BUILDING STATE WILDLIFE AGENCY CAPACITY FOR EFFECTIVE PARTNERSHIPS

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ABSTRACT

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State wildlife agencies (SWAs) partner with organizations of various types, on projects of various types, at what is anticipated to be an increasing rate. Inclusion of multiple and diverse stakeholders and partners is postulated to improve effectiveness of wildlife management (Anderson & Loomis, 2007; Jacobson et al., 2010). Through partnerships, actors from private, civil, and public sectors work together to reduce negative impacts from wildlife and improve access to and benefits of wildlife resources. Although partnerships can improve the ability of SWAs to address these issues, little is known about how the perspectives of internal employees and external partners and stakeholders differ regarding factors affecting perceived success of partnerships in wildlife conservation.

This dissertation addresses SWA partnerships through an examination of one prototypical SWA's partnership arrangements. I propose a typology for categorization of SWA partnerships and apply a theory of collaborative capacity to the assessment of them. I surveyed all employees of the Michigan SWA and asked them to identify the three partners they consider most key to their work and found gaps in the frequencies of partners considered key to the work of SWA employees based on their locations in the defined typology. Additionally, the model of collaborative capacity tested varied in performance when applied to SWA employees and SWA partners.

This research has implications for transparency regarding how state power is shared and considers how the disparate prevalence of various partnership arrangements may affect wildlife

governance. Furthermore, my research findings may be used to improve SWA partnership arrangements and improve their alignment with governance and management-relate goals, as well as increase awareness of differences in views regarding partnership success as defined by SWA employees and partners.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Chapter One: Introduction

As the world faces myriad environmental challenges that are too vast for any single organization to manage, there is a need for state wildlife agency (SWA) employees and other natural resource professionals to work in coordination with each other to affect conditions that sustain wildlife and their habitats for future generations. Nationally, views toward nature and wildlife are changing (Manfredo et al., 2020), and to remain relevant to changing constituencies SWAs may benefit from integrating diverse actors and perspectives into their work (Association of Fish and Wildlife Agencies, 2019; Jacobson et al., 2010). In the North American context, SWAs regulate access to wildlife resources and seek to optimize human benefits and minimize costs associate with wildlife (Metcalf et al., 2021; Organ et al., 2012). Pursuing novel and effective approaches to wildlife conservation to support these goals will require sustained, coordinated efforts by SWA employees and private citizens or individuals representing organizations of all scales, in the various sectors of society, from large federal agencies to small community nonprofits. These arrangements are likely to occur more frequently in the future (Rosenbaum, 2006). Insights about how natural resource managers work together and with other entities will improve organizational capacity for partnership and collaboration.

Partnerships and collaborations are defined variously. They are decentralized governing institutions, operable at any scale, often external to normal governing agencies. I refer to partnerships as one type of institutional arrangement in which two or more actors share power, resources, and responsibility (Schäferhoff et al., 2009). Partnerships are considered by some as a form of coalition (Farrell & Scotchmer, 1988). The goal of managing through partnerships may also be considered an advanced form of public participation (Glasbergen, 2011); actors engaged in partnerships generally aim to achieve a collaborative advantage through synergy created by

1

the arrangement (Huxham, 1993; Lasker et al., 2001). Collaborative advantage is what is achieved that would not have been attainable by any one actor operating in isolation, and synergy is the process and relationships through which that advantage is achieved (Huxham, 1993).

Several frameworks related to partnerships describe their development and characteristics, as well as outcomes related to collaborative advantage and the creation of collaborative capacity. These models help practitioners and academics codify a common lexicon and understanding of partnerships and collaboration, and these frameworks lend themselves to the formulation of interesting and important questions regarding partnerships and their implications. Although no single model fully describes all relevant aspects of partnerships, comparisons and analysis of the models may help improve understanding of partnerships in which SWAs are engaged.

Based on previous frameworks, value added by partnerships is accomplished through synergy and outcomes such as links to other actors, increased capacity resulting from a partnership, or other multiplier effects (Asthana et al., 2002; Brinkerhoff, 2002; Foster-Fishman et al., 2001). Partnerships typically begin with a phase of trust-building and work towards the power to affect decisions and the political order (Decker & Chase, 1997; Glasbergen, 2011). An evaluation of partnerships may focus on the processes related to partnership operation or the outcomes resulting from partnership, although partnership processes are typically the focus of assessment-type research (Dowling et al., 2004). Additional process measurements may pertain to agreement about shared principles, goals, trust, culture, leadership, knowledge, and understanding (Asthana et al., 2002; Vangen & Huxham, 2013). Research on the benefits of partnership evaluation focuses on evidence of meeting objectives, enhanced performance in pursuing their own mission, and enhanced performance in satisfying constituencies also relate to

meeting the objectives of partnerships (Brinkerhoff, 2002; Mohr & Spekman, 1994). Other outcomes of partnerships are partner performance (e.g., partner roles are enacted as prescribed, partner satisfaction with each other's performance) and efficiency in strategic decisions (Brinkerhoff, 2002).

As governing arrangements, partnerships are inherently political in nature (Klijn & Skelcher, 2007). For SWAs, partnerships redistribute power for managing public goods such as wildlife from strictly government agencies to a diversity of groups. The integration of public and private organizations to conduct wildlife management may shift power traditionally held by public agencies to other actors. In some partnership arrangements, private institutions and nonprofit organizations become responsible for the public good, although they are not directly accountable to the public. Thus, partnerships have numerous implications for how state resources and power are shared. With whom the government engages through partnership and for what purposes has implications for how public goods and services are delivered to citizens (Klijn & Skelcher, 2007).

A frequent criticism of partnerships as a governing structure is that governance networks are incompatible with representative forms of democracy because policy should be determined by elected officials, and their authority is undermined by other models of governing (Klijn & Skelcher, 2007). By this account, partnerships can lack legitimacy because political representation is contested by actors in the private sector who may be self-interested against the interests of the public and who may displace public decision-making or oversight in a frame outside of representative democracy, and public administrators have undue power as facilitators of governance networks, of which partnerships are one type (Klijn & Skelcher, 2007; Sørensen, 2002). The potential redistribution of state responsibilities to non-state actors as partnerships are

one mechanism through which state fragmentation may occur. In the context of public wildlife management, partnerships have potential to threaten or infringe on state authority over public trust resources and test limits of public participation (Decker et al., 2015). As a result, natural resource decision-makers may benefit from increasing the transparency of the work accomplished through partnerships (Klijn & Skelcher, 2007). Normative principles of wildlife governance suggest that transparency and inclusion of diverse groups are valued (Decker et al., 2016) and partnerships offer one mechanism for achieving these aims. Insofar as transparency improves legitimacy, legitimate partnerships may also be more effective at accomplishing desired goals due to their acceptability to relevant parties (Glasbergen, 2011). In addition, private sector actors may bring resources that the public sector lacks, such as additional capital investment or technical help (Rondinelli, 2003).

Although there are many benefits to partnerships, given their diffuse nature there may be obstacles to managing through them. Partnerships often have indeterminate outcomes and may be exclusionary to underrepresented populations (Verma, 2016). Partnerships may increase government agency vulnerability to agency capture and fragment government policy (Crenson & Ginsberg, 2003; Verma, 2016). By examining SWA partnerships through the techniques outlined in this dissertation, however, it may be possible to avert or identify these challenges (see Chapter Two). Although managing through partnerships is complex, given the need for increased capacity in wildlife agencies which may coincide with shrinking budgets (Winkler & Warnke, 2013), partnerships are likely to be a key strategy for implementing conservation in the future.

The goal of this dissertation is to generate and convey knowledge that may be used to improve capacities in SWAs to achieve objectives for conservation, through the development of a partnership typology which may be implemented to predict partner needs, and a formal,

comprehensive assessment of factors leading to successful partnerships that will benefit SWAs while contributing to theory on stakeholder participation. Partnerships are a common and increasingly frequent arrangement between SWAs and various stakeholders, yet little is known about how success or management effectiveness are reliably achieved and maintained in the context of a SWA and their partner organizations.

My research objectives were to: (1) describe and assess the current array of types, scale, and extent of partnerships engaged in by SWAs; (2) describe why some SWA partnerships are perceived as more successful than others; (3) develop a survey instrument to measure partnership processes and outcomes as they relate to perceptions of partnership success (4) reveal gaps in beliefs about partnerships and partnering between SWA employee and partner drivers and barriers to partnership success.

My work has implications for current SWA partnerships and those programs with potential to expand in the future. Adopting an interdisciplinary approach and incorporating research from various fields, including organizational psychology and political science, can enable SWAs to make strategic decisions about which partnerships most greatly benefit their organizations, how to facilitate those partnerships most effectively, and how to improve those already in existence.

Exploration of SWA partnerships and collaboration, as described in this dissertation, was conducted through quantitative survey research. Quantitative methods enabled me to describe factors contributing to perceptions of success in partnerships from the perspective of employees within a SWA and partners external to the agency. I developed and tested measurement instruments through a pilot study and surveyed SWA employees and their partners. In addition to

quantitative surveys, I gathered qualitative feedback through semi-structured interviews with SWA employees and partners, as well as qualitative items on the survey instruments.

Outputs from this project include a novel survey tool for measuring collaborative capacity achieved by SWA partnerships, identification of factors associated with partnership success, and deepening the understanding of how partnership success may be perceived and sustained. Results of my work relate directly to the mission of SWAs to conserve the wildlife resources, natural communities, and ecosystems for current and future generations. The outcome hoped for is that by increasing understanding of partnerships and employee and partners' experiences of them, SWAs may be empowered with knowledge and tools to increase partnership effectiveness and, if used as an evaluation tool, aid in strategic decision-making regarding allocation of effort in partnerships.

My dissertation is written as three separate manuscripts, with supplementary introductory and concluding chapters. Chapters Two, Three, and Four are written as scientific manuscript drafts that will be revised for submission to academic journals. Chapter Two proposes a typology to characterize partnerships in which SWA are involved, provides an assessment of a prototypical SWA's partnerships, and describes the implications of the participation, or lack of participation, of partners of various types for SWA governance of wildlife resources in the North American context. Chapter Three outlines development of a tool for assessing SWA and partner collaborative capacity based on a proposed theoretical framework for collaborative capacity and a pilot study to validate results of the associated measurement model. Chapter Four describes the performance of the collaborative capacity measurement model in the context of a SWA and its partners and reveals gaps between SWA and partner perceptions of partnership success. The final chapter consolidates the research findings and suggests advances of theory and management

applications based on a holistic synthesis of the research findings from the results of the 3 data-driven chapters.

Chapter Two: Partners in Conservation—How State Power Is Shared Via State Wildlife Agency Partnerships

Abstract

As state wildlife agencies (SWA) adapt to changing societal values and needs—some of which diverge from the intent of past funding models—they may seek opportunities for partnerships that create synergy between statutory obligations and the passion or influence of non-governmental organizations (NGOs). Partnerships as an advanced form of collaboration between government actors in the public, private, and civil sectors, however, have implications for how state power is or is not shared. Although not a novel form of stakeholder participation, an increasing diversity of interests and arrangements in partnerships confront personnel in SWAs (Jacobson et al., 2010; Manfredo et al., 2020). Success of these partnerships, no matter the forms through which they occur, is expected to affect nearly all the activities of SWAs in the future given broadening constituencies (Association of Fish and Wildlife Agencies, 2019). My research seeks to assess the partnerships identified by SWA employees and categorize them by location in a typology that is based on partner organization scale and sector of society. I surveyed all employees of Michigan's SWA and asked each employee to identify three partners they consider most key to their work. I found inconsistencies in the frequencies of partner types considered key to the work of SWA employees based on their locations in the defined typology. My research results have implications for transparency regarding how and with whom state power is shared and considers how partnership arrangements may affect the efficacy, legitimacy, and efficiency of wildlife governance. This form of assessment enables citizens and stakeholders to identify how responsibility for wildlife management is shared. My findings may be used to better tailor SWA partnership arrangements to align with desired goals for governance and management.

Introduction

In a wildlife conservation future characterized by more active public participation, continued decline of certain stakeholders (e.g., hunters and agricultural interests), and subsequent decreases in conventional funding (e.g., revenue from hunting license sales), one mechanism for reaching SWA capacity to achieve wildlife management objectives is through partnerships (Krester et al., 2014; Trauger et al., 1995). For this research, I define *capacity* as having the necessary resources for governance systems to learn, adapt, and conduct actions to achieve desired outcomes while remaining resilient to change (Brown & Westaway, 2011). Partnerships and the activities, processes, and systems they encompass have become ubiquitous in the work of SWAs. If revenues continue to decrease as anticipated because of declines in hunter populations (Winkler & Warnke, 2013), SWAs who effectively engage in strategic partnerships are more likely to increase management capacity and achieve mutual interests in wildlife conservation that effect change in wildlife conservation across landscapes (Johnson et al., 1994; Kretser et al., 2014; Trauger et al., 1995). Conservation efforts often operate in conjunction with other organizations, communities, and businesses. SWA partnerships normally engage individuals and organizations from various sectors of society, including civil society, the private sector, and other public agencies.

Although SWAs have a long history of establishing and maintaining partnerships, groups interested in communicating and pursuing projects with SWAs are anticipated to increase in number and diversity (Association of Fish and Wildlife Agencies, 2019; Jacobson et al., 2010). Today, SWAs engage with a multitude of partners, however, relatively little is known about how and with whom SWA power is shared through partnerships at the agency level. In the context of a SWA, partnerships connotate a sharing of state (government) power, and how this power is

9

shared by SWAs has numerous ramifications for wildlife governance. The objective of this paper is to report on research assessing actors considered by SWA personnel to be key partners and explore the implications of those partnerships represented for the sharing of state power and wildlife governance. Specifically, I address:

1. Where is state power allocated through partnerships in wildlife management?

2. How can these partner arrangements be described in the context of state wildlife management?

3. What are the implications of the relative prevalence of partnership arrangements for wildlife governance?

Partnerships and Wildlife Governance

For purposes of this research, partnerships are defined as the sharing of goals, risks, and responsibilities between two or more actors to achieve some mutual interest (Schäferhoff et al., 2009). Definitions of partnerships vary widely in literature and in practice, yet partnerships are common in governance structures (Delmas & Young, 2009). Partnerships are one of many collaborative governance arrangements (Bednar & Henstray, 2018; Hall et al., 2011). They are decentralized governing institutions that are operable at any scale (e.g., global, local, ecosystem) and outside of normal governing institutions (Kenney et al., 2000). Partnerships enable organizations to benefit from the resources and expertise of partners to advance a common goal.

In partnerships and other collaborative arrangements, citizens receive government services and public goods from a variety of organizations, including nonprofits, local governments, private organizations, and public agencies. Under these conditions, the administration of government is no longer solely the job of the state, but often necessitates involvement of non-state actors, and the new work of government agencies is to navigate the

10

ecosystem in which public services are dispensed (Munro et al., 2008). Managing interconnected network of actors and directing public policy are governance activities; partnerships and collaborations are one of many forms of collaborative governance. Governance, applied to conservation, describes processes, instruments, and mechanisms available to collectively steer a society or organization toward a desired end state (Bäckstrand et al., 2010; Kooiman, 2003; Lemos & Agrawal, 2009). Governance includes how decisions are made and implemented, and how responsibilities are exercised (see Armitage et al., 2012, for descriptions and comparisons of environmental governance and management). Thus, governance and government are not wholly synonymous. Governance includes actions initiated by the state (e.g., public trustees or trust managers, in the case of wildlife conservation; Smith, 2011), but also includes actions of a civil society (e.g., NGOs or groups of organizations and beneficiaries of public trust management, such as individuals), as well as actions of the private sector (e.g., corporations that might not be direct beneficiaries). Conservation is accomplished through management, which in most cases is a governance activity (Rudolph et al., 2012).

Partnership arrangements between a SWA and other actors suggest a sharing of state power. However, little is known about the whole of how SWA power is shared across an agency, which has numerous implications for the legitimacy of these governing arrangements.

Partnerships and Legitimacy

Given that SWA partnerships disperse state power by distributing the power, resources, and responsibilities of wildlife management with other actors, questions persist as to whether there is an obligation for SWAs to partner with other agencies or NGOs to fulfill their administrative responsibilities and, more fundamentally, whether partnerships are a legitimate form of SWA governance (Klijn & Skelcher, 2007). Although partnerships and collaboration

offer one mechanism for SWAs to achieve more work by benefitting from the resources and

expertise of partner organizations while advancing common goals, there are challenges to the

legitimacy of this governing arrangement and the associated dispersion of state authority (Klijn

& Skelcher, 2007; Rhodes, 1994). Related to SWAs, views on their ability to share power,

resources, and responsibilities with non-state organizations vary, and there is debate on the

limitations on SWAs to engage in partnerships given the "administrative responsibility of the

state" as public trust manager (Decker et al., 2015). Potential attitudes towards SWA

collaborations may fall between opposing extremes: (a) partnerships are an abdication of public

trust responsibilities and thus, cannot occur; and (b) that partnerships enable SWAs to focus on

the important work of setting policy directions and strategic visions that can then be carried out

by partners.

Although partnerships and collaboration are one mechanism for improving the delivery

of public goods and services, as the state government is fragmented through configurations in

which multiple agencies and organizations are networked together through partnerships and

other collaborative arrangements, it becomes more complex to manage and assign authority over

decision-making power (Hooghe & Marks, 2001; Klijn & Skelcher, 2007; Skelcher, 2005;

Sørensen, 2002). This fragmentation of state control decreases the culpability of actors involved

in the delivery of public goods because it is difficult to assign accountability with more actors

delivering the goods and because fewer individuals can understand and hold organizations and

individual actors accountable (Klijn & Skelcher, 2007; Skelcher, 2005; Sørensen, 2002).

Additionally, politicians and politically appointed employees distance themselves from the

delivery of public goods (intentionally or unintentionally) as non-state actors become integrated

into the work of the state (Klijn & Skelcher, 2007), limiting citizens' ability to hold elected

12

officials accountable (Skelcher, 2005). Defining measures of success and responding to them requires coupling numerous organizations and building consensus. Simply managing the fragmented policy and service delivery landscape has become the new role of the government (Klijn & Skelcher, 2007; Rhodes, 1994). The sum of these outcomes could lead to a decline in the state's capacity to meet its duties and obligations effectively (Kjaer, 2011).

Challenges to the legitimacy of partnership arrangements relate to the view that governance networks are incompatible with democracy because policy should be determined by politicians, and that their authority is undermined by other models of governing (Klijn & Skelcher, 2007). By this account, governance networks—of which partnerships are one type— may lack legitimacy because political representation is contested by actors in a frame outside of representative democracy and because public administrators have undue power as facilitators of governance networks (Klijn & Skelcher, 2007; Sørensen, 2002). According to this stance, partnerships and governance networks allocate too much power to actors outside of the political sphere; therefore, they lack legitimacy and should not occur (Klijn & Skelcher, 2007). This mode of governance suggests that the state governs through hierarchy; hierarchical governance describes a mode of governance in which strict hierarchies govern the activities of state and non-state actors; responsibilities between the two are not shared (Hall, 2011). In hierarchical governance, there is top-down decision-making, with the state determining policy directions (Hall, 2001; Klijn & Skelcher, 2007). Although this model of democracy is considered elitist, ironically, the role of the state is arguably the greatest in this case as compared to the other modes of governance that integrate non-state actors (Hall, 2001; Klijn & Skelcher, 2007). In hierarchical governance, rights to public goods are not granted to private industry, and institutional arrangements are clear (Hall, 2001). In a hierarchical governing arrangement, it

would be simple to identify who controls the power over decisions (Klijn & Skelcher, 2007). To conduct hierarchical governance, legal knowledge and capacity to define policy and regulation is invaluable, and determines decision-making authority (Hall, 2001). However, this approach to governance requires a well-funded state and measurement of policy outcomes that responds to on-the-ground delivery of public goods and services.

An example of hierarchical governance conducted by SWAs is the licensing of hunting and fishing activities. In the case of hunting and fishing, the state allocates the right to engage in hunting and fishing and sets strict regulations on the type of wildlife that can be harvested (Organ et al., 2012). There are harsh penalties for any failure to abide by state policy in this area. Measures of success for hunting and angling license policy can be defined by the generation of license sales and poaching incidents, as well as public acceptance of various hunting and angling behaviors.

In another view, governance networks are considered complementary to representative democracy. In this case, they are primarily thought of as a tool used by politicians and others in representative democracy to increase public involvement in decision-making (Klijn & Skelcher, 2007). In doing so, the decisions of politicians and state organizations have greater legitimacy and accountability is spread among governance network actors instead of resting solely with politicians, as is the case in the view that governance networks are incompatible with representative democracy (Klijn & Skelcher, 2007). In this framework, state governments can use governance networks to handle lower-level decisions, thus allowing politicians to focus on the top priorities facing the state while allocating greater power to public administrators (Klijn & Skelcher, 2007). Collaborative governance as in through partnerships is also demanded by

citizens, who seek control over their government and the services it provides (Goldsmith & Eggers, 2005).

Partnerships can be thought of as an advanced form of stakeholder participation or engagement (Arnstein, 1969; Decker & Chase, 1997; Lauber et al., 2012). Honest engagement can lead to informal or formal relationships, and these relationships may lead to partnerships where risks, rewards, and decision-making power are shared between two or more groups (Schäferhoff et al., 2007). The degree of sharing often depends on the type of partnership, as well as why and how the relationships were initially formed (Arnstein, 1969). Partnerships within and across the spectrum of partnership types (Figure 1) are arrangements, in part, in response to the current needs and trends of society, with the expectation that government agencies will work together and will engage with stakeholders in transparent decision-making and implementation of management interventions. Partnerships, as a form of engagement, are most likely to form when citizens and groups are well organized and have resources of their own to contribute or bargain with (Arnstein, 1969; Munro et al., 2008). Forming them may generate social capital (Purdue, 2001). They indicate a high degree of citizen power and power sharing, but less than full citizen control or delegated power (Arnstein, 1969). However, lines between the different demarcations in characterizations of partnerships and other forms of participation blur; some partnerships *do* delegate power and control to citizens. In the context of wildlife governance, this occurs in co-management (Lauber et al., 2012).
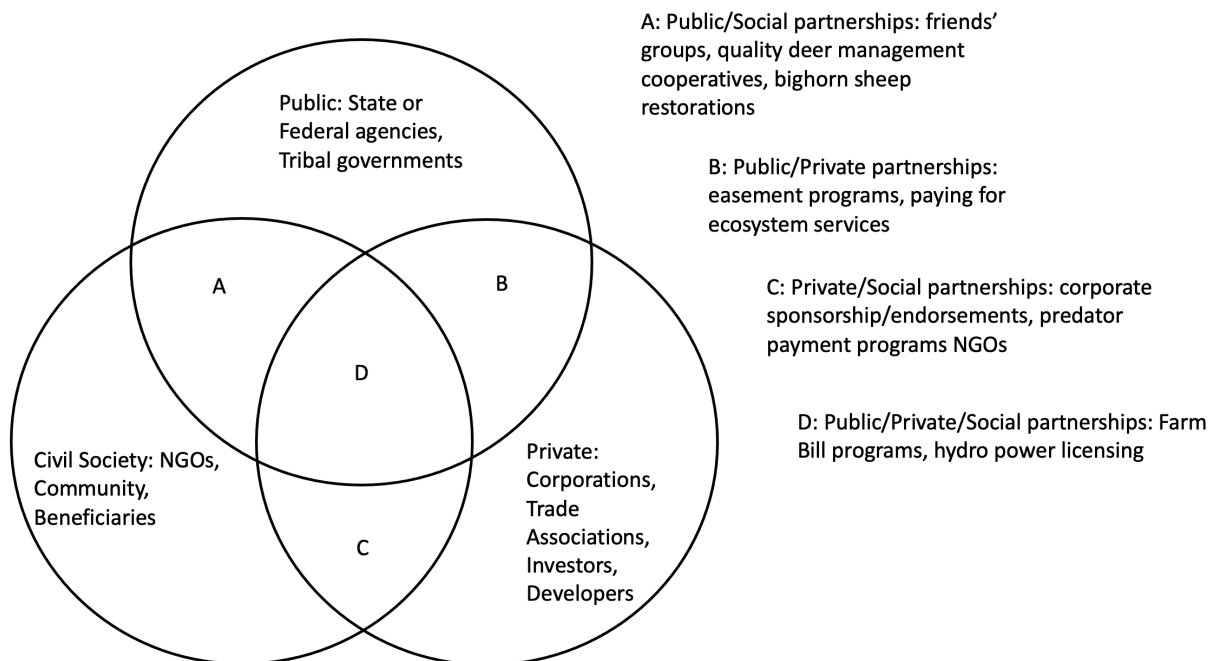
Beyond engagement, governance networks may include a transitional form of government between a central state and a new approach towards governance (Klijn & Skelcher, 2007). According to this perspective, traditional representative democracy is no longer our system of government due to a combination of factors that include globalization, information

technology, and a decline in citizenship (Klijn & Skelcher, 2007). This is conceptually related to the "downsizing of democracy," in which public sentiments can no longer be ascertained by elected officials due to the lack of organization and coherence of stakeholders and civic organizations (Crensen & Ginsberg, 2004). Governance networks increase the openness of decision-making and enhance the flexibility and efficiency of government by reducing barriers between decision makers and citizens (Klijn & Skelcher, 2007) and allow for greater citizen control over decisions (Goldsmith & Eggers, 2005). In this perspective, through governance networks, government may become more efficient and flexible, which ultimately benefits citizens (Klijn & Skelcher, 2007).

Figure 1

A Typology of Partnership Arrangements Within a Governance Framework with General Examples of Wildlife Management Activities

A: Public/Social partnerships: friends' groups, quality deer management cooperatives, bighorn sheep restorations

B: Public/Private partnerships: easement programs, paying for ecosystem services

C: Private/Social partnerships: corporate sponsorship/endorsements, predator payment programs NGOs

D: Public/Private/Social partnerships: Farm Bill programs, hydro power licensing

Public: State or Federal agencies, Tribal governments

Civil Society: NGOs, Community, Beneficiaries

Private: Corporations, Trade Associations, Investors, Developers

16

Finally, governance networks may be considered instrumental to democracy (Klijn & Skelcher, 2007). By this view, governance networks help state institutions increase their authority and assert control over the complex governance system, affecting the outcomes considered desirable by politicians and stakeholders (Klijn & Skelcher, 2007). This is akin to the "steering of a ship" idea of governance first identified by Rhodes (1994), in which public institutions struggle to combat the hollowing of the state. There are also parallels with the view of governance networks as instrumental to democracy and communitarianism. This perspective encapsulates the idea of governance as communities and suggests that citizens should be directly involved in governance (Hall, 2011). By increasing public participation, governing units can emphasize deliberation and be more voluntary and local in scale (Hall, 2011).

Ultimately, politicians and court interventions determine the actions of the state and government employees, and legal decisions about partnerships have a high degree of contextual specificity. Insights into frameworks and normative criteria used to judge an arrangement's legitimacy, however, can illuminate the guiding principles behind governance arrangements. Defining the assumptions of these various perspectives can help citizens, stakeholders, and public employees ensure that the government is functioning at an acceptable level, and advance ideas about how to improve the delivery of public goods. Identifying the actors that have increased their power over wildlife management decisions will improve our understanding of wildlife governance.

Partnership Typology Conceptual Framework

To answer questions of how state power is allocated through partnerships in wildlife management, I developed a typology to categorize the partners of a SWA. The typology of partnerships within a governance framework (Figure 1) includes two dimensions (sector and

scale) and myriad relationships. Figure 1 describes the partnerships from the lens of a partner's societal sector. Arrangements between the public sector (e.g., government agencies), civil society (e.g., public trust beneficiaries, NGOs), and the private sector (e.g., corporations, developers) exist in many forms (Delmas & Young, 2009). Previous research in the field of natural resource governance has described cross-sector partnerships to address social issues (CSSPs), which are "cross-sector projects formed explicitly to address social issues and causes that actively engage the partners on an ongoing basis" (Selsky & Parker, 2005, p. 850). Views toward CSSPs vary by sector, and analysis therefore includes the diverse motivations, goals, and approaches by actors based on their sector (Selsky & Parker, 2005).

In addition to CSSPs, this research encompasses intrasector public partnerships given the myriad ways SWAs partner within their respective sector with other government actors. For instance, SWAs frequently partner with state forest agencies to help ensure wildlife risks are considered when managing forests (Charnley et al., 2020; Hamilton et al., 2019; McWethy et al., 2019). Similarly, two private companies might partner with one another to produce a product that could not be produced by either company alone. However, my research does not include partnerships without a public sector component, given the SWA-centric focus of this research and their position as public sector actors; SWAs are not engaged in intrasector partnerships in the private and civil sector or business-nonprofit CSSPs by definition.

Sector. Partnerships do not occur in a vacuum. Partnerships influence and are influenced by their organizational environments and policy networks (Stone & Sandfort, 2009). The use of a typology enables examination of common themes among various partnerships that influence wildlife governance. Although each partnership may have its own culture, norms, and institutional structures, its positionality in the proposed typology has numerous implications for

18

how resources and power are shared within the partnership and between organizations. I describe

themes associated with each category of the typology based on what is known in the literature

and through my research, using a variety of SWA partnerships as examples. Although

institutional structures and order may vary, this typology and others (Hall, 2011; Selksy &

Parker, 2005) aid interpretation of how partnerships (one type of institution) effect change and

are likely to undergo change themselves. Below, I describe the implications for partnership and

power sharing based on partner organizations' sector and scale relevant to SWAs and give

examples of SWA partnerships of each form (Table 1).

Table 1

State Wildlife Agency Partnership Typology

	Sector(s) of society			
	Public	Private	Civil	Multisector
Large	**1** National or international public agencies and department (e.g., USFWS, USDA)	**2** National and international businesses, corporations	**3** International or country-wide civil organizations (e.g. The Nature Conservancy, Ducks Unlimited)	**4** National or international focus, addressing wicked problems (e.g., Landscape Conservation Cooperatives)
Medium	**5** State and region-wide organizations (e.g., other state wildlife agencies, MI Department of Environmental Quality)	**6** State and region-wide businesses, corporations	**7** State and region-wide organizations (e.g., Michigan Audubon)	**8** State or regional focus (e.g., wildfire resiliency partnerships)
Small	**9** Small public organizations (e.g. city and county governments)	**10** Local businesses	**11** Small nonprofits and community organizations (e.g. individual parks' friend groups, individual Ducks Unlimited chapters)	**12** Community focused, small in scale (e.g., individual habitat restoration projects)
	Public	Private	Civil	Multisector
	Sector(s) of society			

(Left and right axis labels: **Partnership organization scale**, with rows labeled Large, Medium, Small)

Public-Private Partnerships. Public-private partnerships are a tool that allow two groups to leverage resources. Generally, the public sector benefits from the resources of the private sector through service contracts or agreements to operate or maintain facilities (Wojewnik-Filipkowska & Węgrzyn, 2019). Private sector actors may benefit from concessions related to

state regulations, privatization, and other profit-generation through contacts and agreements (Wojewnik-Filipkowska & Węgrzyn, 2019).

Although these partnerships occur in fiscally robust times for the public sector, they may also be driven by austerity measures. Public-private forms of collaborative governance tend to occur when resources and power allocated to the state constrict; the conservative political ideology of "hollowing the state" centers on reducing the public sector and role of government (Rhodes, 1994). Outcomes of these efforts are evident in the reduction of public spending, public ownership, and measures of government employment (Rhodes, 1994). Rhodes (1996) suggests, "governance is the acceptable face of spending cuts." Reduced spending correlates with reductions in public services provided to citizens, reduced public ownership translates into the sale of public property to private industry, and a reduction in the civil service means that there are fewer government employees to carry out the management and provision of public goods and services.

A "hollowed out state" would challenge the state's public trust management of wildlife resources if SWAs were allocated insufficient resources to carry out their missions to the satisfaction of stakeholders. As such, public-private partnerships often emerge during times of financial crisis. Public private partnerships allow governments to ease the financial burden of providing services to citizens by avoiding a large upfront cost, while the private sector actor can profit from the provision of services to citizens (Meidutē & Paliulis, 2011). However, this cost offsetting may be short term, and public-private partnership performance varies wildly in terms of the quality of public good provision (Selsky & Parker, 2005). This represents a narrow view of public-private partnerships but is practiced in the context of wildlife management.

Partnerships between organizations in the public and private sector may also be political

symbols and policy tools (Selsky & Parker, 2005). Accordingly, the extension of government

initiatives to the private sector may improve public sector actors' ability to focus on strategizing

policy directions and management rather than service delivery, which has numerous benefits and

costs. These partnerships typically "depend on successful development of legal procedures,

agreements, and contracts that define the relationship clearly" (Selsky & Parker, 2005, p. 159).

A common form of public-private partnership in wildlife management relates to habitat

restoration programs, such as when private industry partners agree to engage in wildlife-friendly

habitat planning or restoration in return for grants or other funds from the state. Because a vast

majority of land in the US is in private ownership, particularly in the eastern half of the country,

these public-private partnerships allow SWAs to conduct habitat restoration on large swaths of

land that would not be accessible otherwise (Georgia Department of Natural Resources, 2017).

Corporations and private industry actors are often large landowners. Conducting habitat

restoration on private lands improves wildlife populations; wildlife do not constrict their

movement to land boundaries, and managing at the landscape rather than land ownership scale

improves wildlife populations and habitats in the public interest.

In return for restoration activities, private partners receive some combination of financial

compensation and public recognition. For example, in Georgia the Forestry for Wildlife

Partnership is accessible only to landowners with more than 20,000 acres; businesses that enroll

receive technical assistance, are honored at the state capitol, receive recognition in press releases

and radio announcements, ads in hunting and fishing regulations, and are included in other state

outreach materials, such as on their website, and may have the opportunity to display the SWA

logo on their lands (Georgia Department of Natural Resources, 2017). These activities increase

the social capital of businesses and grant them recognition on a large scale for engaging in activities that benefit a state's citizens, and particularly the hunting and fishing community.

Public-Public Partnerships. Partnerships and collaborations between public sector organizations suggest a relationship between two or more, public sector organizations that work together to achieve a mutual interest. These collaborations may rely on the use of formal agreements, relationship building, leadership, and collaborative resource management (Dockry et al., 2018).

Despite their benefits, these arrangements may be challenged by the complex bureaucratic structures that guide the work of public sector organizations, competing missions, differences in perspectives, lack of resources, and turnover in personnel (Dockry et al., 2018). They are also complicated by disputes over jurisdiction and opposition to federal regulation of state government, such as in the case of the Sagebrush Rebellion (Glicksman & Chapman, 1995). Under the present system of environmental regulation, management of environmental resources involves overlapping jurisdictions given the vastness of issues that permeate federal and state loci of control (Engel, 2006), which results in what is referred to as "dynamic federalism" (Hudson, 2014).

Public-Civic Partnerships. Partnerships between public sector organizations and actors in the civil sector may represent a political third way. These public-civil relationships have been classified in 4 ways based on organizational identity and mutuality: (i) contracting, in which clear contributions are set and an outside organization fulfills them, (ii) extension, in which one organization is an extension of the other and lacks their own clear identity but supports the dominant organization in some manner, (iii) gradual absorption, in which the identity of one organization subsumes the other, and (iv) partnership, in which both the government and

nonprofit actors have a high organizational identity and work together towards a mutual goal (Brinkerhoff, 2002). The state often controls government-nonprofit partnerships through funding mechanisms and direction-setting, and their role is the management of such partnerships. In such instances, the power and resources reside with the state, which may breed distrust (Selsky & Parker, 2005).

In the work of SWAs, however, nonprofit organizations may support state activities that lack funds or recognition. Because SWAs are government agencies, they cannot lobby on their own behalf. As a result, one function of many state-nonprofit partnerships in the realm of wildlife management relate to the ability of nonprofits to promote the activities of state government and garner funding for them (which, in some cases, may then be filtered to from the state to nonprofit organizations). An example of this type of partnership was the Michigan Waterfowl Legacy (Michigan Waterfowl Legacy, 2014). Members included state and nonprofit organizations, and the purpose of the partnership was to improve waterfowl populations and habitat, increase waterfowl hunting participation, engage citizens, and motivate them to act to conserve waterfowl hunting opportunities and habitat (Michigan Waterfowl Legacy, 2014). The Michigan Waterfowl Legacy newsletter suggests that individuals can take "big steps" to help the partnership by "ask[ing] legislators to support programs and legislation that conserve wetlands and waterfowl" (Michigan Waterfowl Legacy, 2014, p. 4).

In public-civil partnerships, SWAs may defer to politically organized nonprofits when determining their policy directions. The power of these nonprofits is often measured by their membership, but "membership" may lack meaning and describe, for example, the number of people subscribed to a newsletter (Crensen & Ginsberg, 2004). In such instances, nonprofits gain political currency by having large "memberships," yet a few influential members may define

policy directions for entire organizations that then influence regulators in the public sector. In doing so, the public good for all is eroded by the existence of politically influential nonprofits that are controlled by elites (Crensen & Ginsberg, 2004) and these power dynamics may cause tension in partnerships (Raik et al., 2005).

Another example of a nonprofit funding a government program is the reintroduction of bighorn sheep. The Nevada Division of Wildlife, which oversaw the reintroduction of bighorn sheep, had its activities funded by Nevada Bighorns Unlimited, Fraternity of the Desert Bighorn Sheep, and other organizations (Nevada Division of Wildlife, 2001). These forms of partnership, however, may suggest agency capture.

Tri-Sector Partnerships. Tri-sector partnerships often address issues that require joint action (Selsky & Parker, 2005). A characteristic of these arrangements is the inclusion of bridging organizations tasked with management of the partnerships. These partnerships require communication and likely involve interdependencies between organizations, and the interests of all partners are not likely to be addressed (Selsky & Parker, 2005). Other important capacities include the ability to mobilize groups (a strength of nonprofits), contribute resources (a strength of private sector organizations), and the ability to garner media attention (Selsky & Parker, 2005).

A common tri-sector partnership engaged in by SWAs relates to the administration of the Farm Bill, federal legislation that helps protect wildlife habitat on public and private lands. The program requires that organizations match funds provided, which leads to the formation of tri-sector partnerships. Each year SWAs, nonprofits, federal agencies and private sector organizations convene to decide on projects that the North America Waterfowl Conservation Act partnership will pursue for federal funding. These groups contribute money jointly to garner

federal match dollars, and funds are often spent on private lands and administered through nonprofit programs. This long-term partnership is characterized by cooperation. Because this is a long-term partnership, in some years partners will contribute funds for federal match and ask for none in return, considering that they may benefit from the partnership in the future. However, in general, partners that contribute the greatest amount of money wield the greatest power over decision-making.

The Federal Agriculture Act of 2014 (i.e., the Farm Bill) provides over 6 billion dollars in funding over ten years for conservation programs often delivered through multidimensional partnership programs. Specifics of partnerships vary depending on the program, yet include federal, state, and tribal government agencies, NGOs, the private sector, and individual landowners where the conservation actions take place. As one example, the Conservation Reserve Program (CRP) administered by the US Department of Agriculture Farm Service Agency (FSA) is a 30-year-old program that has resulted in more than 20 million acres currently enrolled in projects designed to protect water quality, prevent soil erosion, and improve wildlife habitat. Grassland bird species, in particular, benefit from the CRP program, including a positive relationship between ring-necked pheasant abundance and the amounts of CRP acreage in a nine-state area (Nielson et al., 2008) and increases in abundance of five targeted species in Pennsylvania (Pabian et al., 2013). Whereas Farm Bill funding provides financial incentives to landowners, actual project implementation is unlikely without positive capacity-building relationships between FSA and many partners (often with complimentary or matching funds from non-federal sources). Potential downsides for regional or national programs of this scale are larger bureaucracies, increased orientation toward process as opposed to conservation interventions, and less direct engagement with stakeholders (Prager, 2010).

Another example of a public/private/social partnership is the Federal Energy Regulatory Commission Licensing Process. There are three approaches allowed in the process, yet all three bring together the Federal government, the private sector energy providers, and NGOs and other groups interested in fish and wildlife conservation, water quality, recreational opportunities, and other beneficial public uses that could be impacted by continued operation of hydroelectric projects. There are opportunities built into the licensing process for all the partners to engage and collaborate to resolve natural resources issues associated with the generation of hydroelectric power, thus increasing capacity to fulfill as many stakeholder interests as possible (Federal Energy Regulatory Commission, 2015). This and other partnerships range in their complexity (e.g., individuals engaged, number and type of organizations represented, legal issues addressed, etc.) and desired goals (e.g., changing technical aspects of permitting regulations, engaging volunteers to complete ongoing invasive species removal, etc.). They address current needs of SWAs and partner groups, such as the decline in available resources and desire for alignment between resource agencies conducting large-scale projects.

Scale. In addition to describing a partnership's sector, the typology I use to describe SWA partners captures partnership organization scale. I chose to define partner organization scale to characterize the level at which SWA objectives are being pursued through partnerships at various democratic levels. In the context of the public sector partnerships described in this work, the scale is a crude measure of the level of locality of democratic governance processes being executed through the partnership and the scope of organization missions as it pertains to the relative nature of the issue(s) they are organized around. Scale also has numerous implications for mutualism and identity of the partnership as well as SWA identity and those of

their partners, which relates to partnership culture, values, mission, name recognition and partnership constituencies (Brinkerhoff, 2002).

To this end, the typology describes organization scale at 3 scales: small, medium and large. I define organizations with a "small" scale as those that occur at the city, county, or local community-level. Organizations with a "medium" scale are those whose work centers on the state or regional level, and organizations with a "large" scale are those that typically operate at the multi-regional, national, or international level.

In the context of organization scale as defined in this research, SWAs are positioned as having a "medium" scale. Given our definitions of organization and thus partnership scales, this dimension of the typology also enables a preliminary analysis of the flow of public goods and services to and through SWAs due to their positionality in the middle of the scale. In this context, when SWAs partner with organizations with a "large" scale, the SWAs are likely to increase the localness of the work conducted through the partnership by its members. Conversely, when a SWA partners with people in organizations with a "small" scale, the SWA is more likely to be enhancing its operability and local scales.

Methods

Sampling

The SWA being assessed in this study is the Michigan Department of Natural Resources Wildlife Division (WLD). The WLD, in association with the Natural Resource Commission, is responsible for managing the state of Michigan's public trust wildlife resources. This SWA is known to work with numerous partners of various types (Michigan Department of Natural Resources, 2015). Using a list of employees of the WLD (n = 164) as a sample frame, I distributed a questionnaire electronically by email through Qualtrics to conduct a census of

employees ages 18 years and older. All known WLD employees for whom an email address was obtainable (N = 164) were contacted. Thus, the study population for my research included all adult employees of a SWA (response rate = 88%). My study population did not include WLD contract employees.

The questionnaire was implemented following a modified version of the Tailored Design Method (Dillman et al., 2014). I emailed the survey questionnaire to employees and used four waves to maximize response. Data were collected from January - February 2020 (Michigan State University Institutional Review Board: STUDY00002839).

Partner Actor Identification

The typology-based theoretical framework served as a guide to measure WLD employee experiences working with partners in external organizations. In this context, "external organizations" includes other divisions of the Michigan DNR, an employee or member of another organization such as a nonprofit, business, or government agency, or a private citizen. Given the aim of describing partners that SWA employees consider "key to their work with the WLD," I requested that SWA employees list the names and organizations of three individuals external to the SWA that they have worked with in the past who are key to their work with the SWA. The list of partners generated by this sample was compiled and cleaned to ensure that everyone listed as a partner by a WLD employee was present only once in our dataset (e.g., if two or more employees listed the same individual as a partner key to their work with the WLD, that partner would only appear in our database of partners only once).

Data Analysis

SWA partners were categorized by organization or entity scale. These classifications were chosen based on feedback from SWA employees about the meaningfulness of distinctions

between categories as well as the positionality of a SWA in the middle of the scale. Statistical data related to summary statistics for responses to items were analyzed in the program R (R Core Team, 2013).

Data were analyzed individually by me and two other individuals familiar with the WLD and other natural resource organizations in the state. Analysis constituted categorization of the generated list of partner actors identified by SWA employees by each listed partner's organization sector and scale. Subsequently, categorizations between myself and two other individuals categorizing partners were compared. Our decisions were compared and adjusted after reaching a consensus about the appropriate sector and organization scale for each partner.

Organizations were categorized in the framework based on their highest typical level of operation in terms of scale. For example, although the Michigan Department of Environmental Quality engages in projects that occur at the scale of a single city, because they are a state agency, they would be categorized as having a "medium" scale for the purpose of this research. After categorizing identified actors by sector and scope, I arranged them in the typology based on their sector and scale.

Results

Response Rate and Respondent Characteristics

Of the employees of the SWA, 133 responded to the survey items and 75 individuals provided information related to partners considered key to their work with the SWA. Thus, the usable response rate for this analysis was 46% (n = 75) after removing individuals due to nonresponse to the survey items related to partner identification.

The SWA employees who responded to items related to partner identification indicated that they personally interact with individuals not employed by the SWA in a professional

capacity daily (48%), weekly (45%), or monthly (7%). All respondents included in this study interact with external partners, and most interact with partners daily or weekly. No individuals that provided information related to key SWA partners indicated that they interact with individuals not employed by the SWA in a professional capacity "once a year" or "never." Of their contacts with individuals not employed by the SWA, employees indicated they interact with individuals not employed by the SWA in a partnership capacity daily (16%), weekly (47%), monthly (31%), or at least once a year (7%).

Responses of individuals excluded from analysis for failing to respond to items related to identification of key SWA partners (n = 58) indicated that they personally interact with individuals not employed by the SWA in a professional capacity daily (47%), weekly (33%), monthly (12%), or at least once a year (9%). In addition, employees who did not respond to items asking them to list partners external to the SWA key to their work indicated that they interact with individuals not employed by the SWA *in a partnership capacity* daily (10%), weekly (35%), monthly (22%), at least once a year (26%), or never (7%).

Typology Results

Most (n = 91) partners listed by SWA employees were in the public sector (Table 2). Only four private sector partners were listed, and 66 belonged to the civil sector. Relative to partner organizations from the other sectors, private sector partners are not as well represented in the sample of partners considered key to the work of SWA employees relative to partners in the civil and public sectors. In terms of partner organization scale, SWA employees most often identified partners from medium-sized organizations (those that generally focus on state or region-wide projects).

My findings suggest that the partners of the SWA considered key to the work of employees are overwhelmingly in the public sector and more than half (56.5%) of the partners listed by SWA employees were employees of other public sector organizations. Conversely, individuals operating as private citizens or employees of private sector organizations were underrepresented relative to partners of other types (n = 4) and comprised only 2.5% of the list of partners generated by employees included in the study.

I also found that the SWA employees indicated partners serving "medium" organizations key to their work in the greatest frequency (n = 75). Organizations with a "medium" scale are those that generally operate statewide or regionally. Partners working in organizations with a "large" scale were least frequently listed as partners key to the work with the SWA (n = 32).

Table 2

Count of SWA Partners by Typology Orientation Based on a Snowball Sample of Partners Considered "Key to the Work of the SWA" Generated by SWA Employees

	Total	**Public**	**Private**	**Civil**
Large	32	16	1	15
Medium	75	58	1	16
Small	54	17	2	35
Total	161	91	4	66

The most frequently listed partner type considered key to the work of a SWA is that of medium public sector employees. These partners are most like SWA employees, in terms of their location in a similarly positioned organization in the typology. In the context of civil sector

organizations, SWA employees most often list partners in small-scope civil sector organizations as partners key to their work of the SWA.

Discussion

Partnerships between SWAs and local communities, businesses, landowners, and other agencies and conservation organizations provide one mechanism to collaboratively manage habitat and wildlife populations. Because outcomes of SWA projects often have implications extending beyond the boundaries of where work is conducted, collaboration between actors reduces the likelihood that the actions of one party (e.g., removing a dam) will negate or even erode the efforts of another (e.g., preventing the spread of invasive sea lamprey). Complex issues that span ecological, jurisdictional, and ownership boundaries often cannot be addressed except through partnerships. Whereas public trust responsibilities include "all wildlife for all people," management interventions to protect or enhance wildlife populations or habitat may only be possible for SWAs on lands for which they have direct access.

A poorly executed strategy towards SWA partnerships has the potential to reduce the legitimacy of wildlife governance by decreasing transparency and accountability and eroding trust with public trust beneficiaries (Klijn & Skelcher, 2007). To leverage resources, SWAs mindful of challenges to the legitimacy of SWA partnerships may be better positioned to take intentional actions to change and craft collaborations that broaden perspectives among all concerns, are transparent, and assure public trust beneficiaries understand why the partnership was formed.

Partnerships are not a panacea for building capacity to manage more effectively (Hall, 2009). They require the expenditure of time and resources, perhaps at the expense of the public interest (Hall, 2009), and could have the opposite effect than intended and tax SWA capacity

rather than increase it. This chapter represents a first step in increasing the transparency of a SWAs partnerships by examining them holistically, from the perspectives of employees based on who they consider key to their work. Insofar as a goal of SWAs is for the public to perceive partnerships as a legitimate mechanism for dispensing public goods and services, SWAs that define with whom and at what scale they are engaging in partnerships increase transparency.

This chapter describes the partnerships of a SWA using a typology that defines SWA partners by their organizational scale and sector of society to identify patterns and explore implications of the composition of SWA partnerships involved in wildlife governance. Assessing how the power, resources, and responsibilities of a SWA is shared through partnerships improves collective understanding of how and with whom the state is executing its public trust responsibilities. Partnerships and collaborations between a state agency and other actors create a context in which interest groups can gain power and actor preferences, rather than directives from political figures, and affect the likelihood of policy adoption. This heightens the need for assessments of participants in SWA partnerships to evaluate SWA performance in terms of meeting public trust obligations for beneficiaries in the context of a fragmented state (see Chapters Three and Four for an evaluation of partnerships based on a collaborative capacity-based theoretical framework). Study results revealed disparities between the numbers of partners of various types described by the typology, which has consequences for how state power is being shared in the context of wildlife and natural resource governance.

Traditionally, SWAs have been involved with partnerships and building on these past experiences is one way to maintain capacity for conservation. Yet, few guidelines for *who* to consider working in partnership with exist, and metrics to evaluate such partnerships are generally lacking (see Chapters Three and Four). This typology is a first step at addressing the

question of how SWA power is shared, both with whom and at what level of locality, and what the implications of those partnerships are for how SWAs achieve goals related to wildlife conservation.

For example, individuals operating as private citizens or employees private sector organizations were underrepresented relative to partners of other types (n = 4) and comprised only 2.5% of the list of partners generated by employees. Given that private sector partnerships may be more likely to emerge during periods of state hollowing (Rhodes, 1994), this finding could reflect the stable or growing budget of the SWA (Scott, 2019). Accordingly, if the SWA budget constricts, there may be an increase in the number of private sector partners considered key to the work of SWA employees (Seekamp & Cerveny, 2010).

Scale has been found to be a determining factor in partnership selection by the SWA, with increases in scale linked with greater likelihood of selection for SWA partnership in the context of grant programs (Burton et al., 2021), which is contrary to the results of this study, in which employees were asked to provide information on partners considered most "key to their work." In this research, partners of large-scaled organizations were the least likely to be listed as key to the work of SWA employees (n = 32), which describes partnerships where state power in partnerships would generally flow to the SWA from national or international organizations.

My results also suggest that SWA employees work with partners serving "medium" organizations key to their work in the greatest frequency. Organizations with a "medium" scale are those that generally focus on a state- or region-wide issues. This suggests that the power of SWAs is staying within organizations of a similar scale and may reflect the mission of the SWA to manage the state's resources.

My findings also suggest that the partners of the SWA considered key to the work of employees are overwhelmingly in the public sector and over half of the partners listed by SWA employees were employees of other public sector organizations. The most frequently listed partner type considered key to the work of a SWA is that of medium public sector employees. These partners are most similar to SWA employees, relative to other groups in the typology. Public sector partnerships may emerge as state and federal governments negotiate with each other over jurisdictional authority and seek to avoid privatization (Boag & McDonald, 2010; Engel, 2006). In this study, given the similarity in scale of public sector partnerships, this suggests that despite numerous partnerships, in general the power over wildlife governance being shared is still held by the state.

In the context of civil sector organizations, SWA employees most often list partners in small-scale civil sector organizations as partners key to their work of the SWA. By partnering with smaller organizations in the civil sector, the SWA likely increases the locality of their work by integrating the perspectives and resources of individuals in local organizations, but for those partner organizations may involve the risk that their organizational identity is subsumed by SWAs (Brinkerhoff, 2002; Goldsmith & Eggers, 2005). This may reflect the trend towards community-based wildlife management, which improves SWA understanding of wildlife issues that impact stakeholders (Decker et al., 2005).

For SWAs, partnerships represent opportunities to increase support for agency programs and build capacity. Partnerships may aid SWAs that lack capacity to fulfill their public trust responsibilities and acknowledge the important roles the private sector and civil society can play in addressing collective conservation challenges are taking steps to improve capacity (cf. Stoker, 1998). Despite being the administrative role of the government (the state) to fulfill public trust

responsibilities, recognition by SWAs that capacity is lacking enables mechanisms to be crafted

to help ensure effective partnerships can fulfill that need, with accountability and transparency

measures in place for all sectors involved in the partnership.

Partnerships are a way to seemingly increase effectiveness of SWAs seeking to address

conservation issues on private lands; these partnerships may involve NGOs such as land

conservancies, and corporations such as Timber Investment Management Organizations

(TIMOs) that hold millions of acres of property open to public hunting and angling. Concerns

regarding abdication of public trust responsibilities can be minimized or mitigated through

accountability and transparency requirements spelled out in agreements. These often take the

form of fiscal accounting standards, reporting requirements, and sometimes competitive

arrangements at the front end of the process if the SWA is providing funding for management

efforts.

For example, if the expectation is partners can take on some of the roles of trust

managers, additional measures (e.g., memoranda of understanding or similar formal agreements)

may be required to help ensure public trust responsibilities are not abdicated by SWAs but are

fulfilled by the partnership. In addition, SWAs may benefit from this form of assessment because

it increases their capacity to manage and anticipate potential conflicts that may be created by

partnering with stakeholder groups at the expense or exclusion of others (see Decker et al.,

2015).

Management Considerations

If SWAs conduct intentional engagement required to incorporate multiple and diverse

perspectives, not only will decisions be based on a broader diversity of information, but the

partnerships that emerge from that engagement likely will be less traditional and have the added

benefit of helping safeguard against "agency capture" by stakeholder groups (Jacobson et al., 2010). This has the additional benefit of allowing SWAs to explore and understand diverse partners' interests more closely, if extra efforts are taken to ensure all the interests are considered, and not just those of special interest groups. Engaging a diversity of partners may help agencies align with Wildlife Governance Principles (WGPs), in effect a self-reinforcing feedback loop resulting in greater capacity and more effective conservation outcomes (Decker et al., 2016). While adopting the practices and traits detailed in the WGPs may help SWAs foster and maintain more effective partnerships and build capacity for conservation, it is also worth considering how those partnerships distribute state power and the implications of that power sharing for governance at a finer scale.

Conservation issues often are complex, and decisions require careful consideration of power and decision-making authority. Citizen involvement and citizen science projects by their very nature are partnerships that increase capacity through the collection and sharing of local ecological and social information. Examples include Audubon Christmas Bird Counts, which have yields some of the longest continuing data sets (more than 100 years in some areas) on species that are often underrepresented in normal SWA survey and inventory efforts. Another example is the Monarch Watch program, sponsored by the University of Kansas that has been collecting population data on butterflies since 1992 (Monarch Watch, accessed 25 March 2016). These and other efforts promote SWA power by connecting their goals to willing participants that foster information gathering and wildlife conservation in the public interest.

This paper addresses questions about how various forms of SWA partnership affect the allocation of political power and explores these realities through an examination of one SWA and its partners. The research has implications for defining and describing the power of

institutions, particularly SWAs, and the individuals that comprise their network. By investigating frameworks and normative criteria for judging SWA partnership arrangements, it is possible to examine one dimension of how wildlife management occurs in this mode of governance and clarify the assumptions guiding adoption of various governance arrangements. Illuminating these perspectives can help citizens and stakeholders ensure that their government is functioning legitimately, and advance ideas about how to improve the delivery of public goods.

Partnerships are governance activities that can build or erode agency (trustee and trust manager) capacity to achieve objectives for wildlife conservation. In the short term, my expectation is that the breadth and number of partnerships will increase based on current trends in various partnering arrangements, expectations that public (beneficiary) participation will intensify, and declines in revenue generated by wildlife agencies will continue, in the absence of new legislation to change how state and federal budgets are allocated. Nonetheless, these conclusions are predicated on the necessity that SWAs will not simply engage more, and partner more, but intentionally engage and partner thoughtfully with desired groups to increase the legitimacy of wildlife governance and the power of the state is shared with collaborating organizations.

Capacity of trustees and trust managers to achieve conservation objectives can be enhanced through research that focuses on factors influencing effective, sustained partnerships that manifest good governance. An initial set of questions to further research focused on improving effectiveness in partnerships include:

1. Do partnerships build legitimacy of SWAs to govern? How can partnerships build legitimacy such that trustees and trust managers can act appropriately on issues, such as

disease management or during emergencies (e.g., Kapucu et al., 2009), when time for extensive stakeholder engagement is not readily available?

2. Exploration of roles, responsibilities, and expectations by participants in various types of partnerships that occur or could plausibly occur in wildlife conservation. What are the expectations of external stakeholders for participation by SWAs regarding initiation and governance of partnerships? Conversely, what are the expectations of trustees and trust managers for their role in partnerships? Are there gaps between perspectives internal and external to SWAs that could be minimized through communication and education?

3. Development of metrics based on partner characteristics that may help evaluate the effectiveness of various partnership arrangements in wildlife conservation and whether those arrangements help SWAs align with the WGPs and increase capacity. Do partnership arrangements of various kinds based on scale and societal sector deliver what is being sought from partnerships?

Limitations

I only asked employees to list partners "key to their work" with the SWA; I do not know which partners they feel are least valuable. Although we assessed the partnerships of a SWA, outcomes of partnerships have been excluded from analysis. Outcomes of partnerships are a challenge to assess due to the diffuse nature of goals, which may vary wildly between actors. In addition, authority (or culpability) over decisions is difficult to assign to actors in partnerships and collaborations. I can make inferences about private sector partners being less important to the work of individual SWA employees given their low prevalence. However, these partnerships may simply be occurring at a higher level in the organization (through leadership that oversee the SWA) and exert an overarching influence on the work of SWA employees. Private sector

partnerships, although apparently fewer in number, may still have a vast effect. Although private sector partners are underrepresented in the sample, we do not have quantitative information about effects of those partnerships on the work of SWA employees, and, for example, it is possible that only a few private sector partnerships are highly influential to the work of SWA employees.

In addition, the unit of analysis for my study did not explicitly address tri-sector partnerships, although they occur in practice. Given that the typology is actor-based rather than partnership-based, individuals involved in tri-sector partnerships were included in the research. However, study participants are not grouped by specific partnerships, but rather their status as valued SWA partners. As a result, this specific form of partnership is not capturable by the data, which simply defines the actors considered key partners according to employees of one SWA.

Related to the lack of measurement of partnership outcomes, we also did not ask SWA employees to provide information about the relative effects of their work with partners of various types. Although we provide information about the frequencies of partnerships of various types, we lack information about the influence of that work on employees beyond that they identified partners "key to their work." We also don't know the relative weight of organizations operating in the domain of wildlife management. While partners in large organizations were underrepresented in the sample relative to the number of partners in small or medium organizations, perhaps there are fewer organizations in the realm of wildlife management that exist at the nation-scale or that operate internationally.

Chapter Three: Identification of an Instrument to Measure Collaborative Capacity

Abstract

Natural resource managers from organizations in the public, private, and civil sectors of society engage in partnerships and collaborations to increase their capacity for achievement of objectives for wildlife management. Measurement and assessment of collaborations in a broad range of contexts within which wildlife management occurs and improving knowledge about how to foster success through these partnerships may yield benefits for a broad range of natural resource users and decision-makers. To advance scholarship on the assessment of collaborations, I developed and tested an instrument that measures collaborative capacity of wildlife partnerships. The measurement instrument focuses on collaborative capacity sub-dimensions of member, organizational, programmatic, and relational capacity. Through confirmatory factor analysis (CFA), I identified a second order latent construct of collaborative capacity, based on the 4 sub-dimensions of collaborative capacity (RMSEA = 0.052, CFI = 0.962, SRMR = 0.033, n = 835). The CFA findings support the hypothesized measurement model based on the proposed theory of collaborative capacity previously identified in the literature. My results suggest this instrument may be used to evaluate partnerships and collaborations in a variety of contexts, thus enabling managers and practitioners to tailor their partnerships with greater contextual specificity, as well as make informed interventions to those partnerships and collaborations in which they are currently engaged.

Introduction

State wildlife agencies (SWAs) engage in collaborations to increase their capacity to achieve positive outcomes for the public trust. Although collaborative arrangements are common between SWAs and various stakeholders, little is known about how success or management effectiveness through partnerships are reliably achieved and sustained in the context of SWA management. Development of a measurement model to predict partner and SWA collaborative capacity and a formal, comprehensive assessment of factors leading to successful partnerships is expected to provide insights that benefit SWAs while contributing to theory on stakeholder participation.

A considerable amount of literature exists on partnerships and collaborations. These studies, however, define partnerships variously. Operationalizing a definition of partnership and collaboration is a central challenge to this work. As a result, the first hurdle in an evaluation of partnership success (or lack of) was defining the meaning of the terms "collaboration" and "partnership." A complicating factor in doing so is an apparent similarity between the concept of partnerships and those of collaborations, coalitions, social sector networks, and collective impact initiatives. The most inclusive definitions of collaboration are "working together" and "pursuing shared commitment to a common goal." In this context, collaborations are "when a group of autonomous stakeholders of a problem domain engage in an interactive process, using shared rules, norms, and structures, to act or decide on issues related to that domain" (Wood & Gray, 1991). Partnerships are collaborative arrangements where two or more actors share goals, power, risks, and responsibilities (Schäferhoff et al., 2009).

In addition to development of a scale to assess an organization's collaborative capacity to engage in partnerships, I measured perceptions of the success related to partnerships with which

a SWA may be involved. I was interested in understanding if an organization's partnership collaborative capacity influences the perception of success achieved through partnerships. Thus, I also tested the correlations between the collaborative capacity measure and perceptions of organization partnership success.

Such a measurement tool has implications for improving current SWA partnerships and those with potential to expand in the future. Incorporating research from various fields, including organizational psychology and political science, may enable SWAs to make strategic decisions about which partnerships most greatly benefit their organizations, how to facilitate those partnerships most effectively, and how to improve those already in existence. My aim in this chapter is to develop a quantitative model of collaborative capacity to apply to SWAs partnerships.

Background

Increasingly, governance is characterized by participation and power-sharing, multi-level integration, diversity and decentralization, deliberation, flexibility, and experimentation (Hall, 2011). These changes also have been adopted in wildlife management in many ways (Decker et al., 2016), and may help address the likely decline of hunters (Winkler & Warnke, 2013) and changes in how government services are funded or executed (Bovaird, 2004). Research may be used to help practitioners consider the constantly changing role of humans and human systems in wildlife management and improve the application of partnerships that address these challenges.

Partnerships can increase group interactions and debate, foster creative problem solving, consensus decision-making, and voluntary actions, which is often less expensive than the cost of enforcing regulations (Kenney, 2000). They also offer a powerful tool for conflict management. Specific to the sphere of natural resources and environment, partnerships provide a mechanism

to address issues outside of the scope of regulatory agencies and minimize collective action problems (Lubell, 2002). Partnerships may also harness endogenous and exogenous resources. Endogenously focused partnerships center on "maximize[ing] the efficient use of existing resources and the synergy between these resources" while exogenous partnerships seek to garner additional resources from outside sources (McQuaid, 2000, p.7).

Throughout this chapter, I use the terms "partnerships" and "collaboration" interchangeably in the survey instrument; in practice partnerships are also a form of collaboration and an advanced form of stakeholder participation (Arnstein, 1969). However, the survey instrument does not define these nuances given the colloquial understanding of the phenomena. I felt that survey respondents were unlikely to detect divergences in the terms, as is commonly the case among SWA professionals. Furthermore, the theory of collaborative capacity utilized may be applied similarly to collaborations and partnerships and is based on coalitions (Foster-Fishman et al., 2001). Descriptions of predictors, responses, and measurements developed in this work will help integrate knowledge and insights about collaborative capacity, which may be applied to collaborations, partnerships, and coalitions.

Assessment of partnerships may be done through qualitative interviews, process observation and assessment, and surveys, depending on the aspect of partnerships being examined (Brinkerhoff, 2002). They also may be measured by on-the-ground outcomes, such as dyadic-sales or, in the case of SWAs, work completed by partnerships that would not have occurred elsewise (e.g., acres of habitat created). Performance metrics may vary widely based on the focus of the partnership and its organizational structure (Brinkerhoff & Brinkerhoff, 2011).

In my research, I am applying a model of collaborative capacity to perceptions of an organization's partnerships. In considering how to evaluate success of collaborative efforts, I

adopted a model for collaborative capacity that assumes improving collaborative capacity directly improves outcomes of partnerships and collaborations. A test of this assumption relative to a SWA will be reported in chapter 4, however, doing so requires development of a measurement model to assess collaborative capacity which is the focus of this chapter.

Conceptual Framework

My research was designed to better understand participant perceptions of collaborative capacity within the partnerships they participate in. The work is based on a proposed theory of collaborative capacity (Foster-Fishman et al., 2001). Collaborative capacity relates to "the conditions needed for coalitions to promote effective collaboration and build sustainable community change" (Foster-Fishman et al., 2001, p. 242). However, the theoretical framework identified by Foster-Fishman et al. (2001) lacked an associated measurement model or assessment tool. Thus, I seek to advance the measurement of collaborative capacity as proposed in the theoretical framework identified by Foster-Fishman et al. (2001) quantitatively. Although there are numerous studies on collaboration and partnerships, there is no measurement scale associated with the theoretical framework identified by Foster-Fishman et al. (2001) in the literature. There are studies also assessing community collaborative capacity, however, none emerged that test the theoretical framework proposed by Foster-Fishman et al. (2001). I apply this framework to participant perceptions of the collaborative capacity of their organization's partnerships.

The collaborative capacity theoretical framework (Foster-Fishman et al., 2001) applies to coalitions. However, my research uses the term "partnership," which I have defined as two or more actors sharing or risks, resources, and responsibilities (Schäferhoff et al., 2009), instead of "coalition" which is what the theoretical framework was developed to describe. These terms are

used interchangeably in the literature, and the choice to apply this framework to SWA partnerships rather than SWA coalitions reflects the language used by SWA employees and partners. In over 60 qualitative interviews associated with this research, the term coalition was never used by an employee or partner of a SWA to describe a collaborative arrangement. Given the literature on coalitions and the similarity of coalitions and partnerships and usage of the terms, it is useful to explore what is known about coalitions and their collaborative capacity when considering how to improve partnership membership. Using the theory of collaborative capacity (Foster-Fishman et al., 2001), I quantitatively assess perceptions of collaborative capacity via a survey questionnaire.

Collaborative capacity is theorized to have four dimensions: member capacity, relational capacity, programmatic capacity, and organizational capacity (Foster-Fishman et al., 2001). In the measurement model I defined based on the framework identified by Foster-Fishman et al. (2001), these dimensions are affected by a higher order latent factor of collaborative capacity. In addition to identifying a latent factor, I assessed the fit statistics of the sub-dimensions of collaborative capacity. Member capacity relates to core skills and knowledge of members and core attitude motivation. Relational capacity relates to the working climate, shared vision, and power sharing in a partnership (Foster-Fishman et al., 2001). Organizational capacity includes leadership, formalized procedures, effective communication, resource availability, and continuous improvement orientation (Foster-Fishman et al., 2001). Finally, programmatic capacity relates to programmatic objectives, realistic goals, innovation and ecological validity (e.g., is program-driven by community needs?; Foster-Fishman et al., 2001).

The dimensions of collaborative capacity were developed based on a qualitative analysis on collaboration and thus, reflect literature on the topic. For example, predictors of partnership success commonly relate to pre-requisites and success factors (Brinkerhoff, 2002). Prerequisites include perceptions of partners' tolerance for sharing power, partners' willingness to adapt to meet partnership's needs, and the existence of partnership champions (Brinkerhoff, 2002). These primarily relate to relational capacity (Foster-Fishman et al., 2001). Other success factors from the literature include trust, confidence, support of senior management, ability to meet performance expectations, clear goals, partner compatibility, and aspects of conflict and conflict management (Brinkerhoff, 2002), which relate to organizational capacity. Conflict resolution techniques relevant to partnership include joint problem solving, persuasion, smoothing, domination, harsh words, and arbitration (Mohr & Spekman, 1994). Metrics of communication, such as quality, extent and frequency of information sharing, and participation also relate to partnership success (Mohr & Spekman, 1994) and organizational capacity (Foster-Fishman et al., 2001).

For example, there are two primary aspects of the degree of partnership, which are mutuality and organization identity (Brinkerhoff, 2002). Mutuality relates to mutuality and equality, equality in decision-making processes, resource exchange, reciprocal accountability, transparency, partner representation and participation in partnership activities, mutual respect, and even benefits (Brinkerhoff, 2002), which is reflective of the relational capacity dimension of collaborative capacity (Foster-Fishman et al., 2001). Partnership attributes include commitment, coordination, interdependence, and trust (Mohr & Spekman, 1994), which relate to member capacity (Foster-Fishman et al., 2001).

Ties Between Collaborative Capacity and Perceptions of Partnership Success

Positive outcomes of partnerships and collaboration relate to the value added by the partnership, partners meeting their own objectives, and development of partnership identity (Brinkerhoff, 2002). In this context, value added by a partnership generally relates to its synergy and outcomes, links (networks) to other actors, the increased capacity resulting from a partnership, and other multiplier effects (Brinkerhoff, 2002). Research on partnerships and collaborations also utilizes response measurements related to agreement about shared principles, knowledge, understanding (Asthana et al., 2002).

When researching partnerships, identifying causation is a challenge due to the gap between an individual's participation in partnerships and the outcomes from work accomplished that benefit the organization they represent. Furthermore, assigning credit for outcomes in a partnership is a political challenge – often one or more partners may want to claim credit for their own organization rather than for the partnership writ large (Acar & Robertson, 2004). Ultimately, this research may be used to help assess perceptions of partnership success, assuming that higher measures of collaborative capacity dimensions indicate greater likelihood of partnership success.

Methods

Instrument Design and Measurement

Collaborative Capacity Variables. I measured member capacity, relational capacity, programmatic capacity, and organizational capacity with seven-point Likert scales within a questionnaire. Participants were asked to rate their agreement with various statements related to each of the dimensions. Possible responses ranged from, "Strongly Disagree (1)" to "Strongly Agree (7)" (Table 3). I tested 46 items based on the collaborative capacity theoretical

framework: 13 member capacity items, 10 relational capacity items, 10 programmatic capacity items, and 13 organizational capacity items. (Table 3). These items were developed based on the proposed collaborative capacity theoretical framework (Foster-Fishman et al., 2001) and designed to capture the concepts identified in each of the dimensions.

I refined this scale through reliability analysis, confirmatory factor analysis of each scale sub-dimension, and confirmatory factor analysis of a factor structure that included a second order latent factor for collaborative capacity. I refined the member and organizational capacity scales by removing an item from each. The items removed displayed a lack of alignment with other items in their respective scales.

In addition, these removed items also had wording that may have been difficult for questionnaire respondents to interpret. For example, the removed organizational capacity item asked respondents to indicate their agreement with a statement that included the text "affected by conflicting policies that make partnerships/collaborations difficult." Given the range of policies (e.g., organization policies, state and federal regulations, informal metrics defined by organization culture, etc.) that may influence a partnership, this may have been interpreted variously by respondents leading to the item's poor performance. The member capacity item that was removed related to "political support to engage in collaborations," and similar to the dropped organizational capacity item, it is likely that this was interpreted by respondents variously. Political support may or may not exist at various levels within an organization or its external environment. Additionally, political support may or may not have been interpreted as relating only to political figures like politicians, as opposed to the power dynamics within an organization or in partnerships. The poor performance of this item may have reflected this

disorientation. The refined scales, with the member capacity item and organizational capacity item removed, were described in the models presented (Table 3).

Sampling and Data Collection

To generate a sample of respondents to pilot test the collaborative capacity scale I used Amazon Mechanical Turk (MTurk). MTurk provides access to a heterogeneous survey participant pool and as a result is commonly used by social science researchers to generate the statistical power necessary to conduct studies. In previous studies, MTurk respondents have been found to be representative of individuals who use the internet (Ross et al., 2010), and more highly educated and white, and have a greater proportion of females than the general U.S. population (Paolacci et al., 2010). Given my interest in assessing SWA employees, who typically have a 4-year college degree and regularly use the internet to perform their work, these biases were deemed to not represent a detrimental issue for my purposes.

To improve the likelihood of having a sample of quality respondents it is possible to filter MTurk respondents by various criteria. Respondents for this study were generated based on individuals whose location is in the US, have completed at least 1,000 previously approved tasks on MTurk, are employed in the government or nonprofit industry, and have an approval rate of greater than 95% on all tasks completed through MTurk. These decisions about filtering potential MTurk respondents were made to recruit a sample population similar to the population of interest, which is SWA employees and partners. Data were also validated by providing participants an access code on the Qualtrics survey that they then were required to submit via MTurk to track that survey respondents aligned with the MTurk sample. I eliminated individuals from the sample if they indicated that they did not work in partnership with individuals external to their organization in a partnership or collaboration or who had a pattern of responding to scale

items with a single selected response (e.g., responding "Somewhat Agree" to every item). Data were collected September-October 2020.

Data Analysis

Data were analyzed using the Statistical Program for the Social Sciences IBM SPSS Statistics 23 (IBM Corp., 2019), program R (version 3.5; The R Foundation), and MPlus (Version 8). Scale subdimensions were assessed based on Cronbach's alphas and inter-item correlations for internal consistency as well as confirmatory factor analysis (CFA) on the sub-scales individually prior to their inclusion in the model with collaborative capacity as a higher order latent factor (see Chapter Four). The CFAs were conducted with data defined as categorical in MPlus, which relaxes the assumption of normality and reflects the left skew of responses to Likert items. The final CFA presented is defined by the factor of collaborative capacity with sub-dimensions of member capacity, organizational capacity, programmatic capacity, and relational capacity. I examined fit statistics for goodness-of-fit and factor loadings for general patterns.

Results

Respondent Characteristics

I received 835 usable responses to the MTurk survey. All respondents in the sample indicated they work in partnerships with individuals external to the organization with which they are affiliated in the government or nonprofit sectors. All respondents indicated they were 18 years or older. All questionnaire respondents indicated they work with individuals not affiliated with their organizations in a professional capacity daily (49.6%), weekly (38.2%), monthly (9.7%) or at least once a year (2.5%) and do so in a partnership capacity daily (26.6%), weekly

(37.1%), monthly (24.6%), or at least once a year (11.7%). Approximately 56% of my sample indicated they were male, and 44% indicated they were female, with less than 1% of the sample not responding to a question about gender or providing a qualitative response to the item. The proportion of respondents who indicated they are male is similar to the percentage of individuals that identify as male in The Wildlife Society (59.7%), a common professional organization among SWA employees (Menale, 2021).

Scale Reliability Results

I tested the reliability of the 46 items related to collaborative capacity, organized by their positionality in the sub-scale dimensions. Individual dimension scale Cronbach's alphas indicated all scales were internally consistent and reliable indices: member capacity (α = .92), programmatic capacity (α = .90), relational capacity (α = .91), and organizational capacity (α = .92). Cronbach's alphas reported are based on results with items that did not perform well removed (Table 3).

I removed one item from the member capacity scale and one item from the organizational capacity scale for poor performance. These items had low factor loadings in a CFA that did not reflect the pattern revealed by the rest of the items in each sub-dimension of collaborative capacity. The item removed from the organizational capacity scale had a factor loading of -0.084 and the item removed from the member capacity scale had a factor loading of .363 in the CFA for member capacity.

The inter-item covariances and correlations for the various dimensions were high. The within scale correlations were not appreciably different from the between scale intercorrelations. Examining trends of individual items, they were sometimes more correlated with items from

other scales than items from their own scale. Nonetheless, within the dimensions there is a pattern.

The model fit statistics for each sub-dimension based on their CFAs had good fit, as did the CFA that describes the final model of a second order latent factor representing collaborative capacity, with sub-dimensions of member capacity, organizational capacity, programmatic capacity, and relational capacity. To investigate the factor structure between a collaborative capacity latent factor and the sub-dimensions of member capacity, organizational capacity, programmatic capacity, and relational capacity, a CFA was tested using MPlus Version 8 (Muthén & Muthén, 1998-2021). The chi-square value was significant; however, chi-square is sensitive to sample size and other conditions, so I examined alternative fit indices to determine model fit (Table 4). The alternative fit indices suggest acceptable fit, RMSEA = 0.052, CFI = 0.962, SRMR = 0.033 (Table 4). In addition, the loadings of the sub-dimensions of collaborative capacity on the higher order factor suggest they are highly related. These findings support the hypothesized measurement model based on the proposed theory of collaborative capacity identified by Foster-Fishman et al. (2001).

Discussion

My aim was to develop a scale related to collaborative capacity that may be used to assess and improve work achieved by SWA employees through partnerships. I explored how to measure collaborative capacity through this novel scale, based on the theoretical framework developed principally by Foster-Fishman et al. (2001). The scale was built to reflect what is known about the sub-dimensions of collaborative capacity: member capacity, organizational capacity, programmatic capacity, and relational capacity.

Scale performance of the member, organizational, programmatic, and relational capacity dimensions varied. The Cronbach's alphas for each of the sub-dimensions of collaborative capacity revealed high measures of internal reliability. This suggests these scales may be further refined for improved parsimony through removal of additional variables. I chose to keep all items in the scales, however, because Cronbach's alpha is affected by the number of items in a scale. Given the high number of items per scale, the high alphas are acceptable for this application (Table 5). Although some items cross-loaded on dimensions of collaborative capacity that were not the one under which they were categorized, this reflects the interconnectedness of the concepts of member, organizational, programmatic, and relational capacity. These dimensions of collaborative capacity are not wholly discrete, so this statistical overlap between some items reflects the nature of these concepts (Foster-Fishman et al., 2021).

The alternative fit indices for the final confirmatory factor analysis that include the second order factor for collaborative capacity are within an acceptable range, although the chi-square was significant. Given the closet fit of the final model as indicated by alternative indices, it is adequate for future use of the scale in subsequent chapters of this dissertation and for application of the measurement tool in the context of a SWA and its partnerships.

This measurement tool was developed for eventual use evaluating the collaborative capacity in SWAs (see Chapter 4). Although the model was tested in the context of the collaborations engaged in by MTurk survey respondents, I expect it to perform similarly with populations of SWA employees and partners. While the MTurk sample did not strictly represent SWAs or individuals who partner with them, the sample is robust in terms of statistical validity on which to assess a measurement model. Although the characteristics of the MTurk sample are not identical to the specific population of my interest, the model may apply to a variety of

contexts. My conclusion is that scales developed in this pilot study measure constructs defined by the theoretical framework.

Conclusions

This research may be of value to organizations, particularly in the government and nonprofit sector(s) that have an interest in assessing the performance of their partnerships and collaborations, as perceived by their employees and partners. Results suggest that collaborative capacity may be captured by a survey instrument, which theoretically relates to perceptions of success in partnerships and collaborations, although this is tested in a subsequent chapter. This information may then be used by individuals to improve the performance of their organization's partnerships and collaborations, and to assess in which areas of collaboration their organizations are succeeding and struggling.

My work is a first step in addressing challenges of developing a tool for monitoring perceptions performance in partnerships and collaborations. Deployment of this model to assess organizations of various types that partner with SWAs will help gauge trends in the collaborative performance, which in turn improves performance of SWAs in partnerships. This instrument may help improve the ability of individuals from different organizations to work together by improving knowledge about challenges to anticipate when conducting partnerships of various types.

Limitations and Future Research

Given the difficulty of operationalizing a definition of partnership and collaboration, my research assumes that the participants in the survey adopted the definitions indicated to them. This chapter also operates from the assumption that improving the collaborative capacity benefits organizations and improves the work of nonprofit and SWAs based on the framework

from Foster-Fishman et al. (2021). Partnerships, however, are expected to create some negative consequences as well that may not have been captured by my research. These may include that they often have indeterminate outcomes and can be exclusionary, especially to underrepresented groups (Verma, 2016), increase agency vulnerability to capture (Crensen & Ginsberg, 2004; Verma, 2016), and may fragment government policy. There have been calls to reconsider use of the term "partnership" due to its top-down re-entrenchment of power structures (Atkinson, 1999). Although the term partnership is used often in official discourse, its meaning is not well understood; Atkinson (1999) writes, "government has been unwilling to spell out exactly what partnership means, other than expressing hopes that greater coordination and synergy will focus minds and maximize resources" (p. 63). The term partnerships may disparately distribute power and legitimacy among stakeholders and potential stakeholders. In an ideal scenario, measurements associated with partnerships would not be based on self-reported information.

Table 3

Model Reliability Statistics by Collaborative Capacity Scale Dimension

Sub-scales	Cronbach's alpha	Number of items	Mean	Range of inter-item total correlation
Member capacity	0.918	12	5.604	0.361-0.596
Organizational capacity	0.924	12	5.365	0.340-0.642
Programmatic capacity	0.895	10	5.372	0.448-0.589
Relational capacity	0.914	10	5.496	0.338-0.586

Table 4

Chi-Square and Goodness-Of-Fit Indices for Confirmatory Factor Analysis of the Collaborative

Capacity Scale

Model	$\chi 2$	df	RMSEA	90% C. I.	CFI	TLI	SRMR
Member capacity	299.782	54	0.074	0.066-0.082	0.950	0.938	0.035
Organizational capacity	342.716	54	0.080	0.072-0.088	0.946	0.934	0.034
Programmatic capacity	194.987	35	0.074	0.064-0.084	0.955	0.942	0.033
Relational capacity	141.046	35	0.060	0.050-0.071	0.974	0.967	0.025
Collaborative capacity final model	2903.209	898	0.052	0.050-0.054	0.962	0.960	0.033

Note: * $p < .05$; *** $p < .001$; Collaborative final includes the second order factor for collaborative capacity where member, organizational, programmatic, relational capacity are indicators of collaborative capacity.

Table 5

Standardized Factor Loading Pilot Model Results

Scale Item	Estimate	S. E.	*Est/S. E.*	*p*-value
MEMBER CAPACITY				
... recognize a need to work with collaborators.	0.638	0.021	30.472	***
... are knowledgeable about the viewpoints of other collaborators.	0.737	0.016	46.833	***
... communicate effectively with each other.	0.763	0.014	55.108	***
... respect each other's views.	0.764	0.015	51.508	***
... view themselves as valuable members of collaborations/partnerships.	0.701	0.017	40.277	***
... view collaboration in a positive perspective.	0.751	0.015	49.004	***
... view each other as legitimate participants in wildlife management.	0.753	0.015	49.236	***
... are skilled at forming teams.	0.762	0.015	51.74	***
... are able to resolve conflicts that arise in collaborations.	0.764	0.015	50.552	***
... develop formal procedures to monitor collaborations.	0.716	0.017	42.018	***
... are able to obtain resources to carry out inclusion of external collaborators.	0.75	0.016	46.013	***
... believe their organization's leadership supports external collaborations.	0.698	0.019	37.007	***
ORGANIZATIONAL CAPACITY				
... respond well to suggestions made by other members of the collaboration/partnership.	0.775	0.014	54.514	***
... develop effective communication among collaborators, including employees of the WD.	0.798	0.013	61.228	***
... share information in a timely manner among collaborators/partners.	0.733	0.015	48.28	***
... are skilled at raising sufficient resources - financial or human - to create a successful collaboration/partnership.	0.698	0.016	43.235	***
... respond well to feedback from other members of the collaboration/partnership.	0.757	0.015	52.019	***

Table 5 (cont'd)

... have metrics in place to evaluate the collaboration/partnership.	0.632	0.02	32.254	***
... know their roles when working in a collaboration/partnership.	0.778	0.014	55.888	***
... develop effective internal operating procedures to guide their collaborations/partnerships.	0.788	0.013	59.177	***
... have well-defined roles and responsibilities internally to guide collaborations/partnerships.	0.732	0.015	47.242	***
... believe the collaboration/partnership has visionary leadership.	0.726	0.016	45.639	***
... possess leaders who are sufficiently skilled at communication in collaborations/partnerships.	0.8	0.013	62.711	***
... identify leaders committed to working in a collaborative fashion.	0.783	0.014	56.614	***

PROGRAMMATIC CAPACITY

... set clear programmatic objectives for the collaboration/partnership.	0.725	0.017	43.073	***
... set realistic overarching goals for collaborations/partnerships.	0.74	0.016	45.593	***
... set intermediate goals/milestones to measure collaboration/partnership progress.	0.743	0.016	47.256	***
... are innovative.	0.711	0.017	42.37	***
... design collaborations/partnerships to fill unmet needs.	0.717	0.017	41.795	***
... base collaborations/partnerships on comprehensive needs assessments.	0.763	0.015	49.939	***
... engage with local planning efforts (e.g., community, town, or city planning).	0.597	0.021	27.905	***
... deliver programs that respect the cultural differences of target audiences.	0.681	0.018	37.927	***
... have members who are focused on the needs of a target audience when developing program plans for a collaboration/partnership.	0.752	0.015	50.601	***
... adapt their behaviors based on a situation's context when communicating about the partnership/collaboration.	0.753	0.015	49.146	***

Table 5 (cont'd)

RELATIONAL CAPACITY

... trust the other members of the collaboration/partnership.	0.754	0.015	48.93	***
... unite around a shared vision.	0.731	0.015	47.644	***
... share decision-making power with each other.	0.742	0.015	49.298	***
... have a strong network of relationships with policy makers.	0.751	0.016	46.905	***
... provide each other access to information from their own organizations relevant to the work of the collaboration/partnership.	0.741	0.015	48.799	***
... are responsive to other collaborators/partners with whom they work.	0.797	0.013	63.021	***
... share a common understanding of problems with each other.	0.753	0.015	49.388	***
... work with each other to evaluate collaborations/partnership.	0.788	0.014	57.844	***
... have a strong network of relationships with key community leaders.	0.749	0.015	49.385	***
... invest sufficient resources to become familiar with each other's capabilities.	0.773	0.015	52.942	***

COLLABORATIVE CAPACITY BY

Member capacity	0.937	0.006	144.765	***
Organizational capacity	0.982	0.003	287.704	***
Programmatic capacity	0.953	0.005	179.954	***
Relational capacity	0.975	0.004	249.499	***
Organizational capacity with				
Member	0.925	0.008	123.154	***
Relational capacity with				
Member	0.914	0.008	114.807	***
Organizational	0.951	0.006	171.247	***
Programmatic capacity with				
Member	0.883	0.01	89.283	***
Organizational	0.937	0.007	143.522	***
Relational	0.937	0.007	128.154	***

Chapter Four: A Comparative Assessment of State Wildlife Agency Employee and Partner

Perceptions of Collaborative Capacity

Abstract

In an era when state wildlife agencies (SWAs) are threatened with declining revenue, partnerships are viewed as one way to fulfill public trust responsibilities and align activities with the broader community of stakeholders to achieve outcomes desired by society. I define partnership as the sharing of goals, risks, and responsibilities between two or more actors to achieve a mutual interest. Little research has been done to comprehensively assess collaborative capacity of SWAs and their partners. Collaborative capacity, in this context, is a measure of the ability of collaborative groups to foster success. Accordingly, collaborations or partnerships are improved by building several capacities: member, relational, organizational, and programmatic. I assessed collaborative capacity of a SWA and its partners via quantitative questionnaires administered via Qualtrics. The sample population included all employees in a SWA (n = 146, response rate = 89.0%) and partners identified through a snowball sample via stakeholder engagement efforts (n = 171, response rate = 40.6%). Employees of the SWA evaluated member capacity of their partnerships and collaborations highest relative to other dimensions. Employees also reported their partnerships and collaborations could be improved most by having members who are skilled at forming teams and developing formal procedures to monitor existing collaborations. Programmatic capacity was perceived to be the weakest dimension of existing collaborative capacity within the SWA. Programmatic capacity is a function of the design and implementation of activities that result from a collaboration. Partner perceptions of SWA employee member capacity were more positive than those of SWA employees; partners believed SWA employees were more valuable members of partnerships and collaborations than did

employees. These differences between dimensions of collaborative capacity and between model performance in different populations have implications for where effort may best be spent depending on the goals of a partnership, as well as providing information about how to make targeted decisions to improve partnership performance. For example, member capacity was identified as a significant contributor to collaborative capacity in the partner sample, which suggests that SWAs may improve partner perceptions of success by investing resources into improving SWA employee knowledge and skills related to member capacity. These findings may be used to design strategies for the improvement of partnerships based on desired goals for positive engagement with SWA employees and partners.

Introduction

Background

Increasingly, governance is characterized by participation and power-sharing, multi-level integration, diversity and decentralization, deliberation, flexibility, and experimentation (Hall, 2011). These changes are being adopted in wildlife management (Decker et al., 2016) to help address anticipated changes in how government services are funded and executed (Bovaird, 2004). A likely decline in hunters will affect current revenue flows for some state wildlife agencies (SWA; Winkler & Warnke, 2013). One manifestation of these changes to governance is the adoption of partnerships and collaborations as a mechanism for accomplishing conservation-related goals.

Partnerships and the activities, processes, and systems that the term encompasses are pervasive in wildlife and habitat conservation. Through partnerships, SWA employees often operate in conjunction with individuals from numerous nonprofits, government agencies, community organizations, and businesses. Agency employees engage in partnerships with individuals from various sectors of society, including civil society, the private sector, and other

public agencies (see Ch. 2, Figure 1). In this context, partnerships are collaborative arrangements where two or more parties share goals, power, resources, and responsibilities (Schäferhoff et al., 2009). Partnerships range in complexity (e.g., individuals engaged, number and type of organizations represented, legal issues addressed) and desired goals (e.g., changing technical aspects of permitting regulations, engaging volunteers to complete ongoing invasive species removal). As an advanced form of stakeholder participation or engagement (Arnstein, 1969; Decker & Chase, 1997; Lauber et al., 2012), partnerships address current needs of SWAs and partner groups such as the decline in available resources or desire for alignment between resource agencies conducting large-scale projects.

Partnerships and decentralization benefit SWAs through improved knowledge of stakeholders and increased legitimacy (Bäckstrand, 2006; Sandström et al., 2014). Partnerships foster group interactions and debate, lead to the adoption of creative solutions to problems, and promote voluntary action through desirable norms that limit the need for regulation (Kenney, 2000). Opportunities provided by partnerships relate to policy design and planning, coordination, monitoring, evaluation and review, implementation and service delivery, and resource mobilization and management (Bovaird, 2004). Partnerships may be implemented as a policy, form of service delivery, organizational infrastructure, and tool for capacity building or economic development (Brinkerhoff & Brinkerhoff, 2011). They may also minimize collective issues and address problems outside the scope of regulatory agencies or central government (e.g. habitat destruction, nonpoint source pollution) (Lubell, 2002). In addition, inclusion of multiple and diverse stakeholders and partners in the work of SWAs is thought to improve the quality of wildlife management by incorporating the views and preferences of a broadening constituency (Anderson & Loomis, 2007; Jacobson et al., 2010). Partnerships offer one mechanism to do so.

However, capitalizing on these benefits will require that SWAs develop the capacity for collaboration and addressing the legal and political challenges that come with partnerships.

Several typologies and frameworks exist on which to evaluate partnerships (Hall, 2001; Selsky & Parker, 2005). Factors associated with success in partnerships typically include trust, confidence, support from senior management, ability to meet performance expectations, clear goals, partner compatibility, and aspects of conflict and conflict management (Brinkerhoff, 2002). Conflict resolution techniques relevant to partnership include joint problem solving, persuasion, smoothing, domination, harsh words, and arbitration (Mohr & Spekman 1994). Communication behavior, such as quality of communication, information sharing and participation also relate to partnership success (Mohr & Spekman, 1994) and organization capacity (Foster-Fishman et al., 2001). In this research, I used a measure of partnership success related to these factors and designed to assess the quality and frequency of SWA partnerships, which integrates key concepts related to successful partnerships (Lauricella et al., 2017).

My research expands what is known about partnerships and collaborations by examining what capacities foster SWA partnership success from the perspective of SWA employees and their partners. This research will enable SWAs and their partners to make more nuanced decisions about how to conduct partnerships to achieve their desired goals. Learning in what contexts models of partnership success operate or fail to operate, may improve wildlife conservation efforts by enabling practitioners to focus on targeted endeavors that will have the greatest effect. Although there are numerous theories related to the success of partnerships, few of these have been tested in the realm of wildlife management.

Conceptual Framework

To investigate how capacities contribute to perceptions of partnership success in the context of state wildlife management, I used the proposed theory of collaborative capacity (Foster-Fishman et al., 2001) to assess SWA partnerships. Collaborative capacity defined within that theoretical framework is "the conditions needed for coalitions to promote effective collaboration and build sustainable community change" (Foster-Fishman et al., 2001). Collaborative capacity is further based on four sub-dimensions: member capacity, organizational capacity, programmatic capacity, and relational capacity. I investigated these capacities and their relationship with perceptions of partnership success to gain insights about how to foster success in partnerships.

The model presented in this article describes the relationship between the individual dimensions of collaborative capacity and perceptions of success in external collaborations. The surveys assessed perceptions of collaborative capacity among SWA employees and partner organizations' personnel. Accordingly, collaborative capacity requires building member capacity, relational capacity, organizational capacity, and programmatic capacity.

Member capacity relates to core skills, knowledge, and attitudes motivation while relationship capacity involves developing a positive working climate, shared vision, power sharing, valuing diversity and developing positive external relationships. Organizational capacity relates to a collaboration's leadership, formal procedures, communication, resources and orientation towards continuous improvement, and programmatic capacity includes setting goals and objectives and pursuit of collaborative advantage. According to the proposed framework, developing these capacities may facilitate the success of collaborations (Foster-Fishman et al.,

2001). For a further description of the collaborative capacity theoretical framework, see Chapter

Three.

    In addition to the dimensions of collaborative capacity, I measured employee and partner

perceptions of success in their organization's external partnerships. The items related to

perceptions of external success related to knowledge, behaviors, and attitudes towards external

partnerships (Lauricella et al., 2017). This measure was used in previous research with the SWA

funding this research and was applied in this study for pragmatic reasons related to repeating

previously used measures and its development specifically for evaluations of SWA partnerships

(Lauricella et al., 2017).

Figure 2

Structural Model of Perceptions of Collaborative Capacity
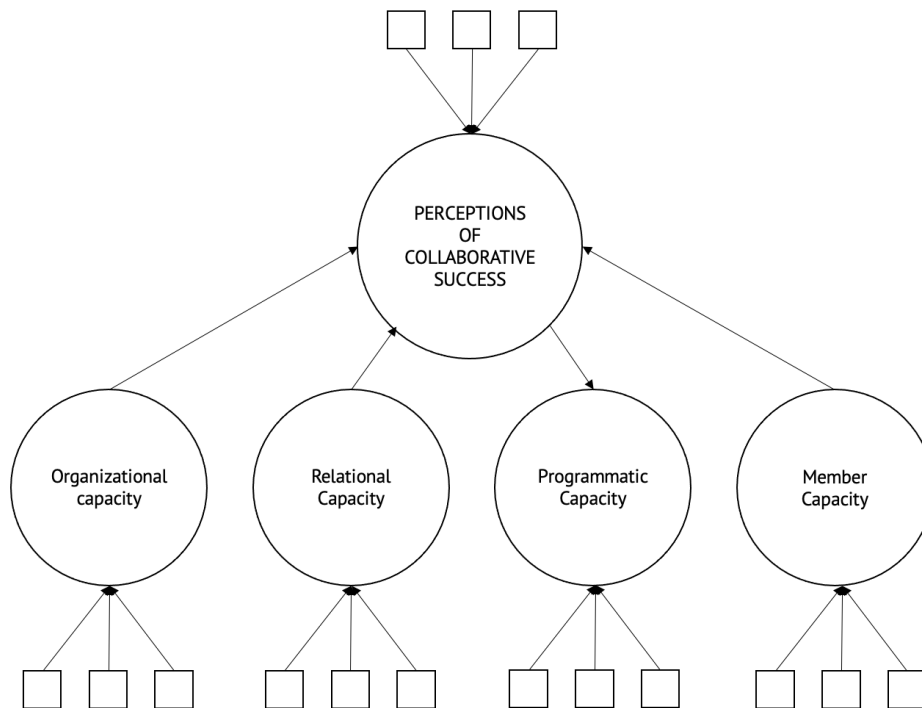
Methods

Instrument Design and Measurement

The instrument was designed to measure perceptions of collaborative capacity via its subdimensions as well as perceptions of partnership success. The instrument design and measurement for this study follow the same protocols as those of the pilot (see Chapter Three) regarding measurement items, however, items that performed poorly in the pilot and were omitted from the analysis of the final pilot model presented were excluded from the questionnaires distributed to SWA employees and partners. A pilot study described in Chapter Three also described the protocols for validating the measurement tool that is used in this research.

Using employee and partner data, I conducted a structural equation model (SEM) to assess perceptions of their organizations' partnership collaborative capacity. The model for each group specified direct paths from the dimensions of collaborative capacity (relational capacity, member capacity, organizational capacity, and programmatic capacity) to a factor that assesses perceptions of their organization's performance in external collaborations (Figure 2). The development of the measures for collaborative capacity are described and validated in Chapter Three and are based on prior research by Foster-Fishman et al. (2021), and the measure related to SWA partnership success was developed by Lauricella et al. (2017).

Sampling

Employee. I attempted a census of the SWA employees for participation in this research. Conducting a census was necessary to generate the statistical power required to run models, and the sample population for the employee-focused research included all SWA employees (n = 146). The survey followed a modified version of the tailored design method (Dillman et al.,

2008) and employees were contacted to complete the questionnaire 4 times to achieve a response rate of 89%. The survey was conducted via Qualtrics, and employees were contacted via their SWA email addresses. Data were collected in January to April 2020.

Partner. In addition to surveying SWA employees, I also conducted a survey of external partners to assess their perceptions of collaborations involving members of their organizations and the SWA. The sample population for partners included all members of the SWA's collaborations and partnerships who were not employed directly by the SWA. The sample frame was developed by compiling (1) a snowball sample from SWA questionnaire respondents and (2) a 2015 list of stakeholders included in the SWA strategic planning engagement. This survey was conducted after the completion of the SWA employee surveys; on their questionnaires, SWA employees responded to an item that asked them to list partners "key to their work with the SWA" and provide contact information for up to 3 of those individuals (see information regarding the demographics of this sample in chapter 2). Survey questionnaires were sent to 421 partners of the SWA (n = 171, response rate = 40.6%).

Data Analysis

Respondents responded to 7-point Likert-style scales ranging from "strongly disagree" to "strongly agree" to respond to each collaborative capacity-related item and each item pertaining to perceptions of external partnership success. I conducted a confirmatory factor analysis (CFA) that defined the relationship between dimensions of collaborative capacity and perceptions of partnership success. Data were analyzed using R (version 3.5; The R Foundation) and MPlus (version 8). In the CFA models, data were identified as categorical to reflect the nonnormal nature of the responses and align with the intended framing of the scale.

Results

Response Rate and Respondent Characteristics

Employee Results. The chi-square for the model with direct paths from the dimensions of collaborative capacity to a factor that assesses their organizations' performance in external collaborations was statistically significant, ($\chi2(1165) = 1728.869$, $p < .001$), and alternative fit indices indicated a good fit to the data, (CFI = .962, SRMR = .065); results support the model. Regarding the relationship between the dimensions of collaborative capacity and partnership success, programmatic capacity is the only dimension found to be statistically significant ($p = 0.023$) (Table 6). Of the other dimensions of collaborative capacity, only relational capacity borders on statistical significance ($p = 0.083$) and may be considered statistically significant at the $p < .1$ level (Table 6).

Employees rated member capacity of their partnerships and collaborations highest relative to other dimensions. Employees described the partnerships and collaborations they are involved with are weakest at having members who are skilled at forming teams and developing formal procedures to monitor collaborations. Employees rated organizational capacity with an average score of 4.65. Relative to the mean scores of other items, employees rated partnership participants' likelihood of responding well to suggestions made by other members of the collaboration most highly and having metrics in place to monitor collaborations/partnerships lowest.

Regarding relational capacity, employees rated collaboration participant responsiveness to the people with whom they work and collaborators' unification around a shared vision highest. SWA collaborations were perceived to be weakest in the evaluative aspect of

relationship capacity, whether collaboration participants work with each other to evaluate the partnership.

Programmatic capacity is perceived to be the weakest dimension of collaborative capacity in SWA partnerships according to SWA employees. Programmatic capacity relates to the design and implementation of activities that result from a collaboration/partnership. The most highly rated item related to programmatic capacity is the likelihood that collaboration participants are focused on the needs of a target audience when developing program plans. There seems to be the perception among SWA, however, that the partnerships in which they are involved do not engage with local planning efforts.

We also received valuable qualitative feedback from employees. One employee indicated the following, which relates to member and relational capacity:

> *When one partner has plenty of enthusiasm and willingness but few skills or resources, the other partner is left with the majority of the work. In this situation, the under qualified partner is "only a "token partner" and it may have been more efficient to not have a partnership to begin with. Occasionally, [the SWA] seems to enter into partnerships with groups or individuals for the purpose of showing a willingness to work with groups that may not be our "usual customers." These partnerships often seem to struggle because of inequalities in capability and resources as well as a lack of combined vision and objectives and commitment.*

Qualitative feedback and the statistical insignificance of employee ratings of member capacity may reflect that the state engages in partnerships to demonstrate a commitment to working with partners to highlight that they are doing so as opposed to conducting partnerships because there is a need for the work of a partnership to be accomplished.

Partner Results. The SEM to assess perceptions of partner organizations' collaborative capacity, with direct paths from the dimensions of collaborative capacity to a factor that assesses their organizations' performance in external collaborations, had a significant chi-square

significant, $\chi 2(1165) = 1660.020$, $p < .001$, and alternative fit indices indicated a good fit to the data, CFI = .949, SRMR = .073. The results suggest that the dimensions of programmatic capacity ($p = 0.003$) and member capacity ($p < .001$) have a significant, positive relationship to perception of partnership success. The dimension of relational capacity verges on statistical significance ($p = .061$), although the relationship is negative.

Table 6

Employee and Partner Perceptions of Partnership Success on Collaborative Capacity

Dimensions

Model dimension	Estimate	S. E.	Est/S. E.	p-value
Employee model				
Member capacity	-0.119	0.169	-0.709	0.478
Organizational capacity	-0.057	0.315	-0.181	0.856
Programmatic capacity	0.308	0.136	2.269	0.023*
Relational capacity	0.708	0.409	1.732	0.083
Partner model				
Member capacity	0.921	0.142	6.465	0.000***
Organizational capacity	-0.123	0.154	-0.799	0.424
Programmatic capacity	0.478	0.162	2.950	0.003*
Relational capacity	-0.577	0.308	-1.872	0.061

Note: * p < .05; *** p < .001

I also assessed SWA partner perceptions of their organizations' collaborative capacity. This questionnaire measured the same dimensions of collaborative capacity as the SWA

employee survey. Partner perceptions of their partnerships' member capacity was higher than any other dimension. Perceptions of organizational capacity scored lowest.

A willingness and a certain level of confidence among external partners to engage in collaborations was detected as partners agree that members of their organization's partnerships view collaboration in a positive perspective and agree that participants of their organization's collaborations view themselves as valuable members of a collaboration and partnership.

Discussion

My research focused on organizational capacities necessary to foster success in partnerships. An examination of the relationships between dimensions of collaborative capacity and perceptions of partnership performance suggests that there are variations in how these dimensions relate to, or do not relate to, perceptions of partnership success. Furthermore, there is evidence of difference in the valence of these dimensions in terms of their relationship to partnership success, as well as differences in how this model operates in the context of SWAs and their partners.

Given that it is most closely linked to outcomes of partnerships, this finding is congruent with the concept of programmatic capacity and what the scale for programmatic capacity attempts to capture. Unlike other dimensions of collaborative capacity, the programmatic capacity dimension was found to be statistically significant both in the employee and partner samples. Programmatic capacity describes the degree to which collaborations solve community needs, set realistic goals, and deliver meaningful impacts (Foster-Fishman et al., 2001), and it was the sole dimension that achieved statistical significance at the $p < .05$ level in the employee sample.

Conversely, the organizational capacity dimension does not have a statistically significant relationship at the p < .05 level with perception of partnership success in the employee or partner sample, and this finding is in opposition to findings from other research on partnerships and collaborations, which suggests that clearly defined roles are key to the success of a partnership (Mohr & Spekman, 1994). Based on qualitative feedback from individuals in our study populations, however, the finding may reflect reality of how work in partnerships is accomplished. In essence, although formal metrics of partnership success include factors related to formal rules and procedures, in practice such metrics often fail to be implemented, with partners relying on informal metrics that may not be shared with the group, or explicitly among members. In one qualitative interview, an employee of the SWA indicated that they had attempted to institute formal rules and structure in a partnership and received no buy-in from other members of the partnership to do so.

Similarly, the dimension of relational capacity is not found to be statistically significant at the p < .05 level in the employee or partner models. In both cases, however, the dimension verges on statistical significance at the p < .05 level and given variation in its operation between the samples, it highlights a potential difference in the employee and partner results.

Although the dimension fails a test for significance at the p < .05 level in both study populations individually, the variation between the partner versus employee sample for this dimension and how it operates in the employee versus partner population are almost certainly statistically different from one another. The valence for relational capacity shifts between the employee and partner sample. For SWA employees, relational capacity is positively related to perceptions of partnership success (e.g., higher scores in relational capacity indicate higher perceptions of partnership success). However, for partners, this relationship appears to be

negative (e.g., higher scores for relational capacity are likely to suggest lower evaluations of partnership success). This variation may reflect the literature on organizational identity in partnerships as it pertains to 1) the use of partnerships on the part of government actors to increase state capacity in a diversity of ways (Lasker et al., 2001; Radin & Romzek, 1996; Weiss et al., 2002) and 2) the loss of identity of NGOs when engaging in partnerships with the state (Brinkerhoff, 2002; Edwards & Hulme, 1996; Gazley & Brudney, 2007; Huxham, 1993). Further research with larger sample sizes may find that these relationships are significant in the population, when individuals' organizational identity is stratified by the societal sector. Preliminary analysis in this area may also be conducted by me in future work by 1) combining partners in state or federal agencies with the SWA responses or 2) stratifying the partner sample by government and nongovernment organizational affiliation.

Another difference in the model's performance between samples is in the performance of member capacity. The member capacity dimension only achieved statistical significance in the partner data, which suggests that highly competent members of partnerships will be valued by SWA partners. Although this dimension failed to achieve statistical significance in the SWA employee sample, SWA may capitalize on this finding in the partner data by ensuring that their employees are able to competently engage in collaborations with their partners. This may be reflective of the technical role of SWA employees in partnerships with external groups, in which they may be included to provide biological information about wildlife and habitats (Decker et al., 2002).

Conclusions

The findings of this study have applications for decision-makers in natural resource management with questions about where effort in partnership development is best spent,

depending on the goals of a SWA or their partners. The model of collaborative capacity and its dimensions applies to a broad range of actors in wildlife management and represents an effort to assess which dimensions of collaborative capacity are most impactful in the context of wildlife conservation.

My assumption was that improving the collaborative capacity would yield positive outcomes for partners. Based on these models, member capacity directly influences partner evaluation of collaborations. This finding suggests that SWAs who develop employees' competency in partnering will be valued by those that they collaborate with. Doing so requires that SWAs invest in training employees to recognize a need to work with collaborators, become knowledgeable and respectful towards the viewpoints of collaborators, increase their team building and conflict resolution skills, and become familiar with ways to gather resources for partnerships. Conversely, member capacity did not influence employee perceptions of partnership success may suggest that SWAs willingly engage in partnerships when they have the technical competence and capacity to carry out the work on their own. This reflects qualitative feedback gathered via the survey. "Token partnerships" mentioned in qualitative feedback may be a sign of a lack of agreement in informal and formal metrics of partnership success that may exist in an organization (in which the informal metric is building relational capacity with a partner organization rather than the stated management goals related to wildlife populations or habitat).

The opposing valence of the relational capacity dimension revealed by SWA employees in comparison with versus partners sample may reflect a cost to NGOs that partner with government organizations in terms of loss of organizational identity on the part of the NGO (Brinkerhoff, 2002; Edwards & Hulme, 1996; Gazley & Brudney, 2007; Huxham, 1993).

76

Conversely, by partnering with NGOs and community groups, SWAs may increase their reputational or social capital (Lasker et al., 2001; Radin & Romzek, 1996; Weiss et al., 2002). In addition, nonprofits often have capacity to mobilize stakeholders and integrate them into decision-making processes, which illustrates their capacity to increase partnership legitimacy (Selsky & Parker, 2005).

Although this paper focuses on the benefits of partnerships to wildlife management and ways to improve their application, partnerships are not a panacea and may impose costs in time, resources, and effort. In addition, they often have indeterminate outcomes and can be exclusionary, especially to underrepresented groups (Verma, 2016), increase agency vulnerability to capture (Crensen & Ginsberg, 2004; Verma, 2016), and may fragment government policy. This sharing of authority leads to the blurring or responsibility and accountability between the public and private sectors (Bovaird, 2004). However, by assessing partnerships to ensure that they are yielding benefits and avoiding negative outcomes, their benefits for wildlife conservation practitioners may be enhanced.

Future Research

Although not statistically significant from zero, an inverse functional relationship between relational capacity and perceptions of partnership success was apparent between partners and employees. Further research with larger sample sizes may inform the numerical or statistical significance of this relationship. The dimension of relational capacity captures the social environment and relationships relevant to a collaboration. That this relationship is positive for the SWA but negative for partners may suggests state partner identity may be subsumed by their relationship with the state.

Refining each of these scales by separating them into a) strategies to build the associated capacity and b) perceptions of that dimension rather than a single scale that combines them both may reveal how to improve capacities in which there is a deficiency. As the scales currently are written, strategies for building capacities (behaviors) and perceptions towards the dimensions (attitudes and values) are combined. Rather than capturing these both in a single scale, it would be informative to evaluate the degree to which the behaviors for building the capacities contribute to evaluations of the capacities, and the degree to which these appear to be related to the collaborative capacity factor. Doing so would yield information about which strategies are most effective at building collaborative capacity dimensions.

Chapter Five: Conclusion and Recommendations

I intended to assess partnerships and highlight ways to improve their application in the context of state wildlife management; my hope was findings from my research would be applicable to the broader enterprise of American wildlife management. My research is novel in the context of wildlife management. Although partnerships have been used since inception of formal agency-based, public wildlife management, my intention was that findings from this dissertation research would be a catalyst for further, deeper evaluation of partnerships as they become a more common mechanism for achieving objectives.

Guiding this work was an assumption that improving the ability of decision-makers and wildlife practitioners to work in partnerships improves wildlife resources and outcomes from wildlife management for the public good. Particular attention was paid to the need for partnerships, factors contributing to partnership success, and how employees of state wildlife agencies (SWAs) and partners view partnership success. The long-term goal was to enable employees of SWAs and similar resource organizations to identify ways to enhance success in partnerships that improves capacity to conduct meaningful conservation of wildlife resources. This was achieved by exploring SWA employee and partner beliefs regarding successful partnerships, identifying important factors contributing to perceptions of partnership success, and investigating challenges posed to individuals currently engaged in partnerships that are perceived to yield limited success. Adoption of practices outlined in the preceding chapters is intended to aid practitioners in designing and implementing partnerships that achieve their desired goals for governance of wildlife resources and improve the efficacy of partnerships.

A description SWA partners and the implications of the demographics of those organizations represented in terms of access to wildlife resources are addressed in Chapter Two.

Partnerships of the prototypical SWA studied in my research relied heavily on participation from individuals in other government organizations and in the civil sector of society. Relative to partner organizations from the public and civic sectors of society, private sector partners are not well represented in the sample of partners considered key to the work of SWA employees.

My findings suggest that despite numerous partnerships, power over wildlife governance being shared by the SWA is still held by the state. To the degree that there are private sector partners collaborating with the SWA, they are not considered by employees to be "key to the work" of a SWA. To improve resilience of SWAs to scenarios that benefit from private sector involvement, however, SWAs that invest resources into exploring partnerships with the actors in the private sector are more likely to gain relevance and organizational resilience. If SWA budgets further constrict, I expect there to be an increase in the number of private sector partners considered important to the work of SWA employees (Seekamp & Cerveny, 2010). The work of building relationships with private sector organizations in the future can be expected to strengthen agency effectiveness and avoid a reactive approach to constricting budgets.

In terms of partner organization scope, SWA employees most often identified partners from medium-sized organizations (those that generally focus on state or region-wide projects) as "key to their work." The scale of a partnership is a crude measurement of the degree to which SWA employees increase or decrease the locality of their work through collaboration. Partnerships with external collaborators, by definition, do not occur in isolation and are influenced by and influence their organizational environments. As institutional structures, partnerships have numerous implications for how resources and power are shared between SWA employees, stakeholders, and individuals in partner groups. By examining partnerships more closely, it is possible to improve agency abilities to interpret how partnerships (as one type of

80

institution) affect organizational change or change themselves (e.g., historical, temporal, endogenous, normative, demographic, symbolic) (March & Olsen, 2011).

My research suggests that the power of a SWA currently is being shared primarily with organizations of a similar scale, which may create inertia related to operating in conjunction with individuals at more local scales. Partnerships provide a powerful tool for safeguarding against "agency capture" and improving access to information values by a diversity of stakeholder groups. Increased benefits realized by SWAs from partnerships are likely by ensuring that they work closely with stakeholders representing individuals engaged in work in a dissimilar scale. By conducting continual assessments of partnerships, SWAs may increase their capacity to anticipate and manage potential conflicts that may be created by partnering with particular stakeholder groups at the expense or exclusion of others (see Decker et al., 2015).

Findings described in Chapter 3 suggests that measurements of collaborative capacity may be assessed by a survey instrument that theoretically relates to perceptions of success in partnerships and collaborations. By deploying the measurement tool, information gathered may in turn be used by individuals to improve the performance of their organization's partnerships and collaborations, and to assess in which areas of collaboration their organizations are succeeding and striving to improve. Chapter 3 outlines a process for measuring the collaborative capacity of an organization's partnerships and collaborations. The concept and term of collaborative capacity was designed to assess key characteristics vital for thriving collaborations (Foster-Fishman et al., 2001), but lacked an associated measurement tool. Based on Foster-Fishman et al. (2001), I operationalized a theory for collaborative capacity via a survey measurement tool and identified a collaborative capacity latent construct. The scale was based on the dimensions of collaborative capacity: member capacity, organizational capacity,

programmatic capacity, and relational capacity. It may be deployed for use in any organizational context; however, I designed it to be relevant to SWAs and their partners.

Chapter 4 synthesized findings about collaborative capacity and its relationship to perceptions of partnership success, according to both SWA employees and their partners. The research revealed capacities operate differentially in terms of performance relative to each other as well as in the SWA employee and partner populations. Understanding of these nuances in capacity dimension performance enables SWAs and partners to better tailor their collaborations to achieve specific objectives. For example, SWA partner evaluation of partnership success is notably related to member capacity, which suggests SWAs may benefit from developing this capacity to operate in partnerships with external collaborators. Member capacity, however, does not seem to affect SWA employee evaluation of partnerships, which may mean that SWAs should not expect individual partner skills at collaborating will greatly affect their view of the performance of the partnership. By contrast, member capacity was not meaningly related to perceptions of partnership success among SWA employees. Nonetheless, SWA employees value collaborations that increase the programmatic capacity of their organization. This finding indicates that if SWAs and their partners engage with local planning efforts, develop programs that are respectful of cultural differences and engage in goal setting related to their partnerships, those partnerships are more likely to be perceived to be successful by SWA employees.

The future opportunities in partnerships and collaborations are vast. Partnerships, as one type of institutional structure and long considered an advanced form of stakeholder engagement (Arnstein, 1969), have numerous implications for how resources and power are shared. Who the state engages with through partnership and the capacity of those collaborations has implications for how public goods and services are delivered to society. A criticism of partnerships as a

governing mechanism is that they are incompatible with representative forms of democracy because policy is considered the purview of politicians and their authority is undermined by other more collaborative models of governance (Klijn & Skelcher, 2007). In this view, political legitimacy of partnerships may be jeopardized because representation is contested by actors in a frame outside of representative democracy while public administrators may be viewed as having undue power as facilitators of governance networks (Klijn & Skelcher, 2007; Sørensen, 2002). To combat this assertion, natural resource decision-makers can help ensure that the partnerships they pursue explicitly benefit the public and deliver wildlife resources for present and future generations.

APPENDICES

APPENDIX A

Pilot Survey Instrument

You are being asked to participate in a research study with an objective to improve the way public wildlife agencies partner with individuals like you or the type of organization in which you work. Insights from this study will help build capacity for agencies to function better as partners and more effectively serve the public. Your participation is invaluable and greatly appreciated.

As university researchers, we are required to provide a consent form to inform you about the research study, to convey that participation is voluntary, to explain risks and benefits of participation, and to empower you to make an informed decision. You should feel free to ask the researchers any questions you may have.

Study Title: Improving State Wildlife Agency Partnerships: Creation of Public Value Through Collaborative Governance and Partnerships Researcher: Dr. Shawn J. Riley, Professor of Wildlife Management Department and Institution: Department of Fisheries and Wildlife, Michigan State University   Address and Contact Information: Michigan State University, 480 Wilson Road, room 13, East Lansing, MI 48824 Email: rileysh2@msu.edu Phone: 517-353-9456

PURPOSE OF THE RESEARCH   You are being asked to participate in a pilot research study of state wildlife agency employees and partners. You have been selected as a participant in this study due to your employment in the public sector (i.e., working for local, federal, or state government). From this study, the researchers hope to identify criteria related to successful partnerships. You must be at least 18 years old to participate in this research. Your participation in this study will take approximately 20 minutes.

WHAT WILL BE ASKED OF YOU To participate in this study, fill out and complete the online survey questionnaire. In the survey, we ask that you share information about your perspective and past experiences with work-related partnerships. These surveys are not intended to be sensitive in nature, however, we will be requesting that you share information regarding your work and views related to partners of your organization. Findings of this research may be shared with you upon request.

POTENTIAL BENEFITS You will not directly benefit from your participation in this study. However, your participation in this study will contribute to improving state wildlife agency partnerships and aid the development of future partnerships.

PRIVACY AND CONFIDENTIALITY Your privacy will be respected throughout the project. We are not using personal identifiers (e.g., your employee ID, name, etc.) to track your participation in this study. Any identifying information will be removed from all reports of the data and demographic information will only be shared in aggregate form. Data will be stored behind 3 locked doors at MSU, and only the researchers and Institutional Review Board (IRB) will have access to it. The results of this study may be published or presented at professional meetings, but the identities of all research participants will remain confidential.

YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW Participation is completely voluntary. You have the right to say no or to change your mind at any time and withdraw. You may choose not to answer specific questions or to stop participating at any time. You indicate your voluntary agreement to participate by completing and returning this survey.

CONTACT INFORMATION If you have concerns or questions about this study, such as scientific issues or how to do any part of it, please contact the researcher, Dr. Shawn J. Riley or Megan Cross at: MSU Department of Fisheries and Wildlife 480 Wilson Road East Lansing, MI 48824 Dr. Shawn Riley: phone 517-353-9456 or email rileysh2@msu.edu Megan Cross: phone 248-709-7752 or email crossmeg@msu.edu   If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 4000 Collins Rd, Suite 136, Lansing, MI 48910.

You indicate your voluntary agreement to participate by completing and returning this survey.

The following are reasons why we would not be able to compensate you for your participation. By following these compensation rules, we hope to be as fair as possible to survey respondents who meet the study criteria, who access the survey only once, and who provide quality data for our study. Please note:

If you do not include your MTurk ID in the online survey we cannot identify you and so you will not be compensated if you fail to correctly enter your Mturk ID in the online survey. If we have no record of your Mturk ID in our data, we cannot compensate you.

If you are not eligible to take this research survey based on the prescreening questions, we cannot compensate you for your participation. The quality of our scientific study depends on participants meeting these criteria. If we find that you have re-entered the survey multiple times after initially failing the prescreening questions, we also cannot compensate you.

If your survey responses include poor qualitative (written) responses, we cannot compensate you for your participation. Poor quality qualitative responses include, but are not limited to, nonsensical text or lines copied and pasted from other internet sources. The rigor of our scientific study depends on high-quality data. **I**

f your survey responses include poor quantitative (multi-choice) responses, we cannot compensate you for your participation. Poor quantitative responses include patterned responding, such as choosing the same answers for a great number of items in a row when the wording of the items would suggest that this would not be possible (i.e., some items are positively worded and some are negatively worded). The rigor of our scientific study depends on high-quality data.

If you type the wrong survey code into the Mturk survey code box, we cannot compensate you for your participation as we cannot ensure you are a human participant who is eligible for this research survey.

A public sector employee is anyone currently employed by a public sector organization or anyone who has worked for a public sector organization in the past. A public sector organization is any federal, state, or local government organization. Examples of public sector jobs are those in law enforcement, public transit, public education, and anyone working for government itself.

 A nonprofit employee is anyone currently employed by a nonprofit organization or anyone who has worked for a nonprofit organization in the past. A nonprofit organization is an organization that is tax-exempt or charitable. Examples of nonprofit jobs include those with foundations, charities, hospitals, and universities, and anyone working for a nonprofit itself.

Only current or prior public sector employees or current or prior nonprofit employees should fill out this survey.

Are you currently a public sector employee or did you work in the public sector previously?

◯ Yes, I am currently working for a public sector organization.

◯ Yes, I worked for a public sector organization in the past.

◯ No, I have not been employed by a public sector organization.

Are you currently a nonprofit employee or did you work for a nonprofit previously?

○ Yes, I am currently working for a nonprofit organization.

○ Yes, I worked for a nonprofit organization in the past.

○ No, I have not been employed by a nonprofit organization.

Are you age 18 or older?

○ Yes

○ No

Please read the questions carefully and answer all of them to the best of your ability. Your effort to respond to every question is greatly appreciated. The purpose of this questionnaire is to gain insights into your experiences working in collaborations/ partnerships with individuals or groups external to your organization. For purposes of this survey, individuals or groups external to your organization are those people not employed by your organization.

How often do you personally interact with individuals not employed by your organization in a professional capacity? *(Select only one.)*

○ DAILY

○ WEEKLY

○ MONTHLY

○ AT LEAST ONCE A YEAR

○ NEVER

How often do you interact with individuals not employed by your organization in a partnership/collaboration? *(Select <u>only</u> one.)*

○ DAILY

○ WEEKLY

○ MONTHLY

○ AT LEAST ONCE A YEAR

○ NEVER

Please reflect on your <u>current and past work</u> experiences. Which sector(s) of society do you have experience working in? (Check all that apply.)

☐ PRIVATE SECTOR (e.g., businesses)

☐ PUBLIC SECTOR (e.g., organizations that perform public services, such as law enforcement, public education and public safety, and others)

☐ CIVIL SECTOR (e.g., community groups and nonprofit organizations)

☐ I have never worked for organizations in any of the sectors of society listed.

The following questions relate to your demographic characteristics. We recognize that this is personal information and are taking precautions to prevent your confidentiality from being compromised, beginning with limiting the number of questions that are potentially identifiable. None of the information is intended to be identifying, and to protect your confidentiality any demographic information collected will only be shared in aggregate and only the researchers have access to the database of responses.

- -

Which gender identity do you most identify with? *(Please select one.)*

○ Male

○ Female

○ Not listed. Please describe below: _____

○ Prefer not to answer

- -

What is the number of years you have worked in your current position with your organization? *(Please select one.)*

○ Less than 1 year

○ 1 to 10 years

○ 10 to 20 years

○ More than 20 years

○ I am not currently working for any organization

What is the number of years you have worked for your current organization?

○ Less than 1 year

○ 1 to 10 years

○ 10 to 20 years

○ More than 20 years

○ I am not currently working for any organization.

Please share any additional comments or thoughts you might have on your organization's collaborations/partnerships in the space below:

_____

_____

What is your MTurk ID?

_____

This set of questions is designed to gain information from which to develop a better understanding about participants of your organization's collaborations/partnerships. "Participants" may include employees of your organization as well as collaborators/partners from other organizations. This may include individuals with a collaborative or partner relationship with your organization, as well as organized groups, organizations, or other stakeholders that work with your organization (e.g., an employee of another organization such as a nonprofit,

business, or government agency, or a private citizen. Please respond to these prompts based on your views towards members of collaborations/partnerships with your organization.

Think back on your experiences working in collaborations/partnerships and the individuals (both employees of your organization and individuals external to your organization) involved when responding to the following prompts. *(Select one response for each.)*

In my experience, participants in collaborations involving my organization typically...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
... recognize a need to work with collaborators.	○	○	○	○	○	○	○
... are knowledgeable about the viewpoints of other collaborators.	○	○	○	○	○	○	○
... communicate effectively with each other.	○	○	○	○	○	○	○
... typically respect each other's views.	○	○	○	○	○	○	○
... view themselves as valuable members of collaborations/partnerships.	○	○	○	○	○	○	○
... view collaboration in a positive perspective.	○	○	○	○	○	○	○
... view each other as legitimate participants of the partnership/collaboration.	○	○	○	○	○	○	○
... are skilled at forming teams.	○	○	○	○	○	○	○
... are able to resolve conflicts that arise in collaborations.	○	○	○	○	○	○	○
... develop formal procedures to monitor collaborations.	○	○	○	○	○	○	○
... are able to obtain resources to carry out inclusion of external collaborators.	○	○	○	○	○	○	○
... receive political support to engage in collaborations.	○	○	○	○	○	○	○
... believe their organization's leadership supports external collaborations.	○	○	○	○	○	○	○

This next set of questions is designed to gain insights about what your organization's collaborations/partnerships look like from an organizational perspective. This will help develop a better understanding of the work environment of collaborations/partnerships, and how the individuals involved in them work together. We are specifically interested in collaborations/partnerships that include one or more employees of your organization and one or more members of an external organization (e.g., an employee of another organization such as a nonprofit, business, or government agency, or a private citizen).

Consider your experiences working in collaborations/partnerships and how participants of those collaborations/partnerships engaged in their work when responding to the prompts. *(Select one response for each.)*

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
... respond well to suggestions made by other members of the collaboration/partnership.	○	○	○	○	○	○	○
... develop effective communication among collaborators, including employees of my organization.	○	○	○	○	○	○	○
... share information in a timely manner among collaborators/partners.	○	○	○	○	○	○	○
... are skilled at raising sufficient resources – financial or human – to create a successful collaboration/partnership.	○	○	○	○	○	○	○
... respond well to feedback from other members of the collaboration/partnership.	○	○	○	○	○	○	○
... have metrics in place to evaluate the collaboration/partnership.	○	○	○	○	○	○	○
... know their roles when working in a collaboration/partnership.	○	○	○	○	○	○	○
... are affected by conflicting policies that make collaboration/partnership difficult.	○	○	○	○	○	○	○

... develop effective internal operating procedures to guide their collaborations/partnerships.	○	○	○	○	○	○	○
... have well-defined roles and responsibilities internally to guide collaborations/partnerships.	○	○	○	○	○	○	○
... believe the collaboration/partnership has visionary leadership.	○	○	○	○	○	○	○
... possess leaders who are sufficiently skilled at communication in collaborations/partnerships.	○	○	○	○	○	○	○
... identify leaders committed to working in a collaborative fashion.	○	○	○	○	○	○	○

In my experience, participants in external collaborations/partnerships (involving employees of my organization and external collaborators) typically...

This set of questions is designed to clarify details about the social environment and relationships that exist within your organization's collaborations/partnerships. We specifically are interested in collaborations/partnerships that include one or more of your organization's employees and one or more members of an external organization (e.g., an employee of another organization such as a nonprofit, business, or government agency, or a private citizen).

93

Consider the relationships of participants in your organization's collaborations/partnerships (including employees of your organization and external collaborators) when responding to these prompts. *(Select one response for each.)*

In my experience, participants in external collaborations (involving employees of my organization and external collaborators)...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
... trust the other members of the collaboration/partnership.	○	○	○	○	○	○	○
... unite around a shared vision.	○	○	○	○	○	○	○
... share decision-making power with each other.	○	○	○	○	○	○	○
... have a strong network of relationships with policy makers.	○	○	○	○	○	○	○
... provide each other access to information from their own organizations relevant to the work of the collaboration/partnership.	○	○	○	○	○	○	○
... are responsive to other collaborators/partners with whom they work.	○	○	○	○	○	○	○
... share a common understanding of problems with each other.	○	○	○	○	○	○	○
... work with each other to evaluate collaborations/partnership.	○	○	○	○	○	○	○
... have a strong network of relationships with key community leaders.	○	○	○	○	○	○	○
... invest sufficient resources to become familiar with each other's capabilities.	○	○	○	○	○	○	○

This set of questions is designed to elicit information about the design and implementation of activities resulting from your organization's collaborations/partnerships. We are specifically interested in collaborations that include one or more members of your organization and one or more members of an external organization (e.g., an employee of another organization such as a nonprofit, business, or government agency, or a private citizen). A target audience

is the particular group at which a collaboration/partnership effort may be aimed (e.g., a stakeholder group, grantor, etc.).

Consider the work employees of your organization have accomplished through external collaborations/partnerships when responding to these prompts. *(Select one response for each.)*

In my experience, members of my organization's external collaborations/partnerships typically...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
... set clear programmatic objectives for the collaboration/partnership.	○	○	○	○	○	○	○
... set realistic overarching goals for collaborations/partnerships.	○	○	○	○	○	○	○
... set intermediate goals/milestones to measure collaboration/partnership progress.	○	○	○	○	○	○	○
... are innovative.	○	○	○	○	○	○	○
... design collaborations/partnerships to fill unmet needs.	○	○	○	○	○	○	○
... base collaborations/partnerships on comprehensive needs assessments.	○	○	○	○	○	○	○
... engage with local planning efforts (e.g., community, town, or city planning).	○	○	○	○	○	○	○
... deliver programs that respect the cultural differences of target audiences.	○	○	○	○	○	○	○
... have members who are focused on the needs of a target audience when developing program plans for a collaboration/partnership.	○	○	○	○	○	○	○

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
... adapt their behaviors based on a situation's context when communicating about the partnership/collaboration.	○	○	○	○	○	○	○

This next set of questions is designed to provide insights about the quality of relationships and frequency with which employees of your organization form collaborations/partnerships with external stakeholders, and the adequacy of resources required to form and maintain these collaborative arrangements. (Select one response for each.)

In my experience, employees of my organization...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
… are forming effective external collaborations.	○	○	○	○	○	○	○
… view external collaborations as effective in helping meet the mission of our organization.	○	○	○	○	○	○	○
… are conducting effective collaborations internal within the WD.	○	○	○	○	○	○	○
… are given sufficient authority to make decisions in working with collaborators.	○	○	○	○	○	○	○
… are provided sufficient autonomy to pursue	○	○	○	○	○	○	○

| external collaborations. | | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| … view fostering high-quality external collaborations as a priority. | | | | | | | | |

APPENDIX B

SWA Employee Survey

Wildlife Division Employee Collaborative Capacity Survey

The DNR Wildlife Division (WD) needs your help. You are being asked to participate in a study with an aim to increase the capacity of the WD to create and conduct effective partnerships in Michigan. Your experiences and insights are invaluable and greatly we appreciate you responding to this brief questionnaire. Your responses will not be associated with your identity in any way.   You are provided a consent form (continued on the following page) to inform you about the study, to affirm that participation on your part is voluntary, to explain foreseeable risks and benefits of participation, and to empower you to make an informed decision. You should feel free to ask the researchers any questions you may have.

Study Title: **Improving State Wildlife Agency Partnerships: Creation of Public Value Through Collaborative Governance and Partnerships**
Researcher: Dr. Shawn J. Riley, Professor of Wildlife Management Department of Fisheries and Wildlife, Michigan State University   480 Wilson Road, Room 13 Natural Resources Bldg.,   East Lansing, MI 48824
Email: rileysh2@msu.edu

PURPOSE OF THE RESEARCH

Your participation is needed to inform decisions about partnerships and how to more effectively carry out partnerships in Michigan. This project is funded by the Michigan DNR WD and you were selected as a participant due to your experience in the WD. We are asking you in this questionnaire to identify ways to create more successful partnerships for the WD. You must be at least 18 years old to participate in this research. Your participation in this questionnaire likely should take no more than 20 minutes.

WHAT WILL BE ASKED OF YOU

Please complete the online questionnaire at your earliest convenience. In the survey, we ask that you share information about your perspective and past experiences with work-related partnerships as part of your work with the WD. These surveys are not intended to be sensitive in nature, however, we will be requesting that you share information regarding your work and views related to partners of the WD. Findings of this research may be shared with you upon request, but your responses will not be associated with your position or your identity in any way.

POTENTIAL BENEFITS

Your participation in this study will contribute to improving state wildlife agency partnerships and aid the development of future partnerships.

PRIVACY AND CONFIDENTIALITY

Your privacy will be respected throughout the project and covered by the rules and regulations of Michigan State University's Human Research Protection Program. Any identifying information will be removed from all reports of the data and demographic information will only be shared in aggregate form. Data will be stored behind 3 locked doors at MSU, and only the researchers and Institutional Review Board (IRB) will have access to it. The results of this study may be published or presented at professional meetings, but the identities of all research participants will remain strictly confidential.

YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW

Participation is completely voluntary. You have the right to say no or to change your mind at any time and withdraw. You may choose not to answer specific questions or to stop participating at any time. You indicate your voluntary agreement to participate by completing and returning this survey.

CONTACT INFORMATION

If you have concerns or questions about this study, such as scientific issues or how to do any part of it, please contact the researcher, Dr. Shawn J. Riley or Megan Cross at:

MSU Department of Fisheries and Wildlife

480 Wilson Road

East Lansing, MI 48824

Dr. Shawn Riley: phone 517-353-9456 or email rileysh2@msu.edu

Megan Cross: phone 248-709-7752 or email crossmeg@msu.edu

If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 4000 Collins Rd, Suite 136, Lansing, MI 48910.
You indicate your voluntary agreement to participate by completing and returning this survey.

Please read the questions carefully and answer all of them to the best of your ability. Your effort to respond to every question is greatly appreciated.

The purpose of this questionnaire is to gain insights into your experiences working in collaborations/partnerships with individuals or groups external to the WD. Your input will contribute to deliberations about partnerships and in developing more effective collaborations in the future. For purposes of this survey, individuals or groups external to the WD are those people not employed by the WD and includes individuals who are external to the DNR entirely or those who are employed by other Divisions of the DNR, such as Parks and Recreation, Law Enforcement, or other Divisions.

Please respond to all the questions about WD collaborations based on your experiences working with individuals or groups not employed by the WD.

How often do you personally interact with individuals **not** employed by the WD in a professional capacity? *(Select only one.)*

○ DAILY

○ WEEKLY

○ MONTHLY

○ AT LEAST ONCE A YEAR

○ NEVER

How often do you interact with individuals **not** employed by the WD in a partnership/collaboration? *(Select only one.)*

○ DAILY

○ WEEKLY

○ MONTHLY

○ AT LEAST ONCE A YEAR

○ NEVER

This set of questions is an opportunity to share your perspectives about how WD employees view working in collaborations/partnerships with individuals external to the WD and their capacity to do so. Individuals external to the WD are those people who are not employed by the Division; this includes both individuals who are external to DNR entirely and those who are employed by other Divisions of the DNR such as Parks and Recreation Division, Law Enforcement Division, or other Divisions.

Consider **how WD employees** view working in collaborations/partnerships and their behaviors when doing so. *(Select one response for each.)*

 In my experience, employees of the WD typically…

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
… recognize a need to work with people not employed by the WD.	○	○	○	○	○	○	○
… are knowledgeable about the viewpoints of people not employed by the WD that they work with.	○	○	○	○	○	○	○
… communicate effectively with people not employed by the WD that they work with.	○	○	○	○	○	○	○

... respect the viewpoints of people not employed by the WD that they work with.

○   ○   ○   ○   ○   ○   ○

... view themselves as valuable members of collaborations/partnerships.

○   ○   ○   ○   ○   ○   ○

... view collaboration in a positive perspective.

○   ○   ○   ○   ○   ○   ○

... view people not employed by the WD as legitimate participants in wildlife management.

○   ○   ○   ○   ○   ○   ○

... are skilled at forming teams.

○   ○   ○   ○   ○   ○   ○

... are able to resolve conflicts that arise in collaborations with people not employed by the WD that they work with.

○   ○   ○   ○   ○   ○   ○

... develop formal procedures to monitor collaborations/partnerships.

○   ○   ○   ○   ○   ○   ○

... are able to obtain resources to include people not employed by the WD in collaborations/partnerships.

○   ○   ○   ○   ○   ○   ○

... believe WD leadership supports external collaborations.

○   ○   ○   ○   ○   ○   ○

Please reflect on your **current and past** work experiences. Which sector(s) of society do you have experience working in? *(Check all that apply.)*

☐ PUBLIC SECTOR (e.g., organizations that perform public services, such as law enforcement, public education and public safety, and others)

☐ CIVIL SECTOR (e.g., community groups and nonprofit organizations)

☐ PRIVATE SECTOR (e.g., businesses)

☐ I have never worked for organizations in any of the sectors of society listed.

The following questions relate to your demographic characteristics. We recognize that this is personal information and are taking precautions to prevent your confidentiality from being compromised, beginning with limiting the number of questions that are potentially identifiable. None of the information is intended to be identifying, and to protect your confidentiality any demographic information collected will only be shared in aggregate and only the researchers have access to the database of responses.

How many years have you worked in your **current position** with the WD? *(Please select one.)*

◯ Less than 1 year

◯ 1 to 10 years

◯ 10 to 20 years

◯ More than 20 years

How many years have you worked for the WD **in total**? *(Please select one.)*

◯ Less than 1 year

◯ 1 to 10 years

◯ 10 to 20 years

○ More than 20 years

What job classification most accurately represents your current position with the WD?

○ Administrative Support

○ Analyst/Specialty Areas

○ Technician

○ Supervisor

○ Specialist

○ Not listed. Please describe below. _____

Please share any additional comments or thoughts you might have on WD collaborations/partnerships in the space below:

_____

_____

_____

_____

_____

This set of questions is designed to gain information from which to develop a better understanding about individuals or groups who participate in collaborations or partnerships with the WD. "Participants" includes WD employees as well as collaborators from other organizations. Some may be individuals with a collaborative or partner relationship with WD. Others may be organized groups, organizations, or other divisions within the DNR. Please respond to these prompts based on your views towards members of collaborations/partnerships with WD. We are specifically interested in collaborations/partnerships that include one or more WD employees and one or more members of an external organization (e.g., another Division of the DNR, an employee of another organization such as a nonprofit, business, or government agency, or a private citizen).

Think back on your experiences working in WD collaborations/partnerships and the individuals (both WD employees and individuals external to the WD) involved. *(Select one response for each.)*

In my experience, participants in external collaborations / partnerships (involving employees of the WD and external collaborators) typically…

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
… recognize a need to work with collaborators.	○	○	○	○	○	○	○
… are knowledgeable about the viewpoints of other collaborators.	○	○	○	○	○	○	○
… communicate effectively with each other.	○	○	○	○	○	○	○
… respect each other's views.	○	○	○	○	○	○	○
… view themselves as valuable members of collaborations/partnerships.	○	○	○	○	○	○	○
… view collaboration in a positive perspective.	○	○	○	○	○	○	○
… view each other as legitimate participants in wildlife management.	○	○	○	○	○	○	○
… are skilled at forming teams.	○	○	○	○	○	○	○
… are able to resolve conflicts that arise in collaborations.	○	○	○	○	○	○	○
… develop formal procedures to monitor collaborations.	○	○	○	○	○	○	○

... are able to obtain resources to carry out inclusion of external collaborators.	○	○	○	○	○	○	○
... believe their organization's leadership supports external collaborations.	○	○	○	○	○	○	○

This set of questions is designed to gain insights about what collaborations/partnerships with the WD look like from an organizational perspective. This will help develop a better understanding of your work environment in collaborations/partnerships, and how the individuals involved in them work together. We are specifically interested in collaborations/partnerships that include one or more WD employees and one or more members of an external organization (e.g., another Division of the DNR, an employee of another organization such as a nonprofit, business, or government agency, or a private citizen).

Consider your experiences working in WD collaborations/partnerships and how participants of those collaborations/partnerships engaged in their work. *(Select one response for each.)*

In my experience, participants in external collaborations / partnerships (involving employees of the WD and external collaborators) typically…

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
... respond well to suggestions made by other members of the collaboration/partnership.	○	○	○	○	○	○	○
... develop effective communication among collaborators, including employees of the WD.	○	○	○	○	○	○	○
... share information in a timely manner among collaborators/partners.	○	○	○	○	○	○	○

... are skilled at raising sufficient resources – financial or human – to create a successful collaboration/partnership.

  ○   ○   ○   ○   ○   ○   ○

... respond well to feedback from other members of the collaboration/partnership.

  ○   ○   ○   ○   ○   ○   ○

... have metrics in place to evaluate the collaboration/partnership.

  ○   ○   ○   ○   ○   ○   ○

... know their roles when working in a collaboration/partnership.

  ○   ○   ○   ○   ○   ○   ○

... develop effective internal operating procedures to guide their collaborations/partnerships.

  ○   ○   ○   ○   ○   ○   ○

... have well-defined roles and responsibilities internally to guide collaborations/partnerships.

  ○   ○   ○   ○   ○   ○   ○

... believe the collaboration/partnership has visionary leadership.

  ○   ○   ○   ○   ○   ○   ○

... possess leaders who are sufficiently skilled at communication in collaborations/partnerships.

  ○   ○   ○   ○   ○   ○   ○

... identify leaders committed to working in a collaborative fashion.

  ○   ○   ○   ○   ○   ○   ○

This set of questions is designed to clarify details about the social environment and relationships that exist within the WD's collaborations/partnerships. We specifically are interested in collaborations/partnerships that include one or more WD employees and one or more members of an external organization (e.g., another Division of the DNR, an employee of another organization such as a nonprofit, business, or government agency, or a private citizen).

Consider the relationships of participants in WD collaborations/partnerships (including WD employees and external collaborators). *(Select one response for each.)*

In my experience, participants in external collaborations / partnerships (involving employees of the WD and external collaborators) typically…

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
… trust the other members of the collaboration/partnership.	○	○	○	○	○	○	○
… unite around a shared vision.	○	○	○	○	○	○	○
… share decision-making power with each other.	○	○	○	○	○	○	○
… have a strong network of relationships with policy makers.	○	○	○	○	○	○	○
… provide each other access to information from their own organizations relevant to the work of the collaboration/partnership.	○	○	○	○	○	○	○
… are responsive to other collaborators/partners with whom they work.	○	○	○	○	○	○	○
… share a common understanding of problems with each other.	○	○	○	○	○	○	○
… work with each other to evaluate collaborations/partnership.	○	○	○	○	○	○	○

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
... have a strong network of relationships with key community leaders.	○	○	○	○	○	○	○
... invest sufficient resources to become familiar with each other's capabilities.	○	○	○	○	○	○	○

This set of questions is designed to elicit information about the design and implementation of activities resulting from WD collaborations/partnerships. We are specifically interested in collaborations that include one or more WD employees and one or more members of an external organization (e.g., another Division of the DNR, an employee of another organization such as a nonprofit, business, or government agency, or a private citizen). A target audience is the particular group at which a collaboration/partnership effort may be aimed (e.g., a stakeholder group, grantor, etc.).

Consider the work accomplished through external collaborations/partnerships (including employees of the WD and external collaborators) when responding to these prompts. *(Select one response for each.)*
In my experience, participants in external collaborations / partnerships (involving employees of the WD and external collaborators) typically…

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
... set clear programmatic objectives for the collaboration/partnership.	○	○	○	○	○	○	○
... set realistic overarching goals for collaborations/partnerships.	○	○	○	○	○	○	○
... set intermediate goals/milestones to measure collaboration/partnership progress.	○	○	○	○	○	○	○
... are innovative.	○	○	○	○	○	○	○

... design collaborations/partnerships to fill unmet needs.	○	○	○	○	○	○	○
... base collaborations/partnerships on comprehensive needs assessments.	○	○	○	○	○	○	○
... engage with local planning efforts (e.g., community, town, or city planning).	○	○	○	○	○	○	○
... deliver programs that respect the cultural differences of target audiences.	○	○	○	○	○	○	○
... have members who are focused on the needs of a target audience when developing program plans for a collaboration/partnership.	○	○	○	○	○	○	○
... adapt their behaviors based on a situation's context when communicating about the partnership/collaboration.	○	○	○	○	○	○	○

This next set of questions is designed to provide insights about the quality of relationships and frequency with which WD employees form collaborations/partnerships with external stakeholders, and the adequacy of resources required to form and maintain these collaborative arrangements.

(Select one response for each.)

In my experience, employees of the WD…

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
… are forming effective external collaborations.	○	○	○	○	○	○	○
… view external collaborations as effective in helping meet the mission of our organization.	○	○	○	○	○	○	○
… are conducting effective collaborations internal within the WD.	○	○	○	○	○	○	○
… are given sufficient authority to make decisions in working with collaborators.	○	○	○	○	○	○	○
… are provided sufficient autonomy to pursue external collaborations.	○	○	○	○	○	○	○
… view fostering high-quality	○	○	○	○	○	○	○

external
collaborations
as a priority.

We would like to survey partners of the WD to learn about their experiences working with the WD and other partners of their respective organizations. Please help us identify potential partners to contact for participation in the next stage of this research.

To the best of your ability, please list the names and organizations of 3 individuals external to the WD (i.e., individuals who are external to the DNR entirely or those who are employed by other divisions of the DNR) that you have worked with in the past who are key to your work with the WD.

Individual 1
Name:

_____

Individual 1
Organization:

_____

Individual 1
Email address:

_____

Individual 2
Name:

_____

Individual 2
Organization:

_____

Individual 2
Email address:

_____

Individual 3
Name:

_____

Individual 3
Organization:

_____

Individual 3
Email address:

_____

APPENDIX C

SWA Partner Survey

Collaborative Capacity Survey - for partners

Greetings,

These are unusual times, to be sure. I hope you are well and weathering the current situation, however, and that you will help improve conservation in Michigan. I am asking for your participation in a project with an aim to increase the capacity of natural resource organizations to create and conduct effective conservation partnerships in Michigan. In particular, I am assisting the Michigan Department of Natural Resources' Wildlife Division to engage in more effective partnerships -- those that meet the needs of the Division and external partners. Insights gained from your unique experiences with this the DNR are invaluable.

I know your time is precious, and I greatly appreciate your forthright responses to this brief questionnaire. The questionnaire should not take more than about 20 minutes. Your responses will not be associated with your identity in any way. You will be provided a consent form (continued on the following page) to inform you about the project, to affirm that participation on your part is voluntary, to explain any foreseeable risks and benefits of participation (we do not believe there are any), and to empower you to make an informed decision. You should feel free to contact me should you have any questions.

Dr. Shawn J. Riley, Professor

Department of Fisheries and Wildlife, Michigan State University

480 Wilson Road, Room 13

Natural Resources Bldg.

East Lansing, MI 48824

Email: rileysh2@msu.edu

Improving Natural Resource Management: Creation of Public Value Through Collaborative Governance and Partnerships

PURPOSE

Your participation is needed to inform decisions about partnerships and how to more effectively carry out partnerships in Michigan. This project is funded by the Michigan Department of Natural Resources' Wildlife Division and you were selected as a participant due to your unique experience working in partnerships/collaborations that improve natural resource management in Michigan. We are asking you in this questionnaire to identify ways to create more successful partnerships. You must be at least 18 years old to participate. Your participation in this questionnaire likely should take no more than 20 minutes, and your response will not be associated with your name or organization in any way.

WHAT WILL BE ASKED OF YOU

Please complete the online questionnaire at your earliest convenience. In the survey, we ask that you share information about your perspective and past experiences with work-related partnerships generally and with the WD. These surveys are not intended to be sensitive in nature, however, we will be requesting that you share information regarding your work and views related to partnerships and working with the WD. Findings of this research may be shared with you upon request, but your responses will not be associated with your position or your identity.

POTENTIAL BENEFITS

Your participation in this study will contribute to improving Michigan Department of Natural Resources' partnerships and aid the development of future partnerships between the Wildlife Division and external collaborators.

PRIVACY AND CONFIDENTIALITY

Your privacy will be respected throughout the project and covered by the rules and regulations of Michigan State University's Human Research Protection Program. Any identifying information will be removed from all reports of the data and demographic information will only be shared in aggregate form. Data will be stored behind 3 locked doors at MSU, and only the researchers and Institutional Review Board (IRB) will have access to it. The results of this study may be published or presented at professional meetings, but the identities of all research participants will remain strictly confidential.

YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW

Participation is completely voluntary. You have the right to say no or to change your mind at any time and withdraw. You may choose not to answer specific questions or to stop participating at any time. You indicate your voluntary agreement to participate by completing this survey.

CONTACT INFORMATION If you have concerns or questions about this study, such as scientific issues or how to do any part of it, please contact the researchers, Dr. Shawn Riley or Megan Cross at:

Shawn Riley: email rileysh2@msu.edu

Megan Cross: phone 248-709-7752 or email crossmeg@msu.edu

MSU Department of Fisheries and Wildlife

480 Wilson Road

East Lansing, MI 48824

If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 4000 Collins Rd, Suite 136, Lansing, MI 48910.

You indicate your voluntary agreement to participate by completing and returning this survey.

Are you age 18 or older?

○ Yes

○ No

Please read the questions carefully and answer all of them to the best of your ability. Your effort to respond to every question is greatly appreciated.

The purpose of this questionnaire is to gain insights into your experiences while working in collaborations/partnerships with individuals or groups external to your organization. For purposes of this survey,

individuals or groups external to your organization are those people not employed or otherwise affiliated with your organization.

In this questionnaire, we will refer to "your organization" frequently. For our purposes, "your organization" is the one in which you are involved in that most often causes you to have contact with employees of the Wildlife Division. <u>You may be an employee of the organization, a dues-paying member in the organization, in an advisory role for the Wildlife Division, a volunteer, or a private citizen.</u> "Members of your organization" are individuals who are similarly affiliated with "your organization." Please describe your relationship to the Division below.

For example:

Jim is self-employed as an accountant. He is also a member of his local chapter of Ducks Unlimited, and in that capacity he often attends Wildlife Division meetings and, on occasion, volunteers on projects where both employees of the Wildlife Division and members of Ducks Unlimited contribute. In the space below, Jim would type "local chapter of Ducks Unlimited."

Lawrence is an employee of an organization that frequently consults with the Wildlife Division on habitat projects. In his free time, he also enjoys bird watching and he sometimes attends Wildlife Division meetings to learn about local bird populations. However, he has more experience interacting with employees of the Wildlife Division in his capacity as a consultant. In the space below, Lawrence would type the name of the organization where he is employed as a consultant.

Sarah is an avid hunter and conservationist, and she is a member of several wildlife organizations such as the National Wild Turkey Federation, Whitetails Unlimited, and the Ruffed Grouse Society. She has interacted with the Wildlife Division in her capacity as a member of several of the organizations she is a member of. In the past year, she has spent a lot of time on an effort to restore grassland with other members of the Ruffed Grouse Society and employees of the Wildlife Division. Because she has the most experience interacting with employees of the Wildlife Division as a member of the Ruffed Grouse Society, in the space below, she would type "Ruffed Grouse Society."

Rick is a teacher at an elementary school. He is not a member of any conservation organizations. However, he also owns 100 acres of land and enjoys planting species to attract birds that he likes to hunt. In the past, he has worked with Wildlife Division employees to submit habitat grants to restore a small grassland on his property. In the space below, Rick would type "private citizen."

Based on the examples above, what is the name of the organization with which you are a member that <u>most often</u> causes you to have contact with employees of the Michigan Department of Natural Resources' Wildlife Division?

_____

_____

_____

_____

_____

The following two questions are about how often you interact with individuals who are not members of your organization. Individuals who are not members of your organization are those who are not employed by your organization or are not members of the organization.

How often do you personally interact with individuals **who are not members** of your organization in a professional capacity? (*Select only one.*)

○ Daily

○ Weekly

○ Monthly

○ At least once a year

○ Never

How often do you personally interact with individuals **who are not members** of your organization in a partnership/collaboration? (*Select only one.*)

○ Daily

○ Weekly

○ Monthly

○ At least once a year

○ Never

This set of questions is designed to gain information about your perception of employees of the Michigan Department of Natural Resources' Wildlife Division. Please respond to these prompts based on your views towards members of the Wildlife Division.

Think back on your experiences working in collaborations/partnerships and with the employees of the Wildlife Division (WD) when responding to the following prompts. (*Select one response for each.*)

In my experience, employees of the Wildlife Division (WD) typically...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
... recognize a need to work with people not employed by the WD.	○	○	○	○	○	○	○
... are knowledgeable about the viewpoints of people not employed by the WD that they work with.	○	○	○	○	○	○	○
... communicate effectively with people not employed by the WD that they work with.	○	○	○	○	○	○	○
... typically respect the viewpoints of people not employed by the WD that they work with.	○	○	○	○	○	○	○
... view themselves as valuable members of collaborations/partnerships.	○	○	○	○	○	○	○
... view collaboration in a positive perspective.	○	○	○	○	○	○	○
... view people not employed by the WD as legitimate participants in wildlife management.	○	○	○	○	○	○	○
... are skilled at forming teams.	○	○	○	○	○	○	○
... are able to resolve conflicts that arise in collaborations with people not employed by the WD that they work with.	○	○	○	○	○	○	○

... develop formal procedures to monitor collaborations.	○	○	○	○	○	○	○
... are able to obtain resources to include people not employed by the WD in collaborations/partnerships.	○	○	○	○	○	○	○
... believe WD leadership supports external collaborations.	○	○	○	○	○	○	○

Please reflect on your <u>current and past</u> work experiences. Which sector(s) of society do you have **experience working in**? (*Check all that apply.*)

☐ Public sector (e.g., organizations that perform public services, such as law enforcement, public education and public safety, and others)

☐ Civil sector (e.g., community groups and nonprofit organizations)

☐ Private sector (e.g., businesses)

☐ I have never worked for organizations in any of the sectors of society listed.

Please reflect on your current organization. Which of the sector(s) of society listed apply to your **current organization**? (*Check all that apply.*)

☐ Public sector (e.g., organizations that perform public services, such as law enforcement, public education and public safety, and others)

☐ Civil sector (e.g., private citizens, community groups, and nonprofit organizations)

☐ Private sector (e.g., businesses)

☐ Not listed. Please describe: _____

The following questions relate to your demographic characteristics. We recognize that this is personal information and are taking precautions to prevent your confidentiality from being compromised, beginning with limiting the number of questions that are potentially identifiable. None of the information is intended to be identifying, and to protect your confidentiality any demographic information collected will only be shared in aggregate and only the researchers have access to the database of responses.

Which gender do you most identify with? *(Please select one.)*

○ Male

○ Female

○ Not listed. Please describe below: _____

○ Prefer not to answer

What is the number of years you have **been in your current position** with your organization? *(Please select one.)*

○ Less than 1 year

○ 1 to 10 years

○ 11 to 20 years

○ More than 20 years

○ I am not currently working for any organization

What is the number of years you have been **affiliated with your current organization**? *(Please select one.)*

○ Less than 1 year

○ 1 to 10 years

○ 11 to 20 years

○ More than 20 years

○ I am not currently working for any organization.

In what capacity do you serve your organization? (*Select all that apply.*)

☐ Employee

☐ Volunteer

☐ Dues-paying member

☐ Not listed. Please describe: _____

How would you describe your **current role** with your organization (e.g., your position in a volunteer-based organization and/or your job title where you are employed)?

_____

How would you characterize the scope of your organization? The scope of your organization is where members of your organization typically seek to have the most impact. *(Choose the option below that most closely aligns with your organization.)*

○ Local

○ Statewide

○ Regional (more than 1 state)

○ National

○ International

○ Other. Please describe below: _____

Please share any additional comments or thoughts you might have on your organization's collaborations/partnerships in the space below:

_____

_____

_____

_____

_____

This set of questions is designed to gain information from which to develop a better understanding about participants of your organization's collaborations/partnerships. "Participants" may include members of your organization as well as collaborators/partners from other organizations. These may include individuals with a collaborative or partner relationship with your organization,and organized groups, organizations, or other stakeholders that work with your organization (e.g., an employee of another organization such as a nonprofit, business, or government agency, or a private citizen). The external organization may be, but does not need to be, the Michigan DNR or the DNR's Wildlife Division.
Please respond to these prompts based on your views towards members of collaborations/partnerships with your organization.

Think back on your experiences working in collaborations/partnerships and the individuals (members of your organization and individuals external to your organization) involved when responding to the following prompts. (*Select one response for each*)

In my experience, participants in my organization's external collaborations/partnerships typically...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
... recognize a need to work with collaborators.	○	○	○	○	○	○	○
... are knowledgeable about the viewpoints of other collaborators.	○	○	○	○	○	○	○
... communicate effectively with each other.	○	○	○	○	○	○	○
... respect each other's views.	○	○	○	○	○	○	○
... view themselves as valuable members of collaborations/partnerships.	○	○	○	○	○	○	○
... view collaboration in a positive perspective.	○	○	○	○	○	○	○

... view each other as legitimate participants of the partnership/collaboration.	○	○	○	○	○	○	○
... are skilled at forming teams.	○	○	○	○	○	○	○
... are able to resolve conflicts that arise in collaborations.	○	○	○	○	○	○	○
... develop formal procedures to monitor collaborations.	○	○	○	○	○	○	○
... are able to obtain resources to carry out inclusion of external collaborators.	○	○	○	○	○	○	○
... receive political support to engage in collaborations.	○	○	○	○	○	○	○
... believe their organization's leadership supports external collaborations.	○	○	○	○	○	○	○

This next set of questions is designed to gain insights about what your organization's collaborations/partnerships look like from an organizational perspective. This will help develop a better understanding of the work environment of collaborations/partnerships, and how the individuals involved in them work together. We are specifically interested in collaborations/partnerships that include one or more members of your organization and one or more members of an external organization (e.g., an employee of another organization such as a nonprofit, business, or government agency, or a private citizen). The external organization may be, but does not need to be, the Michigan DNR or the DNR's Wildlife Division.

Consider your experiences working in collaborations/partnerships and how participants of those collaborations/partnerships engaged in their work when responding to the prompts. *(Select one response for each)*

In my experience, participants in my organization's external collaborations/partnerships typically...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
... respond well to suggestions made by other members of the collaboration/partnership.	○	○	○	○	○	○	○

... develop effective communication among collaborators, including employees of my organization.

○　○　○　○　○　○　○

... share information in a timely manner among collaborators/partners.

○　○　○　○　○　○　○

... are skilled at raising sufficient resources – financial or human – to create a successful collaboration/partnership.

○　○　○　○　○　○　○

... respond well to feedback from other members of the collaboration/partnership.

○　○　○　○　○　○　○

... have metrics in place to evaluate the collaboration/partnership.

○　○　○　○　○　○　○

... know their roles when working in a collaboration/partnership.

○　○　○　○　○　○　○

... are affected by conflicting policies that make collaboration/partnership difficult.

○　○　○　○　○　○　○

... develop effective internal operating procedures to guide their collaborations/partnerships.

○　○　○　○　○　○　○

... have well-defined roles and responsibilities internally to guide collaborations/partnerships.

○　○　○　○　○　○　○

... believe the collaboration/partnership has visionary leadership.

○　○　○　○　○　○　○

... possess leaders who are sufficiently skilled at communication in collaborations/partnerships.

○　○　○　○　○　○　○

... identify leaders committed to working in a collaborative fashion.

○	○	○	○	○	○	○

This set of questions is designed to clarify details about the social environment and relationships that exist within your organization's collaborations/partnerships. We specifically are interested in collaborations/partnerships that include one or more of members of your organization and one or more members of an external organization (e.g., an employee of another organization such as a nonprofit, business, or government agency, or a private citizen). The external organization may be, but does not need to be, the Michigan DNR or the DNR's Wildlife Division.

Consider the relationships of participants in your organization's collaborations/partnerships (including members of your organization and external collaborators) when responding to these prompts. (*Select one response for each*)

In my experience, participants in my organization's external collaborations/partnerships typically...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
... trust the other members of the collaboration/partnership.	○	○	○	○	○	○	○
... unite around a shared vision.	○	○	○	○	○	○	○
... share decision-making power with each other.	○	○	○	○	○	○	○
... have a strong network of relationships with policy makers.	○	○	○	○	○	○	○
... provide each other access to information from their own organizations relevant to the work of the collaboration/partnership.	○	○	○	○	○	○	○
... are responsive to other collaborators/partners with whom they work.	○	○	○	○	○	○	○
... share a common understanding of problems with each other.	○	○	○	○	○	○	○

... work with each other to evaluate collaborations/partnership.	○	○	○	○	○	○	○
... have a strong network of relationships with key community leaders.	○	○	○	○	○	○	○
... invest sufficient resources to become familiar with each other's capabilities.	○	○	○	○	○	○	○

This set of questions is designed to elicit information about the design and implementation of activities resulting from your organization's collaborations/partnerships. We are specifically interested in collaborations that include one or more members of your organization and one or more members of an external organization (e.g., an employee of another organization such as a nonprofit, business, or government agency, or a private citizen). A target audience is the particular group at which a collaboration/partnership effort may be aimed (e.g., a stakeholder group, grantor, etc.).

Consider the work your organization has accomplished through external collaborations/partnerships when responding to these prompts. (*Select one response for each*)

In my experience, participants in my organization's external collaborations/partnerships typically...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
... set clear programmatic objectives for the collaboration/partnership.	○	○	○	○	○	○	○
... set realistic overarching goals for collaborations/partnerships.	○	○	○	○	○	○	○
... set intermediate goals/milestones to measure collaboration/partnership progress.	○	○	○	○	○	○	○
... are innovative.	○	○	○	○	○	○	○
... design collaborations/partnerships to fill unmet needs.	○	○	○	○	○	○	○

... base collaborations/partnerships on comprehensive needs assessments.	○	○	○	○	○	○	○
... engage with local planning efforts (e.g., community, town, or city planning).	○	○	○	○	○	○	○
... deliver programs that respect the cultural differences of target audiences.	○	○	○	○	○	○	○
... have members who are focused on the needs of a target audience when developing program plans for a collaboration/partnership.	○	○	○	○	○	○	○
... adapt their behaviors based on a situation's context when communicating about the partnership/collaboration.	○	○	○	○	○	○	○

This next set of questions is designed to provide insights about the quality of relationships and frequency with which members of your organization form collaborations/partnerships with external stakeholders, and the adequacy of resources required to form and maintain these collaborative arrangements.

(*Select one response for each*)

In my experience, members of my organization...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
… are forming effective external collaborations.	○	○	○	○	○	○	○
… view external collaborations as effective in helping meet	○	○	○	○	○	○	○

the mission of our organization.

… are conducting effective collaborations internal within the organization.

   ○   ○   ○   ○   ○   ○   ○

… are given sufficient authority to make decisions in working with collaborators.

   ○   ○   ○   ○   ○   ○   ○

… are provided sufficient autonomy to pursue external collaborations.

   ○   ○   ○   ○   ○   ○   ○

… view fostering high-quality external collaborations as a priority.

   ○   ○   ○   ○   ○   ○   ○

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