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Lessons Learned for Military-Based Partnerships for Landscape-Scale Conservation: A Case Study of the North Carolina Sentinel Landscapes Partnership

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Abstract

Landscape-scale conservation has become a popular approach for addressing complex land and water issues. Achieving this level of conservation requires regional collaboration that evokes a variety of approaches tailored to fit the scope and nature of the particular issues. In many states, military training grounds are a part of the rural landscape, resulting in significant interest from the military services in the maintenance and enhancement of land uses that are compatible with their operations. Many programs and initiatives are managing this issue utilizing a landscape-scale approach based on a recognition of the interconnectedness of interests. To date, there has been limited research on military partnerships related to land conservation. In order to better understand how engaging stakeholders from various sectors impacts the initial stages of military-based partnerships for landscape-scale conservation, this study explores climate, processes, people, policies, and resources—five variables that shape cross-sector partnerships, an important theoretical framework for evaluating such collaborative partnerships.

Introduction

Landscape-scale conservation represents a new collaborative approach that has become a widely agreed upon strategy by conservationists, policymakers, and practitioners to address land and water issues facing North America (McKinney & Johnson, 2009). Landscape-scale conservation encompasses three criteria: multijurisdictional, multipurpose, and multistakeholder (McKinney, Scarlet, & Kemis, 2010). Landscape-scale conservation efforts also operate with various governance arrangements and at diverse geographic scales (McKinney et al., 2010). To achieve landscape-scale conservation requires regional collaboration that evokes a variety of approaches tailored to fit the scope and nature of the issues (McKinney & Johnson, 2009).

For many organizations, utilizing a landscape-scale approach to deal with conservation is based on the recognition of the interconnectedness of interests (McKinney & Johnson, 2009). For the military in many states, their interest in landscape-scale conservation is in maintaining their readiness by maintaining compatible land uses with their military training grounds (Governor's Land Compatibility Task Force [GLCTF], 2012) including Department of Defense (DOD) owned or controlled lands and adjacent or nearby non-DOD lands that impact training.

To date, research efforts are limited to military partnerships addressing encroachment and incompatible land use for lands buffering military installations, but little effort is shown in protecting such things as military flight paths or what is often referred to as away spaces. Away spaces are training areas away from the main military installation (Lachman, Wong, & Resetar, 2006). Lachman et al. (2006) research indicates that military-based partnerships have been quite successful because installations are leveraging diverse partners for different buffering needs around their installations. They found that bringing together a diverse group of partners helps to leverage diverse types of funds and funding sources (Lachman et al., 2006). Besides directly funding investments, partners also contribute significant time, skills, expertise, and other resources to conservation buffering (Lachman et al., 2006).

This does not mean that military partnerships do not run into issues. Policy guidance for military-based partnerships is often inadequate and thus, there are inefficiencies in execution of partnership projects. For example, overemphasis on fair market value defined by the DOD's appraisal process has caused effectiveness problems, such as lost deals (Lachman et al., 2006). Additionally, the military's process takes too long for developing, approving, and completing deals (Lachman et al., 2006). This can be a significant obstacle to buffering

military installations because of the need to purchase land or buy conservation easements on private lands, as it can be difficult to engage landowners without funding in hand.

Even though research indicates that the military has had success in leveraging diverse partners in buffering military installations from incompatible land uses and encroachment, little is understood about military-based partnerships for landscape-scale conservation. To better understand how engaging stakeholders from various sectors impacts the initial stages of military-based partnerships for landscape-scale conservation this study explored climate, processes, people, policies, and resources; the five variables that shape Cross Sector Social Partnerships (CSSPs) outside the specific fields of economics and management (Melaville & Blank, 1991).

Theoretical Framework

The evaluative framework utilized in this study is based on the five variables shaping interagency partnerships (Melaville & Blank, 1991).

Climate: Social and Political

Melaville and Blank (1991) identified the social and political climate of an area as the first factor likely to influence a cross sector partnership. The chances of a collaboration occurring among potential partners will depend on how favorable the social and political climate is with regard to potential partners' current relationships, the urgency of the issues, how well-defined the problem is, and other social and political factors (Melaville & Blank, 1991). When human needs, public sentiment, legislative priorities, and institutional readiness converge conditions are ripe for collaboration (Melaville & Blank, 1991).

Processes: Communication and Problem-Solving

Melaville and Blank (1991) identified the processes of communication and problem solving as the second critical variable in creating and sustaining interagency efforts. The process establishes the working relationships and defines the operational rules necessary to guide the partnership initiative, mitigating turf battles, reconciling differences, and making critical corrections in strategy and implementation (Melaville & Blank, 1991; Wondelleck & Yaffee, 2000). Inclusion of a specific geographic location or biophysical feature of interest provides a means for realizing common ground and allows the partnership to explore new and innovative strategies for achieving their goals (Wondelleck & Yaffee, 2000). Successful partnerships are able to

maintain a collective vision through the institutionalization of collaboration that requires creating and leveraging structures that will allow for the management of change and turnover, thus allowing the partnership to continue beyond its initial efforts (Wondelleck & Yaffee, 2000).

People: Leadership and Participation

Melaville and Blank (1991) identified the people who lead, participate in, and eventually implement the activities of cross-sector initiatives as the third variable affecting the growth and development of joint efforts. Carefully designed organizational structures, especially in large coalitions, can ensure that all partners have a leadership role to play in achieving common goals (Melaville & Blank, 1991) and that shared leadership is fostered when participants have clearly assigned opportunities to plan and implement action and are held responsible for those actions (Gray, 1985). It is also important to recognize that the vision, commitment, and competency of the leaders are important to the success of the partnership (Melaville & Blank, 1991). Once broad-based participation has been achieved, leaders must ensure that participants are fully involved in the partnership process (Melaville & Blank, 1991).

Policies: Governing of Partnering Organizations

A fourth variable affecting interagency partnerships is the set of governing policies that each agency brings to the table. These federal, state, and local level policies, guidelines, and definitions comprise each institution's unique identity. The natural tendency of participants to maintain their distinctive organizational characteristics gives rise to the turf issues that many joint efforts experience (Gray, 1985). When the laws, regulations, and standard operating procedures of participating agencies are perceived as generally compatible with each other and the goals of the collaboration, conflict is minimal. However, when substantial differences exist, adjustments and accommodations are necessary to improve their fit. (Gray, 1985; Melaville & Blank, 1991). A strong communication and problem-solving process and persistent efforts to avoid jargon and shorthand, to clarify terms, and to establish mutually acceptable definitions can help partners learn to understand each other (Melaville & Blank, 1991).

Resources: Availability

The availability of resources will determine if the efforts of collaborative partnership will become

permanently institutionalized (Melaville & Blank, 1991). In collaborative ventures, resources of all kinds must be pooled and reconfigured to achieve the hoped-for results. The continuity of funding is as important as the amount of money available. A predictable level of support allows participants to make long-term plans and consider priorities beyond day-to-day survival (Melaville & Blank, 1991).

The partnership must be held accountable for the resources through measuring, monitoring, and meeting the objectives within a reasonable period of time. Establishing clear targeting goals and objectives, and benchmarks to monitor progress on a continuous basis, can provide important feedback to the partnership (Gray, 1985; Melaville & Blank, 1991; Wondelleck & Yaffee, 2000).

Study Area

North Carolina is a rapidly urbanizing state. It is the 9th most populated state in the nation and by 2030 it is projected to rise to the 7th largest, with 12.2 million people (United States Census Bureau, 2015). The military in North Carolina is the second largest economic sector in the state, just behind agriculture (Nienow, Harder, Cole & Lea, 2008). North Carolina has the third largest military population in the nation, home to the largest army installation and the world's largest amphibious training complex (NC Military Foundation, 2015). North Carolina leadership has a vested interest in the sustainability of rural landscapes that contribute approximately \$100 billion to the state's economy and provide irreplaceable ecosystem services that promote environmental quality (GLCTF Report, 2012).

The Partnership

Study participants represent a range of organizations including: academia, state agriculture and environmental agencies, military, environmental and agricultural non-government organizations, and economic development organizations. They were either involved in the inception of the partnership, a member of the overall steering committee, or a key collaborator. These partners and key stakeholders served an important role in the creation of the Sentinel Landscapes Partnership, which began with focusing on four initiatives.

The initiatives are designed to conserve and protect the interests the partnership values — working lands, conservation, and national defense. These initiatives include developing and implementing tools that foster landscape-scale conservation, creating and delivering a working lands conservation professional training and landowner

outreach program, increasing the military's local purchasing capacity, and testing an innovative conservation strategy focused on compensating private landowners for placing term limited restrictions on their property.

Methodology

Using an intrinsic case study design (Yin, 2013), we explored partnership documents as well as partner and key stakeholder perceptions to understand how the variables that shape cross-sectoral partnerships impact the initial stages of military-based partnerships for landscape-scale conservation. Once Institutional Review Board (IRB) approval was obtained, purposive sampling was used to identify the initial study participants based on their influence on overall partnership decision-making. Additional participants were selected using the snowball sampling approach, where each of the initial participants identified additional subjects to interview based on their reputation and influence among key stakeholder groups. There were a total of 13 participants selected that represented a variety of agencies, organizations, and interests.

Semi-structured interviews were conducted with each participant. These interviews were recorded, transcribed, and coded. The constant comparative method was used for data analysis, requiring analysis to begin simultaneously with data collection. Bias was kept in check by constantly comparing new data to previously received data. Categories that were developed were constantly reviewed and combined to form more current categories that coincided with the developing research. These themes, ideas or categories were driven directly from the data; not an existing conceptual or theoretical framework (Corbin & Strauss, 1990).

As part of the constant comparative method, content analysis was completed during data triangulation to analyze organizational documents. This approach encompassed open coding, axial coding, and selective coding. The categories that emerged were then used to understand and complete a holistic view of the Sentinel Landscapes Partnership.

Trustworthiness

Trustworthiness of this study was founded on four tenets (Berg, 2004; Corbin & Strauss, 1990; Creswell, 1998; Dooley, 2007; Krefting, 1991; Lincoln & Guba, 1985; Merriam, 2009). These tenets include credibility, transferability, dependability, and confirmability.

Credibility

Credibility requires prolonged engagement (Lincoln & Guba, 1985), persistent observation (Lincoln & Guba, 1985), data triangulation (Berg, 2004), member checks (Creswell, 1998; Lincoln & Guba, 1985), peer debriefing (Creswell, 1998; Dooley, 2007), and negative case analysis (Lincoln & Guba, 1985). The researchers were engaged with the partnership for approximately three years, which allowed for the development of a holistic and comprehensive understanding of the case and the development of trust among study participants. Over the three years of engagement the researchers had the opportunity to observe the participants by attending more than 20 in-person partnership meetings, more than 30 partnership conference calls, four partnership-related land-owner workshops, and three other partnership events resulting in hundreds of hours of engagement and observation.

Researchers analyzed documents and triangulated those against the semi-structured interviews data in order to gain a deeper understanding of the findings that emerged (Berg, 2004). After each interview was transcribed, the researchers provided the participants transcripts of their interviews to check for accuracy. Participants were also able to review rough drafts of the researchers' work in order to correct or provide substitute language (Creswell, 1998).

A team of peers was formed to take part in the debriefing process based on their knowledge of the partnership, qualitative methods and partnership evaluation. After each step in the analysis process researchers created a memorandum for the team, updating them on the study process and data analysis. The peer debrief team provided guidance throughout the process by suggesting revisions to categories and reviewing themes with the researchers. Once feedback was provided, the researchers would correct and change the developing analysis.

Negative case analysis was conducted to explore all exceptions that emerged during analysis through subsequent interviews and literature review to account for the exception and confirm patterns emerging from the data. This analysis provided overall direction for the presentation of study findings but was not explicitly stated within the findings themselves. It was used as a measure to ensure that the research process was not pursuing interpretations of events that were not shared among multiple participants or presented in previous studies.

Transferability

In order to promote the reader's ability to transfer the findings of the study to their own context (transferability), the insights and lessons learned are richly described along with the population of interest and study context. By developing this comprehensive view, the researcher facilitates the reader's ability to identify the commonalities and differences as they relate to their case and ultimately judge how the associated findings may transfer (Creswell, 1998; Krefting, 1991).

Dependability

To ensure the dependability of the study a dependability audit trail (Berg, 2004; Dooley, 2007) was constructed based on detailed notes taken throughout the study. This audit trail was then used to conduct an inquiry audit that leveraged the input of external researchers to evaluate the researcher's ability to outline a process for replication. Each auditor was provided detailed notes that outlined the overall research process, the evolution of the process through analysis, and associated thoughts and decisions along the process.

Confirmability

A closely related confirmability audit trail was also constructed in order to authenticate the confirmability of the study. The confirmability audit was conducted at the same time as the dependability audit, requiring the auditors to evaluate whether the data and interpretations made are supported by material in the audit trail, are internally coherent, and represent more than the researchers' biased perspective (Lincoln & Guba, 1985). The audit trail provided detail for how data were collected, how categories were derived, and how decisions were made throughout the inquiry (Merriam, 2009). The audit trail provided an organizational structure to understand the relationship between the conclusions, interpretations, and recommendations by clearly linking to the data sources themselves. Triangulation was also used to increase confirmability (Lincoln & Guba, 1985). The researchers used multiple methods of triangulation including triangulation of sources and analyst triangulation to help facilitate a deeper understanding of the phenomenon of interest.

To help maintain objectivity, the researchers developed a reflexive journal that allowed the researchers to track methodological decisions and study logistics as well as the researchers' own values and interests. Journal entries were completed

before and after every interview as well as throughout the process to keep bias in check and keep the researchers on track. The researchers documented bias that related to both personal experience and beliefs as well as experience with the partnership throughout the research process. Journaling allowed the researchers to review data and reflect on personal variables that may affect the interview and data collection process (Lincoln & Guba, 1985).

Findings

Climate: Social and Political

The partnership was thrust into an environment that exhibited characteristics of both a positive and negative climate. Several partners cited a “recognition of what’s happening in North Carolina” among state leadership as an important precursor for the social capital available to the partnership. Leaders in agriculture, forestry and conservation were cognizant of the need to work collaboratively to effectively address mutual issues and had already begun work to address the issues facing rural landscapes. Multiple partners recognized that the expansive military training network was a part of the rural character of the landscape, where stakeholders “saw a value in supporting the military.”

This broad recognition resulted in beneficial policies, mandates, and tools that promoted collaborative efforts. For instance, a program lead explained that this recognition among the General Assembly was crucial to “set up an Agriculture Development and Farmland Preservation (ADFP) trust fund whose mission statement was basically to preserve these resources and to do what has been suggested in mutual partnership activities.”

While the climate among state leadership was positive, local communities in eastern North Carolina had a negative perception of the military as land grabbers based upon previous experience. Several partners and key stakeholders cited the United States Navy’s process for trying to establish Outlying Landing Field (OLF) training area as a specific experience that tarnished the military’s reputation and relations with local communities. Multiple partners identified frustration among the local supporters of the OLF based on misinformation provided by the Navy.

Based on the experience with the OLF, it was evident that there were still leaders who were agitated and who influenced the implementation of the innovative conservation strategy known as the Market-Based Conservation Initiative (MBCI). Partners who led the initiative explained that “the

residual effects of OLF is the sole reason why we never delivered market based in Beaufort and [Washington] County.” One of these partners went on to explain that “select county commissioners had the attitude that market based was an end run to come at the concept of an outlying landing field from a different angle.” Several partners cited the value of the partnership for overcoming the aforementioned perception issues, which the military partner stated was the reason for “the development and implementation of the whole partnership.”

The aforementioned climate that was a result of the OLF project may have been further exacerbated by the administration and outcomes of the MBCI. Concerns of credibility were cited as a potential impediment for future military programs as well as the ongoing work of the other partners’ home agencies or organizations. Many of the partners felt that these issues would further exacerbate military-based conservation efforts in the future with one partner explaining that they are afraid that it will create a mentality where “landowners are going to say well here we go again.”

One of the biggest issues cited by numerous partners was the Navy’s decision to transition away from the original intention of performance contracts to traditional easements, which landowners were told would not be part of the initiative. One of the core leaders explained that “it definitely makes you more skeptical, more cynical and wanting more assurance before you do it again.” Additionally, partners and key stakeholders explained that programmatic change that resulted in issues of timeliness and the abrupt termination of MBCI “didn’t help improve that trust [among landowners].”

Processes: Communication and Problem-Solving

While the partnership was successful at bringing together a diverse group of stakeholders, their initial approach was more project-centric, compromising the group’s initial efforts at achieving collective gains. The group developed multiple projects with respective timelines, scopes of work, and expectations for accomplishments, resulting in project silos that challenged the partnership’s ability for holistic and comprehensive thinking. Members of the core leadership group expressed concerns that it “hurt the situation that some [of] the partners approached it as a project” and believed that “[the] whole thing is a process [that is] more organic in nature than just doing a project within a specific time frame.” According to the sentiment of several partners “there could have been any number of projects that could have

been done under the Sentinel Landscapes umbrella” but due to the fact that everyone was “focused on getting something done by a certain date” many partners “fell out of the loop on what the overall goals were.” Partnership documents including meeting notes identified a transformation from a project-based approach to partnership building midway through the original grant.

Multiple partners believed that the transition allowed “for goals and objectives [to be] embedded in building a broader partnership than something that just met [individual] needs.” Through a consensus-driven model, the partnership welcomed a diverse set of ideas, which was cited as the trademark of the partnership. Several partners expressed the importance of this approach based on the complexity of the partnership citing it as “one of the better aspects of [the partnership].” The partners also felt that by welcoming the diverse set of ideas, thoughts and expertise to the table it helped to reduce conflicts encountered by the partnership.

While cultural differences as a result of partnership diversity appeared to be an issue from the onset, multiple partners believed that over time the partnership was “able to work to create those bridges” by looking at “the common links.” Several partners believed that a shared vision was developed based on “the common link [that] ended up being private landowners because they were the resource that [we] had in common and services related [to] these resources linked all of us together.”

Also as a result of the diversity of actors involved with the Sentinel Landscapes efforts, multiple approaches were needed to solve problems and resolve conflict. Several partners identified the utility of an informal approach within this core group for the continued development of mutual respect that one partner explained was “present among all of those involved here at the state level.” In turn, the partnership evoked structured problem-solving processes in order to increase the ability to reach consensus.

The partnership developed a steering committee in order to represent the diverse interests and needs associated with the context of management. Multiple partners explained that by having the university and Extension develop “a formal steering committee and a core team” it provided some much needed “structure” and a shift to “thinking strategically that [wasn’t] fully realized the first couple [of] years.” Additionally, several partners felt that it provided value-added because “everyone who was in the steering committee [was]

representing a stakeholder [group] and having all of them in place implied their buy in from their organizations.”

According to several partners and key stakeholders, the partnership dedicated a significant amount of time toward informal engagement including “going out to eat,” “sitting down over a beer,” and attending “social events.” Once the relationships were built, these partners and key stakeholders explained that it promoted a sense of “commit[ment] to making all of this work.” According to several program leaders, the “consistent[cy] with communication and meetings” was pivotal, explaining that “once you lose communication you cannot build trust.” To this end, the partnership developed a formal engagement structure that included face-to-face meetings, conference calls and emails based on lessons learned through the pilot process. While several partners and key stakeholders believed that “the frequency with which communication occurred via telephone was beneficial to keeping all of the players informed” all the partners felt that “being able to meet face-to-face was critical.”

Even though the program partners viewed the face-to-face engagement as critical, one of the program leads expressed a sentiment shared among multiple partners who thought the initial quarterly meetings “got into that level of rut” where they eventually morphed into one-way communication. The partnership realized that the meetings were not producing the type of outcomes they wanted and altered the meeting structure to promote effective group discussion. A program lead explained that “you will get more out of it if you have the partners with all their perspectives brainstorming about directions and solutions and not just listening to reports,” which aligned with the sentiments of several partners.

Overall, the communication approach evoked by the partnership was effectively summarized by one of the key partners as being focused on maintaining “an open line of communication” through the aforementioned engagement schedule, which the majority of partners again expressed was important for the development of trust. Several partners explained that it was a challenge to simply “keep our leadership in our respective areas informed” but expressed an additional challenge in keeping leadership informed across the context of management. Specifically, many partners identified the complexity of communicating and effectively educating the military stakeholders because in “the military you’ve got a department of

defense and then in the department of defense you've got the different branches that have their own little cliques or organizational [mandates] to address."

Several partners cited the dynamic of "constant turnover" as an important factor to consider when developing a communication and education strategy because "there's people that are appointed or not reappointed to positions, and if you don't have the ability to keep everybody at least aware, people's opinions get formed in a vacuum." The partners reiterated that it is "an education issue" where the partners must "communicate almost excessively" and it is their responsibility "to continue to encourage that communication, not just for themselves but towards the upward management."

Partnership documents and partner interviews highlighted a need for better communication of the needs of the military for the efforts of Sentinel Landscapes. Several partners identified the utility of a Geographic Information System (GIS) map to highlight military conservation priorities in order to "focus some of those resources from existing programs on those areas." The initial program manager explained that the map "enhanced [the partnership's] understanding of what the military is looking for," going on to explain that it "opens the door for future collaboration, particularly on land conservation, land use issues that can either benefit or be to the detriment of the military." This sentiment was shared among multiple partners and a core leader expressed the value of "a good map that has the operational footprints of the military services as they currently exist and has the different services envision them to the best they can currently envision them."

The partners also identified the need to engage all services of the military and maintain their engagement in order to develop a shared vision for collective action. Multiple partners identified that "all of the services" were invited to participate but only one military service sincerely participated in full. They believed that if the partners were able to maintain the engagement of their military partners, "it would have been more beneficial" and a weakness of the partnership that some believe hurt the efforts of the partnership. This was expressed by several partners and was effectively encapsulated by a core group member that stated that "keeping the other services at the table has been harder [than expected]."

People: Leadership and Participation

A key strength of the Sentinel Landscapes leadership was its ability to leverage pre-existing relationships to create a diverse partnership. Before the partnership was established, brainstorming meetings were held that included approximately 30 different agencies and organizations that represented the interests of working lands, conservation, and national defense in order to understand how to move forward in a collaborative fashion. Multiple partners and key stakeholders explained that along with the network of typical state and federal actors, the network that was tapped into provided capital from "several private industry folks across the state and the military." All of the interviewees mentioned the importance of these pre-existing relationships, going as far as citing them for being "vital stakes in the ground."

Several key partners explained that the Commissioner of Agriculture was critical for "making sure this project stayed on everybody's radar, [providing] influence at the national level" and "open[ing] things up with the military installations [for such initiatives as] Food and Fuel for the Forces." According to multiple partners, the support from this champion's parent organization led to an important partnership tool, "the [Agricultural Development and Farmland Preservation] trust fund" that the partnership was able to effectively leverage for "funding through Marine Corps that has been crucial to us keeping the dialogs going."

Additionally, several partners also lauded the work of program champions within the military. Originally the partnership had two uniformed officers that were "huge advocates" and cited for being "very valuable" in engaging the right military stakeholders to attain social capital within the military. Unfortunately, several partners identified that "there's a real challenge to sustaining a champion in the military particularly because every few years [leadership] change[s]." Partnership documents show that these individuals are no longer involved in the partnership although the partnership was successful in maintaining a program champion "on the civilian side" of the United States Marine Corps. There is a strong belief within the group that "you need a champion there on the civilian's side" but those within the military strongly believe "that champion needs to be a uniform in the military."

Based on the reflection of program leadership, the reach of the land-grant university and Extension provided an appropriate administrative structure for coordinating diverse stakeholder

groups within a statewide partnership. Several partners explained that they thought that having the university as a coordinating entity was a positive experience based on their ability to “monitor [performance] and pull the official meetings together because of the different aspects of Sentinel Landscapes and its [partnership] diversity.” The majority of partners explained the university was an “effective convener of diverse interests and parties” based on their “network of partners and relationships that [they’ve] built with different federal agencies, state agencies, and [non-governmental organizations].”

Core partners also stated that by housing the partnership under the university, it “ended up delivering value to the Marine Corps that exceeded their investment” based on the “oversight and leadership” provided as well as the fact that “the deans were personally involved.” Multiple interviewees also expressed that land-grant universities exhibited a “natural aspect to the fit for this project for its outreach, research, and teaching functions” as well as it being part of [their] mission [in] solving the problems of the people of the state.” The natural fit for land-grant universities to serve as a coordinating entity for large collaborative partnerships was expanded on by key program leaders explaining that these institutions are well positioned with the “expertise to solve the problems of the state” and “recognize[ed] there’s a lot of really good science that can be applied to some of these socially relevant issues that are out there that we’re all having to deal with.”

All of the partners interviewed explained that turnover strongly influenced the success of the partnership, especially due to the changes in internal leadership during the program pilot. Several partners identified the role of the program coordinator as well as all of the partners to help manage the extent of change and turnover. One of the program element leads echoed a sentiment shared by several partners and key stakeholders that the changeover in leadership was such a significant challenge because the partnership “lost certain values when [turnover] occurred” and believed that with the accompaniment of a steep learning curve for new members that “it took a while for them to become fully reengaged with the process.” This resulted in a general “lack of focus on the part of the individuals within the partnership” because there was so much effort dedicated to “getting [new partners and key stakeholders] to the same point because of all that turnover.” One partner who became involved mid-way through the effort explained that “it

would have been nice as me walking in, if I could have ran through a year’s worth of the notes for however long they met and then I could have gotten a better handle on things a lot quicker.”

Policies: Governing of Partnering Organizations

When asked about the governing policies of partnering organizations, only one policy was identified to have had significant influence on the partnership. All of the partners and key stakeholders interviewed expressed significant frustration with the Navy’s policy and associated process for developing conservation agreements with landowners. The policy that the partners identified was called 2684A, which evokes a real estate transaction process for these agreements. The aforementioned policy resulted in a prolonged and costly process for establishing agreements, which was echoed by several partners and key stakeholders as a challenge associated with the military funding authority.

Several partners expressed that the process of due diligence resulted in extremely high administrative costs that were not anticipated by the Navy and resulted in their decision to abruptly terminate the MBCI pilot. The program initiative lead shed some light on the prolonged and costly process that resulted in the aforementioned suspension of the MBCI. This program lead explained that “every contract ended up requiring a 60-year title search,” which involves an extensive process and the inclusion of attorneys and real-estate specialists that quickly increase the costs.

Resources: Availability

The partnership realized that in order to achieve their overarching goals in the midst of public funding limitations it would require the adoption of a match funding strategy. Even amidst this realization, multiple partners felt that the partnership initially fell short of attaining the necessary funding needed for long-term success. The program sponsor expressed a concern that the partnership’s inability to achieve robust funding may be as a result of the perception that the “DOD [is] a cash cow,” with another of the military partners explaining that “the military cannot fund the whole thing” and that “being able to sustain what comes out of the pilot will require more participants” coming to the table willing to fund these efforts.

The partners identified two dynamics where match funding would facilitate success through partnership coordination and mutual gain projects. Multiple program leads expressed that in order for

some of these projects to get off the ground, the idea of match funds must be expanded to encompass coordination costs to manage “the front end of setting up the process and building the partnerships.” Additionally, the partners believe that through the prioritization of projects that achieve multiple benefits it will encourage various agencies and organizations that typically reside in their own silo to come to the table with matching funds, understanding the opportunity for mutual gain.

It was evident that the partnership understood the benefit of match funding based on a subsequent funding proposal submitted to the DOD. In this proposal, match funding was attained from more than twenty organizations that would be brought to bear within the partnership’s area of interest. While this funding approach was viewed by the partnership as a win, it did not cover the administrative components for the management of the partnership. In order to effectively develop and implement these multiple benefit projects, the partners felt that there is a significant amount of coordination and administration that must be taken into consideration in the match funding paradigm in order to develop a true match scenario.

In order to successfully coordinate the breadth of projects under the Sentinel Landscapes umbrella, it requires multiple avenues to disseminate funds that provide enhanced flexibility. The partnership utilized the DOD’s Cooperative Ecosystem Studies Unite (CESU) to channel funds from the military to the land-grant university that served as the administrative entity to further disseminate funds. Many of the partners expressed the value of using this funding structure to disseminate funds because it did provide the partnership with relative flexibility because “the military didn’t try to direct the funding to a dollar amount but rather they allowed the creative minds to work to determine the cost.”

While the partnership experienced relative flexibility through the use of the CESU for administering program funds, multiple partners expressed a heightened level of frustration related to the timeliness of the overall process. One of the partners expressed a sentiment shared by the entire partnership explaining that “the biggest headache [was] just the sheer amount of time it takes to move funds from the Marines, through the Army Corps, down to NC State and then to the other partners” further explaining that “the whole CESU process, that’s a royal pain.” Meeting notes show the overall frustration expressed by the partners due to the manifestation of the aforementioned issues in the

attainment of a no-cost contract extension along with prolonged issues with connecting with the program administrator. Multiple partners explained that due to these issues it interjected “uncertainty into the next year” because the partnership was unsure of future funding and “everybody comes to a screeching halt.”

A lesson learned that several partners identified was the need for ongoing evaluation of current and potential funding mechanisms. Multiple partners admitted that not enough attention was provided to the level of flexibility in funding due to the overreliance on a single mechanism for administering program funds. The partners expressed an ability to create flexibility through the utilization of multiple funding structures as well as developing related funding contracts that integrate flexibility. Several partners believe that based on the experience from the program pilot that partnerships should “build into the structure” measures that enhance flexibility and specifically, “flexibility for future funding.”

Discussion and Implications

The overall social and political climate of eastern North Carolina demonstrated a good mix of a recognized need, associated legislative priorities, and institutional urgency for what Melville and Blank (1991) outline as conditions conducive for effective collaboration. Unfortunately public sentiment did not align, as many local communities in eastern North Carolina developed a negative perception of military programs based on previous experience. This negative perception impacted the overall partnership’s ability to implement certain initiatives because local leaders viewed their actions as a means to take a different angle for taking land away from their communities. The manner in which the partnership implemented the MBCI merely exacerbated these perceptions. Several partners and key stakeholders expressed significant concern that the scrutiny of the initiative had negative implications on future cooperative arrangements with the military. While these issues will continue to impact the ongoing implementation of similar efforts, they also provide an opportunity for the partnership to improve the climate for change by evaluating the individual partner’s need to improve the manner for which they provide services to private landowners (Melville & Blank, 1991).

Leadership quickly identified building a broader partnership as a priority and transformed the Sentinel Landscapes project into a Sentinel

Landscapes Partnership. The reach, capacity, and mission of land-grant universities provided an appropriate administrative structure for providing guidance and coordinating diverse stakeholder groups within a statewide partnership. This approach helps overcome a significant shortcoming identified by Lachman et al. (2006) where military-based partnerships suffer from an overall lack of guidance (Lachman et al., 2006). Land-grant universities and Extension have the available leadership and capacity to facilitate the process of agreeing on a common goal and negotiating a practical vision (Melaville & Blank, 1991). Effective leaders press each side to understand their partners' point of view and the way they perceive the issues and problems at hand (Melaville & Blank, 1991). Based on the organizational mission of land-grant universities, it provides the necessary leadership that represents the goals and interests to the community at large and cultivates potential allies, which aligns with the belief of Melaville and Blank (1991) of what constitutes an effective leadership organization.

The leadership's ability to leverage preexisting relationships while forging new linkages across the context of management resulted in a diverse partnership that is pivotal to the success of military-based efforts that promote effective collaboration (Lachman et al., 2006; Melaville & Blank, 1991; Wondelleck & Yaffee, 2000). Program champions played an important role in ensuring that the partnership remained on everyone's radar and that the needs of the partnership would be taken into consideration among various organizations. This partnership, in comparison with other successful partnerships, has program champions that play an important role in securing resources, attaining institutional support, marketing the efforts and pushing for effective implementation. The unique dynamics of The NC Sentinel Landscapes Partnership resulted in the need for maintaining program champions across multiple sectors but most importantly within the military. To this point, Melaville and Blank (1991) highlight that an indicator of a partnership's effectiveness hinges on its ability to create or secure new champions, that within the military poses a significant challenge due to increased and ongoing turnover.

Since relationships were leveraged across various stakeholder groups, the coordinating entity developed a steering committee representing the diverse interests and needs across the context of management. The steering committee approach provided the partnership with a formal

problem-solving process that was sufficient to enable partners to accept each other's respective goals for the partnership and to resolve difficulties as they arose (Melaville & Blank, 1991). Through a consensus-driven model, the partnership welcomed a diverse set of ideas that was cited as the trademark of the partnership. This aligns with the findings of Wondelleck and Yaffee (2000) that show partnerships are able to build on common ground through shared decision-making in which choices within the group were made by consensus. Accordingly, the partnership was able to constructively explore differences and develop solutions that met the needs and interests of everyone involved. Like other successful collaborative efforts, the partnership was able to identify commonalities of partners rather than their differences, identifying the private landowner as a common link that provided a means to bridge compatible yet disparate interests.

The use of an adaptive management approach allowed the partnership to develop meaningful and effective processes for engagement that institutionalized collaboration, allowing the partnerships not only to develop realistic goals but also to provide a process for measuring partnership impact that is necessary for public support and funding (Gray, 1985; Melaville & Blank, 1991; Wondelleck & Yaffee, 2000). To ensure and maintain an open line of communication for such purposes, a recurring engagement structure of in-person, electronic, and telephonic exchanges were developed by the partnership that resulted in the development of trusting and effective working relationships. Literature highlights the success of many collaborative processes that can be attributed quite simply to the establishment of an opportunity for interaction between parties where one did not previously exist. This is of paramount importance, specifically to military-based conservation partnerships that need to leverage and build long-term positive relationships between the military and its partners to overcome issues of trust and lead to collaborative success (Wondelleck & Yaffee, 2000).

The need for ongoing and meaningful engagement among a range of stakeholder groups highlights the pivotal role of the coordinating entity, in conjunction with the partners, of managing for turnover and change across the context of management. The Sentinel Landscapes Partnership did not have such a process in place, which compromised its ability to move forward expeditiously as new members were introduced into the group. The coordinating entity must lead the

charge in facilitating organizational change as new issues and needs arise, using established structures like the steering committee and adaptive management processes that provide the partnership with a means for adaptation. According to Wondelleck and Yaffee (2000), successful partnerships institutionalize collaboration by creating and leveraging structures that will allow for the management of change and turnover, thus allowing the partnership to continue beyond its initial efforts.

Leadership identified the importance of strategic communication in order to increase overall awareness of the program, as well as social capital for effective collaboration. The novelty of the program required a strategic approach toward educating a diverse group of stakeholders of the issues the partnership sought to address and in turn the value of the partnership. Additionally, the extent of actors needed to take compatible action required extensive strategic efforts to communicate up the hierarchy of leadership as well as across the silos of interest. For landscape-scale conservation strategies, this approach is key for increasing the joint effort's ability to mitigate turf battles, reconcile differences in institutional mandates and professional perspectives, and make critical corrections in strategy and implementation (Lachman et al., 2006; McKinney et al., 2010; Melaville & Blank, 1991). The partnership also identified the utility of mapping the landscape of interest using GIS maps that allows the military to communicate its own priority areas, thus allowing its partners to prioritize resources that can be leveraged to achieve mutual gains through conservation. According to Wondelleck and Yaffee (2000), by identifying a specific geographic location or biophysical feature it provides common ground for which successful cooperative efforts are built and allows the partnership to explore new and innovative strategies for achieving their goals.

In relation to strategic communication, the military needs to be made aware of an ongoing issue related to frequently leveraged authorities for developing agreements with landowners. The Naval policy, in this case funding authority 2684A, proved to be a significant obstacle in the partnership's ability to achieve its intended goals and effectively implement related projects. This aligns with the findings of Lachman et al. (2006) identifying that the military's process, particularly within the United States Navy and United States Marine Corps, takes too long to develop, assess, approve, and fund agreements (Lachman et al., 2006). Since it can be difficult to engage landowners without

funding in hand, "such processes need to be streamlined and other flexibility needs to be built into the system to enable the military to respond faster to real estate opportunities" (Lachman et al., 2006, p. xxi).

Finally, funding from a single source will not be sufficient to sustain the partnership, requiring a strategy of match funding that provides the opportunity to pool and reconfigure resources to achieve the partnership's intended outcomes (Melaville & Blank, 1991). According to Melaville and Blank (1991), the commitment of resources is the litmus test "of any joint effort's determination to make a difference and a prime factor in determining whether partnership goals are likely to be institutionalized, replicated, and expanded" (p.32). While match funding is important, it is important to consider that it is an unrealistic expectation for all projects to have partners who can match or even come close to matching military funds (Lachman et al., 2006). One way to overcome this overemphasis on cost-efficiency and one-to-one match strategies is to consider administrative costs. Program coordination requires administrative work to develop a collaborative forum and associated structure to achieve the stacking of benefits this strategy seeks.

Once funds have been attained, these partnership efforts require multiple avenues to disseminate funds that provide enhanced flexibility. While the funding mechanism used by the partnership provided relative flexibility, there are challenges related to future funding and contract extension as a result of DOD process requirements that must be considered, understood, and managed. Flexibility must be a significant consideration when using funding mechanisms and developing cooperative funding agreements to ensure the availability of resources. Melaville and Blank's (1991) findings show that a partnership ability to reconfigure and attain resource flexibility allows for continuation of funding that is a critical component for collaborative success.

Conclusion

As collaborative efforts to conserve rural landscapes continue, it is important to understand how to effectively engage leadership among diverse stakeholder groups to achieve sustainable, landscape-scale conservation. The case of the North Carolina Sentinel Landscapes Partnership provides a unique example of military leadership becoming integrated into a collaborative partnership of federal, state, and local agencies and non-government organizations to achieve the

conservation of land uses compatible with military training operations. The scale of these efforts represents a divergence from traditional locally based buffer projects that provide minimal protection to the military training mission and center on relations between an installation and local communities. This case provides insights into the complexity and challenges that result from increasing the scale of conservation and integrating military interests and investment, while also providing a robust set of best practices and lessons learned that should be taken into consideration when leadership across multiple sectors seeks to engage in large landscape partnerships with the military.

References

- Berg, B.L. (2004). *Qualitative research methods* (5th ed.). Boston: Pearson Education, Inc.
- Clarke, A., & Fuller, M. (2010). Collaborative strategic management: Strategy formulation and implementation by multi-organizational cross-sector social partnerships. *Journal of Business Ethics*, 94(1), 85–101.
- Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, 13(1), 3–21.
- Creswell, J.W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications, Inc.
- Dooley, K.E. (2007). Viewing agricultural education research through a qualitative lens. *Journal of Agricultural Education*, 48(4), 32–42.
- Governor's Land Compatibility Task Force (GLCTF) Report. (2012). North Carolina Digital Collections: North Carolina Department of Environment and Natural Resources.
- Gray, B. (1985). Conditions facilitating inter-organizational collaboration. *Human Relations*, 38, 911–936.
- Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *The American Journal of Occupational Therapy*, 45(3), 214–222.
- Lachman, B.E., Wong, A., & Resetar, S.A. (2007). *The Thin Green Line: An assessment of DOD's readiness and environmental protection initiative to buffer installation encroachment* (Vol. 612). Santa Monica, CA: Rand Corporation.
- Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications, Inc.
- McKinney, M., & Johnson, S. (2009). *Working across boundaries: People, nature, and regions*. Cambridge, MA: Lincoln Institute of Land Policy.
- McKinney, M., Scarleet, L., & Kemis, D. (2010). *Large Landscape Conservation: A strategic framework for policy and action*. Cambridge, MA: Lincoln Institute of Land Policy.
- Melaville, A.I. & Blank, M.J. (1991). *What It Takes: Structuring interagency partnerships to connect children and families with comprehensive services*. Washington, DC: Education and Human Services Consortium.
- Merriam, S.B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Nienow, S., Harder, C., Cole, T., & Lea, A. (2008). *North Carolina's military footprint: Current economic impacts and projects for 2013*. Raleigh, NC: North Carolina Department of Commerce.
- NC Military Foundation. (2015). *The North Carolina Military Foundation*. Retrieved from <http://www.ncmilitary.org/content/unique-military-presence>.
- United States Census Bureau. (2015). *Population projections*. Retrieved from <https://www.census.gov/population/projections/>
- Wondolleck, J.M., & Yaffee, S.L. (2000). *Making collaboration work: Lessons from innovation in natural resource management*. Washington, DC: Island Press.
- Yin, R.K. (2013). *Case study research: Design and methods*. Thousand Oaks, CA: Sage Publications, Inc.

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