2016

Collaboration in Conservation Networks: Regional Conservation Partnerships in New England

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Collaboration in Conservation Networks: Regional Conservation Partnerships in New England

By

Jill L. Weiss

A dissertation in partial fulfillment of the requirements for the degree of

Doctor of Philosophy
(Environmental Studies)

at

Antioch University New England

2016

Dedication

This dissertation is dedicated to the people who persist in their efforts to span boundaries and connect us in this ever complex, interdisciplinary, landscape of social and ecological systems.

Acknowledgements

Thank you to my sister Janet Patching, her husband Stephen, and their sons Patric and Adam for the diversions, the shelter, and the encouragement.

Thank you to Peter Palmiotto for respecting my work and sharing yours. I am so thankful for my experience with MERE and the Northeast Alpine Stewardship Network. I consider myself especially fortunate that you were able to take over the Chair position on my dissertation committee. Your insights on this project are so important, for it is the people in your field that will most benefit from this application of social research.

Thank you to Joy Ackerman for acting as my advisor from the start, and serving on my dissertation committee. Your interest and support of me and my development as a scholar is very much appreciated. I am certain I would not have been able to make the journey without you and your great questions.

Thank you to Michael Hutton-Woodland for joining my committee and allowing me to bring this project to its conclusion. Your work on collaboration has been a great help to this research. I really appreciate your time and your contribution to my success.

Thank you to the faculty, administration and fellow students of the Environmental Studies Department at Antioch University New England.

A special thank you to Bill Labich, Regional Conservationist for the Highstead Foundation. It was very gracious of you to act as the RCP Network Representative for this research. I appreciate all the time you volunteered to speak with me over the past four years. You provided the best background information, introductions, and guidance for the work I find that I have only started. Thank you for your help. I am very grateful. I hope this project benefits your work as yours has benefited mine.

Thanks also to Emily Bateson, Conservation Director at the Highstead Foundation for your support of this research.

Thank you to Brian Hall for furnishing the shape file and Arc GIS data from Highstead and Harvard Forest. Thanks to Apollinaire William, for assisting with creating the population map.

Thank you to all the research participants from the RCP Network for your generosity with your time and thoughts. I am especially indebted to those who agreed to speak with me in person, either formally in the interviews, or informally at one of the Gatherings. Seeing and hearing your passion for this work in person was inspiring.

Thank you to my wonderful students at Keene State College whom I have taught for the past few years. Your honesty, patience, and humor made my all too brief breaks from my dissertation work truly enjoyable.

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Abstract

Environmental problems are becoming increasingly complex and harder for any one discipline or approach to address. In the case of land conservation, there is an incongruity between how we view and manage social and natural systems even though each is reliant on the other. Adaptive co-management of these socio-ecological landscapes by a cross section of stakeholders and disciplines is necessary. In New England this is happening through Regional Conservation Partnerships (RCPs). RCPs are conservation networks comprised of land trusts, local governments, landowners, and localized conservation action groups. The geographic range of each RCP varies in size from a few hundred to half a million acres. Their activities break down disciplinary, political, and organizational boundaries and connect management of land for people through conserving contiguous and ecologically sustainable landscapes in an increasingly developed Northeast. RCPs represent a great diversity of resources, knowledge, and skills. Partnerships pool what they have and leverage it for their shared purpose. The purpose of this study is to characterize Regional Conservation Partnerships (RCPs), to better understand communication and collaboration among practitioners and across organizations in conservation networks, and find what the participants consider when measuring their success. The study has its theoretical roots in the fields of collaborative adaptive management, landscape ecology, organizational assessment, and communication. Methods employed include archival research, interviews, and surveys, with both qualitative and quantitative analysis. The conclusions drawn were themed around communication and collaboration. This population values opportunities to share information, yet, they do not meet often. When they do meet, important communication opportunities occur through storytelling and shared experience. It was found that elastic and sometimes temporary network relationships, along with clear information sharing expectations,

were most useful for pooling resources aimed at decisive conservation actions. While trust and regular communication were prized, further integration of organizations was not. RCPs are knowledge transfer centers, and an embodiment of landscape ecology theory. Successful RCPs apply the promising practices mentioned above and utilize an ephemeral type of collaboration that allows partner organizations to come together to take action on parcel projects or bolster capacity, then loosen ties to work autonomously. RCPs are a land conservation model worthy of further study and emulation, for, doing more conservation work with less resources is a future certainty.

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CHAPTER 1

Introduction

Overview

The increasing size and complexity of current environmental issues such as climate change, land conversion, and biodiversity loss is exacerbated by scale locally and regionally. The capacity and tools for addressing such problems seem out of reach (Rittel & Webber, 1973). Yet, in the face of uncertainty, individuals and organizations are mobilizing to protect biodiversity and contiguous, sustainable landscapes where they live (Andrews & Edwards, 2005; Rickenbach, Schulte, Kittredge, Labich, & Shinneman, 2011; Svendsen & Campbell, 2008; Weiss, 2011). We are at a time of rapid land conversion in the Northeast; maintaining sustainable landscapes amidst environmental change and economic uncertainty is especially challenging. Such work requires cooperation and communication between multiple agencies and interested parties to ensure the work is ecologically sound and accounts for social, economic, and policy impacts (Karl, Scarlett, Vargas-Moreno, & Flaxman, 2012). Unfortunately, those doing this work may not have access to the information needed to make the best judgment or capacity to take action (Olsson, Folke, & Hahn, 2004; Perera, Buse, & Crow, 2007). Conservation networks like regional conservation partnerships (RCPs) share information and collaborate to gain an advantage in large scale conservation projects. Such practice supports an ideal of adaptive co-management of socio-ecological landscapes (Karl et al., 2012; Olsson, Folke, & Hahn, 2004).

This dissertation focuses on a collaborative, networked approach to conservation called Regional Conservation Partnerships (RCPs). RCPs are conservation networks comprised of land trusts, local governments, landowners, and localized conservation action groups. The RCP

Network, the population for this study, is a network of RCPs engaged in landscape initiatives across New England and the eastern edge of New York State. This metanetwork pools and leverages skills, knowledge, and other resources to make gains in large parcel conservation in the face of economic instability and rapid environmental change. The geographic range of each RCP varies in size from a few hundred to half a million acres. They create both a physical and psychological presence for policymakers and the public. This type of organization is gaining recognition, along with acreage, but its characteristics have not been fully explored.

Conservation projects that cover hundreds if not thousands of acres are comprised of complex, interlocking ecological, social, political, and other systems (Van Bueren, Klijn, & Koppenjan, 2003; Weber & Khademian, 2008). In order to identify leverage points in social and ecological systems where one can positively intervene, one must consider how these systems interact at different scales (Meadows, 1997). Collaboration and knowledge sharing across geographic and disciplinary boundaries allow people to share and leverage resources and knowledge at these different scales. It requires individuals with knowledge about different aspects of systems to collaborate across organizations (Aldrich & Herker, 1977; Rickenbach et al., 2011). The appeal of this dissertation research lies in my interdisciplinary background. I am a trained communications designer and educator with a strong foundation in ecology, and I possess a fascination with systems and scale. This research is an opportunity to examine how organizational collaboration functions in this conservation application. In this research, organizational collaboration is a "process in which autonomous actors interact through formal and informal negotiation, jointly creating rules and structures governing their relationship and ways to act or decide on the issues that brought them together" (Thomson, Perry, & Miller, 2009,

p. 25). In theory, network approaches seem ideal, but there are complexities and barriers to sharing knowledge and collaborating across systems that need to be explored.

The Problem

Over the past half-century, human understanding of ecology and natural systems has grown exponentially, yet we have found that many systems may be too complex for us to fully understand. This finding outdates the classical notion of scientific land management in which parts of a problem are known quantities and solutions are found through application of ecological principles by professionals (Gunderson & Holling, 2001; Gunderson & Pritchard, 2002; Kemmis, 2002; Moller, 2011; Van Bueren, Klijn, & Koppenjan, 2003). There is a disconnect between how we manage social and natural systems even though one is reliant on the other (Olsson, Folke, & Hahn, 2004; Williams & Ellefson, 1997). There are barriers between disciplines and practices; lack of communication infrastructure between the theory and application of collaborative conservation (Buse & Perera, 2006; Gera, 2012; Karl et al., 2012; J. Liu et al., 2007; Meadows, 1997; Perera et al., 2007).

According to Perera et al., (2007), communication infrastructure is a pathway for knowledge to travel between professionals. This exchange is known as knowledge transfer, and it often concerns tacit or hard to quantify knowledge or information (Perera et al., 2007; Simonin, 1999). For example, there are comparatively few normalized pathways for scientific research and practical knowledge to inform on the ground users, and for users to give feedback about applied practice to inform the researchers (Buse & Perera, 2007; Gera, 2012; Salafsky, Margoluis, Redford, & Robinson, 2002). The same gaps are apparent in regional-scale conservation efforts where feedback loops within and between stakeholders and agencies are

often severed or nonexistent; further complicated by geographic distance and differences in organizational culture (Liu et al., 2007; Meadows, 1997; Perera, Buse, & Crow, 2007).

I observed and documented this pathway deficit during my service project, *Sharing Out: Alpine Stewardship Programs in the Northeast*, in which I studied professionals and volunteers who work to protect fragile alpine vegetation. I observed a loose professional network based on personal relationships and shared philosophy about place, conservation, and recreation. While some individuals were connected and sharing knowledge through personal relationships, the overall flow of scientific and land management knowledge between individuals engaged in alpine conservation and education across the ten study sites varied based on historical organizational associations, connection to government agencies, and personal relationships and interests. I found that small deliberate steps to share knowledge across organizational boundaries such as conferences, shared trainings, or publications had immediate and positive effects on network cohesiveness and identity (Weiss, 2011). Making an effort to stay connected validates information pathways and creates communication infrastructure.

Collaborative conservation builds communication infrastructure

Collaborative conservation appears in many forms including ecological stewardship networks, citizen science initiatives, and land trusts (Firehock, 2011; Karl et al., 2012). All work through networks of personal and professional relationships and associations. Networked conservation creates a mosaic of knowledgeable persons highly engaged in the conservation of the resource in question. (Berkes, Colding, & Folke, 2000; Firehock, 2011; Harris, Brown, & Russell, 2012; Margerum, 2008; Pollard, Davies, Coley, & Lemon, 2008). Networks like these value on-the-ground practitioners because their local knowledge and high level of engagement

contributes to accurate risk assessment and better conservation planning. Conservation networks blend common interests, shared purpose, social capital, and participation to build trust and solve problems (Briske, 2012; Genskow, 2009; Kramer, 2007; Lubell, Schneider, Scholz, & Mete, 2002; Putnam, 1995; Van Bueren et al., 2003). Such networks may be described as an adaptive co-management approach to conservation (Camacho, Susskind, & Schenk, 2010; Holling & et al., 1978; Olsson, Folke, & Berkes, 2004; Olsson, Folke, & Hahn, 2004). Successful conservation networks embrace all aspects of the landscape, both human and ecological, and they include collaborative and interdisciplinary practices which are cost-effective, produce gains for multiple parties, and generate innovative ideas from people intimate with a particular site or problem (Beierle, 2002; Karl et al., 2012; Klosowski, Stevens, Kittredge, & Dennis, 2001; Leeuwis & Pyburn, 2002; Prell, Hubacek, & Reed, 2009).

The academic literature supports that collaboration and networking makes for better conservation planning, but practitioners may not have the resources or support to follow through (Curtin, 2011; Firehock, 2011; Florig et al., 2001; Innes & Rongerude, 2006; Karl et al., 2012). An exploration and assessment of the practices of a successful conservation network will be valuable to policy makers, ecologists, land trusts, and community members engaged in collaborative conservation (Adler & Birkhoff, 2002; Carr, 1986; Malhotra, 2002; Woodland & Hutton, 2012).

Purpose and Research Questions

The purpose of this study is to characterize Regional Conservation Partnerships (RCPs) in New England, to better understand communication and collaboration among practitioners and across organizations in conservation networks, define the nature of collaboration in RCPs, and

identify promising practices that may be emulated in similar circumstances elsewhere. My research questions are:

- What level of collaboration helps conservation networks reach landscape scale conservation goals?
- How does frequency and type of communication affect collaboration in these groups?
- Are there "best practices" in collaboration among these networks?
- When best practices are used at the local scale, does such an approach facilitate effective collaboration at a regional scale?

Theoretical Connections

The conceptual framework for researching RCPs in New England is organized by four concepts that are each supported by various theories from the literature (figure 1.1). They are: (1) *Collaborative Management of the Commons*; (2) *Conservation Networks as Co-Adaptive Management*; (3) *Collaborative Communication and Knowledge Sharing*; and (4) *Natural Resources Management Assessment*. Collaborative conservation has been around for well over 20 years in a variety of forms and continues to evolve (Conley & Moote, 2003). The practitioners and stakeholders in these networks hail from many fields making interpretation through any one discipline difficult (Conley & Moote, 2003; Emerson, Nabatchi, & Balogh, 2012; McEathron, 2008). This research seeks to characterize a collaborative conservation network that appears to be reaching social and ecological targets evidenced by improved cooperation between agencies

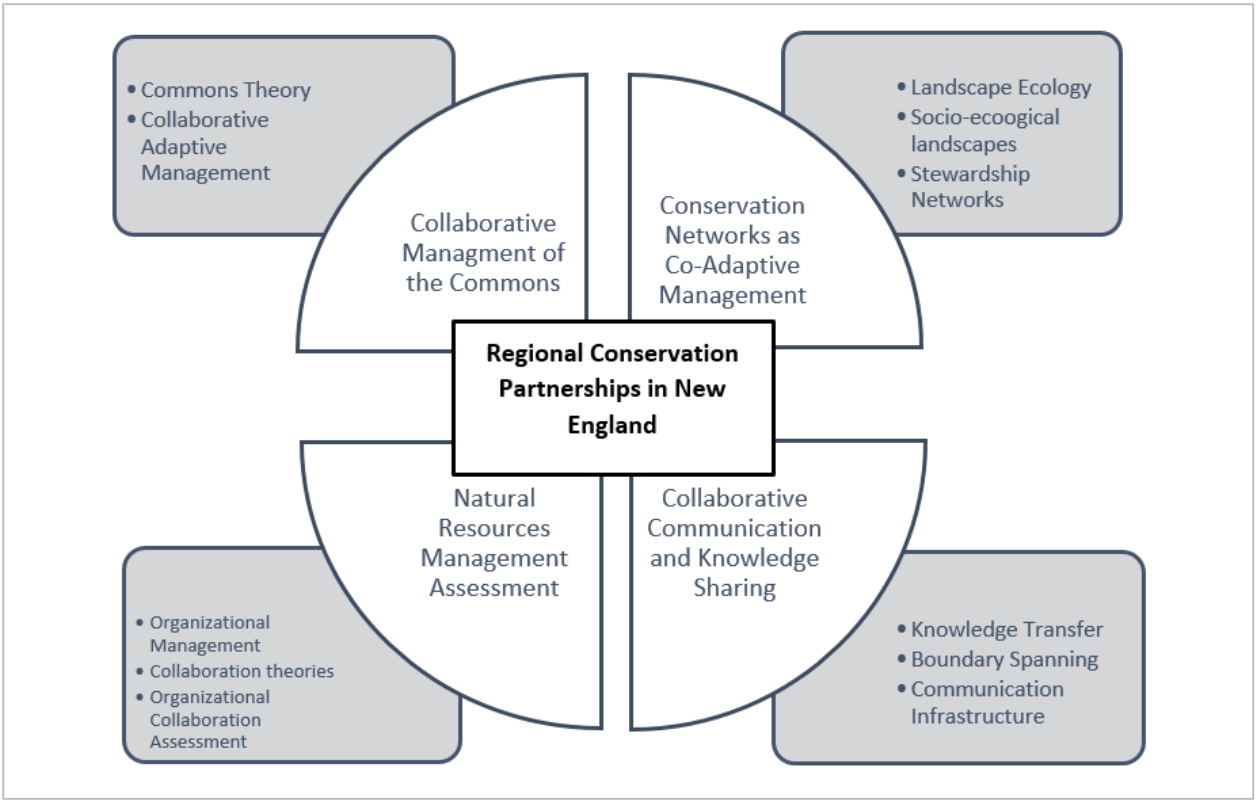

Figure 1.1. Conceptual framework of Regional Conservation Partnership research.

and increases in conserved acreage. RCPs are an emerging form of collaboration in the Northeast, but the theories that drive them have been described previously in the literatures of landscape ecology, collaborative adaptive management, socio-ecological landscapes, knowledge transfer, and collaborative conservation.

Regional conservation partnerships strive to secure conservation of large land parcels that facilitate percolation of charismatic megafauna and ensure ecological services for people such as carbon sequestration and clean drinking water (Forman, 1995; Forman & Godron, 1986; Labich, Hamin, & Record, 2013; Rickenbach et al., 2011). Sustainable landscapes that support wildlife and people require collaborative management of the commons (Hardin, 1968; Karl et al., 2012; Kemmis, 2002). Conservation theory promotes collaboration, especially between governments, private citizens and organizations, but in practice, messaging is often "top-down" (Gordon, 1954;

Gunderson et al., 1995; Salafsky et al., 2002). There is no normalized pathway for theory to influence practice, and a resistance to on-the-ground, systemic, interdisciplinary practice (L.H. Gunderson et al., 1995; Ostrom, 1990; Perera et al., 2007; Salafsky et al., 2002). Co-adaptive management of socio-ecological landscapes as suggested by Olsson, et al. (2004), and demonstrated by RCPs, leads to greater resilience for human and natural systems.

Conservation networks such as RCPs are an application of this ideal. They are an association of individuals that cooperatively manage a resource to address gaps in communication and cooperation, and to meet conservation goals (Batterbury, 2003; Olsson, Folke, & Berkes, 2004; Rickenbach et al., 2011). The value of conservation networks is in their local knowledge and contacts, shared expertise, and interdisciplinary nature (Briske, 2012; Svendsen & Campbell, 2008). Members share information and skill sets across content boundaries, physical barriers and hierarchical levels, and innovation occurs as they pass knowledge along (Batterbury, 2003; Briske, 2012; McEathron, 2008; Rickenbach et al., 2011). This activity creates value added knowledge, and participants develop motivation and values for ecosystem management. With higher quality information, they can effectively direct action at the local level and together navigate the larger social and natural environment (McEathron, 2008; Reagans & McEvily, 2003a; Rickenbach, 2011; Zander & Kogut, 1995).

The collaborative conservation work that RCPs do require a kind of knowledge sharing and mutual understanding that may be interpreted as two types of boundary spanning. The first is socio-political, in which individuals representing their own land, and organization, or agency work to understand the culture and relationships in their region and maintain awareness or invest in the management of lands nearby (Rickenbach et al., 2011). The other type of boundary spanning occurs in the social networking of the practice. Individuals create connections across

organizational disciplines, and act as a translator and connector for others using their knowledge of the situation and partners (Aldrich & Herker, 1977).

The last concept that overlaps with exploration of RCP networks is assessment of collaborative conservation. Conley and Moote (2003), suggests that while collaborative conservation is hailed in popular literature, there is no agreement on how to measure its success. Individual studies are so specific to the situation they cannot be generalized. Appraisal is difficult and relies heavily on who is doing the measuring and what they hope to achieve. Existing evaluation measures in the organizational assessment literature emphasize the relationships between the actors and the organizations, and success is often measured by the level of integration of the organizations and the satisfaction of the participants (Conley & Moote, 2003; Frey, Lohmeier, Lee, & Tollefson, 2006). Such measurements work less well on practices such as RCPs that are not well studied and for whom organizational integration is not a goal.

Summary of Methodology

Maxwell (2012), suggests that developing a concept map for the research makes the relationship between the theoretical framework, subject, and goals clear. Figure 1.2 presents a concept map that depicts how theory informed the goals of the research, helped form the research questions, and guided the methodology. This study began with a preliminary investigation into RCP activity comprised of informal conversations with RCP participants and stakeholders, online research and document review. This was a non-experimental, explanatory, cross sectional study that employed a mixed form qualitative and quantitative research methodology (Lapan & Quartaroli, 2009; Patton, 2002). The data collection took place 2013-2014 and included

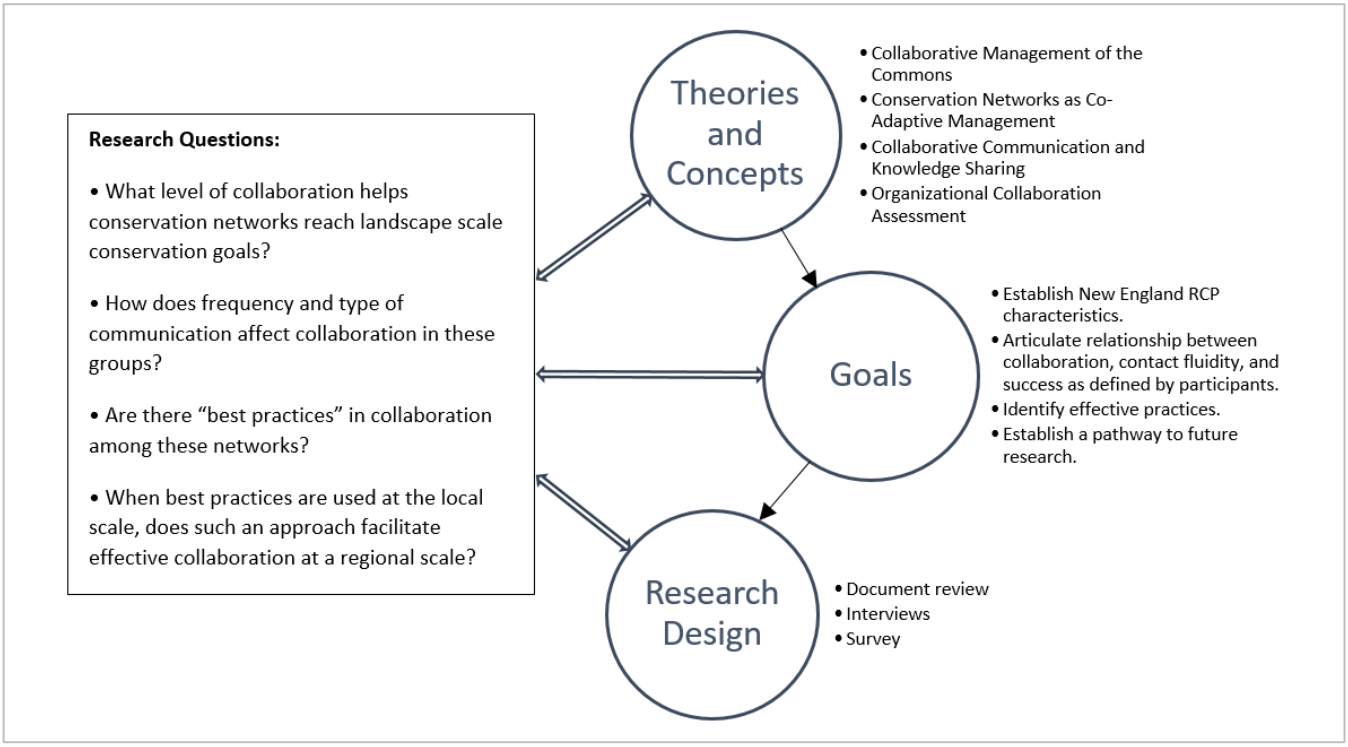

Figure 1.2. Concept map illustrating relationship between theory, research questions, goals, and research design.

interview and survey phases. The population, details of data collection and analyses are shared in Chapters Three and Four.

Limitations

As mentioned above, collaborative conservation comes in many forms and each situation may have its own criteria for typical activities and measuring success, thus making it difficult to make generalizations about the practice (Conley & Moote, 2003). This particular study does not attempt to devise a measurement for all conservation networks or even RCPs. It is a snapshot of practice based on the responses of participants in 39 RCPs active in the Northeast in 2013 and 2014. My analysis is limited to the responses given by those who volunteered to participate. That

said, this research serves as a gateway for future analysis for correlation between practice and conservation targets.

Definition of Terms

Key terms used in this study:

Regional Conservation Partnership (RCP): A network of organizations/agencies that work together to conserve large parcels of land in a geographic area they have in common. They may also do other conservation related activities such as landowner outreach.

Regional Conservation Partnership Network (RCP Network): A network of the above networks in New England and a few counties in New York State. Defines the parameters of my study population.

Partners/ Partnering Organization: The individual participants, the organization/agency they represent in an RCP.

Partnership: in this case used interchangeably with RCP, as in "the partnership."

Collaboration: to work jointly with others or together; in this case we are talking about collaboration between partners within individual RCPs and the potential for collaboration across several RCPs. In this research, *organizational collaboration* is a "process in which autonomous actors interact through formal and informal negotiation, jointly creating rules and structures governing their relationship and ways to act or decide in the issues that brought them together" (Thomson, Perry, & Miller, 2009, p. 25).

Landscape: Spatially heterogeneous geographic areas characterized by diverse interacting ecosystems. This population also uses this word to refer to bioregion, a watershed, or group of connecting parcels.

Parcel/ Parcel Projects: A measured portion of land; may be called a tract. In this application, parcel project refers to RCPs coordinating landowners to stitch together several tracts for a conservation easement or purchase. Such actions contribute to landscape percolation, or an increase in opportunities for species to move around.

This dissertation has five chapters: Chapter One, the Introduction; Chapter Two, a Review of the Literature, which introduces foundational concepts in ecology and social science that support this inquiry, Chapter Three, Methods, explains the instrumentation and data collection, and Chapter Four presents the results of the interview and survey phases, respectively. Chapter Five, Discussion, shares findings, implications and next steps.

CHAPTER 2

Review of the Literature

"We need to nurture the political and social will to undertake the hard work of collaboration, and, particularly, to shape the institutions, policy tools, and science support that sustain collaborative action over time."

(Karl, Scarlett, Vargas-Moreno, & Flaxman, 2012, p. 9)

There is an incongruity between how we view and manage social and natural systems even though each is reliant upon the other. Large-scale, long-term, systems-based conservation efforts that address a peopled landscape will require *adaptive co-management of social ecological systems* (Olsson, Folke, & Berkes, 2004). Collaboration and participatory approaches, already common in international development programs for decades, are now more frequently applied to conservation projects in the United States and will be essential to large scale conservation efforts (Karl et al., 2012; Wilmsen, Elmendorf, & Fisher, 2008). Improved communication, knowledge sharing and collaboration between researchers, practitioners, and local stakeholders aid these efforts and strengthen the framework of adaptive management (Stankey, Clark, & Bormann, 2005).

Collaborative approaches in conservation planning combine social capital, participation and research to create a mosaic of knowledgeable persons highly engaged in the conservation of the resource in question (Berkes, Colding, & Folke, 2000; Kramer, 2007; Pollard, Davies, Coley, & Lemon, 2008; Putnam, 1995). Salafsky et al. (2000) suggest that such cooperative actions strengthen the framework of adaptive management and improve conservation practice. Regional

conservation partnerships (RCPs) in New England epitomize such collaborative work, and occupy a stewardship niche that connects land owners, conservationists, agencies and the actual parcels of land at different scales through collaboration. Increased use of the RCP as a 'human resource' and management of participant's collective knowledge will make for better risk analysis and conservation planning in the future (Foster & Labich, 2008; Florig et al., 2001).

Regional conservation partnerships are a model for how we can retool our land management efforts towards socio-ecological conservation. In order to understand the significance of RCP work in New England one must place it in the contexts of contemporary conservation science, common pool resource management, and organizational assessment. This chapter has four parts. The first part provides context for collaborative conservation and presents the call for a socio-ecological view of the landscape. The second part presents conservation networks (such as RCPs) as a form of adaptive co-management that aids collaborative conservation. The third part presents collaborative communication and knowledge sharing characteristics common to conservation networks. The fourth part addresses collaboration measurement in natural resource management.

Collaborative Management of the Commons

In the later 20th century, land conservation went through a theoretical reframing of conservation problem-solving that looked at the concepts of biodiversity, ecosystem services, and common pool resources in tandem (L.H. Gunderson et al., 1995; Kemmis, 2002; McKinney, Scarlett, & Kemmis, 2010; Salafsky et al., 2002). Moving from the theoretical to the practical, however, has been a challenge (Karl et al., 2012; Scarlett, 2012). By the mid-20th Century, it was a common belief that people could not be trusted to make sound resource decisions because self-

interest would override choices that benefit the greater good (Hardin, 1968; Kemmis, 2002). Thinking like this paved the way for top down agency management of natural resources and open spaces (Gordon, 1954; Kemmis, 2002). Systems thinkers challenged this notion with new ideas about management, scale, and resilience (Gunderson et al., 1995; Karl et al., 2012).

One such thinker is Buzz Holling, who in 1978 presented *adaptive management*, an iterative, systemic approach to conservation and resource management (Johnson, Sexton, Malk, & Szaro, 1999; Holling & et al., 1978; Williams, Szaro, & Shapiro, 2007). Adaptive management goes beyond a simple set of prescribed steps for response to a situation, and it requires exploration of multiple options to solve the problem and predict outcomes based on the current state of knowledge. Any implementation is monitored for impacts, and the results are used to update knowledge and adjust management (MacDonald, Fraser, & Gray, 1999; Murray & Marmorek, 2003; Williams et al., 2007).

In the mid to late 20th Century, the more common agency response to managing landscapes with multiple stakeholders was to increase regulation or outright buy the land, so this system-examination approach was radical. Further, it required viewing the land as not solely property or acreage, but as a common pool resource. A common pool resource (CPR) is one that is available to many, but for which no single individual is responsible. In this context common pool resource management refers to the management for the common good of natural resources such as fisheries, forests, and water sources (Ostrom, 1990). A CPR approach requires participants to (1) recognize the boundaries of the resource; (2) recognize the claim and reach of the stakeholders; (3) collaborate or broker management of the resource; and (4) establish guidelines and monitoring (Ostrom, 1990). This management approach requires consideration for

not only the resource, but for the participants. Boundary recognition, inclusivity, and accountability are features of reflective CPR management practice (Ostrom, 1990).

Theoretically, participatory research and collaborative conservation approaches are a desirable norm, and alliances of individuals, organizations, and larger networks are often a part of conservation projects (Kapoor, 2001; Salafsky et al., 2002). But the frequent review, reflection, and transfer of knowledge required to fulfill the theoretical application is not necessarily present (Rickenbach et al., 2011; Salafsky et al., 2002; Wyborn & Bixler, 2013).

The Problem of Scale and Capacity

The problem of scale has its roots in how conservation has changed over the past half century. The practice has shifted from a "crisis oriented discipline ... to a more proactive discipline focused in patterns and processes at multiple scales" (Poiani, Richter, Anderson, & Richter, 2000, p. 135). Instead of focusing on individual species, researchers in this discipline now advocate for "functional landscapes," that is, landscapes that promote the increased interactions of metapopulations (Poiani et al., 2000). Landscapes are thought of in generalized scales, ranging from connected patches, to matrix scale ecosystems, to regional scales (Poiani et al., 2000; Salafsky et al., 2002; Wiens, 2007).

The scale problem is spatial, but also temporal. Practitioners such as foresters, wildlife managers, and even landowners apply land management plans in a pragmatic way. The policy and plans that guide these activities are made by those often once removed from any given parcel, and are bound to regional plans that span a decade. These are governed by legislative acts that may have a national scale and scope of many decades (Perera et al., 2007). The different purposes of these hierarchical levels would alone create barriers for two-way knowledge sharing,

but the scale differences amplify (1) problem and project complexity; (2) disparate priorities and values; (3) dynamic, non-static settings; (4) wide ranging indicators used to measure conservation success; and (5) lack of organizational capacity in agencies or in institutions to get knowledgeable persons in the right place to read those indicators (Scarlett, 2012).

Large scale, landscape scale conservation initiatives belong in our future. Besides providing habitat and corridors for wildlife, the networked landscape provides essential ecological services for people (Berkes, Colding, & Folke, 2002). In the case of New England, large contiguous forested landscape also sequesters carbon and mitigates climate change (Foster & Labich, 2008). However, coordinating the diversity of experience, skills and resources to do landscape scale conservation work is another matter. Such a vision requires adaptive co-management, an iterative review of results and adjustment of collaborative management techniques by the stakeholders who share the resource (Olsson, Folke, & Berkes, 2004; Rickenbach et al., 2011; Wyborn & Bixler, 2013). This goal can be reached when practitioners and policy makers with common interests collaborate through mechanisms such as conservation networks.

Conservation Networks: A Form of Co-adaptive Management

If the goal is to preserve biodiversity and protect ecosystem services that benefit people and other species, the path is collaborative conservation. Values, knowledge, and skills sharing within networks of stakeholders, organizations and practitioners, both professionals and laypersons, inform applications and practice on the ground. Ideally, this connects to and influences policy and practice development. When strategies, skills, and policy work in concert, opportunities are created and threats to conservation targets may be managed even amidst

changing conditions and incentives (Kapoor, 2001; Salafsky et al., 2002; Wyborn & Bixler, 2013).

Conservation networks are an association of organizations engaged in the cooperative management of a resource (Lankford, 1997). They have their roots in centuries of culturally normalized ecological stewardship later adopted as a systems approach to conservation and resource management that now often includes local stakeholders and traditional ecological knowledge (Berkes et al., 2000; Falanruw, 1984; Holling & et al., 1978; Johnson, Sexton, Malk, & Szaro, 1999; Walters, 1986; Williams, Szaro, & Shapiro, 2007). This form of co-adaptive management has vertical and horizontal network connections, meaning the work tends to create equality in hierarchical organizational structures, and is inclusive in that it may reach across disciplinary boundaries (Batterbury, 2003; Svendsen & Campbell, 2008). Network members are often self-selecting, and are valuable for meeting policy and scientific goals, because network members interact with both the physical and social aspects of the landscape, strike a balance between an ecological and egalitarian land ethic, balancing on-the-ground experience with rigorous science (Foster & Labich, 2008; Forman & Godron, 1986; Leopold, 1949; Svendsen & Campbell, 2008; Thompson, 2010; Travis, Egger, Davies, & Mechbal, 2003).

Olsson, Folke, and Hahn (2004) submit that co-adaptive management ensures social-ecological resilience, meaning that social-ecological systems will be able to absorb shock and return to a state with similar functionality. Those participating in conservation networks engage in co-adaptive management processes and strategies that support three goals: (1) *Developing motivation and values for ecosystem management*; (2) *Directing the local context through adaptive co-management*; and (3) *Navigating the larger environment* (Olsson, Folke, & Hahn, 2004). I have interpreted and summarized the most relevant examples of processes and strategies

into Table 2.1. In Chapter Five, the Discussion, I will return to this table to draw parallels with my findings about regional conservation partnerships in New England.

Table 2.1. Summarized examples of adaptive co-management processes and strategies (Olsson, et al. 2004).

Goals	**Processes and strategies relevant to conservation networks**
Developing motivation and values for ecosystem management	Strategic Planning. For ecological systems, For social systems, Include all stakeholders. Capacity building. Fostering dialogue and building trust with key actors. Developing norms for action and communication.
Directing the local context through adaptive co-management	Encouraging stewardship activity and action based on rigorous science. Building and sustaining purposeful socio-professional networks. Mobilizing networks for action. Synthesizing knowledge and coordinating collaboration. Encourage voluntary participation. Turn problems into possibilities.
Navigating the larger environment	Policymaker outreach. Research center outreach (external knowledge and viewpoints). Raise funds. Collaborating across scales: Organizational, science, government. Anticipate and insulate from external problems.

Williams and Ellefson (1997) describe regional conservation partnerships as the best way to manage forest ecosystems with multiple owners: “In a partnership, members voluntarily promote individual actions that when combined, will sustain larger ecosystems” (p. 24). Further, these partnerships open up lines of communication through which knowledge transfer can occur.

How this community shares information among themselves about applicable science and best practices may influence the efficacy of their work (Svendsen & Campbell, 2008).

Collaborative Communication and Knowledge Sharing

As established in previous sections, large-scale conservation is essential, but extremely challenging because of issues with scale and capacity. Stakeholders may end up at odds simply because their viewpoint obscures common interests. To address this problem, participants in landscape scale conservation networks engage in two kinds of *boundary spanning*. The first is geographic. Rickenbach, et al. (2011) describes boundary spanning as "voluntary behavior whereby one or more landowners account for the plans and practices on adjacent and/or nearby properties" (p. 91). Landowners are more likely to support cross-boundary work when they are well informed. Disseminating those plans and practices to the appropriate parties requires a special type of information sharer that illustrates the second type of boundary spanner: individuals that create connections across organizations and often disciplines. They "select, transmit, and interpret information" based on their knowledge of the "boundary" or the difference between the two sides of the boundary (Aldrich & Herker, 1977, p. 219; Rickenbach et al., 2011). These activities persist because they are a source of reward for the spanner and the network, and often an opportunity for the inclusion of traditional and local ecological knowledge as well (Aldrich & Herker, 1977; Kemmis, 2002; Perera et al., 2007).

Information management is important for collaborative communication, since trends over the last decade have shown improved access to information through globalization and new media. This is a challenge in conservation, for increased generation of information and scientific specialization has led to a significant buildup of knowledge (CAMNet, 2011; Perera et al., 2007;

Rickenbach et al., 2011). Disappointingly, there is not an automated flow from developers to users. The *communication infrastructure* is missing. Not to be confused with communication**s** infrastructure that concerns itself with telecom, communication infrastructure is a pathway for research knowledge to influence and inform user applications, and for feedback to get back to the researchers (Perera et al., 2007). The transfer from research knowledge to user application is not automated. Figure 2.1 shows an adaptation of Perera et al.'s (2007) illustration of communication infrastructure. It has been modified to show that the corridor or enabling structure for communication and knowledge sharing can take many forms, ranging from publications about landowner outreach to conferences regarding financial structures of conservation easements These pathways require active involvement of stakeholders using several techniques and tools (McEathron, 2008; Perera et al., 2007). Star and Griesemer (1989) suggest that the movement of theory to application requires involvement of both knowledge

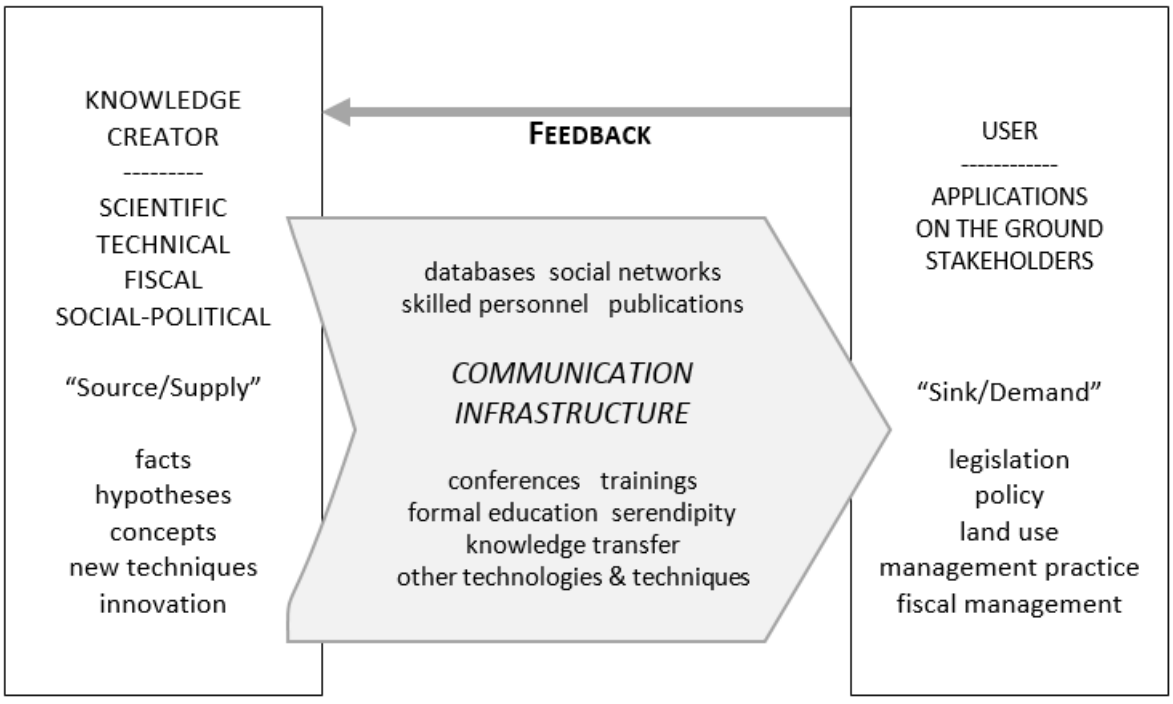

Figure 2.1. Communication infrastructure for knowledge transfer and feedback (Adapted from Perera et al. 2007).

creators and users. Further, through strong networks there can be feedback from knowledge users to creators. The additional role of boundary spanner further aids the knowledge process (McEathron, 2008).

In summary, in conservation networks like RCPs, information users do not simply adopt information, they may innovate, reinvent, aggregate, or even reject knowledge (McEathron, 2008). The practical nature of the RCPs fosters communities for idea creation, adoption, and innovation (Andrews & Edwards, 2005; McEathron, 2008). Through this reprocessing of information, conservation networks *add value* to knowledge. In conjunction with adaptive management, conservation networks' knowledge sharing can strengthen communication infrastructure and create more knowledge sharers.

Collaboration in Natural Resources Management: Beneficial, But Hard to Measure

As outlined in previous sections, rapid changes in the environment, culture, technology, and available resources drive collaborative conservation (Thomson et al., 2009). Organizational collaboration is "widely recognized as having the capacity to leverage fragmented systems and produce increased efficiency and innovation" (Woodland & Hutton, 2012, p. 367). Organizational collaboration is utilized formally and informally by conservation networks like RCPs in New England.

Purposeful organizational collaboration is an investment and an opportunity for increased capacity for these conservation networks. It would be valuable to identify practices and characteristics of successful collaborations. This section addresses how collaboration is defined in organizational research, some ways it has been measured, and the challenges of using these techniques with conservation networks. The collaboration literature is vast, interdisciplinary, and

represents a wide range of theoretical perspectives (Woodland & Hutton, 2012). For the purposes of this review I limit the literature to works found in organizational research, assessment and natural resources management.

Defining Collaboration for Conservation Networks

Defining collaboration can be an abstract exercise because of ranging scales, motivations, and goals. The viewpoints of observers and participants may differ, but most describe collaboration in similar ways. Frey et al. (2006) describe it as "the cooperative way that two or more entities work together toward a shared goal" (p. 384). According to Gajda (2004), actors with specific motivations and goals form "inter-organizational collaboratives" or "strategic alliances" to meet these goals. Thomsen, Perry and Miller (2009) characterize collaboration as "a process in which autonomous or semi-autonomous actors interact through formal and informal negotiation, jointly creating rules and structures governing their relationships and ways to act or decide on the issues that brought them together" (p. 25).

In the case of conservation networks such as RCPs in New England, organizational collaboration builds on a relationship or alliance premise but operates at two distinct scales: (1) the partnering organization; (2) the representative of the partnering organization. Individual participants contribute to the management and governance of the network, the organization agrees to the relationship, but governance and management does not flow back the other way. This duality forms the administrative habits of the conservation network and its management and ensures organizational autonomy. This means the individual and partnering organization in the network are considered in tandem.

Thomson et al. (2009) submit that there are five key dimensions of organizational collaboration, and they are salient to the work of conservation networks (Table 2.2).

Table 2.2. Five key dimensions of collaboration (Thomson et al., 2009).

Dimensions
1. Governance
2. Administration
3. Organizational Autonomy
4. Mutuality
5. Norms

For conservation networks, *governance* speaks to jurisdiction and responsibility. In the case of RCPs, it is essential that partnering organizations are aware of each other's boundaries and responsibilities and it is key that their representatives embody that. This has an impact on the *administration* of an RCP, for the resource management and decision making needed to reach goals must defer to the partners, who, as illustrated in the governance discussion above, maintain autonomy and will likely put their own goals before that of the conservation network. This tension is addressed through *mutuality*. As part of this relationship, partnering organization and the overarching network recognize that their missions are aligned and agree not to compete or interfere with each other. These dimensions or relationship characteristics shape the *norms* of these networks. I will return to these ideas during the discussion of findings in Chapter Five.

Collaboration Assessment

Regardless of the participants, mission, or circumstances, evaluation is invariably linked to collaboration (Conley & Moote, 2003; Frey et al., 2006). Evaluation is done to improve the program, to better appropriate resources, to make sure rules and regulations are followed, and to

allocate funds going forward (Woodland & Hutton, 2012). Both stakeholders and "outsiders" pursue evaluation. They review process and often outcomes. The rationale for evaluation may be clear, but unfortunately, there is a lack of consensus in stakeholders' measurement of organizational collaboration (Frey et al., 2006; Gajda, 2004).

In 2006, Frey, et al. undertook a survey of organizational collaboration measurement tools. They found that the literature points to steps or phases to describe the sort of journey partnerships must take towards integration and reaching goals. They state that an "increased level of collaboration" is usually the objective of collaboration, and summarized these phases into seven levels (Table 2.3).

Table 2.3. Seven phases of collaboration (Frey et al., 2006).

Phases
1. Coexistence
2. Communication
3. Cooperation
4. Coordination
5. Coalition
6. Collaboration
7. Coadunation

Coexistence was added by Frey et al. (2002) to address a gap they saw in other models. It is when entities co-exist, with no collaboration between them. In *communication*, Frey includes the networking of individuals across organizations. *Cooperation* describes the start of an alliance; they may not work together on a given project, but they support each other and do not compete against each other. *Coordination* is when entities work together on projects and share and/or coordinate resources on a case by case basis. *Coalition* refers to actual partnering; identifying as a partnership with shared responsibility, risk and benefit. *Collaboration* is

described here as a merging of entities. Lastly, for *coadunation*, where the two or more entities have become one; perhaps with distinct parts, but a singular entity.

Through a study of small groups in 1965 Tuckman devised a developmental model that is less focused on organizational integration, but more on the negotiation between individuals doing the collaborating. The four stages characterize the level of mutual understanding and collaboration in a group (Tuckman, 1965). The *forming* stage occurs when the group comes together; participants get oriented to the task, and to each other. *Storming* takes place as part of the group problem-solving process. Individuals may assert their ideas, others contribute; the group negotiates to find their way forward with the task. By the *norming* stage, individuals in the group have worked out their roles; they are building trust and respect as they recognize each other's strengths and how they relate to the task. *Performing* is a later stage of these relationships where all energy is focused on the goal and big jumps in progress occur. Not all groups reach this stage, but those that do, form bonds that last beyond the project (Tuckman & Jensen, 1977). In partnership with Jensen, Tuckman returned to the literature in 1977 to revisit the model. They found it viable, and added a fifth stage. The added *adjourning* phase reflects the process of separation of the team as they move onto other tasks, thus creating a five stage model (Tuckman & Jensen, 1977) (Table 2.4).

Table 2.4. Five stages of small group development as outlined in the conclusion of *Stages of Small Group Development Revisited* (Tuckman & Jensen, 1977).

Stages
1. Forming
2. Storming
3. Norming
4. Performing
5. Adjourning

Gajda (2004) suggests that the term collaboration is often applied too broadly, positing that operationalizing the practice of collaboration would identify measurable attributes useful for comparison with other variables. In partnership with Hutton (Woodland (nee Gajda) & Hutton, 2012) they propose a *Collaboration Evaluation Improvement Framework (CEIF)*, and assessment approach that contains five strategies. In their fourth strategy, "Assess Levels of Integration," they build on the findings of both Tuckman and Frey by also considering collaboration stages by both interaction and organizational integration. Their scale is: *Independent*; *Networking*; *Cooperating*; *Partnering*; and *Unifying.* Through their *Levels of Organizational Integration Rubric (LOIR)* one may determine the level of integration through assessment of common organizational conditions and activities: *Purpose, Strategies and Tasks, Leadership and Decision Making,* and *Inter-professional Communication* (Appendix A). The authors recommend reviewing this rubric with participants as part of a conversation, using prompts about goals and desired levels of integration. Through use of this tool and others in their assessment strategy, managers may realize that collaboration is required and beneficial for some aspects of their organizational work, but not others (Woodland & Hutton, 2012; Woodland Associates, 2012).

Reed and Simon-Brown (2007) look at collaboration from a forestry research and knowledge transfer perspective. They claim that it is only through sharing of knowledge and feedback that collaboration becomes "operational practice" (Reed & Simon-Brown, 2007, p. 182). They go on to say that these relationships create communities that share tasks and resources. While they do associate collaboration with formality and organizational integration, Reed and Simon-Brown (2007) refer to "three main levels of linkage among knowledge transfer participants:" (1) *Cooperation*; (2) *Collaboration*; and (3) *Partnership,* based on integration of

organizational activities. According to the authors, *linkages* equate with degrees of demand, whether it is time or level of commitment. The *Cooperation* level is marked by shared activity and short term arrangements; *Collaboration* means sharing of resources as well as activities, and the nature of the relationship between the two parties is defined; and *Partnership* is defined by high levels of trust between parties, an integration of organizational activities, and the authors suggest a new identity emerges.

While framed somewhat differently, these phases are also clearly on a path to further organizational integration. If further integration between organizations is not considered a goal by RCP participants, one can be less sure that these models are applicable.

Challenges to Measuring Collaboration in Conservation Networks

Organizational collaboration at the beginning is optimistic. Participants envision that if parties with different skills, knowledge and resources come together to reach a common goal, the initiative will be more inclusive, strengthen network ties, share knowledge, skills and resources, and reach goals together that one would not be able to attain individually (Conley & Moote, 2003; Thomson et al., 2009; Woodland & Hutton, 2012). Trust and relationship building between individuals represent a level of complexity that is difficult to view at a larger scale. As Ostrom (1998) points out, collaboration may only be built on trust, reciprocity and reputation. Building trust between parties takes time and commitment in order for any meaningful action to occur. Personal relationships do form the connective tissue of collaborating organizations, but it is not yet known how the tension between the individual participant identity and the organizational partner identity affect collaboration and organizational integration in conservation networks.

The characteristics and definitions of collaboration in networks such as those described above and elsewhere in the field of organizational evaluation may not be a good match for the kind of conservation work performed by RCPs such as conservation. While almost anything can be measured, doing so may not always provide useful results for participants. Assessments look for normative values, when the "normal" may not be desirable if one is trying to affect change. Further, if one is measuring between two individuals that may be as simple as measuring the result of their interaction or their satisfaction with the process (Levin & Cross, 2004). Measurement of organizational collaboration is often driven by funding sources. A grantor may assume that such partnering activity is advantageous for "allocating scarce resources" and "achieving complex policy goals" (Thomson et al., 2009, p. 24). And for conservation specifically, looking at the activities and experiences of the people doing the work may seem less valuable than number of acres conserved or landowners reached.

Labich (2013) addressed these concerns in the document "RCP Stages of Development." As explained in the keynote of the 2013 RCP Gathering, the most important benchmarks are on-the-ground results, and increased capacity for participants (Labich, 2013b). A model was developed in an effort to categorize the same RCPs that are part of this study (Appendix C). The categories range from those early in development, (1) *Emerging*, to (2) *Maturing*, to those that are more established, (3) *Conserving*. The model has potential as a self-assessment tool when put in the hands of the conservation network participants. It allows the respondents to identify where they think their RCP is on this spectrum and further elaborate about their collaborative work and about these categories of RCP progress.

Other have also attempted to address the problems of measuring collaboration in collaborative natural resources management. Conley and Moote (2003) define collaborative

natural resources management as anything that utilizes partnerships, consensus groups, and community based collaboratives or other alternative problem solving efforts. Ideally, collaboration in conservation networks would be measured across all their activities. Their possible criteria fall into three categories. The first one, *processes*, features shared vision and goals, process transparency and consensus based decision making. This criterion aligns most closely with this research, for it investigates the means by which these individuals collaborate. The remaining two, *environmental outcomes*, including improved habitats, conservation of ecosystem services and improved management; and *social, civic, and economic outcomes*, which includes strong social ties, increased trust, gained knowledge and increased capacity for stakeholders. To measure all these criteria would be outstanding, but likely not possible because of limits of time and participant capacity (Conley & Moote, 2003). In the case of RCPs in New England for example, the individuals (mostly organizational representatives) that work on any given work team or project may be doing so in a volunteer capacity or maybe a different person altogether depending on the meeting time. Further, these network groups have very limited meeting time. From their perspective, assessment activity may cut into work time. These situations are amplified by the participating organizations lack of staff and capacity, but would be expensive in terms of cost and time. Data collection would rely heavily on these partners, putting strain on individuals in an already taxed system. Further, Conley and Moote (2003) cite that some delicate relationships the organizations have with one another would not tolerate close examination. Some key ties in networks are not strong ones (Levin & Cross, 2004).

There is recognition that evaluation can guide organizations to more effective practices, but these processes don't always work and they cost time and money (Conley & Moote, 2003;

Levin & Cross, 2004). Assessment is wanted by those involved in collaborative conservation to prove their success, but detractors of the practice want proof that their concerns have merit.

Evaluation may capture the fact that even failed efforts can have positive outcomes in terms of increased understanding of the system and stronger social networks. These networks of people may be the last chance some ecosystems have for viability and a failed effort or negative outcome may risk strained or broken relationships between individuals or organizations, as well as collaboration fatigue where no one wants to collaborate any longer due to prior issues. This view does not address the complexities and barriers practitioners face if the collaborative capacity of their organization and even culture is limited.

Collaboration is made more complicated with the realization that in this conversation we are talking about multiple scales, both organizationally and ecologically. As discussed previously, fluidity in membership and degree of integration may be what makes them nimble and successful in the face of changing circumstances.

In organizational assessment, integration is often considered evidence of collaboration success, but this is only something organizations, not individuals can do (Frey et al., 2006). Perhaps an organization's capacity to support individuals who engage in collaboration is a more useful measure rather than seeking evidence of further integration. The relationships within collaborative conservation networks are necessarily complex; perhaps too complex to categorize in this way. For the RCP Network, it would be important to understand how they view their collaborative work, their organizational relationships, and their capacity to reach their goals.

Chapter Summary

This chapter outlined the theoretical concepts that support this research study: (1) *Collaborative Management of the Commons*; (2) *Conservation Networks as Co-Adaptive Management*; (3) *Collaborative Communication and Knowledge Sharing*; and (4) *Natural Resources Management Assessment*. It began with an overview of conservation challenges and communication shortfalls. I then introduced the systems thinking that led to the call for collaborative conservation, and featured the work of Olsson and Folke's *Socio-ecological systems* managed through *co-adaptive management*. Collaborative conservation networks like RCPs in New England are a response to this call, and the study of their work has only just begun. In this last section I provided a brief overview of the organizational assessment of collaboration, the challenges of measuring this activity in conservation networks. I closed with a presentation of three models that will be explored in the research.

The following chapters explain the methodology and results of the study. Chapter Three provides an introduction to the population and an overview of the research design and rationale. Chapter Four, Results, shares interview summaries, descriptive and inferential statistics, and preliminary findings.

CHAPTER 3

METHODS

The start of the chapter briefly reviews the theoretical perspectives that influenced the study design, then lists the research questions that guide the study, and the context questions that explore RCP culture. This is followed by a description of the population, the research methodologies of the study, and how the integration of the qualitative and quantitative data tell a richer story about these complex relationships.

This was a non-experimental, explanatory, cross sectional study that employed a mixed form qualitative and quantitative research methodology (Lapan & Quartaroli, 2009; Patton, 2002). In order to explore co-adaptive management of socio-ecological landscapes and other phenomena that may be present in RCP work discussed in Chapter Two, three theoretical perspectives were employed in the research design: (1) Constructivism, to explore this system through the perspective of the participants – in a sense learn how they have constructed this reality; (2) Narrative analysis, for reflection on the stories the participants tell illuminates the quantitative data and furthers understanding of the culture; and to some extent, (3) Systems theory, to make connections between participants and how they influence one another as well as understand this network at different scales (Patton, 2002).

Research and Context Questions

Through observation and background research of the activities of regional conservation partnerships in New England, four research questions were developed to guide the study:

RQ1 What level of collaboration helps conservation networks reach landscape scale conservation goals?

RQ2 How does frequency and type of communication affect collaboration in these groups?

RQ3 Are there "best practices" among these networks?

RQ4 When best practices are used at the local scale, does such an approach facilitate effective collaboration at a regional scale?

Answering the above research questions required an exploration of the constructs in which RCP participants work. While collaborating to conserve land may not be a unique idea, how RCPs collaborate and who participates is unique to this culture. To better understand practices and conditions within this particular population, I also looked for answers to these context questions:

- What are the characteristics of practice, scope, and culture in these RCP's?
- Who coordinates RCPs and what is their structure?
- Who partners with an RCP? Why? How?
- How do RCP partners communicate? Collaborate?
- How do they interact and express ideas that impact their work?
- Do they want to network across the region?
- Do they think they have the ability to network across the region?

Population

The conservation network selected for this study is the Regional Conservation Partnership Network (RCP Network) that through land trusts, education, and conservation

easement initiatives intends to greatly increase the amount of contiguous conserved land across New England and in border areas of New York State (Labich, 2012). Regional conservation partnerships, or RCPs, are conservation networks comprised of land trusts, local governments, and localized conservation action groups that work together on management and conservation status of land in a particular region. Often these RCPs are started as the result of or in response to a regional conservation plan. Such plans are becoming common in the U.S.; they survey the natural resources of an area and help municipalities, land owners, and local agencies identify threats so they may plan for or respond with recommendations for protection and development. Some RCPs, however, were formed aside from such plans and were a reaction to a development threat, formed for the administration of a grant, or other initiative. The geographic range of each RCP varies in size from a few hundred to half a million acres (Figure 3.1). The RCP Network is a network of these RCPs that work independently but have been coming together in meetings and workgroups for the past five years (ranging from monthly to every two years) to discuss effective practices, finance, and policy for coordinating regional scale conservation (also referred to as *landscape scale conservation* among practitioners in this group). This network of networks is well suited for an investigation of communication and collaboration at different scales because

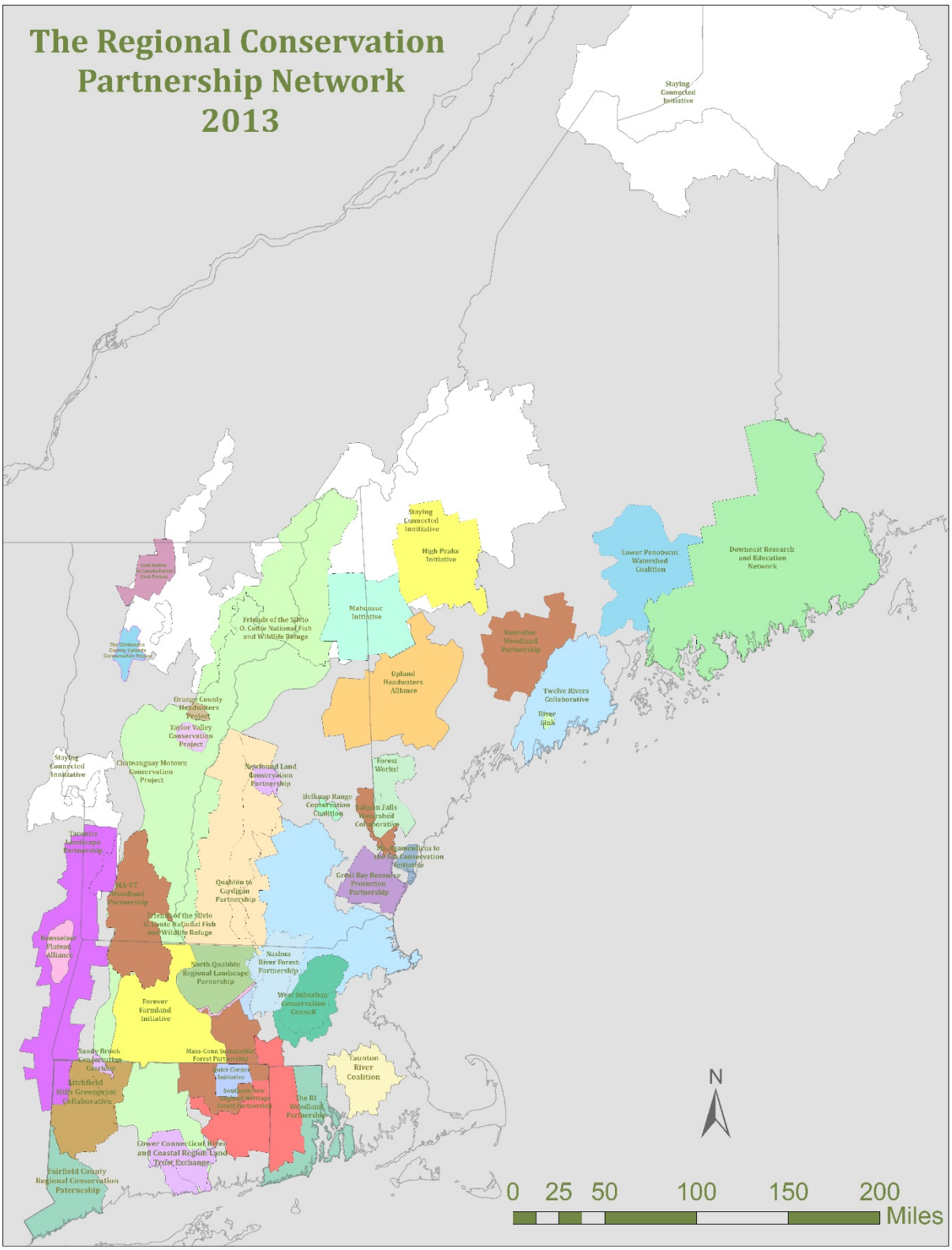

Figure 3.1. Map of Regional Conservation Partnerships (2013) included in this study (Highstead and the Harvard Forest, 2015).

landscape scale conservation, which moves beyond municipal and political boundaries, is gaining traction in New England (Regional Plan Association & America 2050, 2012). Furthermore, these RCPs are an example of New England resourcefulness (D. Foster et al., 2003). Economic changes over the past decade have cut staffing and resources for conservation organizations and agencies of all types, and they are finding they must do much more with much less. Collaboration is one of the means through which they complete their work. It would be beneficial to other large scale conservation projects to know the characteristics of these RCPs, how they operate, and what practices they find effective. From this understanding it would be further beneficial to devise a strategy for measuring RCP success such as creating an index that includes acreage conserved, landowners served, ecological services provided and other valued conservation measures. This research is a first step in the journey towards that goal.

Alignment and Integration of Methods

This study applied two central data collection methods; interviews and a survey, plus unstructured observation and a review of materials published by the various partnerships and organizations. Review of archived documents and relevant websites provided essential background to prepare for data collection (Patton, 2002). Additionally, I attended four RCP events to observe and gain understanding of the interactions and routines of the group (Lapan & Quartaroli, 2009). These activities helped me understand the culture and language so the interview and survey instruments were more effective. Each method is suited for specific tasks and research questions (Table 3.1).

Table 3.1. Method alignment of tasks and questions with data collection methods.

Questions and Tasks	**Method(s)**
Research questions	
RQ1 What level of collaboration helps conservation networks reach landscape scale conservation goals?	Interviews and surveys
RQ2 How does frequency and type of communication affect collaboration in these groups?	Surveys
RQ3 Are there "best practices" among these networks?	Interviews and surveys
RQ4 When best practices are used at the local scale, does such an approach facilitate effective collaboration at a regional scale?	Interviews and Surveys
Context Questions	
What are the characteristics of practice, scope, and culture in these RCP's?	Observations, document review, and interviews
Who coordinates RCPs and what is their structure?	Interviews and surveys
Who partners with an RCP? Why? How?	Interviews and surveys
How do RCP partners communicate? Collaborate?	Interviews and surveys
How do they think that impacts their work?	Interviews and surveys
Do they want to network across the region?	Interviews and surveys
Do they think they have the ability to do that?	Interviews and surveys

Well planned interviews and surveys on their own can be strong social science tools. Because of the semi-formal nature of this conservation network, a purposeful integration of the interview and survey methods provides stronger results. According to Creswell (2014), "integration is the place… where the qualitative and quantitative phases intersect" (p. 82). This interface of the two methods mean they both keep their form, but with multiple points of contact. In this research design there are several places where this occurs. First, during data collection where the interview method not only frames the condition of the participants, but identifies points of interest to be explored in the survey, and guides formation of the survey instrument. The second place the methods intersect is in the analysis. Here, data between the two methods is

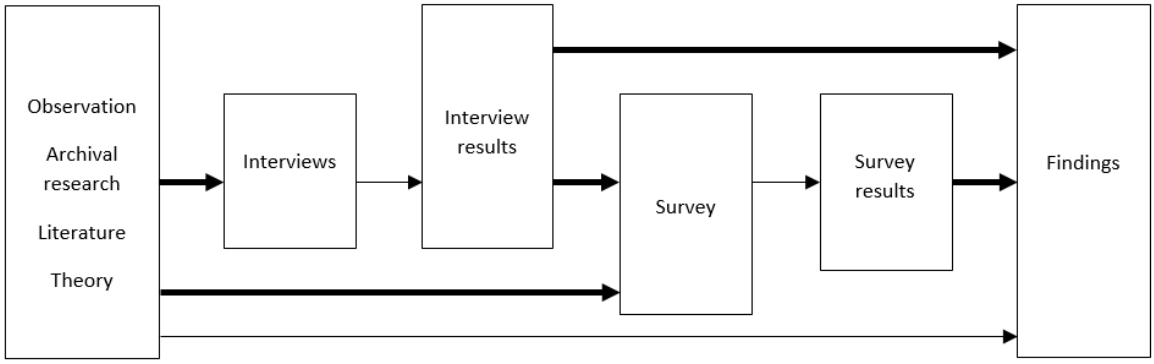

Figure 3.2. Points of integration in this mixed methods study.

compared; the interview data helps explain the survey data; the survey data confirms or refutes the interview data (Figure 3.2) (Creswell, 2014).

Through an interest in conservation networks and landscape ecology, I discovered the RCP Network to be a group that seemed to embody many theories of collaborative conservation. Through preliminary observations and research, I identified stakeholders and the conditions under which they work. I also sought literature and theory that described their work. From this information, I devised the interview guide and proceeded with Phase One of data collection: the interviews described in detail below. Through coding the interviews, I identified the characteristics of RCPs and the themes of their work to form the survey, Phase Two, of the research described below. The online survey was distributed with the help of RCP coordinators. Findings from the surveys were compared with the themes and characteristics found during the interview phase to form answers to my research questions (Figure 3.3).

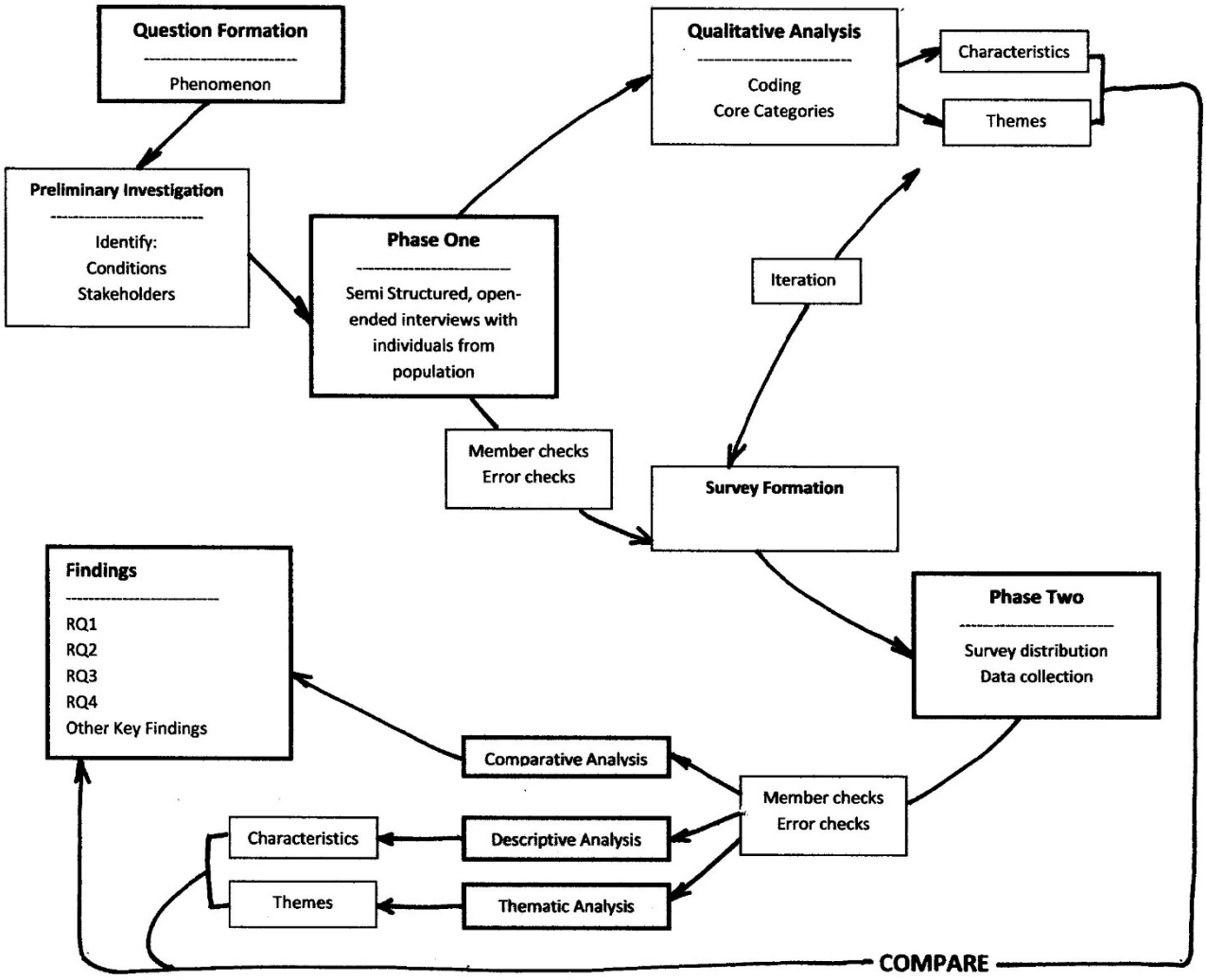

Figure 3.3. Research design overview.

Interview Data Collection

This section details the sample frame, the instrumentation, the procedure, and the analysis for the interview method of the study. This study begins with naturalistic inquiry. Naturalistic inquiry as a form of research is carried out in the setting of the subject and relies on qualitative data collected from respondents and is the source of the narrative analysis (Guba & Lincoln, 1982). Further, I employed a cross-sectional study design that captured a snapshot of this

population and its work in one time period (Lapan & Quartaroli, 2009). Cross-sectional study design techniques provide a picture of the conditions or phenomena occurring in the RCP Network as a system. In a sense, it allows us to enter into the participants' perspective of that system; their construction (Lapan & Quartaroli, 2009; Patton, 2002). Thus, through the interviews we gain a window into the culture as well as familiarity with the structure of the RCP Network.

Sample

To develop the sample, I began with a list provided by Bill Labich, Regional Conservation Partnership Network representative. Through his input and online research, I identified 39 RCPs in the New England study area (Figure 3.1). I stratified these RCPs into five geographic areas drawing random samples from each. The purpose of stratification was to make sure my sample was representative in geography, conservation focus and culture. The five geographic areas are: Maine, Vermont, New Hampshire, Massachusetts-New York, and Rhode Island-Connecticut. In addition to these specific geographic categories it was necessary to create a sixth category called Multistate, as there are several RCPs in New England that cover vast areas over several states.

This purposeful sample method was appropriate because of the large geographic range and diversity of organizational sizes in the study population (Lapan & Quartaroli, 2009; Patton, 2002). It ensured that RCPs with different characteristics, such as coastal or inland forest, were represented in the sample. Within each category I randomly selected two RCPs to interview. I reviewed the public information available for the RCP and the site, and contacted the coordinator by phone. Criteria for interview participation was that the individual was acting as coordinator of

an RCP as defined above; the RCP had been active (met or conducted business at least once in the past calendar year); the individual was willing to be interviewed, and was able to do so during the interview data collection of August 1, 2013 through December 31, 2013.

A total of fifteen participants fit the criteria and were interviewed. Of these, twelve produced data that were used for the study. Some interviews were removed from the study because of recording quality, incomplete responses, or it was found the partnership's mission and activities were not aligned with or fit the definition of an RCP used in the study.

Instrumentation

The interview guide used standardized questions with probes, or follow up questions for use when answers needed more expansion (Appendix H). The interview approach combined two methods: (1) the *informal conversational interview*, which has strength in the salience of the questions, for the interview unfolds based on the observations and circumstances; and (2) the *standardized open-ended interview,* which recommends the use of the interview guide, thus making data collection systematic for each respondent (Patton, 2002).

The interview guide had five sections: (1) the *Introduction*, where interviewer and respondent state name and affiliation, consent is established, and basic demographic information is collected; (2) *Background*, which includes the name of the RCP, participating organizations, scope and history; (3) *Mission and Goals* includes the RCP's mission, strategic planning, current goals, and managing structure; (4) *Communication and Learning* explores the function and communication style of the RCP; meetings, trainings, phone and e-mail habits; promotion, academic research, and knowledge transfer; (5) *Collaboration,* where the interviewer and

respondent review a series of exhibits together (Appendices A, B, & C). The exhibits were models and instruments developed to describe levels of organizational collaboration.

The interview guide is unique to this study but its framework and protocols are based on a guide created for a previous research project and the subsequent report, *Sharing Out: Alpine Stewardship Northeast* (Weiss, 2011). To test the instrument, I conducted three pilot interviews with volunteers inside the population. The consensus was that the final instrument had appropriate and relevant questions, the approach is feasible, and the instrument itself would not interfere with the reliability of the data it generated.

Procedure

To begin the study, I conducted open-ended, semi structured interviews with RCP coordinators selected from the sample frame. Following selection, participation was confirmed through email and phone contact. Interviews were conducted in person during August, September, and December of 2013. They were recorded with an MP3 device and averaged one and one half hours. Interviews took place at the location of the participants' choosing, most often their workplace, but three occurred in restaurants and one was at a park. Interviews followed the sequence of the guide, but in a few instances, the respondents would tell a story or explain a procedure that provided answers to questions before they were asked. An interview section where the interviews became less linear was *Collaboration*, where we viewed exhibits about the collaboration models mentioned in Chapter Two (Appendices A, B, & C). In my pre-research I found that people in this field were hesitant to define collaboration because of its abstract nature, or they shifted the conversation away to concrete topics like number of acres conserved.

Providing the respondents with these models helped them find phrasing for speaking about collaboration. Exhibits summarized in Table 3.2.

Table 3.2. Summary of collaboration exhibits.

Exhibit	**Application/ Description**
1: Levels of Linkage Model Summarized	Prompts respondents to discuss level of "linkage" between partners with increasing complexity
2: Levels of Organizational Integration Rubric	Prompts respondents to consider and discuss collaboration assessment in their partnership.
3: RCP Phase Model Summarized	Prompts respondents to envision and discuss the development of their partnership; how they perceive it; how others perceive it.

The models were used as prompts for discussion. Participants were encouraged to point out or circle parts of interest and locate their RCP. They also described conditions in their network and then explained their selection. Additionally, the respondents viewed and marked a list of the 37 RCPs and verbally explained their connections or professional relationships with the other participants (Appendix I). This activity had several purposes. It allowed the coordinator to (1) identify relationships, activities and points of cooperation in their partnership; (2) describe how collaboration is thought of in their partnership; and (3) express their thoughts on measuring collaboration. It was established in the pilot in early interviews that placing their RCP in any of the offered categories was too "neat," if not undesirable; instead, these models were used as a tool to promote discussion. This interview approach received strong support from the participants, demonstrated by their agreement to assist with survey distribution in the second phase of the study.

Analysis

Analysis of the interview data was achieved through coding of the transcripts and outlined in Figure 3.4. Interviews were transcribed verbatim by myself and a hired transcriber. They were all reviewed by me along with the audio and notated for emotion, hesitation, and emphasis. These characteristics of an interview are important for accurate coding and memo writing (Charmaz, 2006; Glaser & Strauss, 1967; Lapan & Quartaroli, 2009).

Figure 3.4. Interview data analysis process.

Interview data analysis began with an examination of the transcripts for completeness and clarity. Coding is when a researcher assigns a code to items or text to categorize or organize qualitative data. Through these codes researchers may identify patterns, quantify the occurrence of an activity, or identify the importance of a theme (Lapan & Quartaroli, 2009). For the initial codes I employed a combination of *top-down* and *open* approaches. Top-down coding is when one begins with a list of codes previously developed (Lapan & Quartaroli, 2009). Open coding is a classification of concepts generated from the responses (Babbie, 2010). The top-down initial codes were devised from my observations and the context and research questions (Table 3.3). They established the topics that would be discussed during the interviews. The establishment of the open codes essentially follows the interview topics with special emphasis on items where there are commonalities or great divergence in answers across the interviews (Antonesa, 2006; Patton, 2002). Final codes and categories are shared later in the chapter. After the transcription process and initial coding, I conducted a member check with four interviewees by phone to

confirm that what I captured and interpreted matched their experience (Lapan & Quartaroli, 2009).

Table 3.3. Initial codes.

Codes
Setting and context
Defining RCPs
RCP Mission
RCP Characteristics: Age, membership;
Respondent perspective
Respondents way of thinking about people and objects
Organizational process
Funding and support
Activities and events
Methods, approaches
Skill sets, expertise
Communication
Knowledge sharing
Collaboration
Cross-network collaboration

This was followed by axial or focused coding, which relates concepts to each other through inductive and deductive processes such as memoing and review. Memo writing is a method for processing codes into categories through reflection and written comparisons, diagramming, and ultimately connection-making. These attempt to make sense of themes by identifying patterns and key concepts. The resulting themes, known as core categories, are the synthesis of this process (Charmaz, 2006; Corbin & Strauss, 1990; Glaser & Strauss, 1967). These are presented later in the chapter. Patterns established in this process guided formation of the surveys, used in the second phase of the study, which is also described later in this chapter.

Survey Data Collection

This section describes the sample frame, the instrumentation, the procedure and the analysis of the survey phase of the study. To confirm the emergent themes and conditions identified in the interviews and to reveal additional characteristics and activities across the population, I developed a survey regarding practice, communication, collaboration, and demographics. Surveys are useful for they provide information that may support or refute information collected in interviews (Lapan & Quartaroli, 2009). They allow the researcher to collect large amounts of data with less intrusion and expense, especially if administered through the Internet (Lapan & Quartaroli, 2009; Nesbary, 1999). The content and organization of the survey questions were based on the core categories formed during the interview coding process which is detailed in Chapter 4. The aim here is to capture relevant characteristics and practice of individuals, organizations, and of the overall network (Lapan & Quartaroli, 2009; Mehta & Sivadas, 1995). I designed an instrument that used both descriptive and scalar questions. The former requires qualitative analysis such as coding while the latter provides comparative data that may be examined through statistical analysis. The survey was administered in the spring of 2014.

Sample

The survey phase had a broader sample population than the interview phase. The target population was extended to all 35 RCPs in the network that met the criteria for the study, and targeted all the representing partners within each RCP. Using a contact list provided by the RCP Network representative, I reached out to the coordinators (or primary contacts) and asked them to share the survey with the partnering organization representatives in their RCP. I gave the

incentive that if four or more partners from an RCP returned the survey, I would complete a brief collaboration analysis for that RCP. Through the interview phase, I found that most RCPs were likely to have between five and fifteen partnering organizations. From this, I estimated the maximum sample size at around 390. According to Dillman, Smyth and Christian (2008), for an internet survey a return rate of 30% is acceptable to draw conclusions.

Instrumentation

As described above, the survey questions were informed by the responses collected during the interview phase regarding RCP goals and activities. The questionnaire contained 39 questions presented to all participants, and an additional 15 were presented only to RCP coordinators. The questions were organized into the same six sections as the interview guide (Appendix H). The first section of the survey began with a *Welcome and Consent* page; those who did not consent were exited from the survey through the *Thank You* page, while those who agreed continued. Respondents identified their RCP and their role within their partnership. Those who work with multiple RCPs stated that as well. Those who identified as coordinators answered fifteen additional fact-based questions about RCP priorities, characteristics, and connectivity. The remaining respondents skipped directly to the next section, (2) *RCP Capacity*. This section inquired about how the respondent views their RCPs' capacity and effectiveness. (3) *Communication and Connection* asked respondents about communication habits and preferences in their RCP. The next section, (4) *Collaboration and Partnerships* focused on how the partner organizations work with and support each other, and how this occurs. The next section (5) *The RCP Network*, asked more directly about interest and viability of collaborating with other RCPs and sharing information across the network in various ways. Through this point the survey

maintained the same sections as the interview guide (Appendix H), but the survey includes a section entitled (6) *Demographics*, which asks for basic information about survey respondents. This will prove useful in subsequent work with this population and these data. General demographic information and consent to follow up was included in this section. If they agreed to be contacted, they were prompted to give their name and contact information. Otherwise, they were brought to the end of the survey through the *Thank you* page. The average respondent took 20 minutes to complete the survey with coordinators taking slightly longer.

The final version was piloted during the week of April 14, 2014, through a "soft open." Invitations were sent out to four participants from the interview phase for review and trial. I was able to make some small corrections to wording and navigation thanks to feedback from these respondents.

Validity and Reliability of Instruments

In the case of qualitative research such as this survey, it is more appropriate to discuss "trustworthiness" rather than validity (Maxwell, 2012). The survey instrument is unique to this study. For this phase of the research, trustworthiness was established through (1) utilizing the professional network to spread awareness of this research, my familiarity with RCP goals, and my experience with organizational management, (2) basing questionnaire content on information confirmed by participants in phase one of the research, and (3) members of the population and outside sources reviewed the survey for appropriateness and clarity.

Data Collection

To facilitate survey construction and administration, I used Qualtrics software, version 2013 of the Qualtrics Research Suite. It was distributed through a web link via e-mail in the

spring of 2014. The distribution plan corresponds with Dillman's Tailored Design Method (2008), and proceeded as follows: During the week of April 7, 2014, RCP Coordinators were sent advance e-mails alerting them to the study and the survey with the distribution request (Appendix J) and research announcement letter (Appendix K). This helped identify problem e-mail addresses, changed positions, and opt-outers. Most recipients wrote back confirming they would pass on the survey to their RCP's partners. Starting April 21, 2014, the remaining invitations went out with the cover letter; some customized because of changes in leadership and other conditions. Surveys remained open through May 31, 2014. During this time periodic e-mail reminders were sent.

Validity and Reliability of Data

According to Babbie (2010, p. 153), validity refers to "the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration." While surveys capture an enormous amount of information, they can only represent those who participated. It is also possible that people did not answer honestly or they may have marked an expected response rather than truthful one. Further, because participants were self-selected, the data is biased towards those who wanted to do the survey and had the time to do the survey. As mentioned in an earlier section, threats to trustworthiness have more to do with the instruments, their distribution or how a simple population reacts to the researcher, and the researchers biases (Maxwell, 2012). What we are left with is to measure data validity in terms of answer consistency, completion rate, and whether or not the questions asked yielded the data sought (Lapan & Quartaroli, 2009). The best an investigator can do is remain aware of these issues, their position of power, and be transparent about the process to maintain trust.

Survey Analysis

The survey data were analyzed both thematically and statistically depending on the type of data (ordinal, nominal, narrative) and the information captured (context, characteristics, research questions). The latter set the priority areas for analysis. Once the survey was closed, data were reviewed and checked for errors. Because of the high functionality of Qualtrics, some thematic analysis and summary statistics were completed within that interface. To continue the process, the data set was downloaded to Microsoft Excel to (1) aid in coding of open answers; (2) produce more complex tables and graphs; (3) prepare some data sets for frequency and comparative analyses using IBM SPSS Statistics, version 21. Responses to relevant open-ended questions were analyzed inductively using coding strategies described in a later section (Charmaz, 2006; Glaser & Strauss, 1967).

Descriptive Analysis

Descriptive statistics were generated on each of the individual questions, which were then separated under six main headings for organizational purposes: (1) Welcome; (2) RCP Capacity; (3) Communication and Connection in Your RCP; (4) Collaboration and Partnership; (5) The RCP Network; and (6) Demographics. These descriptive statistics included frequency distribution and mean scores for each response. While a larger amount of data were generated by these surveys, not all address the research questions, and therefore not all are represented in the results.

Comparative Analysis

After the characteristics and context of RCP activity was established, the survey data were analyzed to respond to the research questions. Some data were isolated by selected

characteristics and then compared to uncover possible connections between practice, conditions, characteristics, and results. Some items were explored with inferential statistics to uncover possible connections between practice, conditions, characteristics and results. Chi square tests for independence were performed to examine relationships between conditions and significance. RCPs were sorted between those who self-identified as successful and those that did not. This determined through survey questions that asked participants to rank their RCP on reaching goals identified during the interviews: (1) how many landowners reached; (2) acres conserved; (3) projects completed; (4) money raised; (5) How many partners in the RCP; (6) and how many policy makers contacted. After sorting, characteristics, contact type and frequency, collaboration quality, and levels of respect and trust were compared.

Thematic Analysis

The answers to the open-ended questions were sorted, coded and categorized both within Qualtrics, Microsoft Excel, and Microsoft Word, and followed the processes described earlier in this chapter. Coding is well suited to capture the patterns that appear in narrative data. It is essential to capture what the participant is actually experiencing (Charmaz, 2006; Patton, 2002). In this case, answers that signaled divergence or new categories for study were noted (Lapan & Quartaroli, 2009).

Informed Consent

All the participants were treated in accordance with the ethical guidelines of the Antioch University New England Institutional Review Board (IRB), and no data was collected until after approval. Participants are not a vulnerable population (e.g. prisoners or minors), and identify as land owners, volunteers, employees of land trusts, or other environmental nonprofits,

government employees, or consultants. This study was determined to be *exempt* by AUNE's IRB, meaning while this research does not need to be monitored by the IRB, it is expected that I will fulfill my ethical obligation to the study population as stated in the approval letter (Appendix D). To meet these requirements, I arranged for Bill Labich of Highstead to act as the representative of the participants who signed a Letter of Agreement (Appendix E) to confirm support. I have obtained informed consent from each participant through a Letter of Consent (Appendix F) for the interviews; for the surveys there is a Statement of Consent at the top of the online questionnaire (Appendix G).

While there were no physical or emotional risks for participating in this study, participants shared information about their social and professional network and their communication preferences. It is possible that participants have inadvertently revealed information about non-participants or proprietary organizational information. Because the study is of a specific population – members of the RCP Network – it will be known that some or all of the members will have participated. To address these concerns, all research material is kept secure and RCPs and members see only the aggregated results; no individual level data will be shared. Otherwise, research methods have not exposed participants to greater risks than they would normally experience in the course of their participation in this organization. Participants were able to withdraw from the study at any time.

Chapter Summary

This chapter provided an overview for this study's integrated methods design. It also introduced the sample population, and described their informed consent, and presented the

interview and survey instruments, data collection procedure, and analysis for both phases. The next chapter presents the results from the interview and survey phases.

CHAPTER 4

RESULTS

Creating connected landscapes to support natural communities and ecological services in New England is crucial to achieve stated conservation goals (Thompson et al., 2014). Co-adaptive management by a cross-section of stakeholders in the Regional Conservation Partnership model is a pathway to sustain such conservation efforts. Given their success, understanding the communication and collaboration practices among RCP practitioners and across their partnering organizations can provide valuable information to expand conservation efforts. This chapter begins with the interview results and reports response rate, procedures, relevant data and describes survey formation. This is followed by the survey results, which also shares response rate, briefly reviews procedures, and relevant data and findings.

Interview Results

As discussed in Chapter Three, 12 of the 15 interviews fit the criteria for inclusion. The transcripts of the 12 included interviews were reviewed and coded to produce themes and core categories. These results are organized here by interview guide sections: (1) Introduction; (2) Mission and Goals; (3) Communication and Learning; (4) Collaboration; and (5) About the RCP Network. I provide a summary for each, highlight key themes that influenced survey formation, and then summarize the core categories that emerged. To maintain anonymity, the respondents will be represented by their letter code from the study (e.g. “Respondent B.”)

Introduction and Mission and Goals

To recap from Chapter Three, the Introduction segment of the interview was an opportunity for interviewer and respondent to identify themselves and their affiliations on the recording, and confirm purpose, procedure and consent. It is also where respondents described their RCP's characteristics.

The respondents all described their RCPs in similar terms: as partnerships; as groups working towards similar goals; as people sharing the burden of tasks; as colleagues who share information. Some RCPs were started to address a crisis, others to design or implement a regional conservation plan, or to pool resources to work on large parcel projects. Most RCPs reported little change to their organizational structure since they were started. Those who did report changes linked them to the presence, absence, or source of funding.

Themes related to RCP characteristics.

Partner types within the RCP.

Through a discussion of RCP characteristics and membership I found that over a dozen organization types participate. Not all RCPs reported the same combination of partner types. The five most common were: (1) land trusts (state, regional, and local); (2), government agencies (federal, state, and local); (3) conservation non-profit organizations (national and local); (4) watershed/water quality non-profit organizations; and (5) independent contractors. When one reviews the body of the interview transcripts as a whole, it is clear that there are important distinctions between the subgroups of these categories. For example, a state land trust has a different mission and scope than a local land trust, and will act differently, within a given RCP, from one another. The same can be said for government agencies and non-profits. Therefore, the

presence of subgroups was further explored in the survey and will be presented in the survey section of this chapter.

Number of RCPs in the partnership.

The number of partnership members varied from three to 18. When discussed with respondents it was clear that to them, the number of partners correlates directly with the manageability of the RCP. To these respondents, fewer members mean fewer resources and hands to help. Too many members and the RCP may become unwieldy. Further, RCPs with over a dozen partnering organizations reported that not all participate closely, while those with less than ten partners report more hands-on participation by all parties.

RCP age.

The age of the RCPs included in the interview phase ranged from one to 15 years in operation. Respondents who participate in older RCPs credited the "continued support from partners" for their RCP's "stability" or "longevity." Some mentioned that 2005-2009 brought funding cuts and staff shortages that made helping each other necessary or more important than before. Funding was mentioned under this category in a few instances, but was also discussed in the later Collaboration section.

RCP goals.

All reported that their RCP had a mission statement. Common priorities were large parcel conservation projects, landowner outreach, providing conservation services to municipalities, coordinating local conservation planning, and fundraising. Interviewees reported that goals were set by (1) the presence of a regional conservation plan and/or (2) were arrived at by consensus from the partners. Participants used the word *consensus* a great deal. My interpretation of how it is applied here is that RCPs reach agreements often because participants share a common belief

about the goal, but also through the process of deliberation. They encourage dissenters to raise their concerns early so they may be addressed.

While each RCP is unique in both character and geography, they have a great deal of overlap in the tasks they complete. One shared theme is the goal of conserving contiguous landscapes to preserve habitat, ecological services, and regional character. Respondent B said: "Our mission is to conserve land for the future of [the region] and land that is important to community can take many different faces, so I'd say we focus on productive lands, be that farmland, forest land, but we are also interested in things like wildlife habitat, natural areas and community meeting places." Respondent K cited their mission was to "identify, protect, enhance strategic open space within the rural landscape of [the region]" Respondent C stated the urgency for such large parcel work in their area: "…core lands have already been protected either with state, private or other funds, and [this effort] builds on it by considering these working forest lands as buffers to these core ecological reserves and then establishes corridors to connect these islands of protected land…"

RCPs in New England are trying to hold off rapid land conversion. Land trusts, many with few resources, are at the front of this fight. Of the RCP representatives interviewed, all included land trusts as partners, and it is agreed that building land trust capacity is essential to these large scale parcel conservation projects, and therefore also part of an RCP's mission. Several responses illustrate that. From Respondent C: "We knew we needed to increase capacity of our land trusts." Respondent G agreed and said: "We had to coordinate and really bring our land trusts together."

Goals were linked to the stage of development and current management conditions of each RCP. Short-term goals included items like planning for an upcoming event, completing a

grant application, or training for estate planning workshops for land owners. Long-term goals aligned with mission statements except in RCPs where they were at the beginning, end, or reporting phase for major supporting grants (e.g. USFS Forest Legacy Grants). Respondents reported that such grants can cause drastic changes for these partnerships. In one example, a grant allowed one RCP to hire a paid, part time coordinator. In another, the predicted end of a US Forest Service grant will likely mean the end of an RCP.

Managing the work of RCPs.

Respondents agreed that if partnering organizations have increased capacity to do their work they will be in a better position to contribute to RCP goals. Managing the work to reach these goals requires coordination and contributions from all the partners, which means balancing the priorities of the partner organizations with that of the RCPs in the face of very limited resources. Respondent D commented: "how do you balance the need for structure with the [time] challenges? We all have to spend enough time on these efforts."

All reported to have a coordinator of some type, but the managing style and level of engagement varied, possibly due to pay and workload. Some reported to have full-time and paid coordinators; some part-time paid, some part-time unpaid; and some did the coordination as part of their job with one of the partnering or host organizations. Some coordinators gathered information and shared it, while others were concerned with maintaining polycentric leadership. This means RCP actions may be organized around projects, or multiple foci based on partner resources and expertise, rather than a static leadership hierarchy. This is evident in the reported use of semi-autonomous work groups to manage projects. For example, Respondent E was hired through a grant as the coordinator of their RCP, but says management of projects is shared with the staff of partnering organizations, who consider it an in-kind contribution: "they do send out

their ecologists, they send out their land protection specialists, their development director sits down with me, I mean they ante up big time." Other respondents listed similar in-kind services. These are considered demonstrations of membership in the RCP outside of any formal agreements, and no one reported accounting of these hours; only that they occur. Many RCP work hours are donated in kind by the partnering organizations or are volunteered by individuals. If and how these hours were accounted for was not explored in this study.

Formal agreements between partners.

Discussions about mission and management naturally progressed to the topic of organizational sustainability. It was apparent after the first interview that RCP participants give a lot of consideration not just to what they work on, but how they agree to work together for the short and long term. In some cases memorandums of understanding (MOUs) are drawn up. Legally this is often the first step in a more formal agreement. In this culture, however, this may be the most formal agreement achieved. Theoretically it delineates the responsibilities of partners and the consequences for not meeting obligations.

Interview participants were asked about the types of agreements they might have between the partners, and if such agreements are required to maintain such initiatives. Some respondents discussed agreements between partners while describing RCP formation, others connected it to their RCP's longevity. Respondent D cited that to reach capacity goals described in the previous section they "established a memorandum of understanding to describe how the organizations would work together and what their mission is and how they would function." Respondent B felt formal agreements help clarify project ownership: "You know often times we'll either have it written in a formal kind of letter, a memorandum of understanding that says, in this area, you

have the local knowledge, you are able to hold conservation easements. Maybe if there is a project where we (host partner) have expertise, we can take care of that."

Conversely, some respondents felt that such agreements do not promote longevity, but hamper progress. Respondent E explains: "we've made certain decisions that we revisit from time to time – one of them is to not be incorporated, the second is not to have an MOU, so there you have it!" Respondent K was as emphatic: "we never had an MOU…we've never had anything like that signed, part of that is because … I know all the partners pretty well now, we all know we're on the same page." Respondent D admitted that it was a matter of no interest rather than a conscious choice to not have an MOU: "The partnership has been pretty informal – it's worked that way so far, you know it's probably because we'll have at least shared aspects of the purpose…"

In sum, respondents diverged regarding their interest in formal agreements. Those that have them find them valuable; those that don't have them absolutely don't want them. This divergence warranted further investigation in the surveys.

Planning for the future.

Strategic planning, the formal process of setting a course for an organization to meet its goals and further its mission, was not the central focus of this study (Steiner, 2010). However, the topic was brought up by all respondents as they reflected on organizational stability. The participants gravitated to the topic when discussing long-term plans for their RCPs, but the process was viewed as separate from the workings of the RCP, not as integral to its structure, even though organizational management literature supports the latter (Bryson, 2011). All agreed they had engaged in strategic planning activity of some kind, but spoke of strategic planning as something apart from their regular activities. In the case of Respondent B: "…you know, nothing

we labeled strategic planning, but at the very beginning we looked at this landscape and said what are our priorities going to be? We need to take everybody's mission and priorities into account here and work as a collective." Further, planning efforts were invariably tied to a regional conservation plan. As cited by Respondent D: "... well we've been involved in providing insight into the comprehensive conservation plan of [the area concerning this RCP] and we will be involved in the review process of that." Two RCPs were just starting the process with technical assistance from outside parties, such as the National Park Service. Respondent G describes that process: "We're trying to make that leap. We look at our strategic conservation plan. They're just really starting to get off the ground."

Strategic planning sometimes occurred as a secondary result of organizing for a grant application, as described by Respondent E: "We said let's do some goal setting, let's do some strategic thinking for the [federal grant]. We came up with the primary goals. I locked everybody in a room; we did the whole goal setting mission statement and then the whole organizational foundation; got everyone on that page, so we had the structure."

Unfortunately, a few RCPs reported they felt forced into strategic planning because their future is uncertain. Respondent C said: "…one way or another we need to figure out, do some strategic planning for both pathways. What happens if no funding happens? How do we continue this work?" Respondent C went on to say: "…all these people, they want to be out on the land looking at the land. They don't want to be doing strategic planning and analysis and all that! …and strategic planning takes time…" Time pressures and lack of capacity means that assessment does not happen. Respondent B: "We never took that step to kind of go back through the process, update everything, and we kind of had our priorities and we're cranking along for a while so that we never really step back."

To summarize, participating RCPs have a diverse membership representing many skill sets that support short and long term goals. From this portion of the interview it would appear that the goals of RCP Network participants align with adaptive co-management processes such as *strategic planning for ecological systems*, and *collaborating across scales* as presented Table 2.1 (Olsson, Folke, & Berkes, 2004). Participants think an examination of organizational mission and long term goals is necessary and would benefit their partnership. However, they also said the time commitment needed for this sort of work was a problem for their members. These RCPs are challenged in terms of capacity, yet such pressures seem to strengthen the participants' connection to one another. This segment helped focus what RCP characteristics are important to the participants and the concerns they have about working together in a sustainable way. These themes warrant exploration in the survey phase (Table 4.1).

Table 4.1. Codes and categories developed about RCP characteristics.

Initial codes and Themes	**Core Categories to explore in Survey**
Setting/ Context Defining the situation Respondent perspective on ways of thinking about people and objects Processes and activities Capacity Strategy – Evaluation – Planning Leadership – Decision-making Coordination	Regional conservation plans Types of partners Number of partners Formal agreements between partners Age of RCP Funding source and level RCP Activities: • $ raised • # acres conserved • # projects completed • # landowners reached • # RCP partners • # policymaker contacts RCP Effectiveness

Communication and Learning

As described in Chapter Three, this part of the interview asked respondents to discuss learning and communication activity within their RCP. The inquiry focused on the RCP's institutional means to pursue their activities rather than partner organization or individual initiatives.

Organizational learning not prioritized.

While the topics of training and organizational learning were taken up in the conversations, the discussion of these activities was limited to training opportunities for resource inventories (e.g. plant community types), using GIS, and creating estate planning workshops for landowners. Otherwise "learning" was not an expressed priority for the participants in this data collection.

Themes on communication type and frequency.

The topic of communication greatly animated all respondents, signaling the subject's importance to the population. "Good" communication was cited as the most valuable thing. Some characterize good communication as having *clarity*, some as *honesty*, while for others it was about *trust*.

After exploring what communication meant to each partnership, participants shared their preferred methods of communication. Face to face meetings were favored by all, but e-mail was the most popular medium, followed by the telephone. Respondents cited that distance and scheduling makes asynchronous communication essential. Few other technologies were utilized. Only a handful of RCPs had devoted websites and only two individuals reported activity in social media. Several used conference calls to facilitate meetings; no one claimed to use video conferencing.

Finding time.

Finding time for meetings is a challenge for all respondents in the sample. Respondent C said: "In the collaborative I try to schedule meetings, [reach out] to determine when is a good time and unfortunately one of the challenges that I face is that people are stretched already. Whether they are staff or volunteers, they are stretched." Some RCPs struggle with attendance consistency. Respondent C: "It's hard for me to get consistency of people who will come regularly to the meetings; [people with] historical continuity." Respondent G had the same experience: "not everyone comes to every meeting, sometimes they miss and then they come back and are like what's going on; you have to go back and review with them constantly about what's going on."

One respondent (B) suggested that attendance and meeting availability was linked to capacity: "We were meeting quarterly probably, very good attendance and we spent through all that money, and the recession hit, and a lot of money dried up and a lot of people's staff got a lot leaner…"

Facilitating meetings is a considerable management effort, as described by Respondent K: "I use email; phone when that isn't going to work; conference calls a lot…we typically meet four to six times a year…partners come together and …it's facilitating those meetings, coming up with our agenda for the year, the things we want to accomplish and then checking in with the partners, mostly through those meetings to see that were getting those goals accomplished…also it's a voluntary kind of thing so anybody that shows up can participate in decision making…"

The RCPs in this sample hold all partner meetings between one and four times per year; the exception of one respondent who reported that his RCP is entering a "hiatus period" and does not intend to meet in the coming year. Four respondents felt that more often might be useful, but

not a good use of resources. One example, Respondent E, shared the motto of their RCP: "No unnecessary meetings!" Another, Respondent B, agrees: "I'm really sensitive to the time limit of folks, and the fact that we bring people from different parts of the state so um I don't want to schedule meetings unless there is something important to discuss, we keep them posted with emails and newsletters."

Based on respondent answers, inquiry about meeting frequency and type and communication flow in these RCPs would be valuable. These subjects will be investigated with the wider RCP population in the surveys (Table 4.2).

Table 4.2. Codes and categories developed about communication.

Initial Codes and Themes	Core Categories to explore in the Survey
RCP Characteristics Respondent perspective Respondent's way of thinking about people and objects Activities and events Communication Collaboration	Importance of meetings Perception of available time Contact type/ frequency • Meeting frequency • Meeting length Methods of communication Rating communication flow Improving communication Networking for collaboration

Collaboration

In this section of the interview, respondents were first prompted to define collaboration. They were then asked to describe the level of collaboration within their RCP. Exhibits that presented different interpretations of organizational collaboration, integration, and development were provided to aid the discussion (Appendices A, B, & C).

Defining collaboration in RCPs.

When respondents were asked to define collaboration all respondents gave practical examples of cooperation on projects and tasks, rather than sharing formal definitions. For

example, Respondent E said: "I'm thinking stewardship… information was developed with all the conservation partners and then implementation piece is that we meet annually and we talk about what management activities are going on at different conservation properties." From Respondent K: "…when it first came together it was like, [we] know what we're doing in the area, who has the resources, and how we can collaborate and how we can strengthen relationships because at the time…there was a rift between nonprofits and the state. There wasn't a lot of cooperation…now it's a good relationship between nonprofits and agencies…" These respondents both went on to cite *overlapping missions* and *trust* as key components to partner collaboration activity in their RCPs.

The abstract nature of collaboration makes it difficult for some to define it. The tactic of providing phrasing examples was successful and validated my choice to include exhibits in the discussion. They facilitated articulation of the collaborative process for these respondents who generally prefer to speak in terms of acreage rather than social measurement. See Chapter Three for exhibit summaries.

Using organizational models to assess their own RCPs.

Exhibit One: Levels of Linkage

When reviewing the first exhibit (Appendix B), 66% of respondents said they had reached the first two levels of linkage: "cooperation" and "collaboration" but fell short of "partnership" because according to this model, that level requires the collaborative to be "a new entity in which former organizational identities are deemphasized." Respondents were unanimously uncomfortable with that, but then defended their partnership's way of doing things. From Respondent K: "They don't want to deemphasize organizational identity though I've heard some people say 'leave your patch at the door' meaning just come in and talk…and we all have

one goal – conserve land…but they don't want the [partnership] to be the entity that everyone knows in the region."

Exhibit Two: Levels Of Organizational Integration Rubric (LOIR)

To restate from Chapter Three, the LOIR Worksheet (Appendix A) was not applied as the authors instruct in Woodland and Hutton (2012), but was instead used to guide conversations about collaboration. Of particular interest were the headings and labels for the levels of integration. They provided participants with language and categories to speak about their experiences. An example is where Respondent D reflected aloud about *Leadership and Decision Making:* "…the partnership is pretty informal, but we have shared aspects of purpose. I think we are a little lax in our leadership – I think that is our one weakness."

It should be noted here that respondents were put off by what they perceived as the formality of implementing a self-study. As with the topic of planning, assessment was talked about as something outside their systems' structure, and would cost in terms of time and resources. Considering that some RCPs are only very loose associations between organizations, that is an understandable viewpoint. Respondent G: "I think it's worth studying…but it's difficult – everyone's time is [short]." Respondent D: "That's a tough one because we were just…fitting this [RCP work] into our schedule...our main issue is lack of capacity." Respondent C: "totally – and really what it comes down to is time – I don't doubt there are benefits [to measurement], and I think it's worth some time – it wouldn't be right now."

Even though respondents were not predisposed to self-study, all admitted during the interview that they were pleased to have a few moments to reflect on their partnership's integration, signaling future opportunities for assessment.

Exhibit Three: RCP Phase Model

For Exhibit Three, respondents were asked to place their RCP into one of the categories in the RCP Phase Model, which was created with this population in mind (Appendix C). Seventy five percent of the respondents felt their RCPs had met the criteria listed in all three phases (*Emerging, Maturing, and Conserving*) except big fundraising outside of grants. Unexpectedly, this model led participants back to talking about funding and their RCPs future. Respondent L: "I think we are probably somewhere in maturing…even though we are not doing a lot of mapping and stuff like that but we are doing activities that align with our goals." Respondent F: "Between maturing and conserving…but this year we're really moving in to conserving…but we may not be around if we don't put our funding together…I mean we're already a successful multi-year collaborative."

Based on these conversations it would be helpful to identify organizational and leadership qualities that aid collaboration, what capacity exists for collaboration in these partnerships, and the best conditions for collaboration within and across RCPs in the survey (Table 4.3).

Table 4.3. Codes and categories developed about collaboration.

Initial Codes and Themes	**Core Categories to explore in the Survey**
RCP Characteristics	Tasks that require collaboration
Respondents way of thinking about people and objects	RCP qualities favorable for collaboration
Process	Demonstrations of membership
Activity	Conditions needed for collaboration, rated
Events – Meetings	Leadership
Strategy	
Relationship and social structure	
Method	
Mission and Goals	
Communication and Learning	
Collaboration	

About the RCP Network

In the three years leading up to this research in 2013-14, there was an effort to strengthen and formalize the smaller networks across New England into a larger one. Known as the RCP Network, it provides information sharing opportunities, a yearly conference, and other types of support. During the last phase of the interview, respondents were asked to discuss RCP Network awareness, interest, involvement and thoughts on collaboration with other RCPs. All interview participants were aware of coordination efforts in the RCP Network. Seventy five percent had attended one of the gatherings or hoped to do so when time allowed. The most often stated value of the RCP Network was *information sharing*. What Respondent K found valuable: "…what's kind of worked and not worked for other RCPs…people ask 'how do you do that' and I thought I didn't know anything and I found myself talking about what we had learned." As far as cross-RCP collaboration was concerned, there was mention of mentoring arrangements between more and less established RCPs, but this defaulted into conversation about capacity. Cross-RCP collaboration and the RCP Network merits further examination through the surveys (Table 4.4).

Table 4.4. Codes and categories developed about the RCP Network.

Initial Codes and Themes	Core Categories to explore in the Survey
Respondents way of thinking about people and objects Process Event codes (RCP Network gatherings) Strategy Relationship and social structure Mission and Goals Collaboration RCP Network	Cross-organization collaboration Mentoring Expansion-Entropy

Survey Results

In this section I discuss response rate, present some data regarding RCP characteristics, and additional results organized by research questions.

Response Rate to the Survey Phase

The survey was distributed via e-mail link to 35 RCP coordinators and other RCP contacts, who were asked to share it with the other partners in their RCPs. As stated in Chapter Three, the estimated number of possible participants was 390. Between April 14 and May 31, 2014, 149 complete survey responses were collected through the Qualtrics interface.

Demographics Data and Context

The instrument contained questions intended to produce specific demographic and descriptive data about the practices of respondents and the characteristics of their RCP's partnering organizations. The data from these questions is organized into six areas under *RCP Characteristics*, as presented in Table 4.5. This covers structure, mission, membership, size, years active, and funding.

Table 4.5. RCP Characteristics and demographics for context.

RCP Characteristics	**Relevant Research Question**
Participation	Q4,6 Participating RCPs
Mission and Focus	Q11 RCP Priorities Q12 Regional conservation plans Q19 Formal agreements between partners
Number and Types of Partnering Organizations	Q14 Number of partners per RCP Q18 Types of organizations partnered in RCPs
RCP Age	Q10 Founding year
Funding	Q23 Funding source Q24 Rate funding level

RCP Characteristics

Participating RCPs

Participants were asked to identify the RCP in which they are most active. Based on the 134 responses, 91% (32) of the 35 RCPs were represented. In this culture it is known that individuals may contribute to more than one RCP. Twenty seven percent (35) of the 131 respondents stated that they work with more than one partnership. Survey participants were asked to answer questions based on involvement with their "primary" RCP. Based on that, the average response rate was 3.5 participants per RCP, with a range of 0 to 22. Five participants were removed from the sample analysis because they indicated their RCP was not on the list provided in the survey. From this point forward, RCPs will be referred to by their number code to protect anonymity.

Mission and Focus

The questions in this section were posed only to the 32 participating RCP coordinators. During the interview phase, five RCP activities were identified as important for measuring success: (1) Fundraising; (2) Coordinating Local Conservation Planning; (3) Parcel Projects; (4) Conservation Services to Municipalities; and (5) Conservation Services to Landowners. In the survey, RCP coordinators were asked to prioritize these activities or objectives using the following scale: 0 – very unimportant, 1 – unimportant, 2 – neither important nor unimportant, 3 – important, 4 – very important. All coordinators responded. Each of the above activities was rated between 2.7 (just less than *important*) to 3.4 (above *important*). The high rating of importance confirms that these activities are valued universally by this population.

Based on the interview responses, the presence or absence of regional conservation plans or memorandums of understanding (MOUs) says a great deal about the culture and conditions

under which these partnerships operate. To follow-up, coordinators were first asked if their RCP was guided by a regional conservation plan. Of the 30 coordinators that answered, 50% (15) said yes, and 50% (15) said no. Of those that said yes, 93% (14) had completed the plan in the last 10 years. Coordinators were then asked if their RCP had MOUs or other formal agreements between partnering organizations. Of the 32 coordinators that responded, 72% (23) said no. In the follow up question, coordinators who said no were asked to state why or why not they would not want an MOU. Forty-eight percent (11) may be summarized as *don't need/we're informal/not a good fit*. Twenty-two percent (five) generalized *they may need one in the future*. Of the nine that wanted MOUs, two said they were *in the process of creating one*, and they all may be summarized as *the layer of formality could ensure the partners and partnership stay on task*.

Number and type of partnering organizations

Another important characteristic of RCPs is the number of partnering organizations, which may speak to organizational size and the ease or difficulty of coordination. Coordinators were asked how many partnering organizations belong to their RCP. Of the 32 coordinators that responded, 72% (23) answered ten or more partners, 28% (9) answered nine or less partners.

Partner organization type was also explored in the survey. During the interview phase chapter, I identified ten common organizational types participating in RCPs. Coordinators were asked what types of organizations partnered in their RCPs and all (35) responded (Table 4.6). Land conservation organizations are typical RCP members. Sixty nine percent (24) of RCPs have regional or state land trusts as members, 69% (24) have local land trusts, and 69% (24) have national conservation organizations as members in their partnerships.

Table 4.6. Generalized types of partnering organizations represented in 35 RCPs.

Partnering organization type	Selected by # RCPs	% of total selected
State or regional land trust	24	69
Local land trust	24	69
National conservation organization	24	69
Local conservation or environmental organization	22	63
State government agency	21	60
Watershed or rivershed association or organization	15	43
Federal government agency	14	40
Local government – planning board	13	37
Independent contractor or consultant	9	26
Other	9	26
Local agency	8	23

Age of the RCPs

To establish RCP age, coordinators were asked when their RCP was formed. Thirty two coordinators responded. Most reporting RCPs are nine or less years old with 41% (13) at 5 to 9 years old, and 41% (13) at four or less years old. Yet 13% (four) said they were 15 or more years old. Figure 4.1 shows the distribution of founding years.

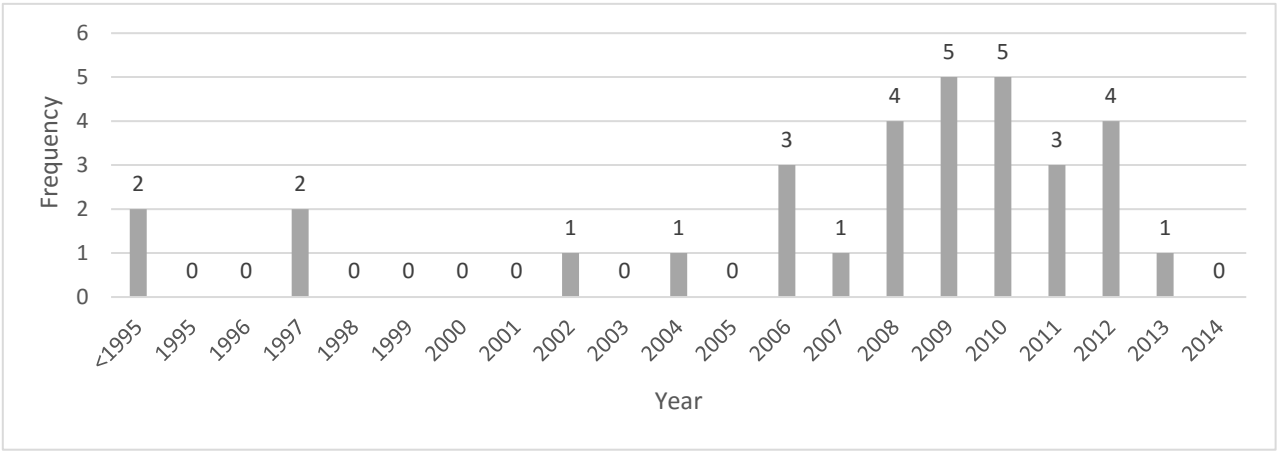

Figure 4.1. Frequency of founding years among RCPs.

Funding

Based on information from the interview phase and some archival research, coordinators were asked to select their funding sources (Table 4.7). The most frequent selection of the 33 RCPs responding was "multiple grants" at 52% (17), followed by "partnering organization contributions" at 45% (15). Twenty four percent (8) RCPs responded that their funding came from one grant. Twenty-one percent (seven) claimed they do not seek funds.

Table 4.7. RCP funding sources in 33 RCPs.

Funding Sources	**Selected by # RCPs**	**% of total selected**
Multiple grants	17	52
Partnering organization contributions	15	45
One grant	8	24
Government funding	7	21
Volunteer/in kind – based/we do not seek funding	7	21
Donations from public	6	18
Other	6	18
Not funded for 2014	0	0

Responding coordinators were then asked if they agreed with this statement: *We have the financial resources for this RCP's tasks.* Of the 29 RCP representatives that responded, 52% (15) disagreed with the statement (Figure 4.2).

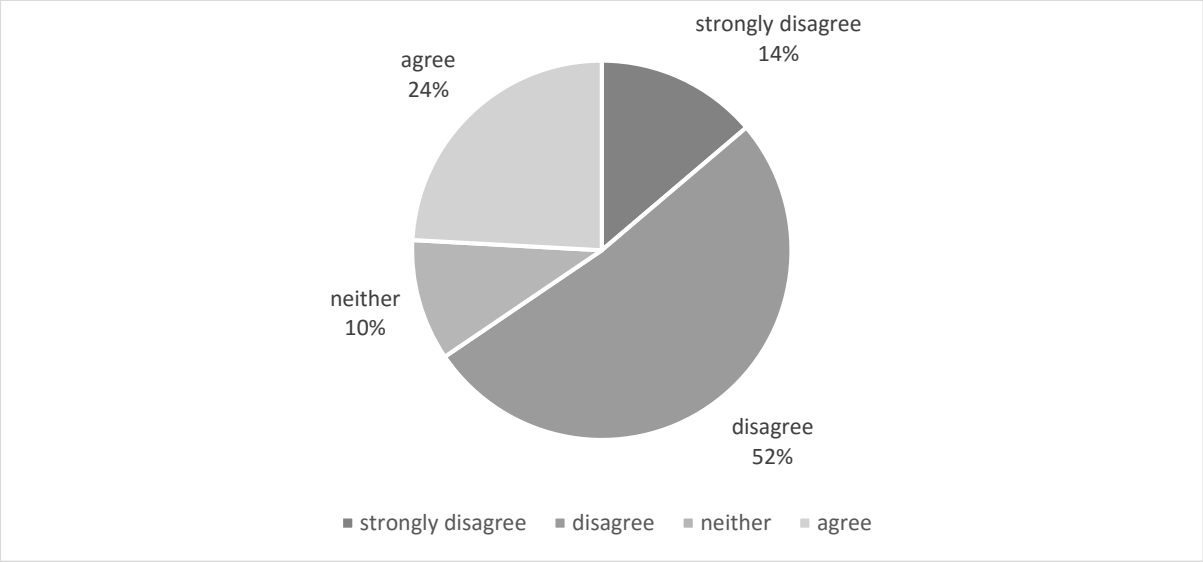

Figure 4.2. Participants respond about their agreement with the statement: *We have the financial resources for this RCP's tasks*.

Research Questions

This section covers data analyses that address this study's research questions. This section is organized by research question and then by relevant survey questions.

Research Question 1 (RQ1)

The first research question I asked was: What level of collaboration helps conservation networks reach landscape scale conservation goals? To answer RQ1, I focused on the parameters in which these RCPs operate and the conditions under which they collaborate. Table 4.8 presents which survey questions pertain to this research question.

Mission and Structure

An RCP's mission (operating parameters), size, and membership would have influence on how closely the partners can collaborate. Results regarding regional conservation plans, formal agreements between partners, number of partners per RCP, and types of partnering organizations, were shared in the *RCP Characteristics* section earlier in the chapter.

Table 4.8. Survey questions relevant to RQ1.

Theme	Relevant Survey Questions
Mission, structure	Q12 RCPs with regional conservation plans Q19 Formal agreements between partners Q14 Number of partners Q18 Types of partnering organizations
Collaboration	Q35 Tasks that require collaboration Q38 RCP qualities for collaboration Q28 Ranking conditions of collaboration

Collaboration

The survey collected data about what tasks require collaboration in RCP work and what is needed to make that collaboration happen. The list of tasks was generated during the interview phase (Table 4.9).

Table 4.9. Tasks that require collaboration within RCPs.

RCP Activities and Tasks	% of total respondents selected
Information sharing	96
Strategic planning	83
Solving problems	69
Landowner outreach	69
Parcel/project work	59
Policymaker outreach	48
Creating documents	47
Training and/or innovation	43
Land stewardship/maintenance	30
Other (most often wrote in fundraising)	9

One hundred fourteen participants responded to this question. For this question respondents could select any answer that applied. The most popular at 96% (109) is “Information sharing.” The second at 83% (95) was “Strategic planning.” Only 9% (10) of respondents checked “Other” and of these eight listed “Fundraising.” Participants were asked to rate the

importance of various qualities needed in an RCP partnership for collaboration. These qualities were identified in the interview phase (Table 4.10).

Of 109 respondents, 105 rated "People working in our RCP trust and respect one another" at 3.6 or just below *very important* with a low standard deviation of 0.9, which suggests that respect and trust are critical to success. Ninety three respondents rated "When the partnership makes major decisions, members confer with their colleagues" at 3.2, or just above, *important*. Some respondents identified "other" partnership qualities required for collaboration. The three that responded cite the *long term relationship and familiarity* as an important quality.

Table 4.10. Average rating of partnership qualities needed for collaboration in RCPs according to 109 participants.

Partnering qualities	**Average rating**	**Standard deviation**
People working in our RCP trust and respect one another	3.4	0.9
When the partnership makes major decisions members confer with their colleagues	2.7	1.3
People in this RCP understand their roles and responsibilities	2.6	1.3
People involved in our RCP are willing to arrive at a compromise on important aspects of our projects	2.4	1.3
There are effective procedures in place to guide the partnership and support collaboration	2.4	1.4
The organizations in our RCP allocate the right amount of time to our projects	2.3	1.2

As described in the interview phase, "qualities" are not the same as "conditions." A partnership can have the desirable qualities to collaborate, but conditions may make that not possible. Seven conditions were identified in that phase of the research and respondents were asked to rate them using the same importance scale shared earlier in this chapter (Table 4.11).

Table 4.11. Average rating of conditions required for collaboration in RCPs according to 116 participants.

Partnership conditions for collaboration	**Average rating**	**Standard deviation**
Strong Leadership	3.5	0.7
Clear communication	3.5	0.6
Shared understanding of goals, roles, timelines, and deliverables	3.4	0.8
Process for partner interaction	3.1	0.9
Focus on the right issue or problem	3.1	1.2
Sufficient funding	3.0	1.0
Partner selection	2.6	1.2

Of the 116 respondents, 99% (115) selected "Clear Communication" and rated it, on average at 3.5 or above *important*. Similarly, 98% (114) selected "Strong Leadership" and rated it, on average at 3.5 as well. The high ratings and the small standard deviations of 0.7 and 0.6 respectively, suggest these conditions are critical to success as well. Fifteen percent (17) respondents selected "Other" as a condition, and these open responses may be summarized as *partners are active and collaborative participants.*

To get a clearer picture of what communication and collaboration means to this population, all participants were asked if there was anything about collaboration in their RCP they wished to share. Twenty six percent (40) respondents took this opportunity. These answers echoed previous responses about the qualities and conditions required for collaboration, but were especially focused on the strengths their RCP had and the things they wanted for their RCP in the future. Some open responses addressed more than one theme so they were counted separately. These themes may be divided into two categories: *strengths* and *wants*.

Strengths

Seven responses can be summarized under a theme of *focus and vision is important*. Four said the *cross-section of skills represented* in their partnership was a major benefit. Another four said *information sharing* was key to their collaborative efforts. Three cited *respect and trust* as an important component of collaboration. Three said *communication flow* was necessary. Three said having *paid staff* was essential. Three cited *strong leadership* as important. Two said their RCP's *willingness to evolve* help them collaborate. Two said the fact that partners can collaborate to *leverage support and dollars* was important to them.

Wants

Twelve responses spoke of what their partnership may lack for collaboration. Five said *uneven partnership participation*; two said *partners too busy* – we need more time. Then there were single responses indicating that: *Our RCP needs its own identity, Needs funding, Needs more shared events, Partners need to be better at cross promotion, and Outcomes viewed differently by different parties.*

Research Question 2 (RQ2)

The second research question I asked was: How does frequency and type of communication affect collaboration in these groups? To examine research question 2, I explored contact type and frequency through meetings and communication methods (Table 4.12).

Table 4.12. Survey questions relevant to RQ2.

Theme	Relevant Survey Question
Contact type and frequency	Q15 Number of RCP partner meetings per year Q17 Length of those meetings Q32 Methods of communication favored by partners Q33 Members rank communication follow of their RCP Q46 On improving communication and networking for collaboration

Contact type and frequency

Coordinators were asked about the frequency and duration of all partner meetings (Tables 4.13 and 4.14).

Table 4.13. Frequency of all-partner meetings per year reported by 32 RCP representatives.

Meetings per Year	Selected by # RCPs	% of total selected
1-2 per year	14	44
3-5	11	34
6 or more	5	16
0	2	6

Table 4.14. Average length of all-partner meetings reported by 30 representatives.

Average Meeting Length	Selected by # RCPs	% of total selected
2-4 hours	24	80
1-2 hours	3	10
all day	3	10
less than 1 hour	0	0
multi day	0	0

Of the 33 coordinators that responded about meeting frequency, 31% (10) selected three to four times per year; 24% (eight) selected two per year. Thirty coordinators responded to the meeting length question. Seventy percent (21) meet for "2-3 hours." None of the respondents

claimed to have a short 45-minute, or very long, multi-day meetings. The value of these meetings would vary based on participation by the partner organization representatives. The entire sample was asked with what frequency they attend their RCP's all partner meetings per year. Of the 101 that responded, the average answer was 3.4, between *most of the time* and *always*.

During the interview phase, ten communication methods were identified as commonly used. All survey participants were asked to rate the importance of these methods of communication. Using the same importance scale described earlier (Table 4.15). Inexpensive and universally available methods were favored along with in person contact as in the interviews. Among the 116 participants "e-mail" was selected by 98% (114) and rated at "3.5" or above

Table 4.15. Average ratings of communication methods from 116 respondents.

Communication Methods	**Average rating**	**Standard deviation**
E-mail	3.4	0.7
Face-to-face meetings	3.4	0.8
Conference calls	2.2	1.4
Telephone (single caller)	2.1	1.4
Formal presentations	2.0	1.4
Newsletter	1.4	1.4
Social media/online discussion boards	1.0	1.1
Fax/memorandum	0.7	0.8
Skype/video conferencing	0.7	1.0
Text messaging	0.6	0.8

important; and 97% (113) respondents selected "Face-to-face meetings" and rated it at "3.5" or well above *important*. The high ratings with small standard deviations of 0.7 and 0.8 respectively, supports the claim made in the interview phase that face to face meetings were ideal, but email serves as a strong substitute.

During the interview phase it was established that contact frequency and methods of communication are important. However, the quality communication flow – the amount and value of information exchanged, likely resides with the habits of and relationships between the partners. Their perception of RCP communication flow may have implications for how RCPs function.

Survey participants were asked to rate communication flow in their RCP using the following scale: 0 – poor, 1 – fair, 2 – good, 3 – very good, 4 - excellent. Ninety-one responded. These answers were sorted by RCP and then averaged (Figure 4.3). Of the 27 RCPs represented in this data set, only 33% (nine) received a rating of "3" (*very good*) or higher, and only 3.7% (one) received a rating of "4" (*excellent*). The average was "2.5" (between *good* and *very good*).

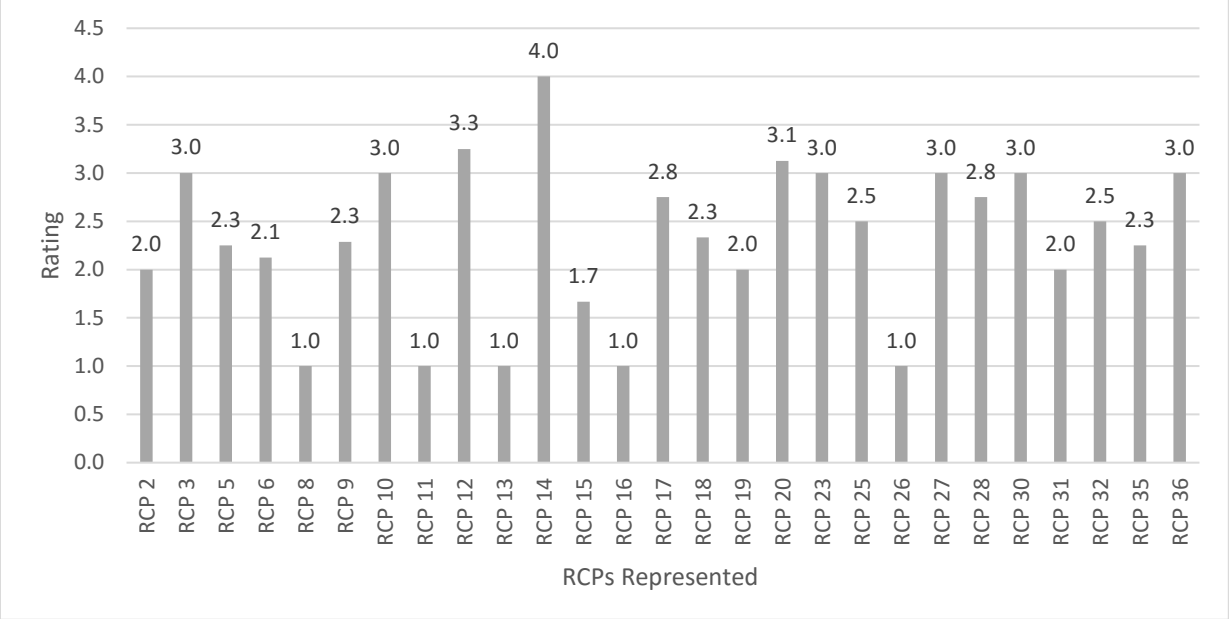

Figure 4.3. Average rating of communication flow in RCPs.

Survey participants were also asked if there was a change that could be made to improve communication and networking to support collaboration within their RCP and across the RCP Network. Of the 66 that responded to this open ended question, 18% (12) wrote out that *they*

[did] not have a good answer. Of the responses that discuss communication within their own RCP (44), 25% (11) cited *staff or more staff time*; 20% (nine) cited *more or more stable funding*; 15% (seven) wanted *more frequent updates* to and about all partners. At the other end of the spectrum, only 7% want more meetings.

Research Question 3 (RQ3)

The third research question I asked was: Are there best practices among these networks? As described in the previous chapter, the interviews revealed these RCPs have much in common, but come in many forms and operate under a variety of conditions. This complicates capturing "best practices." For the purpose of this dissertation, I answer RQ3 in terms of how the participants judge their own practice and their RCP's efficacy. I first identified which practices led to desired outcomes for the participants and their RCPs, and then isolated those data for the RCPs that self-identify as "very effective."

Lastly I reviewed the narrative data regarding how members in RCPs support each other and each other's organizations through in kind support and other means (Table 4.16).

Isolating RCPs that self-identify as very effective

During the interview phase, six RCP activities were identified by respondents as important for measuring their RCPs success: (1) How many landowners reached; (2) Acres conserved; (3) Projects completed; (4) Money raised; (5) How many partners in the RCP; (6) How many policy makers were contacted; and (7) Other. In the survey, respondents rated these activities for importance in terms of measuring their RCPs effectiveness. When posed to the entire sample, 117 responded. All six activities were rated between 2.7 and 3.3 with "3" equaling a rating of *important*. This confirms that the activities first identified in the interview phase are relevant to RCP effectiveness (Table 4.17).

Table 4.16. Survey questions relevant to RQ3.

Theme	Relevant Survey Questions
Isolating RCPs that self-identify as very effective	Q4 Participating RCPs Q26 Activities that represent effectiveness Q27 Respondent rating of their RCPs effectiveness
Very effective RCP characteristics	Q12 Regional conservation plan Q19 Formal agreements Q14 Number of partners Q18 Partnering organization types
Contact type and frequency	Q15 Number of all partner meetings per year Q17 Length of all partner meetings Q32 Methods of communication
Very effective RCP member's perceptions of collaborative work	Q33 Members rate communication flow in their RCPs Q35 RCP tasks that require collaboration Q38 Partnership qualities that are important for collaboration Q28 Conditions needed within RCPs for collaboration

Table 4.17. Average rating of RCP activities as a measure of effectiveness according to 117 participants.

Activities	Average rating	Standard deviation
Number of acres conserved	3.3	1.3
Number of landowners reached	3.2	1.2
Number of projects completed	3.1	1.2
Numbers or partners in the RCP	2.8	1.5
Money raised	2.7	1.5
Number of policymaker contacts	2.7	1.5

In the survey, respondents were asked to rate the effectiveness of their RCP based on the activities listed in the previous section (Table 4.19). On a scale of "0" equaling *very ineffective* and "4" equaling *very effective*. These answers were sorted by primary RCP. Since different numbers of people responded from each RCP, I found the mean response from each RCP group.

Of the 31 RCPs that were represented in the data set, no RCPs were rated by their members as *ineffective* or *very ineffective*. Sixty-six percent of RCPs (21) were rated by their members as *effective*; 25% (eight) were rated as *effective*; 6% (two) were rated *neither effective nor ineffective*. As depicted in Figure 4.4, the majority of participants find their partnerships to be effective which is good news, but based on the information gathered here and in the interview phase, we would be better able to answer the research questions if the focus shifted to those perceived by their members as *very effective* RCPs, those with a rating of "3.2" or higher. RCP3, RCP10, RCP12, RCP14, RCP17, RCP20, RCP23, and RCP 30 meet this criteria. So in total, eight RCPs rated at very effective, and these RCPs will be the focus of RQ3.

Very effective RCP characteristics

Using characteristics identified earlier in the study I compared the eight RCPs that self-identified as very effective with the rest of the population (Figure 4.5). Of the "very effective's" (VEs), 75% (six) have *regional conservation plans*; of the "Others," 50% (15) have the plans. Fifty percent (four) of VEs have *formal agreements with partners* while only 21% (five) of the Others do. Seventy eight percent (seven) of VEs have 10 partners or more, while 54% (13) of the Others have that many.

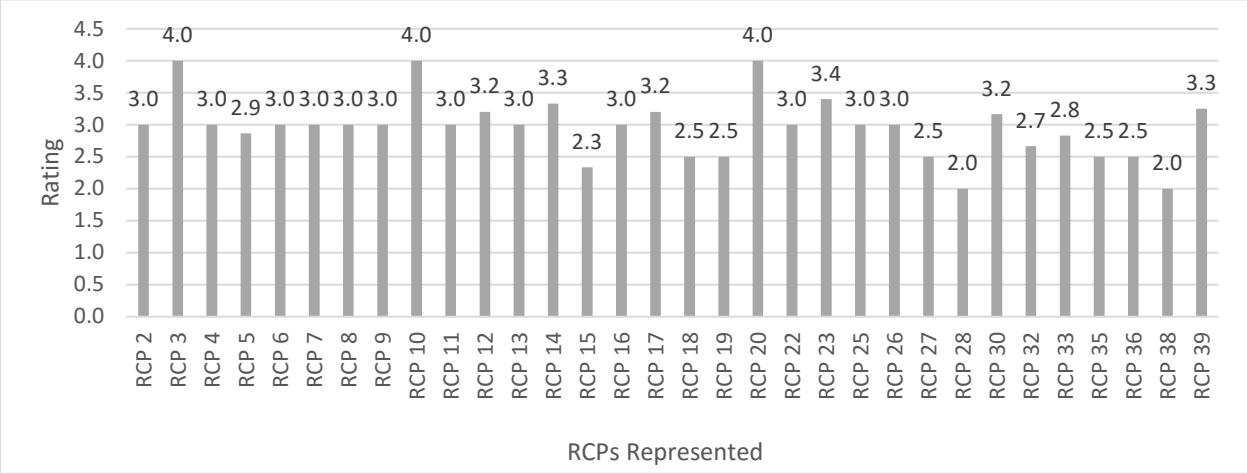

Figure 4.4. Average rating of RCPs for effectiveness by the survey participants.

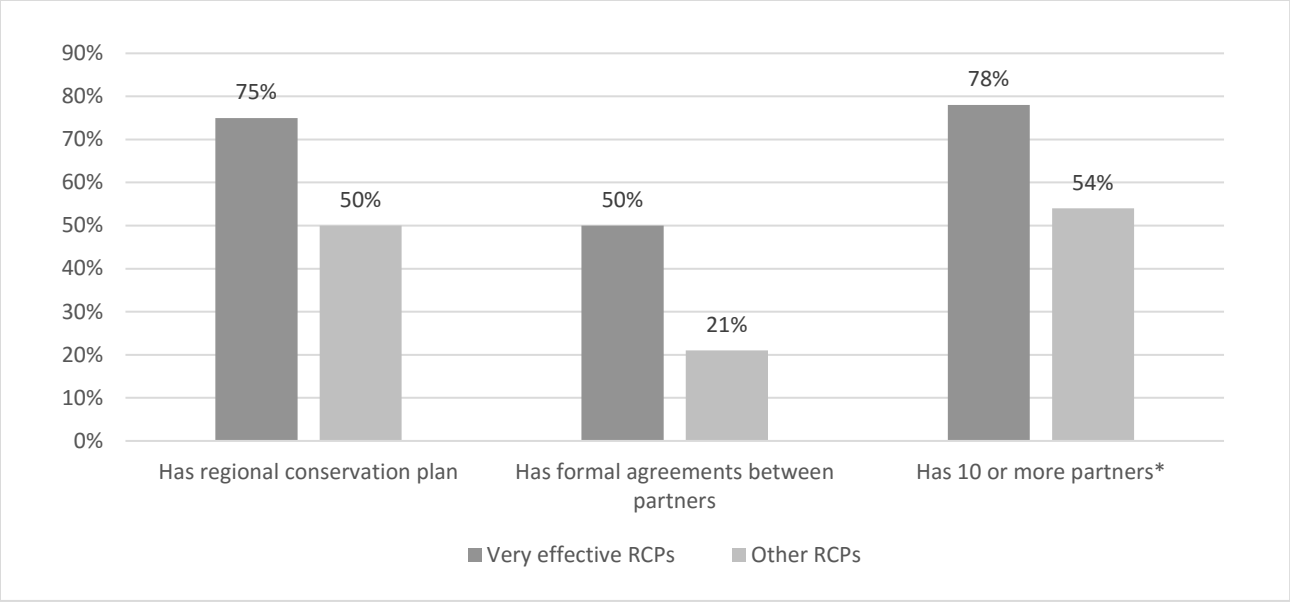

Figure 4.5. RCP characteristics compared between those who self-identified as very effective and those that did not. *indicates significant difference at $p < .05$.

The relation between having 10 or more partners in the RCP and self-identity as very effective was significant, X^2 (1, n = 32) = .03, *$p < .05$. Regarding the types of partnering organizations in RCPs, there is some parity between the VEs and the Others. Clear places of difference are the presence of *land trusts*, both "local" and "state/regional," the presence of *watershed organizations*, and the participation of a *federal government agency* (Figure 4.6).

The categories for local land trust, state or regional land trust, watershed organization, and federal government agency all showed some differences between VEs and Others. When these variables were examined to see if there was a relationship between the presence of these organization types and the perceived effectiveness of RCPs, it was found that the relationship between having a local land trust as a member and self-identity as effective was significant, X^2 (1, n = 30) = .02, *$p < .05$. Similarly, the variables state or regional land trust and watershed

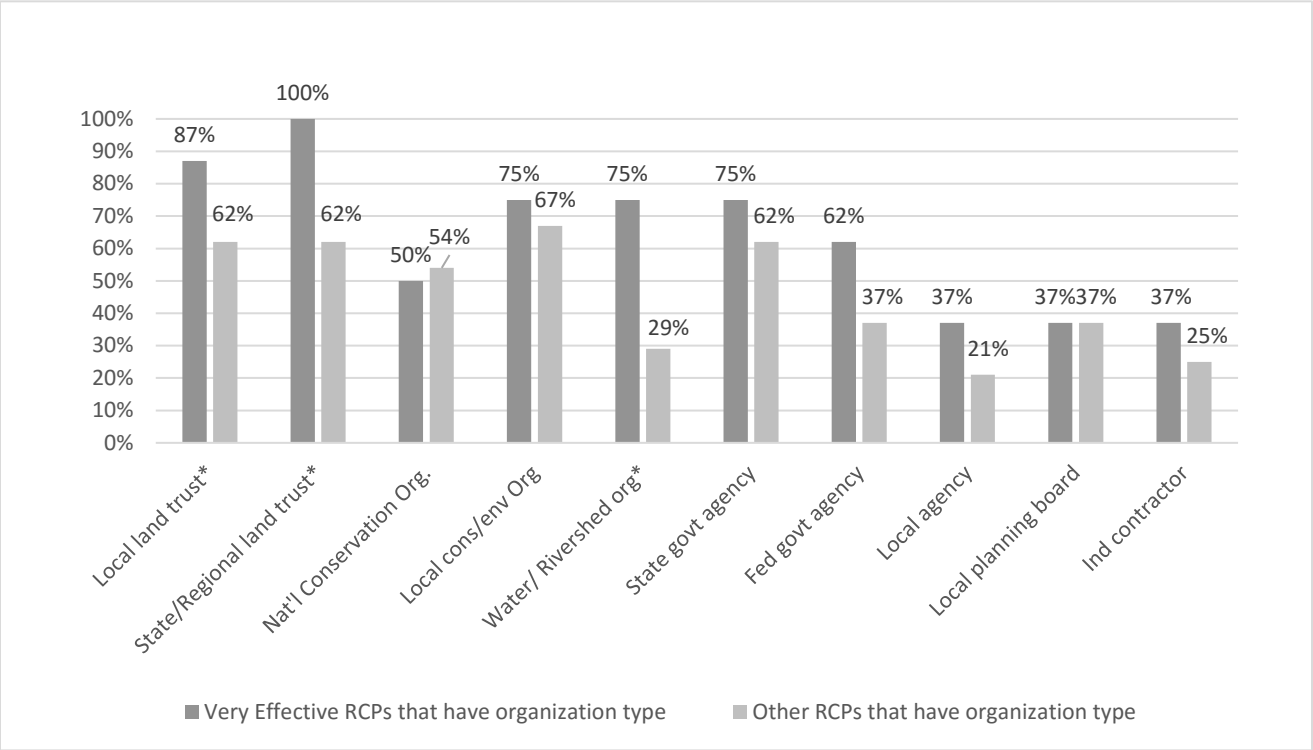

Figure 4.6. Comparison of RCP partnering organization types; VE's versus Others.

organizations proved significant as well: X^2 (1, n = 30) = .001, *p < .05, and X^2 (1, n = 30) = .02, *p < .05, respectfully.

Contact Type and Frequency

To compare amount and type of contact between the partners in VEs and the Others, I first reviewed all-partner meeting frequency and length and then communication methods. There was very little difference between VEs and Others for meeting frequency. As discussed earlier in the chapter, the majority of all RCPs selected "1-2 Meetings per year" (44%; 15) or "3-5 Meetings per year" (32%; 11) (Table 4.13). Isolating those data for VEs, two (25%) selected "1-2 Meetings per year" with Others at 38% (nine). For "3-5 Meetings per year," 38% (three) VEs; Other 29% (seven). For length of meetings the great majority of RCPs selected "1-3 hours" (72%; 21). When those data are isolated, 88% (seven) VEs; 54% (13) Other (Figure 4.7).

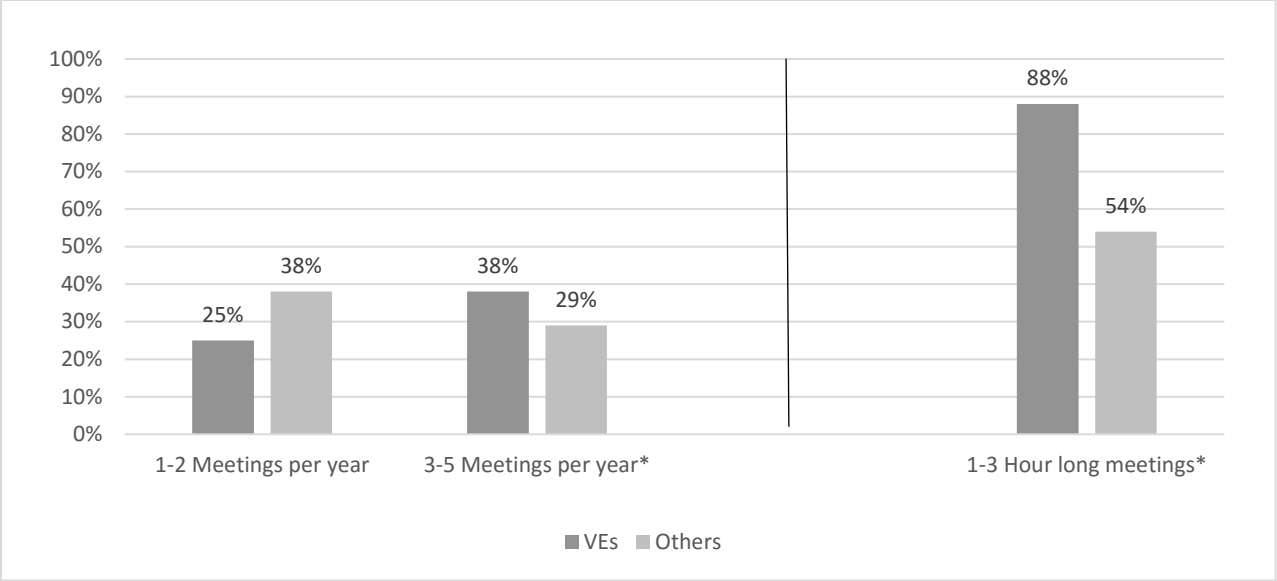

Figure 4.7. Meeting frequency and length: VEs vs. Others. *indicates significant difference at $p < .05$.

The relation between meeting frequency and very effective status was explored and significance was found for 3-4 meetings per year, X^2 (1, n = 33) =.01, *$p < .05$. There is correlation between 1-3 hour meeting length and very effective status as well, X^2 (1, n = 27) = .01, *$p < .05$.

There was also relative parity in the modes of communication favored by VEs and Others. Face-to-face meetings and e-mail are most popular (Figure 4.8). All variables were examined, but none proved to be significant.

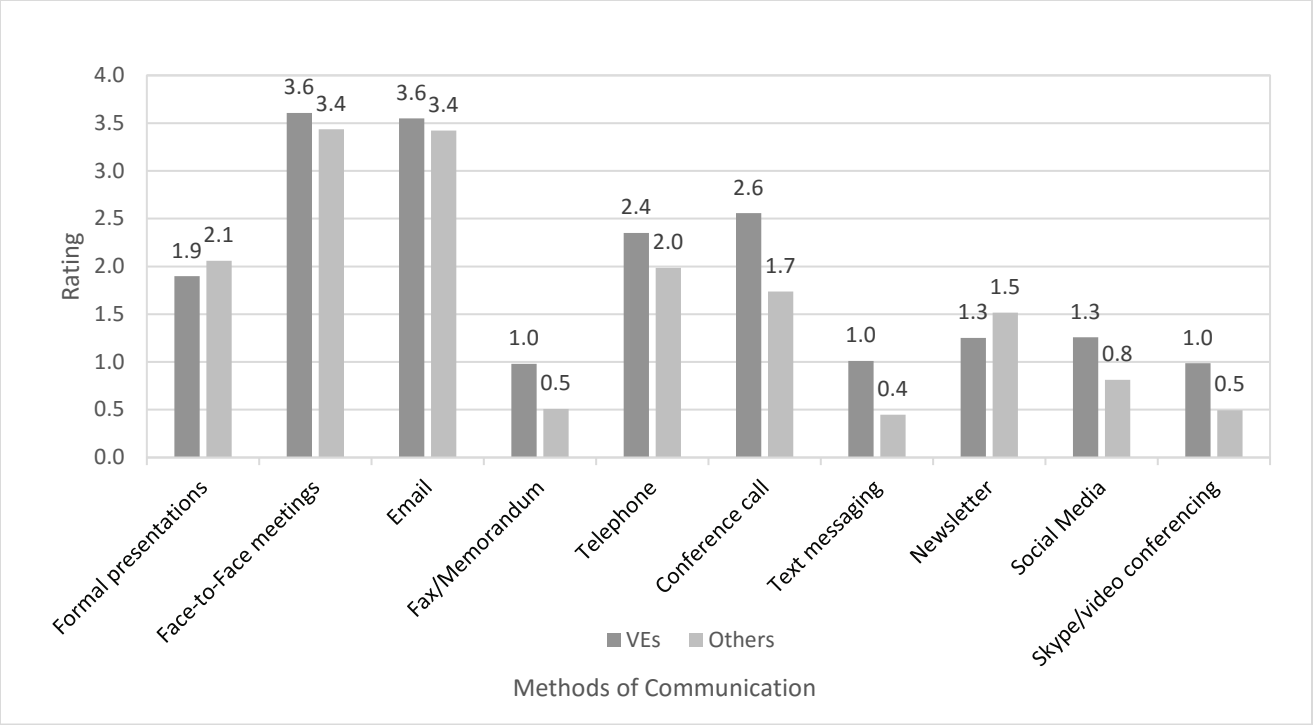

Figure 4.8. Methods of communication preferred by RCP partners: VEs vs. Others.

Collaboration

To capture this population's perceptions of their RCP's collaborative work, they were asked to rate communication flow in their RCP, identify what tasks required collaboration, and name the RCP qualities and conditions required for that to happen. As outlined earlier in this chapter (Figure 4.4), communication flow ratings were mostly positive across the population. When those data were isolated for VEs, 75% (six) were rated as "Very good." This was true of only 21% (five) of the Others; of which most selected "Good" (37%; nine).

Regarding tasks that require collaboration in RCPs, the surveys confirmed those identified in the interviews (Table 4.9); the most popular categories were "Information sharing" (90%), "Strategic planning" (83%), "Solving problems" (69%), "Landowner outreach" (69%), and "Parcel project work" (59%). Isolating those data for VEs versus Others, there is some parity with a few outliers (Figure 4.9). All VEs (eight) selected "Strategic planning," while only 83% (20) of the Others selected it. All VEs (eight) selected "Landowner outreach"; only 88% (21) of

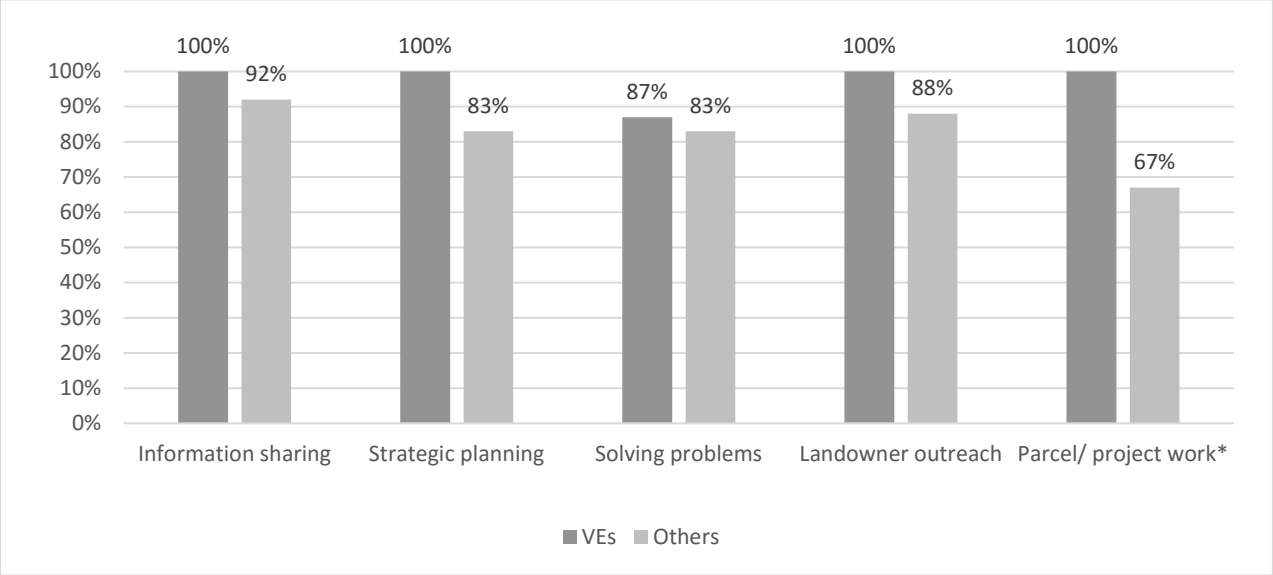

Figure 4.9. Importance rating of tasks requiring collaboration: VEs vs. Others. *indicates significant difference at $p < .05$.

Others selected it. The biggest difference was in "Parcel/project work" where all VEs selected it compared to only 67% (16) of Others. The relationship of prioritizing collaboration for parcel projects and those who self-identify as very effective was significant, X^2 (1, n = 33) = .0005, *p < .05. RCPs who prioritize parcel work as a collaboration activity likely self-identify as very effective.

Earlier in this chapter the results for the qualities most important for collaboration were presented (Table 4.12). The two with the highest ranking were "People working in our RCP trust

and respect each other" (3.6 or between *important* and *very important*; selected by 105 respondents), and "When the partnership makes major decisions, members confer with their colleagues" (3.2 or between *important* and *very important*; selected by 93 respondents). When those data were isolated for VEs versus Others, there is parity in the value of these qualities, 3.3 to 3.5 or between *important* and *very important* (Table 4.18).

Table 4.18. Average rating of partnership qualities that are important for collaboration: VEs vs. Others.

Quality	**VEs rating**	**Others rating**
People working in our RCP trust and respect each other	3.3	3.5
When the partnership makes major decisions, members confer with their colleagues	3.5	3.5

Respondents were asked to rate the importance of conditions required for collaboration. As outlined earlier in the chapter, the two conditions with the highest rating were "Leadership" (3.6 or between *important* and *very important*), and "Clear communication" (3.5 or between *important* and *very important*). When those data were isolated for VEs vs. Others, there is also similarity in the value of these conditions, 3.3 to 3.5 or between *important* and *very important* (Table 4.19).

Table 4.19. Average rating conditions required for collaboration: VEs vs. Others.

Condition	**VEs rating**	**Others rating**
Leadership	3.3	3.5
Clear communication	3.5	3.5

Research Question 4 (RQ4)

The fourth research question asks: when best practices are used at the local scale, does such an approach facilitate effective collaboration at a regional scale? Table 4.20 shows survey questions relevant to RQ4.

Table 4.20. Survey questions relevant to RQ4.

Theme	Relevant survey questions
Intra RCP support	Q36 & Q37 Demonstrations of support
On collaboration across RCPs	Q43 Is it desirable to collaborate with another RCP on a project? Q44 If yes, What type of projects? Q45 If no, Why not?

Intra RCP Support

Respondents were asked how they or their partnering organization demonstrates support for the other partners/ partner organizations in their RCP (Table 4.21).

Table 4.21. Demonstrations of support in RCPs.

Action	Selected by # respondents	% of total selected
Information sharing	103	91%
Lend expertise/ technical support	79	70%
Event support/ promotion	64	57%
Provide meeting space	59	52%
Staff or volunteer sharing	42	37%
Equipment or materials loan	20	18%
Another in kind service or show of support	19	17%
We mainly focus on our own organizations	12	11%

For "Another in kind service or show of support," there was an opportunity for respondents to provide a narrative answer. Nineteen participants provided answers; many were related to funding (36%, seven); the second most common topic was website hosting or management (10%, two). Sixty-one responses included 113 topics that fit into 13 categories, meaning some answers cited more than one category. A summary of responses to this question is in Table 4.22. Some representative examples:

Respondent 6: "Deer management is a big issue in our watershed. Because we have a larger staff than most of our partners, we were able to devote more time…to hashing out the challenges of deer management."

Respondent 40: "We share GIS files and background information to expedite the easement process."

Respondent 63: "I reach out to other partners to do occasional presentations to our business community's [sic] to raise their awareness about important initiatives within the region, but outside our borders."

Table 4.22. Categorical summary of open responses to demonstrations of support anecdotes.

Types of support	**# answers fit this type**
Technical expertise	17
Coordinate for events/activities	15
Information sharing	14
Fundraising/fiscal management/pass through	13
Cross promotion	12
Free meeting space	10
Outreach	9
Loan of equipment or staff/ staff time	8
Contributes funds	6
Networking/ connecting others	6
Research	1
Strategic planning	1
Answer not applicable to this question	1

On collaboration across RCPs

Survey participants were asked if it was desirable to collaborate with another RCP on a project. Of the 102 that responded 78% (80) said yes and 22% (22) said no (Figure 4.10).

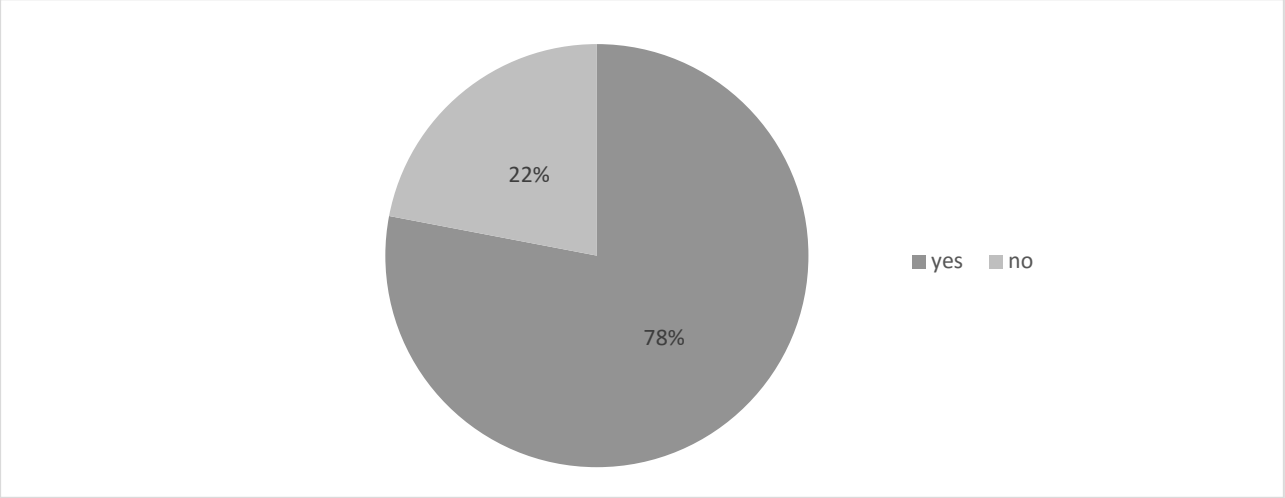

Figure 4.10. Participant's desire to have their RCP collaborate with other RCPs.

Those that answered *yes* were prompted to expand their answer with *What type of projects*? Of the 80, 61 answered. In summarizing these responses, certain themes emerged. Twenty-one cited *regional coordination of conservation and parceling projects*; nine cited *information, resource and tech expertise sharing*; five cited *coordinating stewardship of lands and wildlife*; three cited *watershed and source protection* two cited *research*; two cited *recreation (trails, greenways)*; one cited *climate adaptation* and one wrote "All".

Those that answered *no* to collaborating with another RCP group on a project were asked *why not?* Of the 22, 91% answered (20). The following themes emerged: Five cited that *[their] RCP needed to focus on their own development and goals*; four wrote "it depends"; three cited *limited time/partnership capacity*; three wrote "not critical" or "not needed;" three claimed their RCP was *unique in mission and structure so not a good match with other RCPs*; two thought that *partnering would be unwieldy/ hard to find consensus*.

Chapter Summary

This chapter began with an overview of the interview results and how that influences survey formation. This was followed by a presentation of key data from the survey phase of the study.

The central focus of this study was to determine common characteristics and practices of these conservation networks, and how they collaborate to do their work. The interviews captured an enormous amount of information about culture and collaboration in the RCP network. This network of networks is populated by people who are pragmatic, resourceful, creative and dedicated. They are interested in improving their work and that of their RCP, but they struggle with funding and capacity issues. The surveys were effective in confirming conditions and phenomena raised in the interview phase of the research. The RCP Network shares a set of values for action and natural resource management, they share knowledge, and they consider the larger systems that overlap with their work. These are all characteristics of *adaptive co-management* (Olsson et al. 2004) (Table 2.1). This instrument was limited to organizational processes, but these results also align with the process criteria presented by Conley and Moote (2003) in that participants share a vision, set goals, and strive for inclusive participation among others (Table 2.4). RCPs in New England represent a great diversity of organizations, resources, knowledge and skills. This research is only the start of exploring how these individuals and the organizations they represent pool what they have and leverage it for their shared purpose: to create contiguous conserved landscapes. Uncertain economic times and a New England ethic may have shaped these deeply pragmatic partnerships, but their generosity with each other and commitment to contiguous landscapes is what makes the partnerships strong.

Chapter Five, Discussion, will provide an interpretation of these data and my findings. These findings will extend from the accompanying Review of the Literature (Chapter Two). In addition, implications for land conservation, practice, and further research will be discussed.

CHAPTER 5

Discussion

"…everyone leaves their 'bowling shirts' at the door."– Interview Respondent C

This chapter discusses the findings of the study. It begins with a summary of the dissertation's purpose followed by an interpretation of the findings from the interview and survey data collection phases. That section highlights promising practices and is organized first by a summary of RCP characteristics and then further findings organized by the research questions. The second part of this chapter is a Discussion that addresses the implications of the research. The last part of the chapter suggests future research.

Summary of Purpose

The purpose of this study is to define the nature of RCPs in New England and identify promising communication and collaboration practices that support landscape scale conservation work. This study also explores the secondary benefits of these activities such as providing communication infrastructure for conservation theory and practice to be applied and improved and the consideration of both human and natural systems in the management of landscapes. The shape of this purposeful network of conservation networks in New England is still developing. This research attempts to present their structure and activities, characterize them in light of collaborative conservation and landscape scale conservation, and identify a way forward for measuring their success.

Findings

RCP Characteristics

This research explored RCP characteristics in detail, allowing for better understanding of their purpose, structure, and practices. The context questions shared in Chapter Three focused this work and organize the findings in this section (Table 3.1).

Regional conservation partnerships (RCPs) in New England share the primary goal of conserving land. They do this through cooperative action between organizations, agencies and landowners. In this sample of RCPs, the amount of area covered by individual RCPs ranges from around 10,000 to over 10 million acres. Organizations partner in these RCPs for a variety of reasons, but chiefly to share knowledge, pool resources, and increase capacity. Coordinating stakeholders for parcel projects is not new in conservation or even in New England. In this research I found at least three RCPs from the sample were started over a decade ago. However, 28 out of this sample of 35 RCPs were formed in the 10 years prior to 2015. The purposeful move to form strategic and somewhat permanent (rather than a project by project coalition) associations is a trend supported by my research and others (Labich et al., 2013).

The prevailing structure of these RCPs is an association of nonprofit organizations, often land trusts, government agencies (local, state, federal), and other interest groups. I refer to these member organizations as partners. The majority of RCPs has 10 or more partners. Each partner organization has a representative who acts for their organization in RCP meetings and projects, and serves as a liaison when information must travel from the RCP back to the partner organization and vice versa. RCPs have a coordinator; one individual who acts as the hub of the partnership. This person is often the representative of the organization with the most capacity,

but may also be a paid contractor, employee of a government agency, or volunteer. The person in this role meets the criteria of a boundary spanner. They have a unique perspective of their RCPs geographic area and culture and provide a vital piece of communication infrastructure that addresses information gaps in landscape conservation. They are able to navigate the different social, political, and economic systems that interface with their partnering organizations, and through information sharing activities add value to knowledge and become a receptacle for institutional memory.

The arrangements between partnering organizations in RCPs are voluntary and the presence or absence of formal agreements has more to do with the characteristics of an individual partnering organization and the situation rather than the practices of RCPs. One organization in an RCP may act as host, meaning they can offer in-kind or financial management services to other partners and for the RCP (Labich 2013). However, respondents were emphatic that even though organizational size and capacities may differ, each partnering organization, through their representative, has an equal voice in decision-making, and that is part of their success. This is illustrated in a comment by Respondent E: "...[we] have enough discussion so there is room for everyone to have their opinion…no one organization is more powerful than another."

During the interviews nine "important" RCP activities were identified, and a tenth was added through the survey phase (Table 4.11). The two that rated higher than the others in the survey phase were "Information sharing" and "Strategic planning." Information sharing is essential to the work of RCPs and is the currency of this culture. As mentioned above there are many active boundary spanners in these networks who share knowledge and information across disciplinary and geographic boundaries. As discussed in Chapter Four, interview and survey

respondents said they believed strategic planning was important, but in the narratives expressed concern for its cost in time and effort, and considered it apart from regular activities. The remaining context questions about communications and networking across the region and capacity fold in to the research questions that follow.

Research Questions

What level of collaboration helps conservation networks reach landscape scale conservation goals?

This research question required a better understanding of shared RCP goals, the parameters in which they work, and current partner interactions. To interpret the findings for this research question, Thomson, et al.'s (2009) *Five key dimensions of collaboration* was applied. This framework illustrates the considerations these participants take into account as they interact with each other in the RCP on their organizations' behalf, thus illustrating their collaboration activity (Table 2.2).

Governance

The jurisdictional side of RCP work was evident in the research. Interview respondents delineated the boundaries of their RCP by town, county and state, land parcel ownership, ecosystem type, and ecological service. Survey results confirmed this. In both the interviews and the survey narratives, anecdotes were shared that demonstrated participants are reflective about how they and their organization can contribute based on type, their mission, and the skill sets they possess. I credit these carefully defined parameters and thoughtful actions for (1) providing RCPs with project focus, and (2) providing RCPs with identity. Through shared interests the

participants grow into RCP stakeholders around the common natural resource, and are all the more effective for it (Meadows, 1997; Scarlett, 2012).

Administration

The governance described above influences the management of RCP affairs. As mentioned in Chapter Two, organizational collaboration requires a balance between deference to partnering organizations and meeting the goals of the RCP. This negotiation is carried out by the representatives of these partners. Trust of this representative by both the partnership and their home organization creates great efficiency for a group that may not meet more than a few times per year. A few RCPs have a paid coordinator to work with the representatives and manage the partnership, but limited staff time is a big challenge for other partnerships. RCP partners alleviate that pressure by offering staff hours, technical support, web hosting, meeting space and other in kind services to each other. Partners also cooperate on writing grants, planning and hosting events, creating easement documents and maps, conduction conservation assessments, and educating landowners about estate planning.

Organizational Autonomy

As illustrated in the above *dimensions* and elsewhere in this discussion, partner organizations maintain autonomy; integration of organizations it is limited to activities such as events, grant work, demonstrations for landowners or a letters to a policy makers. As one respondent put it, during all-partner meetings, "everyone leaves their 'bowling shirts' at the door," meaning when they are working on a project, RCP partners are fully focused and noncompetitive. Outside of that, however, their individual organizational identity is very important to them. They do not wish to lessen individual organization visibility in favor of the RCP.

Mutuality

Mutuality is apparent in the interviews and surveys. Besides the fact that these relationships are beneficial for all parties from a land conservation viewpoint, participants grow to know each other and form bonds. They want to support one another. Respondents demonstrated sensitivity to the pressures and limitations partners and partner representatives are under. They take great care to avoid competing or having negative impacts on each other.

Norms

RCPs in New England have cultural and collaborative norms. The respondents established these in the interviews as *Partnership qualities needed for collaboration* (Table 4.12) and *Conditions required for collaboration* (Table 4.13). For *qualities*, the statement "People working in our RCP trust and respect one another" was selected by 96% of survey respondents as important. This was further supported in open narrative responses where *trust* was cited as a key ingredient in their RCP's success. From respondent K: "I know all the partners pretty well now…we've been through a bunch of stuff together." The quality that was second most popular was *When the partnership makes major decisions, members confer with their colleagues*. From respondent J: "we check in with people a lot so they don't forget… If they can't do it we pick it up." This anecdote supports the trust and respect aspect from above, but also demonstrates a kind of vulnerability. The partners know they can ask each other for help, defer to other's expertise, and seek consensus. It cannot be described as relinquished control, but perhaps a shared control through boundary spanning activity (Aldrich & Herker, 1977; Rickenbach et al., 2011; Yaffee, 1998).

Interview respondents implied that collaboration may only flourish under certain conditions. Most of the conditions that appeared in the survey ranked highly (Table 4.13). I will

limit my discussion to the top three: *Communication, Leadership,* and *Shared understanding of goals, roles, timelines and deliverables*. *Communication* is no surprise, for as described earlier in this chapter, the interviews were dominated by talk of sharing information and finding time to meet. *Leadership*'s popularity is understandable when one looks at the leadership structure. First, each representative acts as their organization's de facto leader in the RCP partnership, meaning decision makers are at the table. Second, individuals and organizations will take on leadership roles for specific RCP tasks based on the skill sets and capacity they possess. Lastly, each RCP has an executive or coordinating role. From the interviews and observations, participants are very thankful when an individual is able to take on that job. All three forms of leadership define the work habits of RCPs. Perhaps appreciation of this structure is being expressed in the high survey rating. *Shared understanding* speaks to trust and respect as well, but also supports the idea of cultural norms from the previous section. There is a shared knowledge that all members are under the same pressures, and all want to move their RCP's initiatives forward. Participants value clear goals and roles because this allows partners to work with some autonomy to complete RCPs tasks they take on.

RCPs occupy all the phases of collaboration.

Returning to the *Seven phases of collaboration* by Frey, et al. (2006) (Table 2.3) defines levels that lead to further integration between two or more organizational parties. If one were to ask where on the path to organizational integration are RCP partners, one could say *all*. Based on the interviews, survey selections, and narrative answers, RCPs in New England occupy each of the seven levels at various points in their work. They employ an elastic and vibrant kind of collaboration where they pull together to bolster capacity and then loosen ties to work autonomously. How, when and why they work this way is individualized by RCP. The surveys

support the perception that their strength is the fluidity with which they move back and forth across these steps to act on specific tasks as needed. From respondent E: "it's not a formal [organizational] chart with boxes… [we] get together over different purposes, either we continue, or the work is done and we move on." Such work habits could not exist without high quality communication.

How does frequency and type of communication affect collaboration in these groups?

This research question builds upon the findings of the previous section. The interviews and surveys established that certain RCP activities require more collaboration than others, and those who participate in this type of conservation value certain qualities and conditions for fostering collaboration. The data collected for this question gauges how often these partners interact in person, and by what other means they communicate. Respondents also shared how they saw the role of communication in their collaborative work and if that had any effect (Table 4.14).

This population highly values opportunities to share information, so meetings are important, and the common method of knowledge transfer in this group. These RCPs do not hold many all-partner meetings (Avg. 3-4 per year for 2-3 hours), so the ones they hold matter. They must be focused and action oriented. It is during these meetings where the planning for land conservation and coordination takes place, and partners share updates. When they are not able to meet in person, they stay in touch through email and phone. Evident in both the interviews and the survey was the importance of storytelling. At most all-partner meetings, each organizational representative is given time to share out about their work within the RCP and the work they do with the organization they represent. According to the interviews, sharing stories serves a few

purposes. Storytelling is a form of organizational knowledge transfer (Swap, Leonard, & Shields, 2001). Sharing a story with a group is shared experience and brings the group closer. Respondent G on sharing stories: "they talk a lot between themselves… If there is an opportunity within the structure of the meeting they take it!" Often these stories provide anecdotal evidence partners can use with their own organizations and constituents (Boland et al., 2001). This was demonstrated in the interview process time and again as respondents came alive as they recounted a story from a partner meeting.

People who participate in RCPs appear to be strong communicators, and most rated the communication flow in their own RCP very highly. They did have ideas on how communication and collaboration could be improved, but uniformly, suggestions were capacity based; they need more money and staff time.

Are there best practices among these networks?

Conservation networks share much in the way of overarching goals, but they vary in terms of timelines, membership, project scale and work process. This complicates capturing "best practices." Perhaps rephrasing this to "promising practices" is more helpful. Offering a selection of useful approaches and identify desirable conditions *a la carte*, so to speak, rather than as a prescribed way of doing things, is more practical for such a diverse group.

As identified in the survey, certain practices led to desired outcomes for the participants and their RCPs. Those data were isolated for the RCPs that self-identify as "very effective" (Figure 4.4). There proved to be few differences, but those that do exist may point to promising practices and characteristics that support communication and collaboration. There were four RCP characteristics that correlate with RCPs rated as very effective: (1) the RCP has ten or more partnering organizations; (2) the RCP has a local land trust as a partner; (3) the RCP has a

state/regional land trust as a partner; and (4) the RCP has a river/watershed organization as a partner. There were three practices common to very effective RCPs: (1) the RCP holds three to four all-partner meetings per year; (2) the RCP's all-partner meetings are one to three hours; and (3) the RCP prioritizes their collaboration work to favor parcel projects.

Based on the adaptive management and commons theory literature, including local or regional institutions with site-specific missions about management of the landscape is a benefit in theory, and the data shows that it is a valuable practice (Karl et al., 2012; Perera et al., 2007). The findings that shorter, action-focused meetings that happen regularly every few months are effective is supported by the knowledge transfer and communication literature (Levin & Cross, 2004; Vafeas, 1999).

This discussion can be enhanced by unpacking the smaller differences in characteristics and practice through Conley & Moote's (2003) "Typical Evaluation Criteria." Since this study does not include ecological or socioeconomic measurements, their *process criteria* theme may be reordered and summarized into three headings to aid discussion: (1) Shared and clear goals, which includes goals, vision and written plans; (2) Inclusive participation, which addresses diversity, participation and outreach; and (3) Transparency and consensus, which speaks to transparent decision-making and processes that all participants will regard as just (Conley & Moote, 2003).

Shared and clear goals

It was evident in both the interviews and the surveys that a shared mission and focused goals are essential for RCPs in New England to do their work. This is supported by a review of their mission statements, and activities the respondents identified. While the very effective RCPs

do prioritize parcel project work, all participating RCPs in New England engage in similar activities and share the primary goal of conserving land.

Inclusive participation

Background research on RCPs in New England inferred there would be a variety of individuals and organizations in this collaborative endeavor, and this was confirmed. The interviews provided many anecdotes that demonstrate willingness to reach out, educate, and include others in their mission. Passion, deep local and ecological knowledge, and a diversity of experience was evident in their responses and actions. Most impressive was the dual connection interviewees had between their home organization and the other partners in the RCP. It was apparent that they represent and work for organizations and agencies that support their personal and professional conservation goals.

Transparency and consensus

RCPs in New England are necessarily transparent in their work for legal purposes (e.g. land purchases, estate planning), but also for organizational and collaborative purposes. In both the interviews and narrative survey answers, respondents explained how they check in with other partners about RCP activities as they move forward with projects and work towards agreements through candid discussion. From Respondent J: "...accountability comes up when people sign up for more than they can [do]…we do a lot of follow-up…and help pick up the slack." Again, the words trust and respect were used often to describe how they felt about members of the partnership and how they wish to be viewed by those partners.

When best practices are used at the local scale, does such an approach facilitate effective collaboration at a regional scale?

While the majority (78%) of participants support cross-RCP collaboration in theory, capacity would limit it to conservation projects where the parties have geographic overlap. Supportive or advisory arrangements like mentoring or trainings received more support. Informal information sharing at RCP Network events was the most valued.

For this population, scaling up, or out, may not be desirable. Citing their already taxed capacity, these participants are guarded about activities that would add to their work load. This was made plain in both the interview and narrative survey responses. Put neatly by Respondent C: "People are stretched already." Further, the elastic nature of these collaborative relationships may not scale up if shared goals, inclusivity, and transparency requirements cannot be met (Conley & Moote, 2003).

Discussion

Collaboration is the means by which RCPs reach their conservation goals. They utilize their partnerships to plan, share responsibilities and tasks and offer support both on the individual-representative scale and the organizational scale. Through their representatives, partnering organizations are able to pull together to complete tasks that require the most knowledge and variety of skill sets (ecological assessment, GIS, legal, financial), and then loosen the bond to work autonomously. This fluidity of movement on the collaboration scale bolsters their capacity when necessary and avoids wasting resources otherwise. This ephemeral collaboration activity may be the key to their success.

While participants in these RCPs are interested in knowing about the work happening across the region, and would welcome further coordination for trainings, mentoring, and information sharing, it is unlikely this fluidity would scale up to work across multiple RCPs. Geography, politics, and organizational priorities may alter as boundaries stretch, making local knowledge less applicable and interpersonal bonding difficult. People working across RCPs would not have as much shared background and culture, so it would be more effort, taxing and already burdened system. If cross-RCP collaboration (e.g. a collaboration between two entire networks over a very large land area) were to move forward, it would work best with RCPs that share geographic overlap and have similar characteristics and missions according to respondents.

In Chapter Two, the problems of scale – of geographic area, time length of projects, and capacity of organizations – challenges landscape conservation initiatives. As described in the previous section, RCPs in New England may not scale up as one entity, but their presence as multiple networks across New England landscape has a scaling effect and addresses the problem of conservation at different scales. Each RCP covers from small patch ecosystem scale up to matrix ecosystem scale at around 10,000 acres up to roughly a million acres (Harvard Forest Arc GIS Data, 2014). They concern themselves with the conservation issues in their own area, but as a network of networks, they cover the entire region (Labich et al., 2013; Olsson, Folke, & Hahn, 2004; Poiani et al., 2000). RCPs cover the small patch ecosystems through their partners, which may only concern themselves with small areas of land and/or specific species. By collaborating, they create "functional landscape type[s]," meaning they provide "adequate special context, configuration, and connectivity to conserve regional scale species with or without explicit consideration of biodiversity at finer scales" (Poiani et al., 2000, p. 136). These networks of people work together to create networked lands that provide corridors for charismatic megafauna

or at the very least provide "stepping stones spread over many regions to protect migratory species such as certain birds, insects and bats" (Poiani et al., 2000, p. 137).

Boundary spanning participants in RCPs provide communication infrastructure; the link in the transfer of theoretical knowledge to practice through their networks. As explained in Chapter Two, getting theory applied on the ground and assessed has been difficult. Through the formal and informal knowledge transfer activities in RCPs, applications for technologies like GIS mapping and educational practice like woods forums have spread across the region.

Boundary spanning aids the RCP Network in three ways: (1) strengthens relationships between participants, (2) adds value to knowledge and facilitates transfer of tacit knowledge, and (3) ensures institutional memory through knowledge sharing and retelling of anecdotes across geographic and institutional boundaries.

Regional Conservation Partnerships (RCPs) are an embodiment of adaptive co-management. They are socio-ecological networks that consider functional ecosystems that provide habitat for wildlife but also ecological services for humans. They are co-managed through the experience and knowledge of stakeholders and managers with diverse backgrounds that operate in different sectors and at different scales and influence policy and theory (Olsson, Folke, & Berkes, 2004; Poiani, Richter, Anderson, & Richter, 2000; Wyborn & Bixler, 2013). This practice creates feedback loops between local, social (human systems) and the ecosystems they occupy and value. Such conservation networks link credible science, local knowledge, practical skill sets and financial capital for more effective conservation (Rickenbach et al., 2011). The human and natural systems are considered together which gives both systems greater resilience (Olsson, et al. 2004).

Future Research

As demonstrated in this dissertation, Regional Conservation Partnerships (RCPs) are more than ad hoc coalitions for land conservation, they are knowledge transfer centers, an embodiment of landscape ecology theory, and a movement. An RCP research agenda should include investigations of how knowledge travels through such networks, how these people and networks connect at different scales, and test the practice's replicability and sustainability as a tool for reaching conservation goals. RCPs in New England provide a multitude of opportunities for research. My research connects well to three possibilities: (1) Exploration of knowledge transfer and communication infrastructure in RCPs; (2) Social network analysis of RCPs with special emphasis on purposeful connections; and (3) an RCP Efficacy Index.

Knowledge Transfer and Communication Infrastructure in RCPs

A significant component of the acquired knowledge by those engaged in conservation projects may be tacit and not easily articulated, which can raise special communication challenges (Argote & Ingram, 2000; Nonaka, 1994). Knowledge transfer (KT), a theory of knowledge sharing, has migrated from industry to ecology and is well suited to meet these challenges (Buse & Perera, 2007; Hansen, 2002; Reed & Simon-Brown, 2007). In the sectors of economics, business and manufacturing, KT involves absorption at the individual level, but, the goal is to transcend the individual, and make their knowledge *organizational knowledge* (Argote, McEvily, & Reagans, 2003). Perera et al. (2007) first applied the term "Knowledge Transfer" to forest ecology in 2006. Their primary concern was lack of connection between knowledge creators and those in the field. RCPs mitigate this problem in four ways: (1) ideas are shared through networks and 'up' the hierarchy; (2) knowledge sharing moves field concepts into policy

and abstract concepts into field practice; (3) well-formed networks can create feedback loops; and (4) if the network creates institutional memory, the knowledge base can inform decision making across decades. This allows ideas and goals to be resilient against shocks such as elections, policy or staff changes, as well as long term effects like climate change. Building a deliberate communication infrastructure for land conservation methods, technology and theory is an important step for the inclusion of stakeholders and local ecological knowledge, thus making the process truly collaborative (Buse & Perera, 2007; Kemmis, 2002).

Social Network Analysis of RCPs with Special Emphasis on Deliberate Connections

This population is well suited for a deeper analysis of their work using the theories and tools of social network analysis. Social network analysis is a strategy for investigating social structures through the use of network theory and attempts to measure closeness and connectivity between parties (Scott, 2012). Strong social networks create a culture of knowledge sharing, and there may be a threshold of network activity that produces the best results.

Relationships are an essential component of knowledge sharing between individuals in networks, and influence the level of engagement of individuals in the network and the knowledge they access and hold (Crona & Bodin, 2006). As discussed previously in the chapter, RCPs have a fluidity to their collaboration and closeness. Their ties to each other are strong or weak based on the situation and the purpose of the tie. Ties are likely looser across the RCP Network. Recent research suggests that while strong ties equate with familiarity and facilitate the transfer of tacit knowledge more than codified knowledge, weak ties, which usually exist between less familiar and also less similar members of a network, may be best for sharing new

ideas and diverse information (Burt, 2001). The former may promote redundancies, the latter dynamism and resilience (Prell et al., 2009).

RCP Efficacy Index

In this application, an index would be a score determined through a rubric that considers the diversity of actions that occur within RCPs. Understanding how these networks function and what conditions are present when they have the most leverage will be essential to maintaining and promoting stakeholder involvement in conservation projects (Prell et al., 2009). Indices are useful for data reductions to help manage the varied and numerous variables in this complex system, and can provide a measurement that is more easily correlated with other data used by this population (Schneider & Cheslock, 2003; Van Fleet, Kittredge, Butler, & Catanzaro, 2012). The index score would represent how closely each RCP meets the best practices identified across the system.

Strong contenders for guiding the creation of such a rubric would be the material from the *Typical evaluation criteria* provided by Conley and Moote (2003) (Table 2.4), and the summarized examples of adaptive co-management processes outlines by Olsson et al. (2004 (Table 2.1). This process would also be an opportunity to revisit the content of the exhibits used in the interview phase of this research (Table 3.2). The index could be used to correlate data such as number of acres conserved, but also with other indices developed to measure landowner perceptions, ecological integrity, or wildlife (Andreasen, O'Neill, Noss, & Slosser, 2001; Landres, Verner, & Thomas, 1988; Van Fleet, Kittredge, Butler, & Catanzaro, 2012).

Closing

Ecological systems are complex, operate at different scales, and require an extended temporal worldview. Access to rigorous and relevant ecological and social information is critical, and should also be informed by local knowledge that is trustworthy, relevant, and understandable (Kemmis, 2002; Liu, et al., 2008; Ostrom, 1999). Contemporary conservation challenges require strategies that bring stakeholders with different viewpoints together (Daniels & Walker, 2001). RCPs are essentially social communities that do this by crossing content boundaries, physical barriers, and hierarchical levels. They also provide opportunities to gather unique information and consider diverse perspectives while completing tasks (Briske, 2012; Reagans & McEvily, 2003; Rickenbach et al., 2011; Zander & Kogut, 1995). Interpersonal networks, range (both subject and geographic), and diversity of individuals in the network provide opportunities to access different knowledge tools, allowing for connection to a diversity of audiences (Reagans & McEvily, 2003).

This research found that RCPs are organizational networks whose members act cooperatively to connect and conserve parcels of land to create large contiguous ecosystems that benefit wildlife and people. Information sharing in these networks is not only required for the work, it is a secondary benefit of the work and creates communication infrastructure that allows practice, tools and policy to be exchanged across political and organizational boundaries. Further, very effective RCPs employ promising practices that build relationships and trust, they set clear and common goals, they respect one another's time and experience, and practice inclusive and transparent decision-making. While individual networks may not be scalable, the dozens of partnerships spread across New England have a scaling effect.

The real value of a RCP is that action is built upon the experience of the participants. Put another way, the experience of the participants functions as the institutional memory of the network. These activities further Perera et al.'s (2007) suggestion that if this is maintained, it can influence decision making well into the future. In line with complex adaptive systems theory, RCPs may be perceived as leverage points to affect positive change in these social-ecological landscapes (Meadows, 2008; Olsson, Folke, & Hahn, 2004; Orendorff, 2007).

The lesson RCPs may learn from this research is that ongoing reflection and assessment should be an integral part of their operations rather than considering strategic planning as a separate activity. Incorporating organizational planning alongside land planning would boost effectiveness, maintain communication infrastructure, and ensure institutional memory. The lesson for knowledge developers, academics, and researchers is to expand what the concepts of scale and inclusion can mean: extend the feedback or response loop to users at different scales and create awareness about the meaning of potential use of tools, the potential use of information, or training on new tools. One or more of these goals may be achieved simultaneously with RCPs that continue to pool their resources in their local region while staying in touch with the meta RCP Network through conferences and boundary spanners (Aldrich & Herker, 1977; Malhotra, 2002).

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Appendices

List of Appendices

Appendix A: Interview Exhibit 2 - Levels of Organizational Integration Rubric (LOIR) (Woodland Associates, 2012)

Levels of Organizational Integration Rubric (LOIR)
Worksheet

Date: _____

Your Organization/Team:_____

Other Organization/Team:_____

Rate the Current (C box) and Projected (P box) levels of integration between the two organizations in each of four domains. Place a number in the C or P box in the scoring row with the level of integration you identify. You may use decimals to indicate placement in between full levels (e.g., 3.5)

Level of Integration	Purpose	Strategies and Tasks	Leadership and Decision Making	Inter-professional & Communication
Independent (None) 0	• None identified	• Shared strategies and tasks do not exist	• No shared leadership or decision-making structures	• Non-existent or very infrequent and unplanned
Networking 1	• Create a web of communication • Identify and create a base of support • Explore interests	• Loose or no shared structures • Flexible, roles not defined • Few clear tasks	• Non-hierarchical • Flexible	• Very little inter-professional conflict • Communication among members is planned, but infrequent
Cooperating 2	• Work together to ensure tasks are done • Leverage or raise money	• Member links are advisory in nature • Few structures and shared tasks • Distinct organizational missions	• Non-hierarchical, decisions tend to be low stakes • Facilitative leaders, often voluntary • Several people form a "go-to" hub	• Some degree of personal commitment and investment • Minimal inter-professional conflict • Communication among members is clear, but largely informal
Partnering 3	• Share resources to address common issues • Organizations remain autonomous but support something new • To reach mutual goals together	• Strategies / tasks are developed and maintained • Tasks are delegated • Documented overlaps in organizational mission	• Central leadership group identified • Partners share equally in decision-making process • Decision-making mechanism are in place	• Some inter-professional conflict • Communication system and formal information channels developed • Evidence of problem-solving and productivity
Unifying 4	• Extract money from existing organizations and merge resources to create something *new* • Commitment for a long period of time to achieve short and long-term objectives	• Formal structure to support strategies and tasks • Specific short and long term strategies and tasks defined	• Strong, visible leadership • Committees and subcommittees formed • Roles and responsibilities clear and designated	• High degree of commitment and investment • Possibility of inter-professional conflict is high • Communication is clear, frequent, and prioritized

	Overall Purpose		**Overall Strategies and Tasks**		**Overall Leadership & Decision Making**		**Overall Interprofessional & Communication**	
Rating	C	P	C	P	C	P	C	P

Appendix B: Interview Exhibit 1 – Levels of Linkage Model Summarized (Reed & Simon-Brown, 2007)

Summary of the three main levels of linkage among knowledge transfer participants showing increasing complexity, from cooperation to partnership.

Phase	Criteria
Cooperation	• Participants convene and share activities • Roles undefined • Informal • Temporary
Collaboration	• Shared mission and goals • Shared resources (and staff) • Formal agreements • Occurs regularly
Partnership	• Association yields new identity • Integration of resources and staff • Semi-permanent/ permanent • Trust and consensus based decision making

Appendix C: Interview Exhibit 3 – RCP Phase Model Adapted from Labich 2013 (Labich, 2013a).

Phase	Criteria
Emerging	• Partners convene • Host organization/ partner • Geographic parameters set • Organizational structure outlined • Mission and goals established • Relationships negotiated within network
Maturing	• Conservation assessments • Mapping/ GIS • Strategic planning • Execute land projects • Increase capacity and funding
Conserving	• Relationships negotiated with outside • Connect with government and policy makers • Practices established • Capital campaign • Expand to multiyear planning and projects • (Assessment?)

Appendix D: IRB Approval Letter

Email:

Online IRB Application Approved:(Draft title) Communication Infrastructure in Collaborative Conservation Networks

June 22, 2013, 10:05 am

Inbox x

[redacted]**@antioch.edu** 6/22/13

to [redacted]@antioch.edu

Dear Jill Weiss ,
As Chair of the Institutional Review Board (IRB) for 'Antioch University New England, I am letting you know that the committee has reviewed your Ethics Application. Based on the information presented in your Ethics Application, your study has been approved.
Your data collection is approved from 07/01/2013 to 10/01/2013. If your data collection should extend beyond this time period, you are required to submit a Request for Extension Application to the IRB. Any changes in the protocol(s) for this study must be formally requested by submitting a request for amendment from the IRB committee. Any adverse event, should one occur during this study, must be reported immediately to the IRB committee. Please review the IRB forms available for these exceptional circumstances.
Sincerely,
Katherine Clarke

Appendix E: Letter of Agreement

Letter of Agreement
Research Pertaining to the Regional Conservation Partnerships Network
May 24, 2013

Parties

Researcher: Jill Weiss, PhD Candidate, Antioch University New England
Committee Chair: Charles Curtin, PhD, Antioch University New England
Committee member: Joy Ackerman, PhD, Antioch University New England
Committee Member: Michael Hutton-Woodland, PhD, Woodland Associates
Research Subject: Regional Conservation Partnerships Network (RCPN)
RCPN Representative: Bill Labich, Highstead

Purpose

This qualitative research study is a portion of a dissertation requirement for a doctorate in Environmental Studies at Antioch University New England.

The purpose of this study is to explore knowledge transfer activity in conservation networks, map out network structure and tie strength between parties, identify knowledge-barrier spanning activity, identify what conditions are present for successful activities of this type, and see if there is potential to positively correlate this activity with the success of complex and/or landscape scale conservation projects.

The relative newness and geographic scale of the RCPN is unique and of interest to myself and the fields of Landscape Ecology, Science Communication and Collaborative Adaptive Management. Ideally, one or more publishable academic manuscripts will result from this study as well as a report for participants.

Scope and Objectives

Questionnaires – Short, for entire RCPN population (as available), distributed via email or online interface (or US Mail or in person on request). Demographic, organizational and network information, plus questions about experiences with RCPs, the RCPN, knowledge sharing habits and activities.

Focus Interviews – at least 10, up to 20. Detailed questions about knowledge sharing, network connections and other activities.
Related Persons interviews – General background and activity interviews with key professionals who interact with the network.

Meeting Observations – Attend small and large meetings as able to observe how the group works. [RCP representative to provide information about meetings as available]

Observations on LinkedIn Discussion Board – Observe interactions related to knowledge sharing on boards. Reserve the opportunity to ask questions to the group using this interface during data analysis phase.

Costs

It is estimated the research project will cost ~$3000 in travel, lodging and supplies. The participants and representative incur no cost.

Operational Structure

The researcher is responsible for making all arrangements for interviews and other communications, and is chiefly responsible for the meeting of research objectives.

The representative agrees to make known participant names and contact information available, will assist in distribution of consent information, will notify researcher of meetings and major actions, and will liaise with the group as needed.

Term and Termination

Data collection will take place over at least 5 months (June - October 2013) and no more than 8 months (June 2013 - January 2014). Reporting will be within 10 months (April 2014).
Termination of project can take place at any point with the following conditions:
(1) Mutual agreement.
(2) Subject initiated: after exit interview with researcher and 1 committee member.
(3) Researcher initiated: after exit interview with researcher (and 1 committee member if requested by subject).

By signing, we agree to cooperate, as described above, to meet the objectives of the research study.

[redacted]
Bill Labich, RCPN Representative — Date 5/13/13

[redacted]
Jill Weiss, Researcher — Date 5/29/13

[page 2 of 2]

Appendix F: Letter of Consent

ANTIOCH UNIVERSITY
NEW ENGLAND

Letter of Consent

Project title:

COMMUNICATION INFRASTRUCTURE IN COLLABORATIVE CONSERVATION NETWORKS (Draft title)

Researcher:

Jill Weiss, ES PhD Candidate, Antioch University New England

Dissertation Committee:

Peter Palmiotto, PhD
Joy Ackerman, PhD
Michael Hutton-Woodland, PhD

The Study.

The purpose of this study is to find out about how regional conservation networks communicate, collaborate, share knowledge, and apply what they learn. To do this, the researcher will ask members of the Regional Conservation Partnership Network (RCPN) about how they communicate and collaborate with each other, within their RCP, and across the wider RCPN, and about their goals for regional conservation. The researcher will map out network structure, and see if there is potential to link the above activities and the success of conservation projects.

This research study is a portion of Jill Weiss' doctoral studies in Environmental Studies at Antioch University New England.

You are invited to be a part of this study because you participate in the RCPN. Please read this letter and ask questions before you agree to be in the study.

As a participant in the study, you may be asked to take part in the following:

(1) Survey
(2) Interview
(3) RCPN Event Observation

Some participants will be randomly selected for an interview. The researcher will arrange a time and place convenient for the participant. Many will be asked to complete a survey on line or by US Mail. The researcher will make general observations at RCPN Events and view the RCPN LinkedIn message board.

Risks and Benefits.
There are no known physical or financial risks. Research methods will not expose participants to greater risks than they would normally experience in the course of their work. A risk is that you might share information that you prefer to keep private. To protect your identity, the researcher will not name the participants in this study in reports that result from it, and will not share identifying information with anyone from your organization or the greater network. Participants may benefit through improved communication and understanding the scope and connectivity of the RCPN, and learn new practices for reaching their conservation goals.

Though the purpose of this study is to complete a formal research project, Jill Weiss may also include the data and results of the study in future scholarly publications and presentations. This confidentiality agreement will be effective in all cases of data sharing.

Statement of Consent.
Participation in this study is voluntary. I may refuse to enter it or may withdraw at any time without creating any harmful consequences to myself. I understand also that the researcher may drop me at any time from the study.

I understand that this study is of a research nature. It may offer no direct benefit to me.

This study was discussed with me by Jill Weiss and/or Bill Labich. If I have further questions, I can contact the researcher, Jill Weiss, Dr. Peter Palmiotto, the Dissertation Committee Chair, or the RCPN Representative, Bill Labich.

I have read the above information and received answers to my questions. I agree to participate in the study.

Print Name: _____

Sign:_____ Date:_____

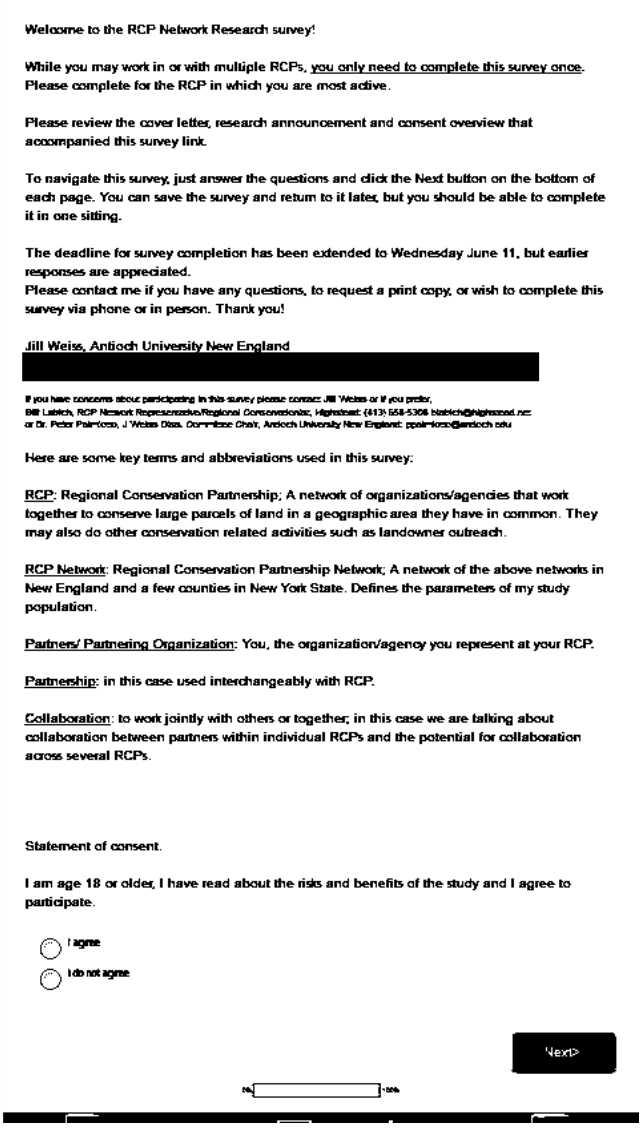
Permission for audio recording:
May I record our interview?

Yes____ No____

Contact Information.
Please feel free to ask questions now or in the future.
Jill Weiss, Researcher: [redacted]
Dr. Peter Palmiotto, Dissertation Committee Chair (AUNE): [redacted]
Bill Labich, RCPN Representative/Highstead: [redacted]

If you have any questions about your rights as a research participant, you may contact Dr. Catherine Clarke, [redacted] Chair of Antioch University New England's Internal Review Board.

Appendix G: Online Consent and Survey



Welcome to the RCP Network Research survey!

While you may work in or with multiple RCPs, you only need to complete this survey once. Please complete for the RCP in which you are most active.

Please review the cover letter, research announcement and consent overview that accompanied this survey link.

To navigate this survey, just answer the questions and click the Next button on the bottom of each page. You can save the survey and return to it later, but you should be able to complete it in one sitting.

The deadline for survey completion has been extended to Wednesday June 11, but earlier responses are appreciated.
Please contact me if you have any questions, to request a print copy, or wish to complete this survey via phone or in person. Thank you!

Jill Weiss, Antioch University New England

[redacted]

If you have concerns about participating in this survey please contact Jill Weiss or if you prefer,
Bill Labich, RCP Network Representative/Regional Conservationist, Highstead: (413) 558-5308 blabich@highstead.net;
or Dr. Peter Pain-Coss, J Weiss Diss. Committee Chair, Antioch University New England: ppain-coss@antioch.edu

Here are some key terms and abbreviations used in this survey:

RCP: Regional Conservation Partnership; A network of organizations/agencies that work together to conserve large parcels of land in a geographic area they have in common. They may also do other conservation related activities such as landowner outreach.

RCP Network: Regional Conservation Partnership Network; A network of the above networks in New England and a few counties in New York State. Defines the parameters of my study population.

Partners/ Partnering Organization: You, the organization/agency you represent at your RCP.

Partnership: in this case used interchangeably with RCP.

Collaboration: to work jointly with others or together; in this case we are talking about collaboration between partners within individual RCPs and the potential for collaboration across several RCPs.

Statement of consent.

I am age 18 or older, I have read about the risks and benefits of the study and I agree to participate.

I agree
I do not agree

Next>

Survey Questions from the Qualtrics Interface
Note: "Survey Logic", meaning programing that routed a respondent to the next question based on their answer, is highlighted in blue and grey.

WELCOME
Q3 Statement of consent. I am age 18 or older, I have read about the risks and benefits of the study and I agree to participate.

- I agree (1)
- I do not agree (2)

If I do not agree Is Selected, Then Skip To End of Survey

Q4 Please select the RCP in which you are most active from the drop down menu

- ❍ Belknap Range Conservation Coalition (1)
- ❍ Chateaugay Notown Conservation Project (2)
- ❍ Chittenden County Uplands Conservation Project (3)
- ❍ Cold Hollow to Canada (4)
- ❍ Down East Research and Education Network (5)
- ❍ Fairfield County Regional Conservation Partnership (6)
- ❍ ForestWorks! (7)
- ❍ Forever Farmland Initiative (8)
- ❍ Friends of the Silvio O. Conte National Fish and Wildlife Refuge (9)
- ❍ Great Bay Resource Protection Partnership (10)
- ❍ High Peaks Initiative (11)
- ❍ Kennebec Woodland Partnership (12)
- ❍ Keeping Maine's Forests (13)
- ❍ Litchfield Hills Greenprint Collaborative (14)
- ❍ Lower Connecticut River and Coastal Region Land Trust Exchange (15)
- ❍ Lower Penobscot Watershed Coalition (16)
- ❍ Mahoosuc Initiative (17)
- ❍ Mass-Conn Sustainable Forest Partnership (18)
- ❍ MA-VT Woodland Partnership (19)
- ❍ Mt. Agamenticus to the Sea Conservation Initiative (20)
- ❍ Newfound Land Conservation Partnership (22)
- ❍ North Quabbin Regional Landscape Partnership (23)
- ❍ Orange County Headwaters Project (24)
- ❍ Quabbin to Cardigan Partnership (25)
- ❍ Quiet Corner Initiative (26)
- ❍ Rensselaer Plateau Alliance, Inc. (27)
- ❍ Rhode Island Woodland Partnership (28)
- ❍ River Link (29)
- ❍ Salmon Falls Watershed Collaborative (30)
- ❍ Sandy Brook Conservation Corridor (31)
- ❍ Southern New England Heritage Forest Partnership (32)
- ❍ Staying Connected (33)
- ❍ Taunton River Coalition (34)
- ❍ Taylor Valley Conservation Project (35)
- ❍ Twelve Rivers Conservation Initiative (36)
- ❍ Upland Headwaters Alliance (37)
- ❍ West Suburban Conservation Council (38)
- ❍ My RCP is not listed here (39)

Answer If Please select the RCP in which you are most active from the drop down menu My RCP is not listed here Is Selected

Q5 Type your RCP's name here:

Q6 Do you serve any other RCPs?
- ❍ Yes (1)
- ❍ No (2)

If No Is Selected, Then Skip To Are you the coordinator of your RCP?

Q7 Please check your additional RCPs.
- ❑ Belknap Range Conservation Coalition (1)
- ❑ Chateaugay Notown Conservation Project (2)
- ❑ Chittenden County Uplands Conservation Project (3)
- ❑ Cold Hollow to Canada (4)
- ❑ Down East Research and Education Network (5)
- ❑ Fairfield County Regional Conservation Partnership (6)
- ❑ ForestWorks! (7)
- ❑ Forever Farmland Initiative (8)
- ❑ Friends of the Silvio O. Conte National Fish and Wildlife Refuge (9)
- ❑ Great Bay Resource Protection Partnership (10)
- ❑ High Peaks Initiative (11)
- ❑ Kennebec Woodland Partnership (12)
- ❑ Keeping Maine's Forests (13)
- ❑ Litchfield Hills Greenprint Collaborative (14)
- ❑ Lower Connecticut River and Coastal Region Land Trust Exchange (15)
- ❑ Lower Penobscot Watershed Coalition (16)
- ❑ Mahoosuc Initiative (17)
- ❑ Mass-Conn Sustainable Forest Partnership (18)
- ❑ MA-VT Woodland Partnership (19)
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- ❑ Orange County Headwaters Project (24)
- ❑ Quabbin to Cardigan Partnership (25)
- ❑ Quiet Corner Initiative (26)
- ❑ Rensselaer Plateau Alliance, Inc. (27)
- ❑ Rhode Island Woodland Partnership (28)
- ❑ River Link (29)
- ❑ Salmon Falls Watershed Collaborative (30)
- ❑ Sandy Brook Conservation Corridor (31)

- ❑ Southern New England Heritage Forest Partnership (32)
- ❑ Staying Connected (33)
- ❑ Taunton River Coalition (34)
- ❑ Taylor Valley Conservation Project (35)
- ❑ Twelve Rivers Conservation Initiative (36)
- ❑ Upland Headwaters Alliance (37)
- ❑ West Suburban Conservation Council (38)
- ❑ Other: (39) _____

Q8 You may comment about or clarify your selection(s) above, here.

Q9 Are you the coordinator /primary contact of your RCP?
- ❍ Yes (1)
- ❍ No (2)

If No Is Selected, Then Skip To End of Block

Q10 What year was your RCP formed?
- ❍ 2014 (1)
- ❍ 2013 (2)
- ❍ 2012 (3)
- ❍ 2011 (4)
- ❍ 2010 (5)
- ❍ 2009 (6)
- ❍ 2008 (7)
- ❍ 2007 (8)
- ❍ 2006 (9)
- ❍ 2005 (10)
- ❍ 2004 (11)
- ❍ 2003 (12)
- ❍ 2002 (13)
- ❍ 2001 (14)
- ❍ 2000 (15)
- ❍ 1999 (16)
- ❍ 1998 (17)
- ❍ 1997 (18)
- ❍ 1996 (19)
- ❍ 1995 (20)
- ❍ 1994 or earlier (21)

Q11 Rank the priorities of your RCP. (move slider for each)
_____ Fundraising (1)
_____ Coordinating local conservation planning (2)
_____ Parcel projects (3)
_____ Conservation services to municipalities (4)
_____ Conservation services to landowners (5)
_____ Other: (6)

Q12 Is your RCP guided by a Regional Conservation Plan?
- ❍ Yes (1)
- ❍ No (2)
- ❍ I don't know (3)

If I don't know Is Selected, Then Skip To How many partners/ organizations belo...

Answer If Is your RCP guided by a Regional Conservation Plan? Yes Is Selected

Q13 How recently was this plan completed?
- ❍ Currently in development or review (1)
- ❍ 2013 or sooner (2)
- ❍ 2 -5 years ago (3)
- ❍ 6-10 years ago (4)
- ❍ More than 10 years ago (5)

Q14 How many partners/ organizations belong to your RCP? (Select from drop down menu.)
- ❍ 2 (1)
- ❍ 3 (2)
- ❍ 4 (3)
- ❍ 5 (4)
- ❍ 6-9 (5)
- ❍ 10-12 (6)
- ❍ 13-15 (7)
- ❍ 16 or more (8)

Q15 How many times per year do all of the partners in your RCP meet?
- ❍ 0 (1)
- ❍ 1 (2)
- ❍ 2 (3)
- ❍ 3-4 (4)
- ❍ 5 (5)
- ❍ 6 or more (6)

Answer If How many times per year do all of your RCP partners meet? 0 Is Selected

Q16 You selected zero meetings per year. Can you share a reason?

If You listed zero meetings pe... Is Not Empty, Then Skip To What types of organizations are partn...

Q17 What is the average length of these all partner meetings?
- ❍ 45 min. or less (1)
- ❍ about 1 hour (2)
- ❍ 2-3 hours (3)
- ❍ Half day (4)
- ❍ All day (5)
- ❍ Multi day (6)
- ❍ Other (7) _____

Q18 What types of organizations are partnered in your RCP? (Check all that apply)
- ❑ Local Land Trust (1)
- ❑ State or Regional Land Trust (2)
- ❑ National Conservation Org (Enter below if a chapter; example: CT Audubon) (3) _____
- ❑ Local Conservation or Environmental Org (4)
- ❑ Watershed/Rivershed Association/Org (5)
- ❑ State Government Agency (6)
- ❑ Federal Government Agency (7)
- ❑ Local Agency (8)
- ❑ Local Government or planning board (9)
- ❑ Independent contractor / Consultant (10)
- ❑ Other (11) _____

Q19 Does your RCP have MOUs or other formal agreements between the partnering organizations?
- ❍ Yes (1)
- ❍ No (2)
- ❍ I don't know (3)

If I don't know Is Selected, Then Skip To What leadership actions are most impo...

Answer If Does your RCP have MOUs or other formal agreements between the partnering organizations? No Is Selected

Q20 Do you wish you had such agreements? Why?

Answer If Does your RCP have MOUs or other formal agreements between the partnering organizations? Yes Is Selected

Q21 For collaboration, are these agreements helpful or a hindrance? In what way?

Q22 What leadership actions are most important for coordinating an RCP? Rank each using the slider.

_____ Select team members who bring real knowledge and expertise (1)
_____ Define goals, roles, timelines, and deliverables clearly (2)
_____ Make full use of collaboration tools/technologies available (3)
_____ Get the team together several times per year for face to face contact (4)
_____ Select partnering organizations that play well with others (5)
_____ Spend more time working together rather than independently (6)
_____ Communicate the process and progress clearly and frequently (7)
_____ Recognize and resolve conflicts quickly (8)
_____ Other: (9)

Q23 What is your RCPs funding source? (Check all that apply)

- ❑ 1 grant (1)
- ❑ Multiple grants (2)
- ❑ Partnering organization contribution(s) (3)
- ❑ Donations from public (4)
- ❑ Government Funding (5)
- ❑ Other: (6) _____
- ❑ Not funded for 2014 (7)
- ❑ Volunteer/ In Kind - based; we do not seek funding (8)

Q24 How much do you agree with this statement?

_____ We have the financial resources needed for this RCPs tasks. (1)

RCP CAPACITY

Q25 What is your role in your RCP's projects? (check all that apply)

- ❑ Observer (1)
- ❑ Leader (2)
- ❑ Key participant (3)
- ❑ Contributor (4)
- ❑ Subject matter expert (5)
- ❑ Sponsor/ Fiscal supporter (6)
- ❑ Other (7) _____

Q26 Which of the following is most important for measuring your RCPs effectiveness?
_____ $ raised (1)
_____ # Acres conserved (2)
_____ # Projects completed (3)
_____ # Landowners reached (4)
_____ # member orgs (5)
_____ # policy maker contacts (6)
_____ Other: (7)

Q27 Based on your selection above, how would you rate the effectiveness of your RCP?
_____ move slider (1)

Q28 How important is each condition for collaboration in your RCP?
_____ Leadership (1)
_____ Partner selection (2)
_____ Process for partner interaction (3)
_____ Clear communication (4)
_____ Shared understanding of goals, roles, timelines, and deliverables (5)
_____ Focus on the right issue or problem (6)
_____ Sufficient funding (7)
_____ Other: (8)

Q29 What frequency do you attend your RCP's all partner meetings per year?
_____ move slider (1)

Q30 Do you participate in any work groups or subcommittees?
❍ Yes (1)
❍ No (2)

Answer If Do you participate in any work groups or subcommittees? Yes Is Selected
Q31 What issues does this group or subcommittee address?

COMMUNICATION AND CONNECTION IN YOUR RCP

Q32 How important are these methods of communication to your RCP work?
❑ _____ Formal presentations (1)
❑ _____ Face-to-Face meetings (2)
❑ _____ Email (3)
❑ _____ Fax/Memorandum (4)
❑ _____ Telephone (5)
❑ _____ Conference call (6)

- ❑ _____ Text messaging (7)
- ❑ _____ Newsletter (8)
- ❑ _____ Social Media/ On line discussion board (9)
- ❑ _____ Skype/video conferencing (10)
- ❑ _____ Other (11)

Q33 How would you rank communication flow between your organization and other partnering organizations in your RCP?

- ❑ _____ move slider (1)

Q34 How important is personal-professional networking for your RCP work?

- ❑ _____ move slider (1)

COLLABORATION AND PARTNERSHIP

Q35 What tasks require collaboration in your RCP? (check all that apply)

- ❑ Information sharing (1)
- ❑ Parcel Project work (2)
- ❑ Creating documents (3)
- ❑ Strategic Planning (4)
- ❑ Training and/or Innovation (5)
- ❑ Solving problems (6)
- ❑ Landowner Outreach (7)
- ❑ Policymaker Outreach (8)
- ❑ Land stewardship / maintenance (9)
- ❑ Other (10) _____

Q36 How do you and your partner organization demonstrate support of the other partners in your RCP?

- ❑ Information sharing (1)
- ❑ Staff or volunteer sharing (2)
- ❑ Provide meeting space (3)
- ❑ Lend expertise/ technical support (4)
- ❑ Equipment or materials loan (5)
- ❑ Event support/ promotion (6)
- ❑ Another in kind service or show of support (7) _____
- ❑ We mainly focus on our own organizations (8)

❑ Answer If How do you and your partner organization demonstrate support of the other partners in your RCP? We focus on our own organizations Is Not Selected

Q37 Can you share an example or anecdote about this kind of support?

Q38 Which qualities are most important for collaboration in your RCP?

❑ _____ The organizations in our RCP allocate the right amount of time to our projects (1)

❑ _____ People involved in our RCP are willing to arrive at a compromise on important aspects of our projects (2)

❑ _____ People working in our RCP trust and respect one another (3)

❑ _____ When the partnership makes major decisions, members confer with their colleagues (4)

❑ _____ People in this RCP understand their roles and responsibilities (5)

❑ _____ There are effective procedures in place to guide the partnership and support collaboration (6)

❑ _____ Other: (7)

THE RCP NETWORK

Q39 Check which RCP meetings you attended or resource types you have used.

❑ Nov 14 2011 Gathering (Wells, ME) (1)
❑ Nov 13 2012 Gathering(Concord, NH) (2)
❑ Nov 13 2013 Gathering (Nashua, NH) (3)
❑ State-specific RCP meetings (4)
❑ Working groups/ focus meetings (5)
❑ Capital campaign or financial training (6)
❑ Strategic planning training (7)
❑ GIS training (8)
❑ Mentoring / Technical assistance (9)
❑ LinkedIn Discussion Board (10)
❑ Publications (Website, newsletter, journal article) (11)
❑ Other: (12) _____
❑ I have not attended these events or used these resources (13)
❑ I was not aware of these events and resources (14)

❑ If I have not attended these e... Is Selected, Then Skip To By what method do you receive informa...If I was not aware of these ev... Is Selected, Then Skip To By what method do you receive informa...

Q40 Do you have any thoughts you wish to share about these experiences and resources?

Q41 By what method do you receive information about the RCP Network and its activities?
- ❑ Face-to-Face (1)
- ❑ Small Meeting (2)
- ❑ Conference style meeting (3)
- ❑ Email (4)
- ❑ Fax/Memorandum (5)
- ❑ Telephone (6)
- ❑ Conference call (7)
- ❑ Text messaging (8)
- ❑ Website (9)
- ❑ Social Media/ On line discussion board (10)
- ❑ Skype/video conferencing (11)
- ❑ Other: (12) _____
- ❑ I don't recall receiving RCP Network information (13)

❑ Answer If By what method do you receive information about the RCP Network and its activities? I don't recall receiving RCP Network information Is Not Selected

Q42 Information shared in the RCP Network is (select all that apply)
- ❑ Of sufficient detail (1)
- ❑ Relevant (2)
- ❑ Reliable (3)
- ❑ Received in a timely manner (4)
- ❑ Critical to RCP success (5)
- ❑ Other: (6) _____
- ❑ Not Applicable (7)

Q43 Is it desirable to collaborate with another RCP on a project?
- ❍ Yes (1)
- ❍ No (2)

❑ Answer If Is is desirable to collaborate with another RCP on a project? Yes Is Selected

Q44 What type of project(s)?

❑ Answer If Is is desirable to collaborate with another RCP on a project? No Is Selected

Q45 Why not?

Q46 What one change would most improve communication and networking to support collaboration both within your RCP and across the RCP Network?

Q47 Is there anything about collaboration in your RCP work that you want to share?

DEMOGRAPHICS

Q48 We are almost done! We just have a few more demographic questions to help us organize the data. Employer/ Partner Organization type

- ❍ Sole proprietor / contractor (1)
- ❍ Local land trust (2)
- ❍ Regional land trust (3)
- ❍ State land trust (4)
- ❍ National Conservation org (5)
- ❍ State Chapter of a larger org (6)
- ❍ Watershed/ Rivershed Association/ Organization (7)
- ❍ State agency (8)
- ❍ Federal agency (9)
- ❍ Local government commission or planning board (10)
- ❍ Volunteer (11)
- ❍ Other (12)

❑ If Sole proprietor / contractor Is Selected, Then Skip To What is your current age? (U.S. Census) If Volunteer Is Selected, Then Skip To What is your current age? (U.S. Census)

❑ Answer If Employer/ Partner Organization type Other Is Selected

Q49 Since you selected "other", can you characterize your organization type?

Q50 How many people does your partnering organization employ?

- ❍ 2-5 (1)
- ❍ 6-10 (2)
- ❍ 11-50 (3)
- ❍ 51-100 (4)
- ❍ 101-1000 (5)
- ❍ Over 1000 (6)
- ❍ No paid, but we have # volunteers: (7) _____

Q51 What is your level in your partnering organization?

- ❍ Self – Employed (1)
- ❍ Executive/ VP or above (2)
- ❍ Director (3)
- ❍ Management (4)
- ❍ Junior level (5)
- ❍ Volunteer (6)
- ❍ Other (7) _____

Q52 What is your current age?

- ❍ Less than 20 (1)
- ❍ 20 to 24 (2)
- ❍ 25 to 34 (3)
- ❍ 35 to 44 (4)
- ❍ 45 to 54 (5)
- ❍ 55 to 64 (6)
- ❍ 65 or over (7)

Q53 Gender

- ❍ Male (1)
- ❍ Female (2)

Q55 May I contact you for clarification or follow up?

- ❍ Yes (1)
- ❍ No (2)

❑ Answer If May I contact you for clarification or follow up? Yes Is Selected

Q54 Contact Information

- ❑ Name (1)
- ❑ Email (xxxx@xxxx.xxx) (2)
- ❑ Phone (XXX-XXX-XXXX) (3)

Appendix H: Interview Guide

J. Weiss/ Antioch University New England

Interview Guide – COMMUNICATION INFRASTRUCTURE IN COLLABORATIVE CONSERVATION NETWORKS (Draft title)

v. 8/12/13

Note: This is an interview guide for a survey of communication, knowledge sharing, collaboration and networking in the Regional Conservation Partnership Network (RCPN). Please do not reproduce or share this document. The nature of semi-structured/ open ended interviews is that we may take these questions in a different order, add or remove themes or diverge from this path completely, depending on the live exchange between the interviewer and the co-researcher/participant/respondent. If you have questions, please contact Jill Weiss at [redacted]

Part 1: Introduction

Before interview start/recording: explanation of procedure, consent form, statement about recording, confidentiality and proprietary information. Ask for verbal consent for recording.

- Start recording -

<Interviewer states date, name, affiliation, purpose, current location, present parties, and project rationale>

Please state your name, affiliation/ position and organization.
"Just before we began, _____consented to recoding this interview"

Part 2: Background

Please tell me a little about _____your RCP_____
- What are the member organizations?
- What is the history/ how did this come about?

Part 3: Mission and Goals

Please state your RCPs Mission
- How is this similar/ different form the member orgs' missions?
- Has it changed since the beginning? Do you think it will change?
  - If yes what may be the cause (internal pressure/ external)
- Have you done any strategic planning?
  - Who/How?

Can you describe the RCPs [managing] structure?
- What is your role in that structure?

What are the top three goals of your RCP (in rank order)?

Expand as necessary

Part 4: Communication and Learning

Does your RCP hold meetings?

- What sort (expand)
- How often?
- Where/who hosts?
- Related costs?

Are there other times when members may see each other in person?

- Other work for their organization
- Trainings
- State and local government matters
- Anything else?

Does this RCP hold any retreats or project days?

Use of technology.

- E-mail
- Message board
- Listserv
- Skype
- Conference call
- Adobe connect or webinar etc.

Promotion/outside communication

- Website
- Brochure
- Poster
- Conference presentation
- Other

Discuss knowledge sharing and transfer

- New techniques, technologies, skills laws, etc.
- How do you get new info?
- Where does the learning/ training come from?

Part 5: Collaboration

Several studies have been done to measure how organizations collaborate. I like to walk through a few of the rubrics these authors developed and see where you think your RCP fits.

Review exhibit 1 – Levels of Linkage Model Summarized

Review exhibit 2 – Woodland and Hutton Levels of Organizational Integration Rubric (LOIR)

Discuss/ expand

Last year Bill Labich of Highstead developed a model for gauging the "maturity" of RCPs in New England. Where do you think your RCP fits?

Review exhibit 3 RCP Phase Model Summarized

Discuss/ expand

When you work together – how do you handle dialogue, decision-making, taking action and evaluation…

Dialogue
- Structure discussion in meetings
- Formal/informal sharing?
- Unstructured sharing time?
- All participate?
- Minutes taken?

Decision making
- Part of the regular "business"
- Always face to face?
- Follows established protocol?
- Everyone votes
- Everyone claims/ commits to taking action

Action
- Follow up / accountability
- Actions
  - Coordinated
  - Independent
  - Complex
  - Challenging

- Actions always elated to mission

- Equitable distribution of action

Evaluation

- Collect and Use qualitative/ quantitative data
- Analysis – review of outcomes
- Use performance data for evaluation
  - Vs. hearsay, anecdotes, etc.
- Evaluation results shared with team publically
- Accountability: each makes evidence based improvements

Part 6: About RCPN

Many of the RCPs in this study have been around for a long while. High-stakes coordination of RCP and is relatively new. What are the impacts of this coordination? How would you characterize being a member of this network of networks?

Were you involved in a previous initiative such as…

- Northern Forest alliance
- Wildlands to Woodlands
- Wildlands and Woodlands

When did you become aware of the network and its current form?

How would you characterize your involvement?

- Meetings
- Committees
- Other?

Do you collaborate/talk to, etc. any other RCPs in this network?

Who are your closest collaborators (personal/ professional/ organizational) and how do you know them?

What do you want to find out about other RCPS in this network?

Please share your thoughts on your RCP, the RCPN, and where these collaborations fit in with your conservation work?
After establishing general information, interviewer asks respondent about what sort of information they are interested in getting from the network, and other questions about network culture. This will help form and edit the questionnaire.

What else should I be asking about communication, knowledge sharing and collaboration in RCPs?

[Interview ends with] Who should I interview next?

Appendix I: Interview Exhibit D – List of RCPs

RCP List

	Belknap Range Conservation Coalition
	Chateaugay Notown Conservation Project
	Chittenden County Uplands Conservation Project
	Cold Hollow to Canada
	Fairfield Country Regional Conservation partnership
	Forestworks!
	Forever Farmland Initiative
	Friends of the Silvio O. Conte National Fish and Wildlife Refuge
	Great bay Resource Protection Project
	High Peaks Initiative
	Litchfield Hills Green print Collaborative
	Lower Connecticut River and Coastal Region Land Trust Exchange
	Lower Penobscot Watershed Coalition
	Mahoosuc Initiative
	Mass-Conn Sustainable Forest Partnership
	MA-VT Woodland Partnership
	Mt. Agamenticus to the Sea Conservation Initiative
	Natchaug River Basin Municipal Conservation Compact

	Newfound Land Conservation Partnership
	North Quabbin Regional Landscape Partnership
	Orange County Headwaters Project
	Quabbin to Cardigan Partnership
	Quiet Corner Initiative
	Rensselaer Plateau Alliance, Inc (R. Working Forest Init.)
	Riverlink
	Sandy Brook Conservation Corridor
	Southern New England Heritage Forest partnership
	Staying Connected
	Taunton River Coalition
	Taylor Valley Conservation Project
	Twelve Rivers Collaborative
	Upland Headwaters Alliance
	West Suburban Conservation Council
	Taconics Partnership
	Rhode Island Woodland Partnership
	Kennebec Woodland Partnership
	Salmon Falls Watershed Collaborative
	Down East Research and Education Network

Appendix J: Survey distribution letter – sample

"Reintroduction" email sample

Hi ----------,
I hope this message finds you well.

I contacted you back in August to announce my dissertation research on collaboration and communication in Regional Conservation Partnerships (A copy of the announcement is attached). Since, I have conducted over a dozen interviews across the region and have learned how people and organizations are partnering and leveraging shared skills and strengths to move conservation forward in the Northeast. It is all very inspiring.

I am reaching out now to let you know that we are moving into the last phase of data collection – the surveys – in the next week. I will be sending the link out to you and the other RCP coordinators very soon. We are hoping to get responses from everyone, coordinators, partners and other RCP contributors, who participate in one of the 38 RCPs in our New England study area.

I am hoping you can help by forwarding the link to your RCP's partners. To encourage you, I have added an incentive. If four or more partners in a particular RCP complete the survey, I will send that RCP's coordinator a preview of the initial findings, and a brief analysis of the collaboration capacity of that particular RCP.

I very much appreciate the support I have received from this network of networks so far. Thank you.
Please contact me if you have any questions about the process, and look for my email in the next week.

Very best,
Jill W

(Attachment)

Appendix K: Research announcement letter. (Version from Phase Two, August 2013)

ANTIOCH UNIVERSITY
NEW ENGLAND

Research Announcement
Jill Weiss, ES PhD Candidate
August 2013

Attn: Potential Research Participants
Cc: Bill Labich, RCP Network Representative / Highstead
Peter Palmiotto, Doctorate of Forestry, C.F., Antioch University New England, Dissertation Committee Chair
Joy Ackerman, PhD, Antioch University New England, Committee Member
Michael Woodland-Hutton, PhD, Woodland Associates, Committee Member

Hello,

My name is Jill Weiss. I am a PhD Candidate at Antioch University New England. I may have met some of you over the past two years at various Regional Conservation Partnership (RCP) Network events or through Bill Labich, Highstead's Regional Conservationist, for I have been observing this regional conservation effort for a while. I hope this message finds you well.

I am writing today to announce that data collection for a research study that includes RCPs in the Northeast is starting today, August 2, 2013. This research study is a portion of my doctoral studies in Environmental Studies at Antioch University New England.

The purpose of this study is to find out about how regional conservation networks communicate, share knowledge, and apply what they learn. To do this, I will ask members of the Regional Conservation Partnership (RCP) Network about how they communicate and learn to improve their work in regional conservation. I plan to map out network structure, and see if there is potential to link these activities and the success of conservation projects.

I am alerting you to this study because you participate in an RCP that is part of this network. I will be reaching out to a random sample of RCP coordinators for one-on-one interviews, and then contacting the broader population to complete a questionnaire. These activities will be arranged by me, the researcher, and at the convenience of the participants. I will also attend some RCP Network meetings and read the RCP Network LinkedIn Discussion Board to observe knowledge sharing activity.

Bill Labich of Highstead has agreed to act as the RCP Network Representative. Further details and consent information will be sent under separate cover.

Thank you – I look forward to hearing about your work!

Best, Jill W

If you have any immediate concerns or questions, please feel free to contact me,
Jill Weiss (Researcher): [redacted]
Or if you prefer,
Bill Labich, RCP Network Representative/Regional Conservationist, Highstead: [redacted]

Appendix L: Permissions

Permission from Springer, publisher, to adapt Figure 1.4, "…factors essential for the transfer of forest landscape ecology knowledge…" from Perera, A., Buse, L., & Crow, T. (2006-7). Knowledge transfer in forest landscape ecology: a primer. *Forest Landscape Ecology: Transferring Knowledge to Practice*. Adapted diagram appears on p. 21 of this document.

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July 5, 2016

Springer reference

Forest Landscape Ecology
pp 1-18
Knowledge Transfer in Forest Landscape Ecology: A Primer
Ajith H. Perera, Lisa J. Buse, Thomas R. Crow
© 2006 Springer Science+Business Media, LLC
DOI 10.1007/978-0-387-34280-1_1
Print ISBN 978-0-387-34242-9
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Material to be used: Figure 1.4

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[redacted]
University: Antioch University New England
Purpose: Dissertation/Thesis

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Permission from Michael Hutton-Woodland, author, to reprint Woodland Associates' adaptation of the "Levels of Organizational Integration Rubric (LOIR)" (2012). Reprint appears in Appendix A, p.132 of this document.

Monday June 13, 2016

Michael Hutton-Woodland, PhD
[redacted]

Dear Dr. Hutton-Woodland,

I am a doctoral student at Antioch University New England. I am writing to ask your permission to reprint the following material in my dissertation: the "Levels of Organizational Integration Rubric (LOIR)", attached. The material will be distributed and published as follows:

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3. AURA: Antioch University Repository and Archive and that AURA is an open access archive. http://aura.antioch.edu/

Thank you.
Sincerely,

[redacted]

Jill Weiss
[redacted]

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[redacted]
Author's name and address
Michael Hutton-Woodland
[redacted]
30 June 2016
Date

Company Signature
Woodland Associates
Name of authorized signatory
Principal
Title
Woodland Associates
Company
30 June 2016
Date

Page 1 of 2

Appendix A: Interview Exhibit 2 - Levels of Organizational Integration Rubric (LOIR) (adapted by Woodland Associates, 2012)

Levels of Organizational Integration Rubric (LOIR)
Worksheet

Date: _____

Your Organization/Team: _____

Other Organization/Team: _____

Rate the Current (C box) and Projected (P box) levels of integration between the two organizations in each of four domains. Place a number in the C or P box in the scoring row with the level of integration you identify. You may use decimals to indicate placement in between full levels (e.g., 3.5)

Level of Integration	Purpose	Strategies and Tasks	Leadership and Decision Making	Inter-professional & Communication
Independent (None) 0	• None identified	• Shared strategies and tasks do not exist	• No shared leadership or decision-making structures	• Non-existent or very infrequent and unplanned
Networking 1	• Create a web of communication • Identify and create a base of support • Explore interests	• Loose or no shared structures • Flexible, roles not defined • Few clear tasks	• Non-hierarchical • Flexible	• Very little inter-professional conflict • Communication among members is planned, but infrequent
Cooperating 2	• Work together to ensure tasks are done • Leverage or raise money	• Member links are advisory in nature • Few structures and shared tasks • Distinct organizational missions	• Non-hierarchical, decisions tend to be low stakes • Facilitative leaders, often voluntary • Several people form a "go-to" hub	• Some degree of personal commitment and investment • Minimal inter-professional conflict • Communication among members is clear, but largely informal
Partnering 3	• Share resources to address common issues • Organizations remain autonomous but support something new • To reach mutual goals together	• Strategies / tasks are developed and maintained • Tasks are delegated • Documented overlaps in organizational mission	• Central leadership group identified • Partners share equally in decision-making process • Decision-making mechanism are in place	• Some inter-professional conflict • Communication system and formal information channels developed • Evidence of problem-solving and productivity
Unifying 4	• Extract money from existing organizations and merge resources to create something *new* • Commitment for a long period of time to achieve short and long-term objectives	• Formal structure to support strategies and tasks • Specific short and long term strategies and tasks defined	• Strong, visible leadership • Committees and subcommittees formed • Roles and responsibilities clear and designated	• High degree of commitment and investment • Possibility of inter-professional conflict is high • Communication is clear, frequent, and prioritized
	Overall Purpose	**Overall Strategies and Tasks**	**Overall Leadership & Decision Making**	**Overall Interprofessional & Communication**
Rating	C P	C P	C P	C P

©Woodland Associates (2012)

132

Permission from William Labich, author, to include adaptation of "RCP Phase Model" (Labich, 2013a). Adapted table appears in Appendix C, p.133 of this document.

Wednesday July 13, 2016

William G. Labich
Senior Conservationist
Highstead Foundation
[redacted]

Bill,

Thank you for representing my study population during my doctoral research at Antioch University New England. Today I am writing to ask your permission to include the following adapted material in my dissertation entitled *Collaboration in Conservation Networks: Regional Conservation Partnerships in New England.*
The work is "RCP Phase Model Adapted from Labich 2013", attached (page 2). The material will be distributed and published as follows:

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Thank you.
Sincerely,

[redacted]

Jill Weiss
12 Granite Street Apt. E
Peterborough, NH 03458

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[redacted]
Author's name and address
William Labich
Highstead Foundation
[redacted]
7/13/16
Date

Company Signature
Name of authorized signatory
Title
Company
Date

As it appears on page 133 of the dissertation:

Appendix C: Interview Exhibit 3 – RCP Phase Model Adapted from Labich 2013 (Labich, 2013a).

Phase	
Emerging	• Partners convene • Host organization/ partner • Geographic parameters set • Organizational structure outlined • Mission and goals established • Relationships negotiated within network
Maturing	• Conservation assessments • Mapping/ GIS • Strategic planning • Execute land projects • Increase capacity and funding
Conserving	• Relationships negotiated with outside • Connect with government and policy makers • Practices established • Capital campaign • Expand to multiyear planning and projects • (Assessment?)