impact in their area(s) (Hanson, 1998). Local elected officials (LEOs), which is the policymaker group of focus in this study, function as part of the larger political system through their responsibilities to make informed decisions about policies that impact their local constituents (Hanson, 1998; Vogelsang-Coombs & Miller, 1999).

The responsibilities of LEOs are complex and demanding as they are bound not only by governances of the position, but also by relationships with and responsibilities to their constituents (Vogelsang-Coombs & Miller, 1999). LEOs are often elected through their personal contacts and ties to their communities, rather than their professional knowledge (Berry, Markee, Stewart, & Giewa, 1996). As such, LEOs primarily contribute to local government not through their technical expertise, but through their abilities to foster public support for policy changes that reflect community values (Berry et al., 1996).

Communicating concerns to elected officials and voting populations can be effective in influencing policy decisions. In 1968, Napa County, California, zoned 23,000 acres with an agricultural designation for wineries, agricultural operations, and homes on 20-plus acre parcels. County voters concerned about urban sprawl voted to limit population growth in the area by requiring a countywide vote for any future changes regarding zoning in the preserve. These efforts allowed Napa County to become a famous agro-tourism destination (Daniels, 2018). Such circumstances provide example of the need to examine the process of how ANR policies are put into place, including how county commissioners prepare to vote on ANR policies and factors that impact their decision-making when making decisions about those policies.

The agricultural industry in Florida is substantial, accounting for roughly $4 billion in U.S. exports from more than 47,000 farms that span nearly 9.5 million acres (Florida Department of Agriculture and Consumer Services [FDACS], 2018). Policy decisions made by county commissioner boards or other LEOs in Florida can significantly impact the production practices and revenue of local agricultural operations. For example, conversion of farmlands for non-agricultural use has posed challenges for local food production systems across the United States (Francis et al., 2012). While federal support programs can help preserve available farmland, it is largely the function of state and county governments and planning offices to apply farmland protection mechanisms to local contexts (Francis et al., 2012). The rezoning of agricultural land has been particularly noteworthy in Florida, due to its popularity as a destination to live and/or vacation (Wershow, 1960; Onsted, Ogden, & Chowdhury, 2009). For example, the Palm Beach Board of County Commissioners (2017) rezoned approximately 38 acres in the county from agriculture residential to mixed development. The change in zoning was approved by six of the seven county commissioners and resulted in agricultural land being taken out of production (Palm Beach Board of County Commissioners, 2017).

Despite the significant impact LEOs can have on ANR policies and the need to communicate and share ANR information with them, little research has been conducted to examine how LEOs interact with information specific to ANR policies, how they prepare to vote on ANR policies, and how they prefer to be communicated to by their constituents. This study was designed to describe the communication and information-seeking behaviors of LEOs in the position of county commissioner and identify factors that may impact their decisions about ANR issues and policies.

## Conceptual Framework and Review of Literature

Much of the available literature in policymaking has not included research conducted to examine LEOs' decision-making and information-seeking behaviors specific to the ANR context. However, policymaking research conducted in other context areas may be transferrable the context of this study, as well as be used to provide a framework for examining or explaining LEOs' ANR policy decisions and behaviors. Brownson et al. (2006) published a synthesis of literature about the roles elected officials play in public heath policy and identified several characteristics of the decision-making process of elected officials, including their incentives, influential opinion leaders, their knowledge span, the type of data they rely upon, and their preferred methods of receiving information. The researchers suggested that the primary decision-making incentives for policymakers to enact or deny policies are recognition and their chances for future election or re-election. The researchers identified civic leaders, contributitors, and political leaders as important opinion leaders who have influence on the decision-making process of policymakers. The researchers also referenced the tendency for policymakers to have "less in-depth knowledge on a wide array of issues". Four main criteria were laid out by the researchers that identify what policymakers look for in data when making decisions about how to vote on issues: (1) public support is exhibited, (2) data demonstrates "priority" over other issues, (3) data exhibits local (voting district) relevance, and (4) data contains a storytelling component that personalizes the issue to represent those involved.

As LEOs are more likely to be elected due to their personal relationships within their surrounding community (Berry et al., 1996), communication from local constituents and organizations may be able to significantly impact the decisions of LEOs. Further, the opinion leaders in this context are likely to be local civic leaders, community members, or other local contributors (Brownson et al, 2006; Lowndes et al., 2006). LEOs are also responsible for acquiring the knowledge needed to make informed decisions. However, the overwhelming amount of information policymakers process to make decisions can make it extremely difficult for policymakers to absorb all information needed for them to make informed decisions (Cairney & Kwiatkowski, 2017). Further, this demand placed on policymakers to review an immense amount of information often causes them to use shortcuts, or heuristics, to help make decisions quickly. These decisions are based on "irrational" decisions, meaning the policymaker processes the information quickly and utilizes heuristics that appeal to his or her gut feelings, familiarity, emotions, habits, beliefs, and values (Cairney & Kwiatkowski, 2017). Employing heuristics allows a person to collect only the amount of information he or she perceives is needed to make decisions (Kam, 2005).

People often rely on heuristics, or visual cues, to process the overwhelming amount of information they need to make decisions (Petty & Cacioppo, 1986). Heuristics appear in all forms in the political arena, including party cues and celebrity endorsements (Kam, 2005). When examining how LEOs process information, it is important to consider that the term *celebrity* in

the local context takes on a different meaning than in a global context. Ferris (2010) defines a local celebrities as "people who are well-known in smaller, more circumscribed worlds." Strategic messengers, such as local celebrities, may thus be effective in sharing information with policymakers. In addition, messengers that appeal to the LEO being communicated to, or messengers that have existing relationships with the LEO, may have the most effective impact when conveying information (Cairney & Kwiatkowski, 2017). Elected officials more often trust information from individuals or organizations with whom they share common characteristics, such as values, beliefs, and backgrounds (Mooney, 1991; Jackson-Elmoore, 2005).

While a large amount of research related to ANR issues has been made publicly available through land-grant universities across the United States, scientists have faced many challenges when trying to communicate research to various policymakers (Brownson et al., 2006; Cairney & Kwiatkowski, 2017; Dodson, Geary, & Brownson, 2015; Treise & Weigold, 2002). Previously identified barriers to the successful translation of research into policy include personal demands of policymakers, information overload, lack of access to relevant research, ambiguity of scientific findings, and poor timing in the communication of research to inform policy (Brownson et al., 2006; Cairney & Kwiatkowski, 2017; Gregrich, 2003; Oliver, Innvar, Lorenc, Woodman, & Thomas, 2014; Shanley & Lopez, 2009).

In a study conducted to examine the dissemination of research findings to elected officials, Gregrich (2003) found policymakers often faced scarce resources, such as funding and staff, which may not be taken into account when research findings are reported. As a result, elected officials can become overwhelmed by the amount of information available and struggle to implement research into problem-solving approaches (Cairney & Kwiatkowski, 2017; Gregrich, 2003). Moreover, Stoker and John (2009) concluded policymakers sometimes dismiss research because it is not available in a format usable and easily understood in the timeframe needed to make a decision. Scientists often use words that are difficult for non-academic professionals to interpret or language that does not resonate with other audiences (Brownson et al.,2006; Treise & Weigold, 2002; Lundy, Ruth, Telg, & Irani, 2006).

Poor timing in the communication of scientific findings poses a challenge to the translation of research into policy in that political and social circumstances may not coincide with research findings about a particular issue (Brownson et al., 2006). Research often progresses across an extended period of time from initiation of the research to the presentation of findings, whereas policy moves quickly and involves frequently election or re-election of officials (Brownson et al., 2006). When policymakers are engaged throughout the scientific process, however, they are much more likely to apply research findings to the policy decision-making process (Stoker & John, 2009). In the context of this study, communicating ANR information to LEOs may be more effective when messages are framed in a way that appeals to the LEO's interests, corresponds with a societal problem they have the ability to solve, and can be easily accessed and understood (Cairney & Kwiatkowski, 2017).

It is also important to consider how LEOs identify trustworthy sources of information. Haynes et al. (2012) examined how Austrailian policymakers identified credible and trustworthy sources of information and found policymakers valued three key attributes when identifying trustworthy sources: (a) competence, the key communication and collaborative skills coupled with a reputation for academic apptitude possed by researchers (b) integrity, the genuine, ethical, and devoted reporting of research and (c) benevolence, the researcher's dedication to policy reform. (Haynes et al. (2012) also noted policymakers prefer face-to-face meetings with experts (scientists or other knowledgeable sources) instead of reading research or reports, especially

when policymakers are under tight deadlines to make policy decisions. Brownson et al. (2006) listed "news media, staff, and colleagues" as the most common sources of information utilized by policymakers.

## Purpose and Objectives

The purpose of this study was to examine Florida county commissioners' decision-making and information-seeking behaviors and preferences when making decisions about agricultural and natural resources (ANR) policies. Four objectives guided this study:

1. Describe how Florida county commissioners prepare to vote on a policy that impacts ANR sectors;
2. Describe Florida county commissioners' perceived trustworthiness of select sources for obtaining information about ANR issues;
3. Describe the extent to which select sources of communication impact Florida county commissioners' decision-making when making ANR policy decisions;
4. Identify Florida county commissioners' preferred methods of being communicated to by their constituents.

## Methodology

### Population and Sample

The population for this study consisted of all Florida county commissioners who had a viable email at the time the study was conducted during spring 2018 ($N$ = 285). Responses were collected from 59 of the 285 county commissioners with a viable email address for a 21% response rate. Due to the inability to obtain an adequate sample of non-respondents for comparisons, nonresponse bias was assessed by comparing early to late respondents (Miller & Smith, 1983). This method has been used frequently in agricultural education research (Lindner, Murphy, & Briers, 2003; Johnson & Shoulders, 2017), as well as been identified as appropriate for addressing nonresponse based on the assumption that late respondents are similar to non-respondents (Burkell, 2003; Lindner et al., 2003). A two-tailed independent $t$-test was used to determine if statistically significant differences existed at the .01 alpha level between early respondents (those responding prior to the third email; $n$ = 42) and late respondents ($n$ = 17) on the construct variable of interest in this study, county commissioners' voting preparation. There was no significant difference between early ($M$ = 4.45, $SD$ = .53) and late ($M$ = 4.25, $SD$ = .46) respondents, $t(52) = 1.25$; $p$ = .217. An online survey questionnaire was developed by the researchers for the purpose of this study. The questionnaire was reviewed for face and content validity by an expert panel consisting of three agricultural communications faculty members, executive directors from three Florida agricultural organizations, an agricultural organization's policy director, a communication director, and one leadership organization director. Revisions were made to refine the inclusion and wording of questionnaire items, as well as to include the neutral midpoint in some response scales for this particular population. The panel deemed the final instrument acceptable. Post hoc reliability estimates for constructs were calculated using Cronbach's alpha. Possibly due to the busy schedules of government officials, the researchers were unable to attain a sample of the population willing to complete the questionnaire twice for test-retest purposes. As such, reliabilities of individual construct items were not assessed. This is a limitation of the study that should be considered when making generalizations to the population of interest.

Four sections of the questionnaire were used for data analysis in this study. The first section was designed to assess how county commissioners prepare to vote on ANR policies. Respondents were asked to indicate their level of agreement with six items such as "when

preparing to vote on a policy that impacts agriculture and natural resources, I would seek factual information." Responses were collected on a five-point Likert-type scale: 1 = *strongly disagree;* 2 = *disagree;* 3 = *neither agree nor disagree;* 4 = *agree;* and 5 = *strongly agree*. Real limits were set for the interpretation of responses: 1.00 to 1.49 = *strongly disagree;* 1.50 to 2.49 = *disagree*; 2.50 to 3.49 = *neither agree nor disagree;* 3.50 to 4.49 = *agree;* and 4.50 to 5.00 = *agree strongly*. The internal reliability for this scale was $\alpha = .80$.

The second section of the questionnaire measured county commissioners' perceived trustworthiness of sources for gathering information about ANR issues. Respondents were asked to indicate the degree of trustworthiness they associated with 19 information sources. Responses were collected on a five-point Likert-type scale: 1 = *very untrustworthy;* 2 = *untrustworthy;* 3 = *neither trustworthy nor untrustworthy;* 4 = *trustworthy;* and 5 = *very trustworthy*. Real limits were set for the interpretation of responses: 1.00 to 1.49 *very untrustworthy;* 1.50 to 2.49 = *untrustworthy*; 2.50 to 3.49 = *neither trustworthy nor untrustworthy;* 3.50 to 4.49 = *trustworthy;* and 4.50 to 5.00 = *very trustworthy*.

The third section of the questionnaire included four items to assess factors that impact county commissioners' decision-making when making decisions about ANR policies. Respondents were asked to indicate the degree of impact factors such as "communication from a farmer or rancher" would have on their decision-making about an ANR policy. Responses were collected using a five-point Likert-type scale: 1 = *no impact;* 2 = *slight impact;* 3 = *moderate impact;* 4 = *high impact;* and 5 = *very high impact*. Real limits were set for the interpretation of responses: 1.00 to 1.49 = *no impact;* 1.50 to 2.49 = *slight impact*; 2.50 to 3.49 = *moderate impact;* 3.50 to 4.49 = *high impact;* and 4.50 to 5.00 = *very high impact*.

The fourth section measured county commissioners' preferences regarding the methods used by constituents to communicate information to them. Respondents were asked to indicate their degree of preference for five methods of communication, including face-to-face, phone or conference call, email, written letter, and social media platforms. Respondents who indicated any degree of preference for being communicated to via social media were then asked to indicate their preference of select social media platforms (e.g. Facebook, Twitter). Responses were collected using a five-point Likert-type scale: 1 = *not at all preferred;* 2 = *slightly preferred;* 3 = *moderately preferred;* 4 = *very preferred;* and 5 = *extremely preferred.* Real limits were set for the interpretation of responses. 1.00 to 1.49 = *not at all preferred;* 1.50 to 2.49 = *slightly preferred*; 2.50 to 3.49 = *moderately preferred;* 3.50 to 4.49 = *very preferred;* and 4.50 to 5.00 = *extremely preferred.*

Florida county commissioners' emails were obtained from an online search. A modified approach to the Tailored Design Method (Dillman, Smyth, & Christian, 2009) was used to collect responses from Florida county commissioners over a period of four weeks. The initial email to county commissioners included a description of the study, consent protocol, and a link to the online questionnaire. Follow-up reminder emails were sent once a week for three weeks to county commissioners who had not yet responded. Due to low response, a fourth and final reminder was distributed two weeks following the fourth email. Descriptive statistical analyses were employed for all objectives in this study.

County commissioners who participated in this study were predominately male ($f = 34$; 58%), white ($f = 45$; 76%), and earned \$150,000 to \$249,999 ($f = 17$; 29%) or \$75,000 to \$149,999 ($f = 16$; 27%) annually. In addition, participants held conservative ($f = 23$; 47%) or moderate ($f = 11$; 22.4%) political beliefs and were affiliated with the Republican party ($f = 35$; 70%). More participants lived in a rural area/not a farm ($f = 18$; 31%) or subdivision in a town or

city (*f* = 17; 29%) than any other type of residential area. Lastly, participants had been involved in agriculture in the past (*f* = 14; 24%) or had never been in agriculture nor had an immediately family member who is/was involved in agriculture (*f* = 13; 22%). Nine (15%) participants were currently involved in agriculture for a living.

## Results

### Objective One: How county commissioners prepare to vote on a policy that impacts ANR sectors

Objective one was to describe how Florida county commissioners prepare to vote on ANR polices. Respondents indicated strongest agreement with the statements, "I would seek information from multiple sources", (*M* = 4.57, *SD* = .536; see Table 1) and "I would consider both the positive and negative implications that could result" (*M* = 4.54, *SD* = .605). Respondents indicated the lowest agreement with the statements, "I would ask others for their opinions on the matter," (*M* = 4.17, *SD* = .795) and "I would discuss my opinions with others" (*M* = 4.09, *SD* = .875). County commissioner responses were *agree* to *strongly agree* for all statements associated with objective one.

**Table 1**

*Florida county commissioners' agreement with statements regarding how they prepare to vote on ANR policies*

| Item | *M* | *SD* | Interpretation |
|---|---|---|---|
| I would seek information from multiple sources. | 4.57 | .536 | Strongly agree |
| I would consider both the positive and negative implications that could result. | 4.54 | .605 | Strongly agree |
| I would seek to fully understand the policy. | 4.52 | .574 | Strongly agree |
| I would seek factual information. | 4.50 | .771 | Strongly agree |
| I would ask others for their opinion on the matter. | 4.17 | .795 | Agree |
| I would discuss my opinions with others. | 4.09 | .875 | Agree |

*Note:* Real Limits: 1.00 to 1.49 = *Strongly disagree*, 1.50 to 2.49 = *Disagree*, 2.50 to 3.49 = *Neither agree nor disagree*, 3.50 to 4.49 = *Agree*, 4.50 to 5.00 = *Strongly agree*

### Objective Two: County commissioners' perceived trustworthiness of select sources for obtaining information about ANR issues

Objective two was to describe Florida county commissioners' perceived trustworthiness of select sources for gathering information about ANR issues. Respondents did not perceive any of the sources listed as being *very trustworthy*. Agriculture specialists (*M* = 4.13; *SD* = .75), [University] services (*M* = 3.98; *SD* = .92), and technical reports (*M* = 3.96; *SD* = .82) were seen as the most trustworthy of the listed sources (see Table 2). Social media (*M* = 2.37; *SD* = .85) and national cable TV news channels (*M* = 2.44; *SD* = .85) were perceived to be untrustworthy.

**Table 2**

*Florida county commissioners' perceived level of trustworthiness of sources for gathering information about ANR issues*

| Source | *M* | *SD* | Interpretation |
|---|---|---|---|
| Agriculture specialists | 4.13 | .75 | Trustworthy |
| [University] services | 3.98 | .92 | Trustworthy |
| Technical reports | 3.96 | .82 | Trustworthy |

| | | | |
|---|---|---|---|
| Fact sheets | 3.93 | .84 | Trustworthy |
| Peer-reviewed journal articles | 3.81 | 1.01 | Trustworthy |
| Seminars or conferences | 3.80 | .83 | Trustworthy |
| Community events | 3.73 | .95 | Trustworthy |
| State agriculture and natural resource organizations/agencies | 3.70 | .86 | Trustworthy |
| Federal agriculture and natural resource organizations/agencies | 3.50 | .86 | Trustworthy |
| Magazines | 3.16 | .76 | Neither |
| Local TV news channels | 2.93 | 1.05 | Neither |
| News radio channels | 2.91 | .78 | Neither |
| Newspaper | 2.85 | 1.04 | Neither |
| TV news programs (not news) | 2.80 | .85 | Neither |
| Internet news sources | 2.63 | .81 | Neither |
| Lobbyists | 2.60 | .81 | Neither |
| National network TV news channels (ABC, CBS, NBC, etc.) | 2.49 | 1.07 | Untrustworthy |
| National cable TV news channels (Fox News, MSNBC, CNN, etc.) | 2.44 | .85 | Untrustworthy |
| Social media | 2.37 | .85 | Untrustworthy |

*Note:* Real Limits: 1.00 to 1.49 = *Very untrustworthy*, 1.50 to 2.49 = *Untrustworthy*, 2.50 to 3.49 = *Neither trustworthy nor untrustworthy*, 3.50 to 4.49 = *Trustworthy*, 4.50 to 5.00 = *Very trustworthy*.

**Objective Three: Extent to which select sources of communication impact Florida county commissioners' decision-making when making ANR policy decisions**

Objective three sought to determine the extent to which communication from select sources impacted Florida county commissioners' decision-making when making decisions about ANR policies. Of the sources provided, respondents identified communication from a farmer or rancher impacted by the proposed policy ($M$ = 3.77; $SD$ = .954) and scientific information from a university regarding the potential impact of the proposed policy ($M$ = 3.61; $SD$ = .878) as those that would have a high impact on their decision-making about an ANR policy. Respondents identified communication from a president/director of an agricultural association ($M$ = 3.41; $SD$ = .836) and constituents other than agricultural organizations or farmers/ranchers ($M$ = 2.92; $SD$ = .944) as having only a moderate impact on their decision-making about an ANR policy.

**Objective Four: County commissioners' preferred methods of being communicated to by their constituents**

Objective four was designed to examine how county commissioners preferred constituents communicate information to them. Respondents most preferred to be communicated to via face-to-face scheduled meetings ($M$ = 3.58; $SD$ = .949) and email ($M$ = 3.51; $SD$ = 1.012; see Table 4). Social media platforms ($M$ = 2.02; $SD$ = 1.118) were the least preferred of the communication methods.

Table 4
*Florida county commissioners' preferences regarding how constituents communicate information to them (N = 53)*

| Item | *M* | *SD* | Interpretation |
|---|---|---|---|
| Face-to-face scheduled meeting | 3.58 | .949 | Very preferred |
| Email | 3.51 | 1.012 | Very preferred |
| Phone or conference call | 3.11 | .974 | Moderately preferred |
| Written letter | 2.98 | 1.000 | Moderately preferred |
| Social media platforms | 2.02 | 1.118 | Slightly preferred |

*Note:* Real Limits: 1.00 to 1.49 = *Not at all preferred*, 1.50 to 2.49 = *Slightly preferred*, 2.50 to 3.49 = *Moderately preferred*, 3.50 to 4.49 = *Very preferred*, 4.50 to 5.00 = *Extremely preferred*

Respondents who indicated some degree of preference (slightly, moderately, very, or extremely preferred) for being communicated to via social media were then asked to indicate their preferences for specific social media platforms. Respondents identified Facebook (*M* = 3.04, *SD* = 1.290) as the most preferred social media platform. Other social media platforms were significantly less preferred: Twitter (*M* = 1.68; *SD* = 0.983); Google+ (*M* = 1.67; *SD* = 0.961); LinkedIn (*M* = 1.48; *SD* = 0.849); YouTube (*M* = 1.44; *SD* = 0.641); Pinterest (*M* = 1.26; *SD* = 0.594); Instagram = (*M* = 1.26; *SD* = 0.526); Snapchat (*M* = 1.19; *SD* = 0.526); Tumblr (*M* = 1.15; *SD* = 0.456); and Buzzfeed (*M* = 1.12; *SD* = 0.431).

## Conclusions, Discussion, and Recommendations

When preparing to vote on an ANR policy, Florida county commissioners reported they would seek information from multiple sources, consider both positive and negative implications, seek to understand the policy fully, and seek factual information. Regarding the trustworthiness of select sources, county commissioners perceived agricultural specialists, University of Florida Institute of Food and Agricultural Sciences ([University]) services, and technical reports as the most trustworthy sources of ANR information. Social media and national cable TV news channels were perceived to be untrustworthy. While the findings of this study suggest Florida county commissioners employ considerable effort prior to voting on ANR policies, it should be cautioned that self-reported bias regarding how county commissioners believed they should respond is a possibility. Therefore, it is recommended that follow-up qualitative research be conducted with Florida county commissioners to gain further insight into their process for preparing to vote on ANR policies.

Based on the findings with the assumption of minimal bias in self-reporting, it is recommended that those seeking to inform Florida county commissioners about an ANR issue do so by providing factual information from multiple sources. In addition, constituents should provide technical reports from agricultural specialists and/or from universities. Considering the vague nature of the term *agricultural specialists*, qualitative research should be conducted with county commissioners to determine who they consider agricultural specialists and what agricultural specialists they have utilized most often in the past. It may be beneficial to also include in such qualitative inquiry questions regarding what county commissioners consider *factual* information. Future research should also be conducted to examine why social media was perceived by Florida county commissioners as the least trustworthy source of ANR information. Moreover, studies of this nature could employ an experimental design to determine if the source of the social media page or posts (i.e. social media posted by agricultural specialists or the

university, rather than news sources or non-agricultural persons) has an effect on how county commissioners perceive and interact with the content posted.

Regarding the impact of sources on their decision-making, Florida county commissioners in this study identified communication from farmers and ranchers impacted by a proposed policy and scientific information from the university about the potential impact of a proposed policy as those who would most impact their decision making. As suggested in prior literature (Berry et al., 1996), LEOs are often elected because of their ties and ability to represent a community's values. The findings of this study support the use of farmers and ranchers as opinion leaders in facilitating change in ANR policy and regulations. As such, leaders of ANR organizations or Extension personnel should communicate these findings to the ANR members with whom they work to demonstrate the impact they can have on county commissioners' decision-making about ANR policies. LEOs in this study and others prefered information be delivered in a storytelling format from those directly involved with issues (Brownson et al, 2006). It is recommended that farmers and ranchers be instructed on how to deliver their personal stories effectively to LEOs. Further, farmers and ranchers could be considered local celebrities (Ferris, 2010) and, therefore, have the potential to serve as a heuristic that expidites the decision-making process for LEOs. To prepare farmers or ranchers to communicate with county commissioners, they should be instructed on how to frame the information in a way that demonstrates how the proposed policy could negatively or positively impact them as a member of the ANR community.

In addition to farmers and ranchers, University of Florida faculty members in ANR departments should seek to share scientific information with county commissioners in the state. However, while not directly within the scope of this study, prior research has identified several barriers to the dissemination of scientific research to policymakers of which faculty members should be aware. Prior literature supports the use of scientific information that is concise and easily digestible when sharing with policymakers (Brownson et al., 2006; Cairney & Kwiatkowski, 2017; Telg et al., 2006). Considering county commissioners' perceived trustworthiness of technical reports, efforts should be made in future practice to deliver reports to county commissioners that are easy for nonscientists to comprehend and make use of (Telg, et al., 2006).

Regarding preferred methods of communication, county commissioners in this study most preferred to be communicated to via face-to-face scheduled meetings. County commissioners least preferred to be communicated to via social media. To ensure favorable ANR policy decisions at the county level, it is recommended that farmers and ranchers, university scientists, or other agricultural specialists email county commissioners directly to share their concerns, opinions, knowledge, and personal stories regarding the policy or issue.

## References


Berry, K. A., Markee, N. L., Stewart, M. J., & Giewat, G. R. (1996). County commissioners' water knowledge. *American Water Resources Association, 32*(5), 1089–1099. doi:10.1111/j.1752-1688.1996.tb04076.x

Brownson, R., Royer, C., Ewing, R., & McBride, T. D. (2006). Researchers and policymakers: Travelers in parallel universes. *American Journal of Preventive Medicine, 30*(2), 164–172. doi:10.1016/j.amepre.2005.10.004

Cairney, P., & Kwitatkowski, R. (2017). How to communicate effectively with policymakers: Combine insights from psychology and policy studies. *Palgrave Communications*, *3*(37), 1–6. doi:10.1057/s41599-017-0046-8

Daniels, T. (2018) The Napa County agricultural preserve: Fifty years as a foundation of America's premier wine region. *Journal of Planning History,* 153851321876904. doi:10.1177/1538513218769042

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method*. Hoboken, NJ: John Wiley & Sons, Inc.

Effland, A. B. (2000). U.S. farm policy: The first 200 years. *Agricultural Outlook, 2000*(269), 21–25. Retrieved from https://www.cabdirect.org/cabdirect/abstract/20001809068.

Ferris, K. (2010). The next big thing: Local celebrity. *Society*, *47*(5), 392–395. doi:10.1007/s12115-010-9349-8

Florida Farm Bureau Federation. (2018). Retrieved from www.Floridafarmbureau.org

Florida Department of Agriculture and Consumer Services. (2018*). Florida agriculture overview and statistics.* Retrieved from https://www.freshfromFlorida.com/Agriculture-Industry/Florida-Agriculture-Overview-and-Statistics

Francis, C. A., Hansen, T. W., Fox, A. A., Hesje, P. J., Nelson, H. E., Lawseth, A. E., & English, A. (2012). Farmland conversion to non-agricultural uses in the US and Canada. *International Journal of Agricultural Sustainability*, *10*(1), 8–24. doi:10.1080/14735902.2012.649588

Gregrich, R. J. (2003). A note to researchers: communicating science to policy makers and practitioners. *Journal of Substance Abuse Treatment*, *25*(3), 233–237. doi:10.1016/s0740-5472(03)00120-x

Hanson, R. (1998) *Governing partners: State local relations in the United States*. Routledge Travis and Francis Group: New York, London.

Haynes, A., Derrick, G., Redman, S., Hall, W., Gillespie, J, Chapman, S., & Sturk, H.(2012) Identifying Trustworthy Experts: How Do Policymakers Find and Assess Public Health Researchers Worth Consulting or Collaborating With?. *Plos One 7(3).* doi:10.1371/journal.pone.0032665

Jackson-Elmoore, C. (2005). Informing state policymakers: Opportunities for social workers. *Social Work*, *50*(3), 251–261. doi:10.1093/sw/50.3.251

Johnson, D. M., & Shoulders, C. W. (2017). Power of statistical tests used to address nonresponse error in the Journal of Agricultural Education. *Journal of Agricultural Education*, *58*(1), 300–312. doi:10.5032/jae.2017.01300

Kam, C. D. (2005). Who toes the party line? Cues, values, and individual differences. *Political Behavior*, *27*(2), 163–182. doi:10.1007/s11109-005-1764-y

Lindner, J. R., Murphy, T. H., Briers, G. G. (2001). Handling nonresponse in social science research. *Journal of Agricultural Education, 42*(4), 43–53. doi:10.5032/jae.2001.04043.

Lowndes, V., Pratchett, L., & Stoker, G. (2006). Local political participation: The impact of rules in use. *Public Administration, 84*(3), 539–561. doi:10.1111/j.1467-9299.2006.00601.x

Lundy, L. K., Ruth, A., Telg, R., & Irani, T. (2006). It takes two: Public understanding of agricultural science and agricultural scientists' understanding of the public. *Journal of Applied Communications, 90*(1), 55–68. doi:10.4148/1051-0834.1290

Miller, L. E., & Smith, K. L. (1983). Handling nonresponse issues. *Journal of Extension, 21*, 45–50. Retrieved from https://joe.org/joe/1983september/83-5-a7.pdf.

Mooney, C. Z. (1991). Peddling information in the state legislature: Closeness counts. *Western Political Quarterly, 44*(2), 433–444. doi:10.2307/448787.

Oliver, K., Innvar, S., Lorenc, T., Woodman, J., & Thomas, J. (2014). A systematic review of barriers to and facilitators of the use of evidence by policymakers. *BMC health services research, 14*(1), 2. doi:10.1186/1472-6963-14-2

Onsted, J.A., Ogden, L., & Chowdhury, R.R. (2009). *Zoning and land use change: Dynamic processes in Southern Florida*. Paper presented at LTER All Science Meeting. Estes Park, CO. Retrieved from https://www.researchgate.net/publication/280052964_Zoning_and_Land_Use_Change_Dynamic_Processes_in_Southern_Florida

Palm Beach Board of County Commissioners. (2017). *Resolution approving zoning application ZV/PDD/R-2016-00845* (No. R-2017-0696). Retrieved from http://discover.pbcgov.org/pzb/zoning/Resolutions-2015-Current/R-2017-0696.pdf

Pattie, C., Seyd, P., & Whiteley, P. (2003). Civic attitude and engagement in modern Britain. *Parliamentary Affairs, 56*(1), 616–633. doi:10.1093/pa/gsg106

Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. In Authors (Eds.), *Communication and Persuasion* (pp. 1–24). doi:10.1007/978-1-4612-4964-1_1

Salazar, V. K. (2015). *Communication among agricultural policy influencers: A delphi study* (Unpublished master's thesis). Texas A&M University, College Station, TX.

Shanley, P., & López, C. (2009). Out of the loop: why research rarely reaches policy makers and the public and what can be done. *Biotropica, 41*(5), 535–544. doi:10.111/j.1744-7429.2009.00561.x

Stoker, G., & John, P. (2009). Design experiments: Engaging policy makers in the search for evidence about what works. *Political Studies, 57*(2), 356–373. doi:10.1111/j.1467-9248.2008.00756.x

Treise, D., & Weigold, M. F. (2002). Advancing science communication: A survey of science communicators. *Science Communication, 23*(3), 310–322. doi:10.1177/107554700202300306

Vogelsang-Coombs, V., & Miller, M. (1999) Developing the governance capacity of local elected officials. *Public Administration Review, 59*(3),199–217. Retrieved from https://www.jstor.org/stable/3109949

Wershow, J.S. (1960). *Agricultural zoning in Florida: Its implications and problems*. The National Agricultural Law Center. University of Arkansas: Fayetteville, AR. Retrieved from http://nationalaglawcenter.org/wp-content/uploads/assets/bibarticles/wershow_zoning.pdf