DISSERTATION

CREATING A TRIBAL NATIONAL PARK:

BARRIERS THAT CONSTRAIN AND MECHANISMS THAT PROMOTE

COLLABORATIVE AND ADAPTIVE ENVIRONMENTAL MANAGEMENT

Submitted by

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ABSTRACT

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In an era of rapid social and environmental change, frequent public protests and the documented decline of ecosystem health have demonstrated that traditional environmental management approaches are ill equipped to address public concerns and adapt to changing ecosystems. To address these challenges, researchers and communities have combined the concepts of collaboration and adaptation to create adaptive co-management. This approach acknowledges that socio-ecological systems are complex and constantly in flux while emphasizing public participation and collaborative learning as mechanisms to create novel solutions to social and ecological challenges. Adaptive co-management encourages land managers to collaborate with local communities to monitor the health of their relationship and the ecosystems they seek to protect. While in theory, adaptive co-management should allow land managers and communities to learn from previous experiences and explore new alternatives to improve natural resource management, few studies empirically analyze the process and outcomes of this new approach.

I collaborated with the Oglala Sioux Tribe and the National Park Service to evaluate a case study of adaptive co-management in the South Unit of Badlands National Park. Working closely with the Tribe and the Park Service I conducted a participatory evaluation of this collaborative relationship. Data was collected through participant observation, in-depth

interviews and a review of policy documents and local archives. A key academic finding from this study is that while the Tribe possessed fewer resources and less authority than the Park Service, they exercised power in the co-management process because they spoke on behalf of Indigenous knowledge and Native American sovereignty. A key applied finding from this study is that while Tribe and the Park Service share the desire to create the nation's first Tribal National Park in the South Unit, their motivations for this goal vary considerably. To encourage the sustainability of this adaptive co-management effort, the Park Service and the Tribe must iteratively evaluate their relationship, recognize the benefits and challenges of diverse perspectives, and build social networks within and between their collaborating organizations. This case study illuminates mechanisms, such as collaborative learning and the combination of tribal consultation with co-management, that can encourage more equitable and adaptive environmental management in the face of social and environmental change.

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DEDICATIONS

This dissertation is dedicated to my best friend and my biggest champion, John Lovell. Thank you for knowing I can and will accomplish my goals, even when my confidence crumbles. Thank you for being proud of me, even when I'm quaking in my boots. Let's never stop challenging each other to be our best, brightest, and brainiest selves.

To my parents, Wes and Lisa Cobb, thank you for being my first and longest source of inspiration. Dad, I've been happily competing with you since I knew what competition was. You got your doctorate? I got mine. Making you proud is one of my biggest accomplishments. Mom, thanks for teaching me how to be strong, how to be brave, and how to fight for what I want.

And finally, this dissertation is dedicated to Dakota, my happy little hound. Thank you for reminding me that life is bigger than this project by gently demanding carrots, belly rubs, and long walks.

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CHAPTER ONE

ADDRESSING UNCERTAINTY AND INEQUALITY

IN NATURAL RESOURCE MANAGEMENT

In an era of rapid social and environmental change, increasingly uncertain socio-ecological systems and unequal power relations pose significant challenges for federal agencies and indigenous communities. It has become increasingly clear that conventional approaches to environmental management simply cannot address the challenges of socio-ecological uncertainty and socio-economic inequality in the modern era (Kates, et al., 2001; Ludwig, 2001).

The concept of collaborative resource management has emerged over the past three decades. This approach emphasizes the ability of local and indigenous institutions to manage natural resources (Berkes, 1989; Ostrom, 1990). Stakeholder participation and community involvement are considered by many to be key components of sustainable environmental decision-making and management (Reed, 2008; Schultz, Duit, & Folke, 2011; Stringer, et al., 2006). Co-management is designed to encourage stakeholder participation in environmental management, to promote legitimacy, accountability, fairness and transparency between federal agencies and collaborating stakeholders (Berkes, 2010; Bown, Gray, & Stead, 2013). Issues of inclusion, power sharing and joint decision-making are central to the concept of co-management (Balsom, 2001; Paulson et al., 2012).

While in theory co-management should reduce conflict and produce better decisions through collaborative and equitable environmental planning (Bown, et al., 2013; Carlsson & Berkes, 2005; Castro & Nielsen, 2001; Howard & Arthur, 2005; Phillipson, 2002; Pinel, 2013;

Pinkerton, 1994), the practice of co-management is neither inherently collaborative nor equitable. A consistent critique of co-management is that power is often retained by state agencies that structure collaborative policy to resemble consultation, thus marginalizing Indigenous and local perspectives and knowledge (King, 2007; Nadasdy, 2003). The exercise of power and historic power inequities inherent in co-management processes can be a barrier to knowledge exchange and equitable environmental management (Pohl, et al., 2010). In light of these barriers, there is little agreement on whether co-management has worked, and on how to document and monitor the success or failure of these initiatives (Berkes, 2009b).

Adaptive management was conceived as an antidote to two assumptions of conventional top-down federal environmental management: 1) that the ecosystem can be perfectly comprehended, and 2) that the ecosystem will respond predictably to management intervention to prevent instability (Bown, et al., 2013). In their foundational study, Holling et al. (1978) argue that because ecosystems are complex and stability is uncertain the only rational course is to accept uncertainty as a permanent condition, rather than see it as an obstacle to be overcome, and to use an adaptive strategy to assist ecosystems and societies to maintain or recover their resilience as a means to cope with uncertainty. Learning has been identified as a key adaptive strategy. While the learning aspect of adaptive management has been broadly embraced (Armitage et al., 2011; Berkes, 2009a; Leys & Vanclay, 2011; Raymond & Cleary, 2013), adaptive management initiatives are often undermined by ineffective leadership (Fabricius, Folke, Cundill, & Schultz, 2007), risk-aversion by decision-makers (Adger, et al., 2009), and limited stakeholder involvement (Reed, 2008).

Adaptive co-management combines adaptive management and collaborative management to address uncertainty and inequality in natural resource management through learning and

interdependence between stakeholders (Bown, et al., 2013). Adaptive co-management

acknowledges that socio-ecological systems are complex and constantly in flux (Berkes & Jolly,

2002), and emphasizes collaborative learning as mechanism to create novel solutions to socio-

ecological challenges. In theory, adaptive co-management should allow federal agencies and

communities to learn from previous experiences and explore new alternatives to improve natural

resource management and environmental decision-making processes (Armitage, et al., 2011;

Berkes, 2004; Carlsson & Berkes, 2005; Folke, Hahn, Olsson, & Norberg, 2005).

However, few studies provide empirical analysis of the process and outcomes of adaptive

co-management. Bown et al. (2013) argues that while co-management and adaptive co-

management are laudable objectives, they are very difficult to implement in full. For example, if

a community hopes to create more equitable land management through adaptive co-management

with federal and state agencies, they often focus more on the collaborative aspects of

management than on implementing adaptive techniques. To see the social and environmental

changes that accompany adaptive co-management participants must be patient, as these

initiatives often require many years to produce results. Adaptive co-management initiatives are

often difficult to maintain over time. Furthermore, the tools to conceptualize and analyze

adaptive co-management remain strikingly blunt (Carlsson & Berkes, 2005). To date, researchers

have relied on positivist tools such as surveys and focus groups that are designed by academics

to produce data that can be easily published and generalized. However, new research techniques

that emphasize reflexivity and collaborative monitoring may improve our ability to understand

how adaptive co-management processes work (Conley & Moote, 2003). Participatory evaluation

is a research approach that enables participants to iteratively evaluate the objectives and

outcomes of a project and adapt their relationship to the results (Sherman, et al., 2012). In this

dissertation I strive to promote a research process and create research products that enable collaborative learning and strengthen the adaptive capacity of stakeholders in an adaptive co-management process.

Creating a Tribal National Park: A Case Study

Through participatory evaluation and close collaboration with key stakeholders, this dissertation explores a case study of adaptive co-management in the South Unit of Badlands National Park. The South Unit is located on the Pine Ridge Indian Reservation in South Dakota. The land is owned by the Oglala Sioux Tribe (hereafter "the Tribe"), held in trust for the Tribe by the United States federal government, and currently co-managed by the National Park Service (hereafter "the Park Service) and the Tribe as a unit of Badlands National Park.

The Tribe and the Park Service have been co-managing the South Unit of Badlands National Park since 1976 under a memorandum of agreement. The co-management agreement in the South Unit is precedent-setting for two reasons, 1) the original co-management agreement between the Tribe and the Park Service is the first of its kind in the United States, and 2) despite years of distrust and political upheaval, the co-management process between the Tribe and the Park Service has the potential to create the nation's first Tribal National Park in the South Unit.

The Park Service and the Tribe recently completed a general management plan for the South Unit, which proposes as its preferred alternative, the creation of a Tribal National Park on the South Unit. While this proposal requires Congressional approval, it marks a major step forward in the relationship between the Tribe and the Park. The concept of a Tribal National Park was created collaboratively between the Tribe and the Park Service during the general management planning process. The planning process featured a variety of adaptive co-management mechanisms including social learning, reciprocity and a strong social network.

Through social learning the general management plan combined the indigenous stewardship practices of the Tribe with the bureaucratic management approach of the Park Service to create novel solutions to pressing social and environmental challenges.

In this dissertation I capitalize the word Tribe when referring to the Oglala Sioux Tribe and Tribal when referring to the Tribal National Park and the knowledge held by the members of the Tribe. I also capitalize the name Lakota as this is the proper name that members of the Tribe call themselves. I do not capitalize the terms tribal or indigenous when they refer to multiple tribes or to an indigenous knowledge system.

Participatory Evaluation: A Method to Promote Adaptive Co-Management

The study of adaptive co-management involves more than the assessment of success or failure; it assesses the change process itself (Shackleton, Willis, Brown, & Polunin, 2010). Ross et al. (2011) emphasize a need for iterative learning in long-term co-management processes, where participants monitor the outcomes of their decisions and adapt them accordingly. While a number of studies have applied participatory evaluation to the study of stakeholder participation in environmental management (Plummer & Armitage, 2007; Reed, 2008), this is the first case study that applies participatory evaluation techniques to an adaptive co-management relationship between a Tribe and a federal agency.

Participatory evaluation is a flexible and iterative research approach that can be adapted when external variables and the internal process of adaptive co-management change (Conley & Moote, 2003). A key characteristic of participatory evaluation is the inclusion of the research community in every phase of the research process (Sherman et al., 2012). From the outset of the research project, I have worked closely with five collaborators who each represent a different interest in the Tribal National Park initiative; 1) the Tribe, 2) the Oglala Sioux Parks and

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Recreation Authority, 3) Badlands National Park, 4) National Park Service leadership, and 5) Colorado State University. Over the last four years, we have collaborated to negotiate research interests, develop the research question, implement research techniques, conduct qualitative analysis and produce academic and non-academic research products.

Acknowledging the contentious nature of the adaptive co-management process and the skepticism toward research expressed by members of the Tribe, I focused on listening and learning before I began negotiating the research question. After two summers of participant observation and negotiations with my collaborators and other key stakeholders, my primary research question became: *What are the barriers that constrain and mechanisms that promote collaborative and adaptive natural resource management?* This broad research question informs each of the subsequent chapters that constitute this dissertation.

I addressed this question by triangulating between participant observation, responsive interviews, and document analysis. I worked with my collaborators to analyze the data and create academic and non-academic research products that will contribute to theory and practice. This dissertation research is designed to inform the adaptive co-management process in the South Unit by highlighting specific mechanisms that may promote or constrain the adaptive and equitable relationship between the Tribe and the Park Service as they work toward their shared goals of continued co-management and the creation of the Tribal National Park.

Chapter Overview and Summary of Findings

This study focuses on the barriers that constrain and mechanisms that promote collaborative and adaptive natural resource management. While adaptive co-management is designed to promote equal participation in natural resource management and to address socio-

economic uncertainty, few studies evaluate how these theoretical goals can be empirically achieved.

Chapter Two explains how I collaborated with key stakeholders to conduct participatory evaluation of the co-management process in the South Unit. Using Sherman et al.'s (2012) research process, I engaged key stakeholders in every phase of the research project from envisioning the goals of the research project to negotiating research products that are beneficial for the research community. The participatory research timeframe, a lack of trust, and funding constraints each posed substantial challenges to the research process. However, through consistent and collaborative interaction with the research community I produced more collaborative, accurate and useful data and research products than I could using traditional research techniques.

Chapter Three examines a case study history of the co-management process in the South Unit, situating the analysis within the context of federal-Tribal relations in the United States. Assessing political, economic and social drivers, I explore how a mandated co-management agreement transitioned into a co-management process. While the co-management relationship in the South Unit may be a model for other Tribes that wish to work more collaboratively with their neighboring National Parks, co-management agreements that lack adaptive mechanisms may reinforce federal authority over Tribes' traditional lands. Co-management and tribal consultation may be combined to prevent the loss of tribal authority over trust lands and sacred sites, and to promote more equitable and innovative land management solutions.

Chapter Four explores how the Park Service and the Tribe negotiated discursive legitimacy and created shared management goals during the general management planning process. Discursive legitimacy is the shared recognition of a group's ability to represent a given

cause or issue. I argue that while the Tribe possessed fewer resources and less authority than the Park Service, they exercised power during the general management planning process because they spoke on behalf of indigenous knowledge and Native American sovereignty. Further, while the Park Service and the Tribe share the desire for collaborative management in the South Unit, their motivations for collaboration varied drastically. As indigenous communities negotiate discursive legitimacy with collaborating federal agencies, they are often constrained by the structures and procedures of co-management that remain entrenched in bureaucratic and western traditions that discourage indigenous participation and challenge the legitimacy of indigenous knowledge.

Chapter Five applies participatory evaluation to the co-management relationship between the Park Service and the Tribe as a learning process to explore the barriers that constrained and mechanisms that promoted adaptive co-management in this case. During tribal consultation and the general management planning process, social learning, reciprocity, and social networks served as mechanisms to encourage the transition from a mandated co-management agreement to an adaptive co-management process. While the Tribe and the Park Service share the goals of creating a Tribal National Park and continued co-management in the South Unit, a lack of recognition of the separate motivations for these shared goals may undermine their ability to adapt to uncertainty and change in the future. To ensure the sustainability of the co-management process, the Park Service and the Tribe must iteratively evaluate their relationship, recognize the benefits and challenges of diverse perspectives, and build social networks within and between collaborating organizations.

Contributions of the Study

The Tribe and the Park Service have been co-managing the South Unit for nearly four decades. Because adaptation and collaboration occur over long timeframes, participants in these processes may not recognize the adaptive and maladaptive strategies they implement. This dissertation is designed to encourage the Tribe and the Park Service to reflect on their co-management relationship, identify barriers to adaptive co-management, and discover mechanisms that improve their ability to adapt to uncertainty and change.

Participatory evaluation has been underutilized as a tool to assess adaptive co-management processes. This dissertation illustrates how participatory evaluation can contribute to adaptive co-management by promoting reflexivity and iterative communication between stakeholders and researchers. While participatory evaluation projects may require longer timeframes than traditional research processes, the results of research are more collaborative, accurate and useful for academia and participating stakeholders because the research process itself acts as a learning mechanism.

The publication of this research in cooperation with the Tribe and the Park Service will help to inform other efforts that seek to address the intersection of scientific and indigenous knowledge in cases of co-management. Building from Hardy and Phillip's (1998) theory of power in collaborative initiatives, the concept of discursive legitimacy provides a new tool to evaluate power in knowledge integration initiatives.

The proposed Tribal National Park provides a novel solution to pressing social, economic, and environmental concerns faced by the Park Service and the Tribe. This solution was conceived through adaptive co-management, but constrained by institutional barriers to adaptation such as outdated policy and slow, inefficient bureaucracy. By identifying the

institutional and interpersonal barriers to adaptive co-management in the case of the South Unit, this study can inform other collaborative initiatives that face similar challenges.

CHAPTER 2

THE PLACE AND THE PARTNERSHIP:

STUDY CONTEXT AND HISTORICAL BACKGROUND

Co-management is often path-dependent, meaning that the outcomes of co-management processes can be strongly influenced by the history of the case (Chuenpagdee and Jentoft, 2007). The historical context of the co-management process in the South Unit illustrates institutional and interpersonal barriers to adaptive co-management and highlights mechanisms that encouraged the transition from a mandated co-management agreement to an adaptive co-management process.

The South Unit is located on the Pine Ridge Indian Reservation, home to the Oglala Lakota people in southwestern South Dakota (see Map 1). The ownership and management of the South Unit has been deeply contested. The land is owned by the Tribe, held in trust for the Tribe by the United States (Badlands National Monument, South Dakota Boundary Revision, 1968), and currently co-managed by the Park Service and the Tribe as a unit of Badlands National Park (United States, 2012). This complex arrangement has emerged from a history of colonialism, tribal consultation and co-management.
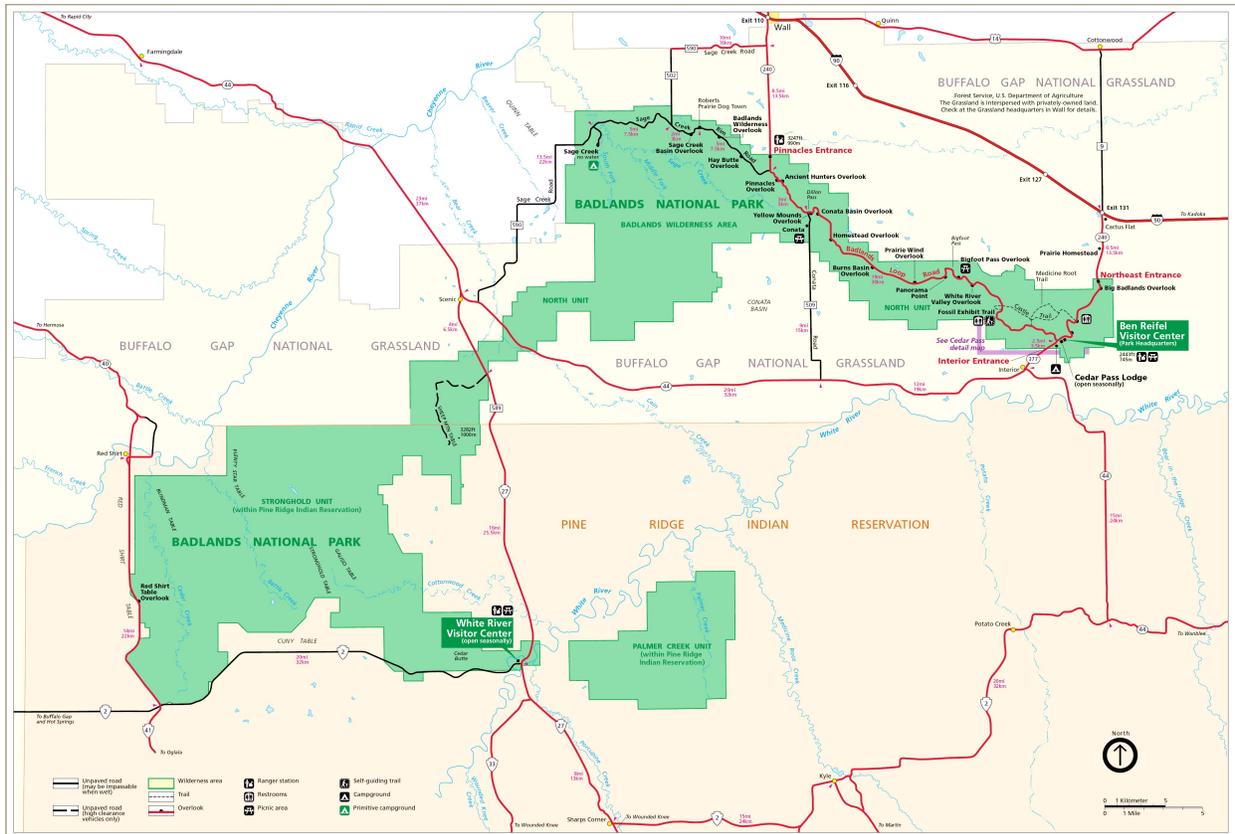
Figure 1: Map of the North and South Units of Badlands National Park

At the end of the 19th century, the Tribe signed the Fort Laramie Treaty (1868) with the United States, creating the Great Sioux Reservation that included land within the states of Colorado, Montana, Nebraska, North Dakota, South Dakota and Wyoming. Subsequent treaties greatly reduced Tribal land holdings until finally in 1889 the Great Sioux Reservation was reduced to five separate reservations, including the Pine Ridge Indian Reservation (United States, 2012). Congress authorized the creation of Badlands National Monument in 1929 (Public Law 16-441 (45 Stat. 1553)) on land that was originally part of the Great Sioux Reservation. Badlands National Monument was created to "Protect and preserve the natural and cultural resources of the South Dakota badlands for the benefit and enjoyment of the people" (Public Law 16-441 (45 Stat. 1553)). The creation of Badlands National Monument displaced indigenous stewardship practices and knowledge, and with it, cultural activities such as hunting and

gathering of native plants (Sherman, Van Lanen, & Sherman, 2010). The exclusionary approach to land management practiced by the Park Service meant that the Oglala Sioux people, if included in the monument at all, were treated as visitor attractions.

In 1942, the United States War Department took 341,724 acres from the Pine Ridge Reservation to establish an aerial gunnery range for training purposes during WWII (United States, 2012). The lands were acquired through declarations of taking filed in condemnation proceedings, and justified as necessary under a wartime emergency. Families and individuals living on the land in the gunnery range were forced to vacate the area on short notice. Many believed they would be able to return once the land was no longer needed by the United States.

In 1968, the gunnery range was declared excess to the needs of the federal government and much of the land was returned to the Tribe. However, under Public Law 90-468 the Secretary of the Interior authorized that 133,000 acres within the former gunnery range would be held in trust for the Tribe by the federal government. This land was used to expand Badlands from a national monument to a national park. The Tribal trust land that was acquired by the Park Service was named the South Unit of Badlands National Park. The land exchange was subject to approval by the Tribe, but if the Tribe did not approve it, the lands previously held in individual trust would be disposed of under surplus property procedures and permanently lost to the Tribe (Public Law 90-468 (82 Stat. 663)). Only by surrendering management of the land to the Park Service would the land be held in trust for the Tribe (Burnham, 2000). While the lands were held in trust for the Tribe, the federal government did not intend that the Park Service manage the easement on Tribal lands for the use and benefit of the Tribe. Instead, the federal government expected the Park Service to manage the easement as part of the National Park system, for the use and benefit of all people in the United States (United States, 2012). The South Unit was held

in trust for the Tribe, but the designation of the area as part of Badlands National Park undermined the Tribe's right to use and manage their lands. Partly to ease tensions over the designation of the South Unit, the Tribe and the Park Service entered into a memorandum of agreement (hereafter referred to as "the memorandum") in 1976 that legally mandated a co-management agreement. Along with the memorandum, the federal government also created an easement in perpetuity for the Park Service to manage the trust lands of the Tribe in the South Unit.

The memorandum, which remains the primary management document for the South Unit, requires that Badlands National Park and the Tribe collaborate to conduct training and interpretive programs, build a cultural heritage center, and manage natural and cultural resources (OST and NPS, 1976). Despite a mandated co-management relationship, the memorandum effectively undermined Tribal sovereignty by legitimizing the control and management of Tribal trust land by the Park Service. In this case, the creation of the co-management agreement was used to avoid the transfer of state power to the Tribe. The situation in the South Unit in 1976 is not without precedent. Governments have often sought to maintain or extend their control through government-community partnerships that are tightly controlled from the top-down (Leys and Vanclay, 2011).

As part of the co-management agreement, the Oglala Sioux Parks and Recreation Authority (OSPRA) was nominated by the Tribe to act as the collaborating organization between Badlands National Park and the Tribe (OST and NPS, 1976). The OSPRA manages the natural resources on Pine Ridge Indian Reservation and is composed of a team of Tribal biologists, interpreters, law enforcement rangers and administrators. The OSPRA was recognized as a bridging organization from the beginning of the co-management agreement. However, their

ability to foster collaboration was undermined by a lack of accountability and initiative from both the Tribe and the Park Service. The memorandum required that the Park Service cooperate with the Tribe to conduct training, law enforcement, biological surveys, and interpretation programs. A Tribal member who participated in the drafting of the 1976 memorandum noted, "The memorandum of agreement in 1976 was a binding agreement between the Park Service and the Tribe and they both failed. The Tribe as well as the Park Service". Institutional arrangements do not always operate according to the expectations of designers or solve the problems that led them to be established in the first place (Heylings and Bravo, 2007).

While the memorandum calls for biannual meetings and shared responsibilities between the Tribe and the Park (OST & NPS, 1976) for many years, neither of these organizations followed this mandate. For example, National Park Service interpreters in the North Unit of Badlands National Park rarely suggested that visitors visit the South Unit, and at times actively advised against visiting the Reservation. A proposed Lakota heritage center, which would have been located in the South Unit, was allocated funding from the Clinton administration, but this funding was revoked because of political upheaval within the Tribe and disagreements about the location, management and ownership of the site. The co-management agreement lacked a social or political foundation to ensure that the Park Service or the Tribe conducted the tasks that were mandated.

Furthermore, a lack of informal communication between the Tribe and the Park Service meant that much of their interaction was based on formal government-to-government communication protocols. For example, in April 2002, the Superintendent of Badlands National Park sent the Tribe a letter informing them of a planned excavation of a paleontological site in the South Unit. The Tribal President at the time replied sternly, "The Park Service does not have

unilateral authority to authorize museums and other entities to go on Tribal lands" (Borrell, 2013). The Tribe responded by issuing a moratorium on fossil collection in the South Unit (OST Resolution 02-91, 2002). Tribal members responded by protesting at the Stronghold, an area within the South Unit where the Lakota people had once practiced ghost dances to protest the breaking of treaties. This moratorium, and the Tribal protests of the Park Service that accompanied it, catalyzed a new relationship between the Park Service and the Tribe.

In 2003, in response to the standoff over fossil excavation, the Tribe and the Park Service entered into a formal government-to-government consultation regarding management control of the South Unit (United States, 2012). During the consultation process the Park Service and the Tribe began to build shared trust. Trust is often a determinant of success in many cases of co-management, as a prelude to building a working relationship (Berkes, 2009; Kruse et al., 1998). Tribal members shared their families' experiences with the bombing range and voiced their concerns over federal management of the South Unit. During this time the Park Service and the Tribe built a rapport based on shared stories instead of formal agreements and treaties. After three years of consultation, the Park Service, Bureau of Indian Affairs (BIA) and the Tribe agreed to use the Park Service's general management plan process to explore management options for the South Unit. The purpose of the general management plan was to establish a common vision for managing resources and visitor use between the Tribe and the Park Service (Fetcher, 2012). The general management plan was created by an interdisciplinary team composed of Park Service employees, employees of OSPRA, and Tribal members. The Oglala Sioux Parks and Recreation Authority (OSPRA) was delegated by the Tribe to collaborate with the Park Service to create the management plan. OSPRA acted as liaisons between the Park Service and the Tribal Council during the South Unit general management plan process, incorporating Tribal practices

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and Indigenous knowledge into the planning process. Tribal members were also encouraged to participate in management planning for the general management plan by attending meetings between the Tribe and the Park Service and voicing their concerns. This initiative challenged the traditional decision-making processes of tribal consultation and environmental planning under the National Environmental Policy Act by including the Tribe as equal and legitimate members in the planning process. A Park Service employee noted,

> The previous superintendent and I both felt really strongly that we needed to have active Tribal participation in this project because a lot of the reasons it fell apart last time was the Park Service didn't bother to consult with the Tribe about anything they planned to do on the South Unit.

The Tribe and the Park Service agreed that equal participation would be a specific parameter of their collaborative relationship during the general management planning process. Equal participation involved equal numbers of Park Service employees and Tribal members at every planning meeting and approval from the Tribal council as well as the Park Service for each new phase of the project.

During the general management planning process the OSPRA and the Park Service began to collaboratively manage the South Unit, finally following through on the promises that were made in the 1976 memorandum. With the introduction of a new superintendent at the beginning of the consultation process, they began to collaborate on interpretive programs, law enforcement activities, and natural resource management initiatives. The OSPRA served as a bridging organization during this time, bridging the divide between Tribal culture and practices and the Park Service's bureaucratic planning and management techniques. Employees of OSPRA played a dual role during this period. They collaborated with Park Service leadership to develop the general management plan while cooperating with Badlands National Park employees to conduct co-management activities in the South Unit.

The general management planning process began in late 2006 and ended in June, 2012 with the signing of the record of decision. The record of decision approved the preferred alternatives proposed in the general management plan. The preferred alternatives for the South Unit general management plan were jointly created and approved by members of the Tribe and Park Service employees. The preferred alternative for the management of resources on the South Unit primarily focuses on restoration of natural ecosystems, expanded visitor access and interpretive programs designed to promote understanding of Lakota history, culture and land management principles (United States, 2012). The preferred management option is to create a Tribal National Park on the South Unit. The park would be owned, managed, and run by the Tribe as a member of the Park Service system, and according to applicable federal and Tribal laws such as the *Organic Act* and the *National Historic Preservation Act*.

The signing of the record of decision fundamentally changed the relationship between the Tribe and the Park Service. The Park Service's role shifted from gatekeepers of the South Unit to advocates for the creation of the Tribal National Park (S. Thede, personal communication, July 10, 2012). However, while the record of decision was approved by the Park Service and the Tribe, the Tribal National Park cannot be created without federal legislation. The general management plan process was designed and implemented following federal protocol. Tribal members participated as collaborators but were unable to craft the design of the overall process of decision-making. During the general management planning process, the Park Service retained a majority of the power in the relationship, providing resources and holding the authority to make decisions at the federal level.

While the Park Service and the Tribe collaborated to create the general management plan, the creation of the Tribal National Park is dependent upon Congressional approval and funding.

The Tribe has taken the lead in drafting federal legislation, working closely with the Park Service to establish the rights, rules and regulations that will form the foundation for the new park. While they work together to draft the legislation, the Park Service and the Tribe are continuing to co-manage the South Unit as a unit of Badlands National Park, sharing responsibility for obtaining funding, training personnel, and managing cultural and natural resources.

Regardless of Congressional approval, the Tribe and the Park Service will continue to collaborate in the management of the South Unit. For example, in January 2014 the OSPRA and the Park Service jointly hosted a community meeting in Kyle, SD with members of the Tribe to discuss progress on the Tribal National Park project. Meetings with the tribal community are essential if the Tribe and the Park Service hope to maintain public support and momentum for the Tribal National Park.

As they move forward drafting legislation and continuing to collaboratively manage the South Unit, the Park Service and the Tribe must remain reflexive about the state of their relationship and their goals for the future of this protected area. The Tribe and the Park Service participated in this participatory evaluation research project to better understand the barriers to effective collaboration and promote more adaptive and equitable land management in the South Unit.

CHAPTER 3

GENERATING COLLABORATIVE, ACCURATE, AND USEFUL RESEARCH:

PARTICIPATORY EVALUATION IN THE SOUTH UNIT OF BADLANDS NATIONAL PARK

Overview

By applying the epistemology and methods of participatory evaluation, qualitative

researchers can achieve more collaborative, accurate, and useful data and results. While

participatory research methods have blossomed over the past few decades, few studies explore

the epistemology behind this methodological shift. The purpose of this article is to present

participatory evaluation as both an epistemology and a research method that integrates

communities of interest into the research process. To illustrate, I show how I used participatory

evaluation to assess the relationship between the Oglala Sioux Tribe and the National Park

Service as they co-manage the South Unit of Badlands National Park. I collaborated with my

research community during every phase of the research process, including: 1) co-creating the

research questions, 2) collaboratively and iteratively constructing the interview script, 3)

participating in co-management as it happens on the ground, 4) conducting responsive interviews,

5) collaboratively analyzing the qualitative data, and 6) creating research products.

Introduction

While participatory research techniques are widely used, the epistemological foundation for these techniques is often ignored. Participatory research is not simply a method, but a worldview that employs a variety of qualitative and quantitative research techniques (Minkler, 2004). This worldview challenges the questions of how, why, and for whom research is conceptualized and conducted. The purpose of this article is to present participatory evaluation as both an epistemology and a research methodology that integrates communities of interest into the research process. The goal of participatory evaluation is to identify stakeholder attitudes, opinions, relationships and other social changes as they unfold during collaborative processes (Conley & Moote, 2003). Participatory evaluation promotes reflexive assessments of social change, for which qualitative methods such as interviews, focus groups, and participant observation are best suited. I describe the challenges and benefits I encountered while I conducted a participatory evaluation process with the Oglala Sioux Tribe and the National Park Service on in the South Unit of Badlands National Park.

Participatory Theory in Practice

Traditional research is based on an epistemology that separates the researcher as a subject in a world of research objects. Under this worldview the researcher controls the research process and reaps all of the benefits (such as publications, funding, and recognition) from the products of the research. In a traditional research process, the researcher determines the focus of the project and the research questions that will be tested. Researchers determine the amount of time spent in the field as well as the appropriate research methods dependent on the research questions. The only involvement communities have in the traditional research process is as objects of study. After the data is collected it is analyzed by the researcher and written up for publication in

academic journals. Under this research process, the knowledge, experiences, and insights provided by community members simply serve as data to be analyzed by the academic researcher.

Conversely, participatory research is collaborative, challenging the traditional relationship between researcher and research object. The participatory worldview attempts to incorporate multiple knowledge systems on equal footing by promoting the inclusion of communities in every phase of the research process and creating research products that are useful for all those involved (Ross et al., 2011). The differences between traditional positivist research and participatory research are rooted in an epistemological shift, not simply methodological techniques (Sherman, et al., 2012). Participatory research is designed to promote the systematic development of relationships and knowledge between researchers and communities. The fundamental principles of participatory research include; 1) participation, 2) cooperation, 3) co-learning, 4) systems-development and local capacity-building, 5) participant empowerment, and 6) balance between research and action (Minkler, 2004). Participatory evaluation incorporates these principles into the research process through the inductive and inclusive assessment of a community's goals, actions, and outcomes (See Figure 2).

Community Involvement

1. Community-Defined Interest or Concern

2. Community Informed of Experiences Elsewhere

3. Community Selection of Project or Approach

4. Implementation of Community Project (Participatory Evaluation Methods)

5. Participatory Interpretation of Primary Research Results

6. Community Re-evaluation and Feedback Loop to Next Project or Approach

Participatory Academic Research

1. Broad Theoretical Topic (Theory)

2. Applications of Theory in Your Area/Other Parts of the World (Literature Review)

3. IDEA TO TEST (Hypothesis; Research Question)

4. Primary Research: Measures of "Success" (Quantitative and Qualitative)

5. General Conclusions

6. Broad Refinement of Theory

Figure 2: Community Involvement in Participatory Academic Research

Adapted from Sherman et al., 2012

By collaborating with communities to determine the research interest, craft the research questions, analyze data, and implement adaptive solutions to collaboratively-identified problems, participatory researchers encourage community buy-in and the sustainability of the research project (Sherman, et al., 2012).

The Participatory Evaluation Process: A case study illustration

The setting for this research project is the South Unit of Badlands National Park, which is situated within the Pine Ridge Indian Reservation, home to the Lakota people of the Oglala Sioux Tribe (hereafter referred to as "the Tribe"). The South Unit is co-managed by the Tribe and the National Park Service (hereafter referred to as "the Park Service").

I began working with the Tribe and Park Service in June, 2010. My advisor, Kathy Pickering, has worked with the Tribe for over twenty-five years and she acted as a gatekeeper,

introducing me to the Director of OSPRA as well as the Deputy-Superintendent of Badlands National Park. From those initial introductions, I worked with community members to create an internship position with OSPRA that ran for three summers. The purpose of the internship was to gather first-hand experience of the relationship between the Tribe and the Park Service as they co-managed the South Unit. The participatory research project emerged from the interactions between the researchers and the community of interest during the internship.

Participatory research is based on communities' genuine and equitable participation in the research process. To understand the process of participatory research, we must understand the concept of community. Communities can be defined using a variety of criteria. In contrast to popular definitions of community based on geography, demographic characteristics, or sense of identity and common interests, Yoshihama and Carr argue, "Communities are not places that researchers enter, but are instead a set of negotiations that inherently entail multiple and often conflicting interests" (2003, p.56). Communities are not homogenous; they are dynamic, fluctuating groups of individuals who do not always share similar viewpoints or goals. The community that participated in the evaluation process consisted primarily of employees of OSPRA, the Park Service and Tribal members that collaborated during the South Unit planning process. One collaborator noted,

> It was the National Park Service's plan (referencing the GMP), and the Tribe was
> the occupier of the South Unit, but they were in a less important role. That was
> the attitude. That has changed over the last six years. I think that the Park staff
> had that attitude and that has changed. I think the Tribe thought we had that
> attitude and that has changed. I'm not talking about all Park staff and all Tribal
> members, I'm talking about specifically the people who have been involved in
> this project.

In this project the community bridged multiple knowledge systems, socioeconomic strata and value systems. I refer to the community that evaluated the co-management relationship between the Tribe and the Park as the research community.

Within the research community I identify distinct and specific roles for stakeholders and collaborators. The term stakeholder has been defined as those groups without whose support an organization would cease to exist (Freeman & Reed, 1983). In this case, I defined stakeholders as those individuals and organizations without whose support the participatory research process would cease to continue. Table 1 illustrates the stakeholder groups that participated in this research project.

Following Weiss' (1994) suggestion I used my knowledge of the co-management process to identify key stakeholders who helped me determine which organizations, groups, and individuals should participate in this research project. Over time, members of the research community contributed varying levels of time and effort. I measured level of engagement according to the amount of time each stakeholder group contributed to the research project as well as the number of individuals from each organization that participated in the project. For example, employees of OSPRA participated in the entire duration of this research project, while members of the Tribal government participated as interviewees, contributing far less time and energy to the research project.

Table 1: Participatory Evaluation Stakeholder Groups

Organization or stakeholder group	Role-to-date in the research process	Level of engagement in the research process
Badlands National Park	Employees initiated research process, were interviewed using responsive interviewing techniques, and provided member checking of data	high
National Park Service	Regional and retired employees interviewed using responsive interviewing techniques, and provided member checking of data	medium
Tribal government	Interviewed using responsive interviewing techniques	low
Oglala Sioux Parks and Recreation Authority (OSPRA)	Employees initiated research process, were interviewed using responsive interviewing techniques, and provided member checking of data	high
Tribal members previously involved with the GMP or with a history of BADL activism	Interviewed using responsive interviewing techniques	medium
Colorado State University	External evaluators and researchers	high

Merriam-Webster defines a collaborator as an individual who works jointly with others in an intellectual endeavor. I defined my collaborators as individuals with whom I had consistent and concerted contact regarding the goals, techniques and outcomes of this research project. A core group of five individuals, each representing separate interests in the co-management process, worked as my team of collaborators for the duration of the research project. Together these five individuals represented five key stakeholder groups: 1) The Oglala Sioux Tribe, 2) OSPRA, 3) Badlands National Park, 4) the National Park Service, and 5) Colorado State University.

Defining the research question: Conceptualization phase

In participatory research, the research process begins from the moment the researchers enter the community (McNicoll, 1999). Often, initial contact between researchers and the community begins with a workshop, organized and facilitated by academic researchers (Dickson & Green, 2001; Nicholls, 2009; O'Fallon & Dearry, 2002; Vähäsantanen & Saarinen, 2012). The purpose of these workshops is to define the questions the research team will study and to determine the roles individuals will play in the process.

I waited two years to explicitly define my research questions. Acknowledging the contentious nature of the co-management process and the skepticism toward academic research expressed by the Lakota people (Sherman, et al., 2012; Smith, 2012), I focused on listening and learning before we began the research project. Instead I built relationships, observed the interactions between the Park and the Tribe, explored how each group conducted land management efforts, and brainstormed with stakeholders about possible directions for this research project. During the course of the internship I contributed to a variety of projects for OSPRA and the Park Service. I helped design an eco-tourism program for OSPRA and facilitated cultural sensitivity workshops between the Park Service and the Tribe. As I built trust within the community I was invited to attend meetings between the Tribe and the Park Service related to the co-management process. During this time I observed and gathered data related to stakeholder attitudes, opinions and relationships.

The information I gathered, the questions I created, and the knowledge I gained are more accurate and useful for the community because I spent time building trusting relationships before the formal research process began. I did not fully develop the research question until the summer of 2012. The majority of stakeholders agreed that with our skill set, the most useful project was

one that evaluated the process of co-management in the context of the Tribal National Park project. My primary research question became: *What are the barriers that constrain and mechanisms that promote collaborative and adaptive natural resource management?*

Data Collection

I triangulated between participant observation, responsive interviewing and document analysis to address this research question. Through triangulation, I increased the accuracy of the data analysis. For example, while history may be reported in an interview through a distorted lens, participant observation allowed me to check participants' descriptions against each other and against my own experience (Becker, 1966). Document analysis allowed me to explore how the knowledge, goals and insights that participants expressed during participant observation and the interview process were incorporated into planning documents (Bowen, 2009).

Participant Observation

During the internship, I conducted daily observations at OSPRA offices and at multiple sites throughout the Pine Ridge Indian Reservation and Badlands National Park. I observed the types of activities employees engaged in and listened to personal accounts related to land management, family lives, life on the Reservation, and many other topics. I participated in the daily routines of OSPRA office and in the field and developed ongoing relationships with OSPRA employees. During one-on-one conversations I would ask if I could take notes, and with approval I would jot openly and ask follow-up questions related to the conversation. At the end of each day I spent two to three hours writing up extensive field notes from the jotted notes, following the design suggested by Emerson, Fretz, and Shaw (2011). Through participant observation I developed descriptive field notes that included dialogue from co-management

meetings and workshops, observations of employee activities, the physical characteristics of social situations, and what it felt like to be part of the social environment (Spradley, 1980).

I also conducted participant observation during a variety of meetings between the Park Service and the Tribe. While in meetings, I openly jotted notes after asking permission. The majority of my fieldwork occurred during the summer months, meaning that I was absent for many meetings between the Tribe and the Park Service throughout the rest of the year. However, I was given access to meeting notes for the meetings I missed. This data provided insight where my personal experience was lacking.

Responsive Interviewing

The data I gathered through participant observation provided a rich experiential context for the responsive interviews I conducted during the summer of 2012. I applied the responsive interviewing techniques developed by Rubin and Rubin (2011) to interview key stakeholders in the co-management process. Responsive interviewing is a specific variety of qualitative interviewing that emphasizes flexible design and expects the interviewer to adapt questions in response to what they learn (Rubin & Rubin, 2011).

I began with a purposive sampling frame for the interviews, in which particular individuals were selected to provide information that could not be attained from other sources. I developed the sampling frame using our increased sensitivity and attentiveness to information related to my research focus that accrued as I spent more time with the community (Biernacki & Waldorf, 1981). I used the knowledge I gained during the internship with OSPRA to identify panels of experts who helped me create a purposive sampling frame for the interviews. This purposive sampling frame formed the basis of a subsequent snowball sampling frame which expanded my initial network of interviewees from 14 to 26 individuals.

Table 2: Responsive Interview Schedule

Name of the Organization or Group	Location of the Interview	Number of Individuals Interviewed from the Organization/Group	Month of the Interview
Badlands National Park	Interior, SD	5	May/June, 2012
National Park Service Midwest Regional Office	Omaha, NE (phone interviews)	4	July, 2012
Private tourism businesses	Multiple locations in South Dakota	2	June, 2012
Oglala Sioux Tribal Government	Pine Ridge, SD	2	June, 2012
OSPRA	Kyle, SD	10	May/June/July, 2012
Oglala Sioux Tribal Members	Potato Creek District, Red Shirt Table District, Wounded Knee District, Pine Ridge Reservation, SD	3	July, 2012

I cooperated with my collaborators to create the responsive interview script. The preliminary interview script contained questions related to the interviewees' roles in the co-management process, their opinion about the relationship between the Tribe and the Park, and their goals for the future of the South Unit. Through email and face-to-face meetings I crafted subsequent drafts of the interview script with my collaborators using the preliminary script as a reference.

My collaborators suggested a variety of interview questions. For example, a collaborator suggested I should add a question about what the loss of the land in 1942 meant to the Lakota. This question addressed issues of place attachment, both for the Tribe and the Park Service. Another collaborator suggested I should ask why the Tribal National Park initiative might fail. This question addressed the structural and epistemological barriers the co-management process may face in the future. A Tribal collaborator suggested that when I conducted the interviews I

should bring a gift of a sweet grass braid to each of the interviewees, both to show my appreciation, and to encourage the interviewees to be truthful during the interview. According to Lakota culture, individuals should not lie to a person who has given them a gift. By including my collaborators in the creation of the interview questions I incorporated cultural practices and norms into the interview process. I also crafted questions that were of interest to the research community, ensuring the information that was gathered was collaborative and useful.

While some may argue that by including the research community in the evaluation of the co-management process I introduced unnecessary bias, I argue that I was not attempting to create generalizable or replicable results, and therefore I was not hoping to produce unbiased data. My goal was to help the research community better understand how co-management has worked in the past and how it can adapt in the future. Bacon et al. (2005, p.23) argue, "(Participatory) researchers facilitate learning during the change process by presenting preliminary results back to participants and creating a forum for on-going analysis and reflection". By asking key stakeholders in the co-management process to reflect on their experiences and desires for the project, I deepened their understanding and analysis of their on-going relationship..

Document Analysis

To explore the cultural, economic, and institutional context of this unique case study, I conducted a document analysis on a variety of public comments, meeting notes, and policy documents related to the co-management process. Unlike participant observation and responsive interviewing, document analysis allowed me to study social behavior without influencing it (Altheide & Schneider, 2012; Warren, et al., 2003). The data gathered through document analysis helped to illuminate: 1) how stakeholders measured success or failure of the co-management effort, 2) drivers for the initiation and sustainability this co-management effort, 3)

how knowledge systems were integrated into planning documents, and 4) stakeholder's goals and values related to the co-management effort.

Data Analysis

Early in the research process, I cooperated with my collaborators to decide how best to conduct the analysis of our qualitative data. We determined that because of our geographical distance and busy schedules, it was best for me to conduct data analysis and report back to my collaborators for member checking. While many participatory studies include the community in the assessment of the data (Åkerström & Brunnberg, 2012) funding and time constraints prevented an in-depth participatory data analysis process. Instead, data analysis began once I assembled the qualitative data that included participatory observation field notes, transcribed interviews, and planning documents. I followed the grounded theory approach developed by Glaser and Strauss (2009) to conduct qualitative coding.

I compiled emergent themes from the initial coding analysis into reports for the collaborators. Each of these reports contained information related to the themes that emerged from the data as well as information regarding how we planned to discuss these themes in academic and non-academic research products. The reports contained three components; 1) a brief abstract, written in a conversational style, 2) a list of highlights from the data, and 3) proposed academic and non-academic products for the collaborators such as web pages, news briefs or pamphlets. I received feedback and suggestions on the content of academic manuscripts as well as suggestions on the format, content and length of the non-academic research products. Through iterative conversations I addressed the concerns of the collaborators and incorporated their comments in the final research products.

Research Products

A fundamental tenant of participatory research is the commitment to giving the study findings back to the community and facilitating community involvement in decision-making about those findings for social change (Minkler, 2004). Many participatory projects conduct workshops and hold meetings to distribute and discuss the results of the research (Brown, Jacobs, & Leith, 2012; Davidson-Hunt & Berkes, 2003; Leith, Jacobs, Brown, & Nelson, 2012; H. Ross, et al., 2009). Constrained by funding and time, I was unable to return to Pine Ridge Indian Reservation after data collection was completed. Instead, through email and telephone conversations, I cooperated with my collaborators to analyze our qualitative data and create research products that were useful for the Tribe, the Park Service, and the academic community. My collaborators' goals were to share the story of co-management with the public and to spotlight their efforts as they attempt to create a Tribal National Park. To address these goals, my research products had to be accessible, fair and accurate. For example, we had multiple discussions about the most useful and accessible medium for the research products. We discussed creating informational pamphlets, a book, and videos of oral histories. Eventually we agreed that news releases and briefs are useful mediums, as they are easily accessible by the public.

Challenges and benefits of the participatory evaluation process

The purpose of this article is to present a case study of participatory evaluation as both an epistemology and a research methodology. I highlight the benefits and challenges of this research process so that other researchers can explore where this process is useful, and where it may not be appropriate.

Respecting Time

One of my greatest challenges was the amount of time it takes to conduct genuine

participatory research. The participatory evaluation process required constant community

involvement, from the community-defined research interest to the participatory interpretation of

results. Genuine collaboration takes significant amounts of time, for meetings, accountability

processes, and conflict resolution (Minkler, 2004). My timeline was adapted to the timeline of

the community. The research community volunteered their time and expertise to design and

participate in this project. As a researcher, I recognized that I was the recipient of the

community's time and knowledge, and I attempted to accommodate their schedules as much as

possible.

Negotiating Trust

Participatory research is predicated on building relationships and trust with communities,

which takes time and persistence. Reason and Bradbury argue,

> To understand deeply what is going on within a work situation, it is necessary to
> gain the confidence of the practitioners in that setting. This often takes more time
> than academic researchers can give, and it also takes time establishing a
> perception of adding value (2001, p.35).

As researchers we must be reflexive about what we bring to a scene, what we see, and how we

see it. My connections to the Tribal National Park process began during the summer of 2010.

Over the past four years I have negotiated trusting relationships with members of the Tribe,

employees of OSPRA, Badlands National Park, and individuals in the National Park Service

regional office. Each of these relationships were different and building trust meant negotiating

different membership roles with each of these organizations and individuals. Membership roles

are the roles that researchers take on in the field as they work with members of a community.

Defining a membership role requires that researchers value their own perspectives and

experiences in the field, and advocate opening membership experiences as acceptable outlets for research. Adler and Adler (1987) define three types of membership roles; peripheral, active and complete membership. For this research project, I engaged in active membership, meaning that I assumed a more central position in the research setting as a co-participant and colleague with employees of the OSPRA and Park Service. I entered directly into this active role by working as an intern with the OSPRA.

Maintaining this active position meant that my role demands were more strenuous and membership relations were more diverse. For example, when working with the Park Service I was careful to maintain a professional relationship with my collaborators and Park Service employees. I dressed business casual when I visited the Park Service offices and I drew upon my previous experiences working with federal agencies to define my role as an early-career researcher. Conversely, when I worked at the OSPRA offices, I dressed in jeans and sweaters on most days, keeping a pair of hiking boots in my car in the event I was invited out on a biological, paleontological, or interpretive assignment. At OSPRA I learned quickly that humor, sarcasm and laughter were constant parts of daily interactions in the office. I earned nicknames, laughed at jokes, and relished the good-natured ribbing I received from OSPRA employees. While I was an active member of both the Park Service and OSPRA offices, my relationships were much more informal with OSPRA than they were with Park Service employees.

The researcher's image is like a snowball, and the researcher acquires more and more social meanings for the host society as she makes her way into the setting (Warren 2003). The body, forms of dress, and social distinctions (married, motherhood, etc.) all influence how the host society views the researcher. As an intern at OSPRA I was acutely aware of my role as an outsider and researcher. I entered the community as a young, single, white female and I was

often warned by people outside of the Pine Ridge Reservation to be careful navigating life among the Lakota. While I never encountered any animosity from the Lakota community, I remained aware of the way my socio-economic background and educational training set me apart from the community. For example, I drove my own car, spoke using large (and often alienating) academic words, and had money to spare to buy my own food and supplies. These attributes set me apart from many Lakota people who struggle to survive on a reservation that is consistently listed as one of the poorest in the country.

I began working at the OSPRA a few weeks after finishing my master's research, and I had very distinct opinions about how research should be conducted which generally followed the positivist approach. I worked as an intern and listened as much as possible to the Tribal members who worked as OSPRA employees, but I itched to begin defining a research question and to focus my data collection on a particular topic. During my first few months on Pine Ridge Reservation I pushed my mentors and collaborators from the Tribe and the Park Service to define a research project for me so that I could "begin doing research". However, while OSPRA employees and Park Service staff gave me tangible tasks that I could complete as part of the internship, they hesitated to define a research topic for my dissertation.

At the end of the second year, after I had completed a number of projects as part of the internship, including an eco-tour of the reservation and the organization and facilitation of a cultural heritage training between the Park Service and the Tribe, my collaborators began to express an interest in defining the research question. I believe that I needed to prove myself with the Tribe and the Park Service before my collaborators were comfortable sharing their experiences, resources and knowledge associated with the South Unit. I shared research topic ideas anonymously between the collaborators and over the course of two months we settled on

the study of the Tribal National Park process through participatory evaluation. After we defined the research topic I transitioned from an intern at the OSPRA offices to a researcher. While I conducted responsive interviews and collected documents for data analysis, I remained aware of the ways in which my role and personal presentation changed when interacting with Tribal members and Park Service employees. For example, when I worked at OSPRA as an intern I played a passive role in the life of the office, sitting at my appointed desk and waiting for employees to stop and chat with me. However, when I began interviewing, I initiated conversations, established the time and dates for interviews, and directed the conversations during the interviews to answer my interview questions. I was an active advocate for my own interests during the interview process, and my personal presentation changed to reflect this new role.

The responsive interview process was a key component of the trust building process. As an interviewer I was aware of the pressures I placed on the interviewee. Wax (1952) argues that whether the interviewee likes, hates, or is ambivalent toward the researcher, she will talk because she and the researcher are making an exchange which at some level both desire or need. I wielded considerable power as the interviewer because I designed the research questions, established the context of the interview, and retained the transcripts of the interviews once they were complete. However, the interviewees established the time and the place for the interviews, requiring that I adjust my schedule for their convenience. This being said, arranging a schedule requires less sacrifice of time and knowledge than does a voluntary interview. Many of the interviews lasted longer than sixty minutes. I argue that the interviewees volunteered this time both because I had established trust with many of them while working as an intern at OSPRA and because interviewees and participants in the Tribal National Park project vouched for me

with other interviewees. While the interview data remains anonymous, the interviews were conducted with a purposive sampling frame of participants in the Tribal National Park project, meaning that many participants discussed the interview process with each other before and after I conducted their separate interviews.

Becker (1967) argues that it is impossible to be objective during the research process, meaning that the real question is not whether we should take sides, but rather whose side we are on. He notes that these political and personal sympathies can deter the researcher from publishing damaging findings, giving an unbalanced picture. In the analysis and feedback stages of the research project, I struggled with how to discuss potentially damaging data with stakeholders without losing their trust and support. While this research project focuses on collaboration and co-management, conflicting values and goals were a constant concern. Participatory research requires consistent consultation with participating stakeholders, and the presentation of unflattering data could cause the stakeholders to either refuse to allow that data to be published or worse, to refuse to participate in the research process.

Many participants simply did not contribute their opinions and concerns about the research project. This lack of participation was arguably more damaging to the outcomes of the research project, because it meant that decisions and directions for the research were skewed toward those participants who were vocal about their support or concerns. For example, when discussing the history of the relationship between the Tribe and the Park Service, Park Service employees were vocal about not including the names of previous superintendents in the discussion, as it may reflect poorly on their careers. Numerous previous superintendents were not friendly with the Tribe, and failed to maintain collaborative relationships. I did not delve into this aspect of the relationship between the Tribe and the Park Service per the request of my Park

Service collaborators. While this research project was a collaborative effort between myself, the Tribe and the Park Service, both organizations have the power to derail and discredit this research project. I was aware of this aspect of our working relationship throughout the research project, and I strove to report the history and challenges faced by the Tribal National Park in a way that was accurate and useful.

During the internship with OSPRA, building a foundation of trust was my main goal. I focused on listening and learning throughout the research process, and shared my stories with community members, breaking down the walls between professional and personal life. The more I connected with the community on a daily basis, the better our relationship became.

Trust is also influenced by culture and history, and I considered the previous history between academics and indigenous people when I built our research timeline. Historically, academic researchers have often viewed community-members as objects of research (Dickson & Green, 2001). Because of this detached attitude, many communities are reluctant to participate in academic research (Smith, 2012). Often, researchers enter a community, such as the Lakota community on Pine Ridge Indian Reservation, and extract knowledge and resources with little or no benefit for the people. While there is no specific timeline for the creation of a foundation of trust, we believed that one or two summers of interaction with the community were not sufficient. When I returned to the Pine Ridge Indian Reservation in the summer of 2012 for our third field season, multiple Tribal stakeholders expressed that they finally believed I was serious about the research project. Indeed, it has been Dr. Pickering's experience over the past twenty-five years that for the Lakota, at least three years of continual commitment is required for a project to be successful and for community members to invest their time and knowledge.

While the relationship between academics and communities is often characterized by the dominance of academic institutions and practices, this is not the case when researchers work with institutions such as the Park Service. Social sciences have been interested in the dynamics of "studying up" (Cassell, 1988; Nader, 1972), "studying down" and "studying sideways" (Plesner, 2011) for decades. This research project could be described as both studying up and studying down, as I worked with a powerful federal agency as well as a traditionally marginalized tribal community. Due to the intersecting histories and power dynamics between academia, the federal government, and the Tribe negotiating trust was a complex and constantly evolving process. By acknowledging and remaining reflexive about my position I hoped to promote a more equitable research process.

Adapting to Funding Constraints

Along with time and trust, funding was a substantial constraint on the research process. I found few academic funding opportunities to support the initial relationship-building process. This is a common problem, as few academic institutions offer funding for participatory research (Cancian, 1993). Instead I participated in a variety of related projects while on the Pine Ridge Indian Reservation to fund the internship with OSPRA. I used the lack of academic funding for the research project as an opportunity to deepen my role in the community. In addition to the unpaid internship I organized and facilitated a number of cultural awareness workshops between the Tribe and the Park Service. In this way, the community was able to see me outside of my traditional role as a researcher.

Conclusions

The participatory epistemology that forms the foundation for participatory evaluation emphasizes equitable relationships within the research process. These approaches are best suited

for research with communities, groups, or other organizations that are invested in the research topic. This often means that if researchers want to work with communities, they must adapt their research interests to fit with the interests of the community. If there is no community buy-in, it is very difficult to start and maintain participatory evaluation projects.

Similarly, community participation in a research process may wax and wane due to outside influences. In communities characterized by flux and movement, our notion of participation must be flexible enough to take into account the cultural and social environment of the community members with whom we work (Minkler, 2004). In my case, the community changed every year, as individuals changed jobs, moved away, and lost or gained interest in the research process.

Participatory evaluation approaches vary with the evaluation's intent, the type of community or collaborative effort being evaluated, and the goals and values of the evaluator (Conley & Moote, 2003). I do not claim that participatory evaluation is appropriate for all qualitative research topics. For example, this approach would not be useful if the researcher has a specific and immutable research interest they wish to focus on. Funding, time, and travel constraints all affect the plausibility of a participatory evaluation project. These challenges should not be ignored, and may be the main reason why many qualitative researchers continue to conduct traditional research.

Individual researchers play essential roles in the participatory evaluation processes. Reason (2006, p.65) argues, "paradoxically…[participatory research] would not occur without the initiative of someone with time, skill, and commitment, someone who will almost always be a member of a privileged and educated group." Researchers must recognize that participatory evaluation is inherently normative, and inevitably political, because it is a forum where the

public image of a community is negotiated (Conley & Moote, 2003). Researchers may become brokers and mediators between communities and the broader society, acting as active channels of communication between cultures (Dickson & Green, 2001). This technique requires researchers that are flexible, adaptable, and able to mediate conflicting interests.

Engaging in participatory research does not mean leaving our knowledge and skills behind, but rather sharing our expertise, including our skills as research methodologists, while accepting the knowledge of others through collaborative and reciprocal research processes. While there are many challenges to participatory evaluation, by emphasizing equitable participation in the research process, we can collaboratively create accurate data and useful research products.

CHAPTER 4

COMBINING CO-MANAGEMENT WITH TRIBAL CONSULTATION

A CASE STUDY ON THE SOUTH UNIT OF BADLANDS NATIONAL PARK

Overview

Despite decades of animosity between Native American tribes and the federal government, a handful of tribes have developed collaborative agreements with the National Park Service to manage their traditional lands. However, because the National Park Service often designs and sustains these agreements, the majority of power remains in the hands of the federal government (Poirier & Ostergren, 2002; Ross, et al., 2011; West, Igoe, & Brockington, 2006). Similarly, while tribal consultation processes recognize the sovereign rights of tribes, they often follow strict guidelines and produce outcomes that favor federal actions over tribal interests (King, 2007). Here we examine how the Oglala Sioux Tribe and the National Park Service combined tribal consultation with collaborative management to create a co-management process that recognizes and strengthens tribal sovereignty. During the co-management process, the Oglala Sioux Tribe and the National Park Service envisioned the creation of the nation's first Tribal National Park on Pine Ridge Reservation; a novel solution to pressing social and environmental challenges.

Introduction

Native American tribes and federal land management agencies share a long and contentious history. The creation of federally protected areas has often led to the loss of tribal control of land and resources, undermining tribal jurisdiction over their traditional homelands and sacred sites (King, 2007). The National Park Service (hereafter referred to as "the Park Service") emphasizes preservation, often displacing tribal members with the creation of parks and monuments (Burnham, 2000; Catton, 1997; Keller & Turek, 1999; Poirier & Ostergren, 2002; Spence, 1999). As a result, many national parks and monuments border or contain sacred sites and Reservations, and often exclude ongoing traditional Native American use such as hunting and gathering native plants (Burnham, 2000).

Despite this troubled history, relations between Native American tribes and the Park Service are beginning to improve (Keller & Turek, 1999; King, 2007). The Navajo (King, 2007), Timbisha Shoshone (Haberfeld, 2000), and Havasupi (West, Igoe, & Brockington, 2006) have each established agreements with the Park Service on their native lands (See Map 2). However, because the Park Service typically designs and sustains these agreements, the majority of power remains in the hands of the federal government (Poirier & Ostergren, 2002; Ross, et al., 2011; West, Igoe, & Brockington, 2006).
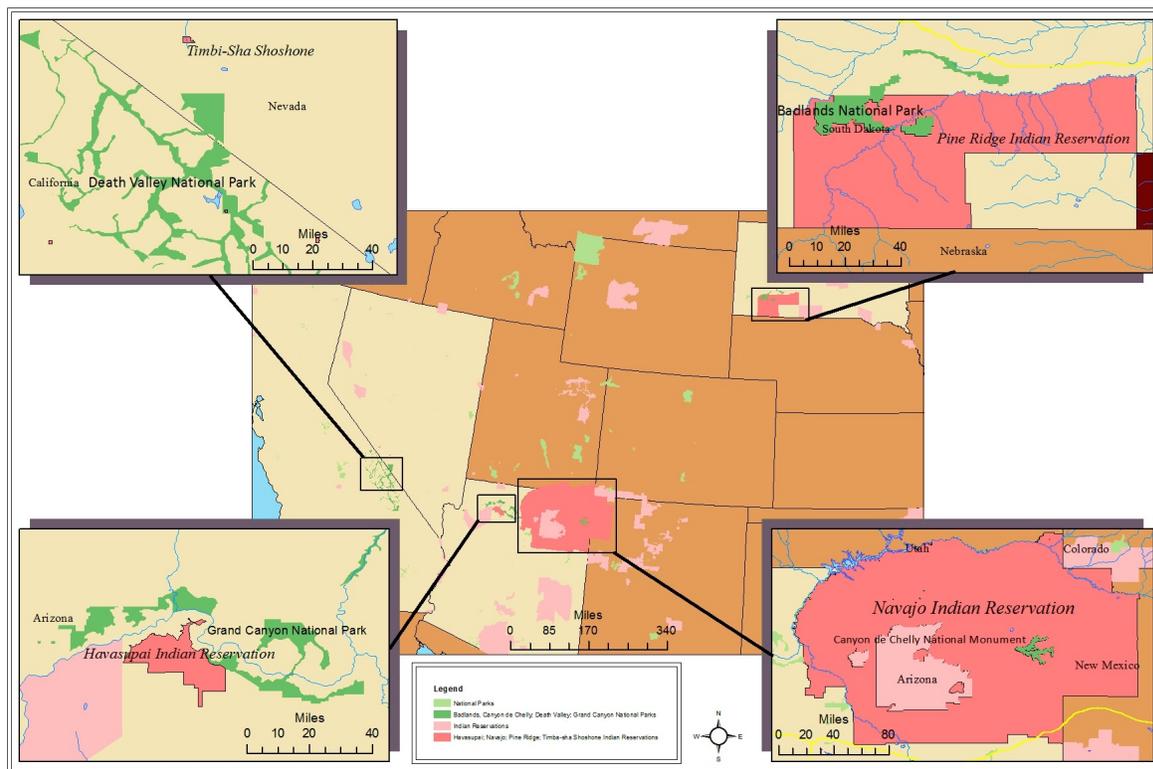
Figure 3: Selected Native American Tribes and their Neighboring National Parks

Co-management has been hailed as a way to reduce conflict, build capital (such as social, economic, and cultural capital), and produce better decisions through collaborative and equitable environmental planning (Bown, Gray, & Stead, 2013; Carlsson & Berkes, 2005; Castro & Nielsen, 2001; Howard & Arthur, 2005; Phillipson, 2002; Pinkerton, 1994). The practice of co-management is neither inherently collaborative nor equitable, but it has the potential to be both. If co-management takes the form of an agreement, it may reinforce state power by legitimizing federal management of Native American traditional lands. However, if co-management is practiced as a process, it may challenge asymmetrical power dynamics between states and Native American peoples by building trust through iterative interactions.

This paper explores a case study of co-management between the Oglala Sioux Tribe (hereafter referred to as "the Tribe") and the Park Service in the South Unit of Badlands National Park (hereafter referred to as "the South Unit"). Co-management of the South Unit is precedent-setting for two reasons, 1) the original co-management agreement between the Tribe and the Park Service is the first of its kind in the United States, and 2) despite years of political turmoil, the co-management process between the Tribe and the Park Service may lead to the creation of the nation's first Tribal National Park in the South Unit.

Through responsive interviews, participant observation, and textual analysis, I explore how co-management evolved from a mandated agreement to a participatory process, and analyze the precedent this case may set for other tribes. If tribal consultation is conducted in conjunction with a co-management process, these initiatives may foster equitable and innovative management solutions by recognizing tribes' sovereign land rights and encouraging the integration of indigenous stewardship practices with bureaucratic western land management.

Background

I adopt Brown et al.'s (2013) broad definition of co-management as a shared decision-making process between a federal government and other stakeholders, which may include resource users, local communities, environmental and non-governmental organizations, tribes and scientists. While co-management initiatives are often associated with natural resource management, they also generally require adept management of human relationships (Natcher, Davis, & Hickey, 2005). The fundamental assumption behind co-management is that sharing authority and decision-making will enhance resource management by making it more responsive to a range of interests and needs (McCay & Jentoft, 1998). In theory, co-management is designed to be a continuous problem-solving process that involves extensive deliberation, negotiation and

shared learning (Carlsson & Berkes, 2005). Co-management is often linked to continuous and reflexive monitoring approaches, such as adaptive management and adaptive governance (Bown, Gray, & Stead, 2013). It is designed to promote collaborative learning and adaptive capacity among participants (Armitage, Berkes, Dale, Kocho-Schellenberg, & Patton, 2011).

In practice, co-management often reinforces state power by offering stakeholders an opportunity to participate in environmental planning, while the state retains control of the final decisions in the process and design of land management (Castro & Nielsen, 2001). When it takes the form of an agreement rather than an iterative problem-solving process, co-management may be used to avoid the transfer of power to stakeholder groups (Carlsson & Berkes, 2005). For example, the Park Service has established a co-management agreement with native Hawaiians for the collection of culturally-significant plants in Hawaii Volcanoes National Park, which does not challenge federal control of the land, but allows native Hawaiians to continue to practice plant collection (King, 2007).

A major critique of co-management is that power is often retained by federal agencies that structure collaborative policy to resemble consultation (Nadasdy, 1999). In environmental decision-making literature, the term consultation refers to the exchange of information between federal agencies and stakeholders (Reed, 2008; Rodriguez-Izquierdo, Gavin, & Macedo-Bravo, 2010; Singleton, 2000). Consultation often involves a federal agency deciding their preferred management action, announcing this management plan to stakeholders, and defending their decision against stakeholder critiques (Hendry, Depoe, Delicath, & Elsenbeer, 2004). While this form of stakeholder engagement promotes dialogue, it does not encourage collaborative decision-making or management.

When working with tribes, federal agencies often use the term consultation to denote the government-to-government relationship between the United States and tribes that are considered domestic dependent nations (Poirier & Ostergren, 2002). The United States government has a unique legal relationship with Native American tribal governments as set forth in the Constitution, treaties, statutes and court decisions (Executive Order No. 12857, 1995). Tribal consultation is a process that aims to create effective collaboration with Native American tribes and to inform federal decision-makers (Secretarial Order No. 3317, 2011). While no set definition of collaboration exists, the term has been explained as a process or a method of stakeholder engagement to achieve outcomes that could not be achieved alone (Luizza, 2012). Daniels and Walker argue, "What distinguishes collaboration from mere cooperation is the assertiveness of a collaborative strategy. It features willingness to cooperate and collaborate while remaining principled about your goals and values" (2001, 40).

In theory, tribal consultation should "Recognize the wisdom of considering the unique perspectives of Native Americans during policy debate, and [make] every effort to incorporate those views and interests into federal planning" and other activities" (Haskew, 1999). For this to occur, tribes and federal agencies must engage in meaningful consultation. Meaningful consultation involves a government-to-government exchange of information and promotes enhanced communication that emphasizes trust, respect, and shared responsibility for decisions (Executive Order No. 3317, 2011). Tribes must be consulted in advance of federal projects with the clear authority to present tribal views to agency decision makers.

In practice, while tribes are recognized as sovereign nations with specific rights, consultation with tribal offices often falls short of the required government-to-government relations most Tribal governments expect (King, 2007). Generally, consultation takes the form of

meetings in which the federal agency notifies a tribe of the proposed action and justifies its

reasoning. A tribe can then either support or reject the decision, pursuant to Tribal law or

procedure (Hutt & Lavallee, 2005). Under tribal consultation, federal agencies and Tribes do not

engage in joint decision-making.

While a range of terms, such as cooperation, collaboration, consultation and co-

management have been used by federal land management agencies to describe how they engage

stakeholders in environmental planning and management, limited attempts have been made to

define what exactly these terms mean (M. Luizza, personal communication, February 4, 2014).

We distinguish between co-management and tribal consultation to understand how tribes can

participate under each of these decision-making approaches. While neither tribal consultation nor

co-management require that tribes and the federal government reach consensus (Castro and

Nielsen, 2001; Executive Order 12857, 1995; Ross et al., 2011, Secretarial Order 3317, 2011), in

this case, the Tribe and Park Service used tribal consultation in conjunction with co-management

to create and agree upon innovative management solutions for the South Unit.

Methods

The study of co-management involves more than the assessment of success or failure of

the agreement; it assesses the change process itself (Shackleton, et al., 2010). The purpose of

participatory research is to integrate communities of interest into the research process.

Participatory evaluation is a form of participatory research that identifies stakeholder attitudes,

opinions, relationships and other social changes as they unfold during collaborative processes.

While a number of studies have applied participatory evaluation approaches to the study of

stakeholder participation in environmental management (Conley & Moote, 2003; Reed, 2008),

this is the first case study that applies participatory evaluation techniques to the evaluation of a

co-management relationship between a tribe and federal agency. I used this approach because it allowed me to consider complex interactions from a variety of perspectives and could be adapted when external variables and the internal process of co-management changed (Conley & Moote, 2003). I used participant observation, responsive interviewing, and textual analysis of historical and legal documents to generate rich data that allowed us to explore the historical, legal, social, and cultural context of this case of co-management.

The research project began in June, 2010. Dr. Pickering has worked with the Tribe for over twenty-five years. She acted as a gatekeeper, introducing me to key stakeholders in the general management plan process. The stakeholders that participated in the participatory evaluation process consisted primarily of employees of OSPRA and the Park Service and additional Tribal members that collaborated during the South Unit general management planning process. Working with these stakeholders, I created an internship position with OSPRA. The internship lasted three summers, during which I gathered participant observation field notes, built relationships with stakeholders in the co-management process, and gathered historical, legal, and management documents for later analysis.

During the summer of 2012 I conducted responsive interviews with key stakeholders in the co-management process. Responsive interviewing allows the researcher to adapt interview questions in response to what they learn during the interview and emphasizes flexible design and open questions (Rubin & Rubin, 2011). Following Weiss' (1994) suggestion I used my knowledge of the co-management process to identify panels of experts (key stakeholders) who helped me create a purposive sampling frame for the interviews. This purposive sampling frame formed the basis of a subsequent snowball sampling frame which expanded my initial network of interviewees from 14 to 26 individuals.

Following the participatory evaluation approach, I worked closely with key stakeholders to create the interview questions. I crafted interview questions that were of interest to stakeholders in the co-management process, ensuring the information that I gathered would be useful for all participants. By asking the interviewees to reflect on their experiences, goals, and concerns related to the co-management effort, I hoped to deepen their understanding and analysis of the co-management process.

Finally, I explored the social, cultural, legal, and historical context of this case study through textual analysis of public comments on the general management planning process, meeting notes, policy documents, and legal agreements. Document analysis allowed me to explore how the knowledge, goals and insights shared by key stakeholders during participant observation and responsive interviewing were (or were not) incorporated into planning documents such as the final general management plan. I triangulated between participant observation, responsive interviewing and textual analysis to ensure that my data accurately portrayed the co-management relationship.

While I included key stakeholders in every phase of the research, due to funding and time constraints I was unable to conduct an in-depth data analysis workshop with participants. Instead I followed the grounded theory approach developed by Glaser and Strauss (2009) to conduct qualitative coding of the data. After initial coding I compiled reports for stakeholders that explained emergent themes and asked for member checking and feedback on these themes. I sent these reports to interested stakeholders before I began creating the research products, so that I could integrate their perspectives and concerns into my analyses. I also collaborated with key stakeholders to define and create the research products, which include four academic articles as well as multiple press releases and reports for the Park Service and the Tribe that explain how the

Tribe and the Park Service have overcome challenges to collaboration and adaptation in the past, how they understand their present relationship, and what they envision may be future challenges that may impede the Tribal National Park project. The goal of participatory evaluation for co-management was to create more collaborative, accurate, and useful data and results for the participants as well as the academic community (Sherman et al. 2012).

Analysis

Shifting Management Authority

Co-management agreements can set into motion new conflicts or cause old ones to escalate (Castro & Nielsen, 2001). If co-management is necessitated by the fact that management power has been taken away from the local community in the first place, power sharing may be an attempt by state authorities to increase the legitimacy of their domination (Carlsson & Berkes, 2005). When co-management was legally mandated in the 1976 memorandum, it was the first agreement of its kind in the United States. While the co-management agreement between the Tribe and the Park Service was created using a collaborative process, this process lacked a strong social, legal, and historical foundation. Indeed, the co-management agreement between the Tribe and the Park was used to *avoid* the transfer of state power to the Tribe. The Tribal lands could not be acquired with the consent of the Tribe, because the Tribe was unwilling to sell, so the only way the Park Service could "protect" the Badlands was to create a co-management agreement (Chief Ranger BADL, 1996). Along with the memorandum, the federal government created an easement in perpetuity for the Park Service to manage the Tribal trust lands in the South Unit. In the case of an easement, if either party breaches the terms of the easement, the agreement continues to exist (Chief Ranger BADL, 1996). The remedy for breaching the agreement is not

termination of the property interest. Instead, the aggrieved party is entitled to either an injunction prohibiting the offending activity, or damages for the injury caused by the offending party.

The combination of the co-management agreement and the easement in perpetuity created a far more secure legal foundation than one based solely on the memorandum (Chief Ranger BADL, 1996). If the Park Service conducted activities that conflicted with the Tribe's desired management of the South Unit, the easement could not be revoked by the Tribe. Instead, the only legal recourse the Tribe possessed was to prohibit the offending activity. The Tribe's moratorium on fossil collection illustrates the level of influence the Tribe possessed over the management of the South Unit under the memorandum. The Tribe could not renegotiate the co-management agreement or the easement and had little power to affect how the Park Service managed the South Unit. The co-management agreement in combination with the easement in perpetuity on the South Unit created a situation of intractable conflict between the Tribe and the Park Service.

In some cases, conflict may act as a catalyst for initiating co-management negotiations (Castro & Nielsen, 2001). Co-management that arises in response to conflict often involves wider and more inclusive participation and the empowerment of more local and diverse voices (Firehock, in press). The conflict that arose over fossil excavation in the South Unit formed the political catalyst that initiated a more inclusive and less adversarial relationship between the Tribe and the Park Service.

During the Tribal consultation that followed the 2002 moratorium, the Tribe and the Park Service engaged in Tribal consultation to address the Tribe's interest in regaining management authority over the Tribal trust lands in the South Unit. Park Service employees listened to Tribal members describe how the loss of land in the South Unit (through broken treaties and the

creation of the bombing range) affects their community today. By listening to these oral accounts, Park Service employees that participated in the consultation process began to understand and value the perspectives of Tribal members. The small group of Park Service employees and Tribal members that participated in the tribal consultation process built commitment and shared understanding through consistent and open communication.

While communication is key to co-management, simply allowing for and respecting multiple perspectives in the management process will fail to reach desired goals unless fundamental changes occur in the relationships between group members, particularly in relation to status and power differentials (Natcher, Davis, & Hickey, 2005). The relationship between the Tribe and the Park Service began to shift during tribal consultation. For example, the Tribe and the Park Service agreed that the consultation team would be composed of equal numbers of representatives from the Tribe and the Park Service. While Tribal consultation took place, co-management of the South Unit began to involve more frequent interaction between Tribal members and Park Service employees. OSPRA law enforcement rangers that worked on the South Unit participated in trainings with Park Service employees, and the biological field crews of both organizations often cooperated to monitor and manage the natural and cultural resources in North Unit and South Unit of Badlands National Park.

Through tribal consultation, the Park Service and the Tribe agreed to begin collaboratively creating the general management plan for the South Unit. The general management planning process integrated aspects of co-management and tribal consultation to include Tribal members as key decision-makers in the planning process. The Tribal Council formally supported the general management planning process and nominated OSPRA to consult with the Park Service throughout the South Unit planning process (OST Resolution 03-59XB,

2003). As they developed the South Unit general management plan, the Tribal internal review and approval process shared equal consideration with the Park Service process. During the creation of the general management plan, by collaborating with OSPRA employees as representatives of the Tribe and respecting the Tribal approval process, the Park Service engaged with a culturally legitimized leadership structure and governing process.

The preferred alternative for the general management plan is the creation of a Tribal National Park on the South Unit. The Park would be owned and managed by the Tribe as a unit of the National Park system and would be subject to federal and Tribal the laws, policies, regulations and guidelines. In cases where Tribal law is inconsistent with, or conflicts with federal law, federal law would control, except where the legislation establishing the new park provides otherwise (United States, 2012). As they work together to draft federal legislation, the Tribe and the Park may include clauses that permit hunting for Tribal members, and allow for the collection of culturally-significant plants on the grasslands in the South Unit. If the Tribal National Park is approved by Congress, a new agreement between the Park Service and the Tribe will be negotiated that will replace the 1976 memorandum.

The creation of the Tribal National Park is dependent on federal legislation. While the Park Service used the general management plan process to negotiate shared goals between the Tribe and the Park, the Tribe will take the lead in drafting federal legislation. Regardless of Congressional approval, the co-management process will continue to evolve as the Park Service and the Tribe work together to manage their relationship and the resources of the South Unit.

Creating A Precedent

The co-management process between the Park Service and the Tribe is not the first case of collaborative management between a Tribe and a national park. Tribes and parks have used a

variety of tools and methods for creating more collaborative relationships, representing a range

of options and experience (King, 2007). For example, the Navajo Nation and the Park Service

have conducted joint management of the Canyon de Chelly National Monument since 1931.

Canyon de Chelly lies within the Navajo reservation in northeastern Arizona, and while it is

managed as a park by the Park Service, it is owned by the Navajo Nation (King, 2007). Although

there are striking similarities, the joint management process at Canyon de Chelly is

fundamentally different than the co-management process in the South Unit. We compare the joint

management process at Canyon de Chelly to the co-management process in the South Unit to

explore some of the mechanisms that promoted a collaborative relationship between the Oglala

Sioux Tribe and the Park Service.

Studies have shown that a strong legislative basis may act as a mechanism to promote the

sustainability of co-management processes (Bown, Gray, & Stead,, 2013; Howard & Arthur,

2005). Canyon de Chelly's enabling legislation does not provide a clear mandate for

collaborative management, and defines separate management roles for the Navajo and the Park

Service (King, 2007). Conversely, the South Unit co-management process began with a federal

mandate that specified areas where the Oglala Sioux Tribe and the Park Service must collaborate

to manage resources and staff (OST and NPS, 1976). The 1976 memorandum of agreement

states,

> Authorized representatives of the Tribe and the Service shall meet twice each year
> to review mutual objectives and programs, and to consider other matters of
> mutual concern which affect the development, protection, and management of the
> Badlands South Unit.

This mandate was rarely upheld during the years between the creation of the memorandum of

agreement and the start of the general management planning process. While mandated co-

management originally legitimized federal management of the South Unit, it became the legal

cornerstone for a more collaborative and equitable relationship.

Face to face interaction has also been identified as a critical factor for successful co-

management processes (Ansell & Gash, 2008). While the co-management agreement for the

South Unit emphasizes shared management responsibility, at Canyon de Chelly the Navajo and

the Park Service have separate and distinct management roles (King, 2007). Shared management

responsibility forces federal employees and tribal members to interact. In the South Unit,

employees of OSPRA have worked closely with Park Service employees to survey

paleontological sites, design and conduct interpretive programs, and manage bison, big-horned

sheep, prairie dogs and swift fox populations. For example, an OSPRA biologist noted,

> We get assistance from the guys at Badlands National Park. They come down and
> cooperate and help us, and we return the favor and go back and help them. Like
> with the big horn sheep they came down and helped us with that, trying to
> tranquilize them. We go up there and help them with their counts and their
> surveys. We do a lot of cooperation like that.

 Through these interactions individuals built shared understanding of indigenous stewardship

techniques and western land management practices.

Finally, building trust has been cited as an effective mechanism for promoting

collaborative relationships between organizations practicing co-management (Berkes, 2009;

Reed, 2008; Selin, et al., 2007). The Navajo and the Park Service coordinate various

management efforts such as law enforcement and interpretation (King, 2007) and they have

collaborated to conduct environmental decision-making. However, the general management plan

process in the South Unit is the first of its kind to propose a shift in management authority

toward more responsibility and authority for the collaborating tribe. The planning team,

composed of Tribal members and Park Service employees, created an innovative solution to a

complex social problem that is built on a foundation of trust. A Park Service employee noted,

> When we have differences of opinion, one of the things that will happen is that
> they (members of the Tribe) will come and ask, "Did you really mean that?" We
> heard such and such and so and so. They will check with us before they assume
> that we are doing something that is not acceptable. That is huge. At least I get a
> chance to explain what I did. It doesn't mean that everyone is going to agree with
> it, but having people watch our back is pretty cool.

The foundation of trust that undergirds co-management in the South Unit was built despite

decades of mistrust and animosity. Many members of the planning team noted that they think the

South Unit process may set a precedent for other tribes that want to work with federal agencies.

An employee of OSPRA noted,

> Saying that this is an opportunity for the Tribe to manage the first every Tribal
> National Park, I think people like hearing that. I think it is like a buzz world
> almost, First. Ever. Tribal. National Park. But really nothing changes in terms of
> land ownership.

> In the South Unit, as well as Canyon de Chelly, collaborative management occurs on

tribal rather than federal lands. Many of the collaborative agreements between tribes and the

Park Service have emerged in response to federal appropriation of native lands (Borrini, 2000;

Carlsson & Berkes, 2005; Castro & Nielsen, 2001; Pinkerton, 1994; Ross & Pickering, 2002). In

some of these cases, collaborative agreements between tribes and the Park Service legitimize

federal management while offering tribes meager opportunities to participate in land

management (King, 2007; Natcher, Davis, & Hickey,2005). When considering a collaborative

relationship with a park or protected area, tribes must be mindful of the potential for co-

management to undermine their ability to manage their traditional lands as sovereign nations.

Conclusion

Pinel and Pecos (2012) call for studies that ask why, and under what legal circumstances, parties participate in co-management processes and agreements. We offer a case study that explores how the legal relationship between a Tribe and a federal agency can be negotiated in conjunction with collaborative management planning. The co-management relationship in the South Unit of Badlands National Park may be a model for other tribes that wish to work more collaboratively with their neighboring National Parks. Co-management presupposes that parties have, to some extent, agreed on an arrangement, but that initial arrangement often evolves; it should be seen as a process rather than a fixed state (Beck, 1999). Co-management that lacks adaptive mechanisms may reinforce federal authority over tribes' traditional lands. Conversely, while tribal consultation processes recognize the sovereign rights of tribes, they often follow strict guidelines and produce outcomes that favor federal actions over tribal interests. Co-management and tribal consultation may be combined to prevent the loss of tribal authority over trust lands and to promote equitable and innovative land management solutions. The general management planning process for the South Unit integrated these approaches and produced a novel solution, in the form of the Tribal National Park, that addresses both Tribal and federal concerns.

CHAPTER 5

NEGOTIATING KNOWLEDGE SYSTEMS:

ACCESSING POWER AND CREATING SHARED VISIONS

IN THE SOUTH UNIT OF BADLANDS NATIONAL PARK

Overview

While indigenous communities and scientists often share a desire to participate in knowledge integration initiatives, in which indigenous knowledge systems are incorporated into scientific studies, their motivations for participation vary considerably. Often, indigenous communities participate in knowledge integration initiatives to gain recognition and validation of their indigenous knowledge system. Conversely, scientists attempt to use indigenous knowledge to fill gaps in the scientific knowledge system. These separate motivations for the shared goal of knowledge integration are closely tied to the amount of relative power held by each stakeholder group during collaborative management processes. To study how power is negotiated during knowledge integration initiatives, we adopt Hardy and Phillip's (1998) framework that highlights resources, authority, and discursive legitimacy as three components of power at work in collaborative management processes. We focus on the concept of discursive legitimacy, which is the shared recognition of a group's ability to speak on behalf of a given cause or issue. I argue that indigenous communities may wield more power during collaborative management processes if they can negotiate discursive legitimacy with scientists and land managers. To examine this hypothesis, I evaluate how the Oglala Sioux Tribe and the National Park Service negotiated discursive legitimacy during a general management planning process on the South Unit of Badlands National Park. While the Tribe possessed fewer resources and less authority than the

Park Service, they exercised power because they spoke on behalf of indigenous knowledge and Native American sovereignty.

Introduction

Over the past three decades scientists and indigenous communities have attempted to integrate their knowledge systems to produce more adaptive (Armitage, et al., 2011; Berkes, Colding, & Folke, 2000; Fabricius, et al., 2007; Pearce, et al., 2010) and equitable (Ballard, Fernandez-Gimenez, & Sturtevant, 2008; Blodgett, et al, 2011; Davis & Wagner, 2003; Gratani, et al., 2011; Hill, 2011; Leys & Vanclay, 2011; Nadasdy, 1999) environmental decisions. Despite good intentions, knowledge integration initiatives often limit the empowerment of indigenous communities by evaluating the validity, accessibility, and applicability of indigenous knowledge from a western perspective.

While indigenous communities and scientists share a desire to participate in knowledge integration initiatives, their motivations for participation vary considerably. Often, indigenous communities participate in these projects to gain recognition and validation of their knowledge systems (Ohlson, et al., 2008; Pinel & Pecos, 2012; Ross, et al., 2009). Scientists often attempt to integrate indigenous knowledge with science to fill gaps in the scientific knowledge system (Gadgil, Berkes, & Folke, 1993; Johannes, 1998; Ohmagari & Berkes, 1997). Indigenous knowledge has been integrated with scientific knowledge in a variety of studies including: wildlife management and monitoring (Fernandez-Gimenez, et al., 2006), native plant databases (Garibaldi & Turner, 2004; Ghimire, McKey, & Aumeeruddy-Thomas, 2004; LaRochelle & Berkes, 2003), climate change management (Berkes, 2009; Nichols, et al, 2004) and co-management initiatives (Castro & Nielsen, 2001; Pinel & Pecos, 2012). By promoting the application of their knowledge in co-management initiatives, indigenous communities advocate

for an increased role in environmental decision-making (Ross et al., 2011). The disconnect between scientific and indigenous motivations can dramatically undermine knowledge integration initiatives, challenging the legitimacy of collaborative efforts (Kofinas, 2005).

Knowledge is a dynamic process that is contingent on being formed, validated and adapted to changing circumstances (Davidson-Hunt & Berkes, 2003). Indigenous knowledge is local knowledge held by indigenous peoples or local knowledge unique to a given culture or society (Warren, 1996). We prefer the term indigenous knowledge over other similar labels such as traditional ecological knowledge and indigenous ecological knowledge because it better reflects the holistic worldviews and dynamic nature of indigenous knowledge systems (Bohensky & Maru, 2011; Rotarangi & Russell, 2009).

Recent studies have emphasized the creation of hybrid knowledge through mutual learning and iterative negotiations (Raymond, et al., 2010). Bohensky and Maru (2011) suggest that knowledge integration should be reframed as a process in which the originality and core identity of individual knowledge systems remain valuable, and are not diluted through combination with other types of knowledge. This can encourage the reciprocal sharing of information between indigenous communities, scientists, and land managers. Under this conception of integration, indigenous knowledge and science remain distinct knowledge systems, which must be validated throughout processes of collaborative management.

Knowledge integration projects often occur in conjunction with collaborative land management initiatives (Berbes-Blazquez, 2011; Bonny & Berkes, 2008; Moller, et al., 2004; Natcher, Davis, & Hickey, 2005; Robinson & Wallington, 2012). Hardy and Phillips (1998) propose three sources of power in co-management relationships: authority, resources and discursive legitimacy. Indigenous communities may wield greater power in co-management

processes if they can negotiate discursive legitimacy with their federal collaborators. Discursive legitimacy is the shared recognition of a group's ability to speak on behalf of a given cause or issue. To date, the concept of discursive legitimacy has been under-theorized in knowledge integration and co-management literature. Using participant observation, in-depth interviews and document analysis, we explore how power imbalances were recognized and challenged during a co-management process. We evaluate how the Oglala Sioux Tribe and National Park Service negotiated discursive legitimacy during a general management planning process on the South Unit of Badlands National Park. While the Tribe possessed fewer resources and less authority than the Park Service, they exercised power during the co-management process because they spoke on behalf of indigenous knowledge and Native American sovereignty.

Background

Co-management may involve a range of arrangements with different degrees of power sharing or joint decision-making between the state and communities (Berkes, 2009). Hardy and Phillips (1998) propose three sources of power that are particularly useful for understanding co-management relationships: authority, resources, and discursive legitimacy.

Authority is the socially acknowledged right to make a decision, or take action (Purdy, 2012). The authority of the state to set and enforce rules is accepted because citizens in western countries share a belief in the rationalization of life through bureaucracies (Friedland & Alford, 1991). Authority may shift over time as social order is renegotiated. For example, recent political emphasis on the devolution of authority from the federal and state level to the regional and local level offers indigenous communities the opportunity to increase their authority by tailoring regulations and government programs to fit their needs.

Resources may include economic resources, people, and technology as well as knowledge, culture and capabilities (Purdy, 2012). Resource power is distinct from authority. For example, the information and economic resources possessed by government agencies gives them influence beyond their authority to make rules (Purdy, 2012). Indigenous communities often lack economic resources, but the culture and capabilities they build from living and working in a landscape are valuable resources.

Discursive legitimacy is the ability of an organization or group to speak on behalf of an issue in the public sphere (Hardy & Phillips, 1998). In co-management processes, participants who lack authority or resources can exert power if they are perceived to speak on behalf of a socially-relevant ideal (Purdy, 2012). In other words, participants may use their social ideals to influence government decisions if these ideals are recognized as relevant and true. During co-management processes scientists and indigenous communities negotiate the discursive legitimacy of their knowledge systems with their collaborators. While scientists evaluate the usefulness and applicability of indigenous knowledge to western land management, indigenous communities evaluate the knowledge held by scientists in light of their experience and traditions on a landscape. The concept of discursive legitimacy has not been adequately evaluated in the context of co-management. We suggest three mechanisms to evaluate how discursive legitimacy is negotiated during co-management processes: validation, access, and application.

Indigenous knowledge is often evaluated using criteria established by western knowledge systems (Bohensky & Maru, 2011). Nadasdy (1999) critiqued knowledge integration processes for what he saw as their flawed central assumption: that the cultural beliefs and practices of indigenous knowledge holders conform to western conceptions about knowledge. Indigenous knowledge is often deemed valid only when it has been adapted to the specialized narrative of

science (Agrawal, 2002; Ellis, 2005). Conversely, indigenous communities often evaluate scientific knowledge based on their lived experiences on a landscape. Fernandez-Gimenez, Huntington and Frost (2006) explored how an indigenous community evaluated scientific knowledge that was used in a co-management process. While the indigenous community found their knowledge about beluga whales to be the most credible, they valued scientific knowledge, particularly when it validated indigenous knowledge. However, the indigenous community perceived science as a power structure as well as a knowledge system. In the study, scientists either did not perceive the power dynamics associated with the evaluation of different types of knowledge, or de-emphasized them.

Language is often a barrier to successful knowledge integration because it limits access to the information contained in knowledge systems. For example, the language that is used during co-management meetings and in scientific documents is often rife with technical and scientific terminology (Ellis, 2005; Ross, et al., 2011). This language is alienating for indigenous participants who are more comfortable speaking conversationally or in their native language. Conversely, scientists may have difficulty understanding the significance of the oral histories and holistic knowledge shared by indigenous participants (Stevenson, 1996).

Finally, the amount of discursive legitimacy held by indigenous communities may be evaluated by examining how indigenous knowledge is incorporated into co-management planning documents. If indigenous knowledge is included in planning documents, it is often in a paragraph related to a particular resource, which separates this knowledge from the larger cultural and ecological context of the indigenous knowledge system. For example, Nadasdy (2003) describes how bureaucratic documents create space for "Indigenous Knowledge about Big Horn Sheep", but are not interested in the spiritual, social, and cultural role of the sheep for

an indigenous community. Indigenous myths, practices, values, beliefs and other contextual knowledge also tend to be discarded in environmental planning documents because science has difficulty dealing with such subjective knowledge (Pierotti & Wildcat, 2000).

Methods

I used participant observation, responsive interviews and textual analysis to collaboratively evaluate how the Tribe and the Park Service negotiated discursive legitimacy during the general management plan process. Participatory evaluation encourages participants to evaluate the objectives and outcomes of a project and adapt their relationship according to the results (Sherman, et al., 2012). A key function of participatory evaluation is to create a learning process to strengthen organizational and institutional learning (Raymond et al., 2010). To be useful, evaluation must happen throughout the project cycle, and not just after the project has been completed (Conley & Moote, 2003). While this study focused on the general management planning process, which ended in 2012, the co-management relationship between the Tribe and the Park Service continues to evolve.

Tribal members and Park Service employees drove each phase of the research project, from the creation of the research question to member checking of the results and outputs of the research. I began conducting participant observation in 2010 as part of an internship with OSPRA that lasted three summers. I collected daily observations of the OSPRA office, attended planning meetings between the Tribe and the Park, and participated in biology and paleontology fieldwork with OSPRA employees.

After two years of participant observation, I worked with my collaborators to create an interview script with the help of key collaborators in the co-management process. A team of five key collaborators included representatives from; 1) OSPRA, 2) Badlands National Park, 3) the

Park Service Regional Office, 4) the Tribe, and 5) Colorado State University. These collaborators worked as a panel of experts (Weiss, 1994) who helped to create a purposive sampling frame for the interviews. My collaborators identified fourteen key stakeholders based on their experience participating in the co-management process. I also used snowball sampling during the responsive interviews to expand this network of interviewees to 26 individuals. I worked closely with the key collaborators to craft interview questions that addressed the motivations, goals, and concerns of the individuals participating in the co-management process as they related to the management of the South Unit. During the interviews, I used a responsive interview approach (Rubin & Rubin, 2011) to adapt the interview questions to what I learned during our conversations. I gathered meeting notes, policy documents, legal agreements, public comments and the draft and final version of the South Unit general management plan to explore how the negotiations that occurred during the general management planning process translated into policy and planning documents. I triangulated between the data gathered during the responsive interviews, participant observation field notes, and textual analysis to explore how the Tribal team members and Park Service employees negotiated discursive legitimacy during the general management planning process.

I conducted qualitative data analysis using a grounded theory approach developed by Glaser and Strauss (2009) to explore the themes that emerged from the data. Due to funding and time constraints I was unable to include the key collaborators in the initial data analysis. However, after initial coding I compiled reports for the stakeholders that explained emergent themes and asked for member checking and feedback on those themes. I also sent drafts of the research articles to the collaborators for member checking before publication, and consulted with collaborators on appropriate non-academic research products.

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Analysis

Negotiating discursive legitimacy is an iterative process. During the general management

planning process, Park Service employees negotiated the legitimacy of science and bureaucratic

management with Lakota participants. Tribal members were often skeptical of scientific

techniques and the use of science to manage their Tribal trust lands. Conversely, Lakota

participants negotiated the legitimacy of their indigenous knowledge and stewardship practices

and the applicability of this knowledge system to the management of the South Unit. During the

general management planning process the indigenous knowledge of the Lakota and the scientific

knowledge of the Park Service remained distinct. Instead of creating hybrid knowledge, this

knowledge integration process promoted the exchange of information and the negotiation of

power between the federal agency and the Tribal community. Table 3 illustrates three

mechanisms of discursive legitimacy, their definitions and a brief explanation of how they have

functioned as barriers to knowledge integration in previous studies.

Table 3: Mechanisms of Discursive Legitimacy

Mechanisms of Discursive Legitimacy	Definition	Barriers to Knowledge Integration
Validation	"To check or prove validity or accuracy" or "to demonstrate or support truth or value" (Oxford Dictionary)	That the validity of one knowledge system must be confirmed by another raises issues over the equity of knowledge integration initiatives (Gratani, 2011)
Accessibility	"Able to be easily obtained or used" or "Easily understood of appreciated." (Oxford Dictionary)	Language is often a barrier to knowledge integration because it limits access to the knowledge contained in knowledge systems (Ellis, 2005; Ross et al., 2011)
Application	"The action of putting something into operation." (Oxford Dictionary)	Often, if it is included in planning documents at all, indigenous knowledge is separated from the larger social and ecological context of the indigenous knowledge system (Nadasdy, 2003).

I provide examples from the South Unit general management plan to illustrate how these mechanisms can also promote the negotiation of discursive legitimacy in a co-management process.

Validation

Scientists and indigenous communities negotiate the legitimacy of their knowledge systems through collaborative evaluation and validation. Collaborative evaluation is not possible during traditional public comment meetings, which feature presentations from federal employees and narrow timeframes for the public to comment on the proposed management plan. Often, these meetings follow a format where the preferred alternative is decided in advance, presented as the best option, and defended against the concerns of the public (Hendry, 2004). However, during the general management planning process, the planning team adapted the bureaucratic public scoping process to better fit with Lakota culture. One Lakota team member noted,

> We broke the rules because they didn't fit our area. They called them open houses,
> we called them open houses too, but we recognized elders and the youth and
> communicated back and forth. We built a relationship rather than business as
> usual.

Traditionally, decisions within the Lakota community were reached through a consensus process, with individuals expressing their dissent by avoiding the event or activities with which they disagreed (Biolsi, 1992). This practice is still common today. Members of the planning team were often concerned by low attendance at the public comment meetings, despite the approval of the Tribal Council and many vocal community supporters.

When members of the Lakota community spoke at the public scoping meetings they often spoke of their families' relationship to the land on the South Unit, including accounts of personal

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history and spirituality. These components of indigenous knowledge are rarely incorporated into environmental decision-making because they seem irrelevant to western decision-makers (Ellis, 2005). While Park Service employees often recognized the legitimacy of the knowledge shared by elders and other Lakota community members, they struggled with the application of this knowledge to the general management planning process.

Lakota team members evaluated the validity of the scientific knowledge possessed by the Park Service employees based on its commensurability to their lived experience and knowledge. Tribal planning team members often observed that the Park Service employees possessed extensive knowledge about the geology and paleontology of the South Unit. However, they questioned the science behind how the Park Service conducted inventories of game animals, a concern that was closely tied to the traditional hunting techniques that are practiced on the South Unit.

During the general management plan process, the Park Service and the Tribe created a forum in which they could exchange information and evaluate the validity of scientific and indigenous knowledge. The purpose of the evaluation was not to determine whether one knowledge system was more valid than the other; instead the purpose was to promote a discussion about where and why these knowledge systems are useful.

Accessibility

The accessibility of knowledge systems is closely tied to language. Scientists and federal land managers often speak and write using scientific and bureaucratic language that may be confusing and alienating to indigenous participants (Ellis, 2005). As one Park Service team member noted,

> We talk in jargon, we talk in acronyms, so that all that people hear is ABCD… We have lost people from wanting to participate or even being able to know how they can participate when we talk like that.

The Park Service recognized the need to speak in accessible language, and actively attempted to speak in conversational terms. Instead of citing policy documents and scientific studies Park Service employees attempted to respond to questions from Lakota participants with responses that began with statements such as, "Typically we have approached situations like this in this manner…".

While Lakota people maintain a strong connection to their native language, the Lakota language is facing a process of attrition similar to that affecting many native languages throughout the world (BlueArm, 2002). The Lakota language was used in the general management planning process alongside English on public scoping documents and at public scoping meetings (See Figure 2).

BADLANDS NATIONAL PARK
South Dakota

National Park Service
U.S. Department of the Interior

Badlands National Park – South Unit General Management Plan
Makaopta Makosica Oinajin – Itokagatanhan Makopaspe Waaokiyapi Ikceka

Dear Friends,

The National Park Service, in cooperation with the Oglala Sioux Tribe, is beginning the development of a new General Management Plan (GMP) for the South Unit of Badlands National Park. The South Unit is located entirely on the Pine Ridge Indian Reservation.

Kolapila,

Makaopta Makosica Oinajin ki el Itokagatanhan Oinajin Waaokiyapi Ikceka lecala wan Makaopta Oinajin Awanyanke ki e na Oglala oyate ki nunpin wanna kahayapelo. Itokagatanhan Makopaspe ki le Wazi Ahanhan Oyanke itimahel yankelo.

Figure 4: Example of a Scoping Document for the South Unit General Management Plan

This is one of few cases in the United States where a Native American language was used in conjunction with English to communicate to the public during a general management public

scoping process. The preferred alternative for the general management plan calls for bilingual (English and Lakota) signs on roads, interpretive displays and elsewhere in the South Unit (United States, 2012). This approach may promote cross-cultural awareness among visitors to the South Unit, and cultural preservation as Lakota interpreters interpret their language for the public.

By recognizing the drawbacks of bureaucratic and scientific language and the benefits of including the Lakota language into planning and public scoping the general management planning team engaged in innovative environmental planning and created solutions that legitimize both knowledge systems.

Application

The application of knowledge in environmental decision-making processes and documents is not an endpoint; it can lead to an ongoing process of knowledge integration (Armitage, et al., 2011). I do not attempt to quantify the amount of indigenous knowledge that was incorporated into the planning process or the final general management plan. Instead, I discuss a few examples that illustrate where indigenous concerns and knowledge were addressed and suggest reasons for these patterns of inclusion or exclusion.

Native plants and animals in the South Unit provide a major source of sustenance for many Lakota people (Pickering & Jewell, 2008). Hunting and the collection of culturally-relevant plants have been allowed on the South Unit since its creation (PL 40-468). These practices are a form of indigenous stewardship, which requires indigenous knowledge about edible and medicinal plants as well as animal behavior (Ross et al., 2011). Some commenters on the general management plan noted concerns about these practices. However, none of the alternatives in the general management plan challenged these rights, which are allowed under the

provisions of PL 90-468, the American Indian Religious Freedom Act, and the 1976

memorandum of agreement (United States, 2012). While the final general management plan

rarely mentioned specific cultural practices, the Lakota stewardship ideology was incorporated

into multiple components of the planning document. For example, the general management plan

states (United States, 2012),

> The Lakota people spent their lives hunting and gathering on the prairies and
> developed a unique and sophisticated culture based on the principle of living in
> harmony with nature and the environment.

This broad statement acknowledges the Lakota peoples' stewardship ideology as well as their

indigenous knowledge of the landscape. However, it frames the Lakota's indigenous knowledge

as something that was developed in the past, and does not acknowledge the continuing creation

of indigenous knowledge about the landscape.

Reciprocity and generosity are integral parts of the Lakota peoples' spirituality and social

relationship with nature (Pickering & Jewell, 2008). Lakota spiritual practices and beliefs were

often integrated into the general management planning process. For example, a ceremony was

held at the White River Visitor Center in the South Unit for the signing of the record of decision.

During the ceremony the entire assembly, including National Park employees, the President of

the Tribe and other council members were smudged for ceremonial cleansing. Lakota elders

offered prayers to bless the agreement and the attendees. Prior to signing the agreement the

Superintendent of Badlands National Park and President of the Tribe placed their hand on the

skull of a bison as a public declaration of commitment to the agreement they were signing (See

Figure 5).

Figure 5: Photo of the Signing of the Record of Decision June 2, 2012

Photo Credit: National Park Service

While Lakota spirituality was integrated into the general management planning process, this form of indigenous knowledge was rarely incorporated into the planning document.

The strict organization and requirements of the National Environmental Policy Act and the general management plan process significantly limited the influence and inclusion of indigenous knowledge into the final planning document. Because the structure and organization of the general management plan is rooted in western bureaucracy, the document required arbitrary distinctions among different types of indigenous knowledge and written documentation of the Lakota knowledge system. The general management planning process was more flexible because it included oral, visual and written forms of communication that were used to negotiate

discursive legitimacy. This allowed the planning team to integrate indigenous knowledge and its underlying epistemology into many aspects of the planning process.

Discussion

The process of knowledge integration can build shared goals while recognizing the legitimacy of individual knowledge systems. However, we should not assume that the shared goals expressed in the general management plan are based on the same motivations and perspectives for all parties. Instead, I explore the sometimes separate motivations behind these shared goals.

The Organic Act of 1916 founded the Park Service for 'the enjoyment of future generations'. One of the shared goals of the South Unit general management plan process was the desire to conserve the landscape for the benefit of future generations. In the general management plan, the term 'future generations' generally related to the American public as a whole. Members of the planning team shared a more specific understanding of the term. They viewed the Tribal National Park as a mechanism to create economic and cultural opportunities for Lakota youth. Gerard Baker, former director of OSPRA told Indian Country Today,

> Like Tribal President Steele said, this is about our youth, our next generation. These children are saying, 'I want to be a Tribal National Park service archaeologist, paleontologist or manager.' Tribal children are taking the reins of our world-class resource.

Echoing these sentiments, Eric Brunneman, the Superintendent of Badlands National Park told the Native Sun News,

> These are our future rangers. These are the young people that may lead a Tribal National Park into the future. I do see a time when our rangers will routinely work side-by-side with Tribal biologists, archaeologists, and paleontologists.

In this case, members of the planning team shared the motivation to create opportunities for Lakota youth that tied to the shared goal of preserving the landscape for future generations.

Shared responsibility for the management of the South Unit was another shared goal expressed in the final general management plan and by members of the planning team. Regardless of the legislative outcome, Badlands National Park and the Tribe will continue to collaborate to manage the South Unit. If the Tribal National Park is created, the planning team envisions a transitional period when Tribal members will be trained by the Park Service to manage, interpret, and administer the new park as Park Service employees. During this period Badlands National Park and the Tribe will continue to co-manage the South Unit until Tribal members are capable of running the park as a unit of the Park Service. If the Tribal National Park is not created, the Tribe and the Park Service will continue to co-manage the South Unit as a part of Badlands National Park.

While the goal of shared responsibility was common among all members of the planning team, the motivations of Tribal team members were different than those of the Park Service employees. Often, Tribal support for shared responsibility stemmed from interests related to Tribal sovereignty and economic opportunities. Some Lakota team members hoped that co-management could be an interim step in their struggle to reclaim the land in the South Unit. One Tribal team member noted,

> If it is a Tribal National Park, the Park has final authority. That was always the hardest part… it won't be under the National Parks' authority forever. It will be a weaning process where we are basically weaned off them.

Tribal team members also noted that they would like to share responsibility with the Park Service to gain training and skills and improve economic opportunities for Tribal members. Conversely, Park Service team members mentioned concerns over the Tribe's ability to manage the South Unit sustainably. Concerns related to financial responsibility, political upheaval and lack of skilled and trained Tribal members. Park Service team members suggested shared management

as a way to ameliorate these concerns, and ensure continued protection of the resources in the South Unit.

These dissimilar motivations for shared management can be tied to the unequal distribution of resources and authority between the Tribe and the Park Service. While the Park Service is a federal agency with the authority to make decisions and manage protected areas, the Tribe has struggled for generations to regain their traditional lands that were lost during American westward expansion. Further, Pine Ridge Indian Reservation is one of the poorest reservations in the country, and has an unemployment rate that is double the national average (Pickering, 2000; Pickering, 2005). Conversely, the Park Service is funded annually through federal appropriations, which, while they have been shrinking in recent decades, still constitute a significant amount of economic resources.

The unequal distribution of power between the Park Service and the Tribe was challenged during the general management planning process. The Tribe built discursive legitimacy through consistent communication and continued negotiation of the goals for the South Unit. While the Tribe possessed fewer resources and less authority than the Park Service, they exerted power in the co-management process because they spoke on behalf of indigenous knowledge and Native American sovereignty. However, the relationship between the Tribe and the Park Service will remain unequal until the Tribe can control more resources and establish more authority in relation to the Park Service.

Conclusion

This assessment of the relationship between the Tribe and the Park Service does not reflect the evolving nature of the co-management process in the South Unit. This paper is meant to illustrate how the Tribe and the Park Service negotiated discursive legitimacy during the

general management planning process, which is part of a larger co-management effort. I focused on discursive legitimacy, and did not delve into the other two sources of power that Hardy and Phillips (1998) suggest are useful for understanding co-management relationships, namely resources and authority. A deeper empirical examination of the intersecting effects of resources, authority and discursive legitimacy may yield further insights into how co-management processes can challenge unequal power dynamics between indigenous people and federal agencies.

As indigenous people build discursive legitimacy with collaborating federal agencies, they may shape co-management processes to better reflect the values and worldviews that are contained within the knowledge they possess about the land. However, the incorporation of indigenous knowledge into co-management is not an automatic result of indigenous participation in these processes. The structures and procedures of co-management remain entrenched in bureaucratic and western traditions that discourage indigenous participation and challenge the legitimacy of indigenous knowledge. Without concerted effort from policy-makers and indigenous communities to address institutional barriers (such as the format and function of the National Environmental Policy Act) to the inclusion of indigenous knowledge in environmental planning processes, federal initiatives will continue to exclude indigenous voices.

CHAPTER 6

CREATING A TRIBAL NATIONAL PARK:

BARRIERS THAT CONSTRAIN AND MECHANISMS THAT PROMOTE

ADAPTIVE CO-MANAGEMENT

Overview

Learning is a key component of adaptive co-management because it allows collaborating

organizations to share knowledge, reflect on challenges and opportunities, and create novel

solutions to social and environmental challenges. Participatory evaluation is a research process

that promotes social learning as participants design the research program, create research

questions, and assess the process and outcomes of change (Bopp & Bopp, 2001). I conducted

participatory evaluation with the Oglala Sioux Tribe and the National Park Service as a learning

process to identify and augment their adaptive capacity. Together we explore the barriers that

constrained and mechanisms that promoted the transition from a co-management agreement to an

adaptive co-management process in this case. Barriers included a lack of accountability and

leadership from both the Oglala Sioux Tribe and the National Park Service. Adaptive

mechanisms such as social learning, reciprocity, and bridging organizations encouraged a more

collaborative and adaptive management process. In light of these adaptive mechanisms I

examine how the intersecting and conflicting motivations of the National Park Service and

Oglala Sioux Tribe converge and diverge as they work toward their shared goal: to create the

nation's first tribal national park on Pine Ridge Indian Reservation. To ensure the sustainability

of the adaptive co-management process, the Park Service and the Tribe must recognize the

benefits of diversity, build networks within and between collaborating organizations, and

iteratively evaluate their relationship to learn from the mistakes of the past and adapt to the

uncertainties of the future.

Introduction

Over the past three decades, federal agencies and indigenous communities have

implemented increasingly collaborative approaches to land management and environmental

decision-making. In theory these collaborative approaches should function as continuous

problem-solving processes in which stakeholders negotiate shared goals for environmental

management (Carlsson & Berkes, 2005). However, in practice, participants in these initiatives

often fail to reflect on the barriers that constrain and mechanisms that promote successful co-

management. Further, because adaptation and collaboration occur over long periods of time,

participants in adaptive co-management processes may not recognize the adaptive or

maladaptive strategies they implement. Social learning processes have been cited as a key

mechanism to promote reflexive and adaptive co-management processes because they enable

actors to consider the consequences of different actions, evaluate and negotiate trade-offs, and

communicate among diverse groups (Armitage et al., 2011). While the merits of social learning

have been hailed by a variety of academic studies (Armitage et al., 2011; Bown et al., 2013;

Cundill and Fabricius, 2009; Raymond and Cleary, 2013; Selin et al., 2007), few case studies

empirically examine the process and outcomes of social learning.

Bellamy et al. (2001) argue,

> Evaluation is fundamental to identifying change, supporting an adaptive approach
> that is flexible enough to meet the challenge of change, and enabling progressive
> learning at individual, community, institutional, and policy levels.

Participatory evaluation promotes continuous assessment of co-management processes,

promoting social learning by allowing individuals and organizations to consider how their

previous actions and strategies are affecting their current relationship. While participatory evaluation has been employed extensively in international development research (Bopp & Bopp, 2001; Miyoshi, 2013) to date, it has been under-utilized in co-management and adaptive co-management initiatives (Conley & Moote, 2003).

I conducted participatory evaluation with the Oglala Sioux Tribe (hereafter "the Tribe") and the National Park Service (hereafter "the Park Service") as a learning process. The Tribe and the Park Service have been co-managing the South Unit of Badlands National Park (hereafter "the South Unit") since 1976. Over the past four decades, their relationship has evolved from a mandated co-management agreement to an adaptive co-management process. Through participatory evaluation, I identify epistemological and social mechanisms that contributed to this changing relationship. I argue that social learning, reciprocity and bridging organizations acted as mechanisms to encourage the transition toward adaptive co-management by promoting learning and a networked approach to co-management.

Today, the Tribe and the Park Service are collaborating to write legislation that will create the nation's first Tribal National Park in the South Unit. This unprecedented effort illustrates how adaptive co-management initiatives can create novel and collaborative solutions to complex socio-ecological challenges. However, we should not assume that all participating stakeholder groups share the same motivations for these novel solutions. In light of the adaptive mechanisms that encouraged the transition from a co-management agreement to an adaptive co-management process, we explore how motivations for the Tribal National Park converge and diverge among and between the Park Service and the Tribe. As they move forward, the Park Service and the Tribe must consider the conditions that contributed to the success of their initiative thus far, and examine the barriers to future adaptation.

Background

To understand how the relationship between the Oglala Sioux Tribe and the National Park Service transitioned from a co-management agreement to an adaptive co-management process, we must explore the concepts of co-management and adaptive co-management (See Table 4).

Table 4: Co-Management and Adaptive Co-Management

Management Terminology	Definition	Potential Benefits of this Approach	Problems Associated with this Approach
Co-Management	A shared decision-making process between the federal government and other stakeholders, which may include resource users, local communities, Tribes, and scientists (Bown et al., 2013)	• Shared authority between the state and resource users • Increased responsiveness to public and community concerns • Increased participation may lead to increased support for land management • Fairness and accountability in management	• May be used to avoid the transfer of power to stakeholder groups from the state (Carlsson & Berkes, 2005) • Lack of accountability between federal agencies and communities (Nadasdy, 2003) • Power imbalances are common (Nadasdy, 1999; Nadasdy, 2003) • Co-optation of co-management processes (Conley & Moot, 2003) • Exclusion of the public and stakeholders (Reed, 2008) • Lack of consistent leadership (Plummer and Fennell, 2007) • Lacks flexibility to respond to ecosystem change (Bown et al., 2013)
Adaptive Co-Management	Adaptive co-management is a process by which institutional arrangements and ecological knowledge are tested and revised through trial and error, which is designed to integrate social learning with collaborative management (Folke et al., 2002)	• Monitoring and assessment of social and ecological variables • Social learning • Creation of novel solutions through collaborative land management • Ability to address uncertainty and change	• Problems balancing adaptive management and collaborative management goals • Continued inability to respond to ecosystem change • Lack of financial resources to maintain monitoring efforts • Long time-frames and a lack of short-term results (Bown et al., 2013)

A fundamental assumption behind co-management is that sharing authority and decision-making will enhance resource management by making it more responsive to a range of interests and

needs (Berkes and Jolly, 2002; Borrini, 2000; McCay and Jentoft, 1998). Co-management is not merely about managing resources; it is about managing the relationships between the organizations and individuals that share decision-making responsibilities (Natcher et al., 2005).

While in theory, co-management initiatives aim to be more inclusive and equitable than traditional land management approaches, a number of studies have identified problems associated with co-management including: significant accountability problems in decision-making processes devolved by the government, power imbalances and co-optation, exclusion of the public and stakeholders, and a lack of consistent leadership through time (Conley and Moote, 2003; Frame et al., 2004; Plummer and Fennell, 2007). Further, if co-management is mandated as an agreement between the state and a community of resource-users, it may be used to avoid the transfer of power to stakeholder groups (Carlsson and Berkes, 2005). In these instances, co-management may reinforce existing inequalities by failing to attend to the political economy in which they are embedded (Nadasdy, 2003). Finally, co-management initiatives may fail to achieve the goals of ecological health and socio-economic well-being because the decision-making processes are insufficiently flexible in their responses to ecological change (Bown et al., 2013).

Within the past two decades, academic discourse and land management practice have shifted focus from co-management to adaptive co-management, which has been hailed as a flexible solution to complex social and environmental problems such as climate change (Bown et al., 2013). Adaptive co-management attempts to address the ecological problems associated with co-management by combining adaptive management with collaborative management to integrate the learning and linking function (horizontally and vertically) of governance (Armitage et al., 2008). By learning from previous management experiences and exploring new alternatives,

adaptive co-management attempts to improve resource management and environmental decision-making processes (Armitage et al., 2008; Berkes, 2004; Carlsson and Berkes, 2005; Folke et al., 2005). A key characteristic of adaptive co-management initiatives is the desire to improve organizations' and individuals' capacity for learning and adaptation in the context of change.

However, despite its theoretical appeal, adaptive-co-management has been difficult to put into practice (Huitema, et al., 2009). Unsuccessful attempts at adaptive co-management have been attributed to difficulties striking a balance between adaptive management and collaborative management, a continued inability to successfully respond to ecosystem change, and a lack of financial support to fund the continual evaluation and monitoring necessary to maintain adaptive management (Bown et al., 2013). Finally, and notably, adaptive co-management initiatives take a long time to be accepted, and stakeholders are often impatient to see its benefits.

Methods

Carlsson and Berkes (2005) observe, "Although ecosystems and institutional systems show a large diversity, our tools for conceptualizing and analyzing co-management are strikingly blunt, and more research needs to be done to refine these tools". The evaluation of participatory processes should itself be participatory, with stakeholders selecting and applying evaluation criteria (Reed, 2008). While learning is often acknowledged as centrally important to adaptive co-management, participation is often evaluated in the absence of stakeholder engagement, which limits the potential for learning during these processes. If researchers and stakeholders systematically incorporate evaluation into adaptive co-management processes the evaluation itself may act as a mechanism for social learning.

The style of evaluation used for co-management initiatives must be able to cope with complexity. Evaluations with an overly rigid focus on defined outcomes may miss valuable

insights or emergent properties of the system. Particular attention should be paid to monitoring how the process itself changes over time (Reid, 2009). The assessment question then becomes one not simply of success or failure of the initiative, but of the change process itself (Shackleton et al., 2010).

Participatory evaluation, in particular, emphasizes a research process that promotes collaborative learning to strengthen organizational and institutional adaptive capacity. This approach enables participants to evaluate the objectives and outcomes of a project and adapt their relationship according to the results (Bopp & Bopp, 2001; Miyoshi, 2013). Following the participatory evaluation research process proposed by Sherman et al. (2012), I collaborated with stakeholders to promote reflexivity and learning about the co-management process.

The research process began during the summer of 2010. Over the course of three summers, I conducted participant observation on a daily basis in the OSPRA office, attended planning meetings between the Tribe and the Park Service, and researched the key players in the co-management process. During this time I built rapport and trust with employees of the OSPRA and the Park Service. I worked closely with a team of five key collaborators to create the research question, engineer interview questions, analyze qualitative data, and integrate member checking and feedback on the research products. This team included representatives from: 1) the OSPRA, 2) Badlands National Park, 3) the National Park Service, 4) the Tribe, and 5) Colorado State University.

After two years of participant observation, with help from my collaborators, I created the research question for this participatory evaluation process: *What are the barriers that constrain and mechanisms that promote collaborative and adaptive natural resource management?* To answer this question, I worked closely with our collaborators to create the interview script. Some

of the interview questions were very straightforward, and were meant to assess interviewees' personal perspective related to the co-management process. For example, we asked, "In your experience, how has the relationship between the Tribe and Badlands National Park changed during the South Unit general management plan process?" Other questions were designed by the collaborators to assess broader interests related to the barriers and benefits of the co-management process. For example, a collaborator suggested that I should ask interviewees to describe some of the reasons that the Tribal National Park might fail. Questions related to the process of change in the context of co-management provided information on how participants envision drivers of change, how they hope to promote change in the future, and the types of change they fear and desire. During the interviews, I used responsive interviewing techniques (Rubin and Rubin, 2011) to adapt the interview questions to incorporate new topics and themes that emerged during the discussion. The interview process allowed participants to reflect on the history of the co-management process and envision future challenges and opportunities.

To create the sampling frame for the interviews, I asked my collaborators to provide the names and contact information for key individuals in the co-management process. I used snowball sampling during the interviews to expand our sample from 14 to 26 individuals. At the end of every interview I asked interviewees to provide names and contact information for other key individuals. Interviewees emphasized the importance of speaking to people who supported and opposed the Tribal National Park. I was often told I should "…speak with people who are still mad." To address this suggestion, my interviewees included Park Service employees, OSPRA employees and Tribal members that participated in the general management planning process, as well as those individuals who openly oppose the creation of the Tribal National Park.

I gathered meeting notes, policy documents, legal agreements, and the draft and final version of the South Unit general management plan to explore the mechanisms that promoted the transition from a co-management agreement to an adaptive co-management process. To understand how the shared and separate motivations for continued co-management in the South Unit constrain and promote adaptive co-management, I triangulated between the data gathered during participant observation, the responsive interview process and textual analysis.

Funding and time constraints prevented my return to Pine Ridge Indian Reservation after data was collected. Instead, I conducted qualitative data analysis using a grounded theory approach developed by Glaser and Strauss (2009) to explore the themes that emerged from the data. After initial coding I compiled reports for my collaborators that explained the themes I saw emerging from the data and asked for member checking and feedback on those themes. I incorporated my collaborators' comments on these reports into our academic and non-academic research products.

Participatory research that includes indigenous communities as equal partners may build social capital and foster the ability to design locally and culturally appropriate resource management strategies (Berkes, 2009). The Tribe and the Park Service have already agreed on a common vision for future management of the South Unit. The purpose of this participatory evaluation project is to enable these organizations to explore the barriers to adaptive co-management, illuminate the mechanisms that promoted adaptation in this case study, and explore how the separate motivations for the shared goal of continued co-management affect the adaptive capacity of the Park Service and the Tribe. Participatory evaluation, if practiced at frequent intervals during co-management processes, may act as another mechanism to build adaptive capacity and encourage adaptation to social and ecological uncertainty.

Adaptive Mechanisms

Social Learning & Reciprocity

Social learning and reciprocity acted as epistemological mechanisms that enabled the transition from a co-management agreement to an adaptive co-management process in the South Unit. Social learning is defined as a change in understanding that goes beyond the individual to become situated within wider social contexts through social interactions between individuals in social networks (Reed, 2008). As the Park Service and OSPRA collaborate to manage the South Unit they have begun to create networks of knowledge between their organizations. For example, a former OSPRA employee noted,

> All those little rocks you see right there are the result of learning from the other interpreters from up on the Northern end. There were a lot of geologists, paleontologists, and botanists that were working and I was the only Lakota person so they wanted to know about the Lakota culture. So I told them, well if you teach me about this I'll give you information about that. It was more like a trade-off, and it worked.

Social learning enables individuals and groups to act collectively to adapt to social and environmental change by linking knowledge and action (Adger, 2003). By exchanging scientific and indigenous knowledge of the environment during co-management of the South Unit, OSPRA and Park Service employees built their knowledge networks and engaged in informal social learning.

In co-management processes, social learning is often affected by the historical power inequities that are inevitably embedded in co-management (Armitage, 2005). Learning is neither value-free nor politically-neutral (Armitage et al. 2008). Legitimizing culture is a key task of any social learning process that engages indigenous participants. By promoting ties within communities and creating broader networks of collaboration, reciprocity acts as a key mechanism to legitimize indigenous participation in environmental decision-making.

Social networks of reciprocity affect who is involved in decision making and when social capital is mobilized (Armitage et al., 2011). Reciprocity is an agreement wherein social groups learn how to give without unduly sacrificing their own interests to others through the process of exchange (Mauss, 1954). In these transactions, when an individual or group receives a gift, they commit to a partnership with others. Often, in the context of the co-management process in the South Unit, reciprocal relations involve exchanging expertise and time through collaborative management of natural resources. For example, an OSPRA biologist noted,

> We get assistance from the guys at Badlands National Park. They've come down and cooperated, helped us. And then we kinda return the favor and go back and help them with some stuff, like with the big horn sheep they came down and helped us with that, trying to tranquilize them. And we go up there and help them with their counts and stuff, their surveys. We do a lot of cooperation like that.

Rules of reciprocity within the Lakota culture include generosity, being a good relative, and taking responsibility for the group (Pickering, 2000). The principles of giving and receiving, central to reciprocity, can be used to sustain collective commitment to co-management.

Bridging Organizations and Networks

Studies of adaptive co-management routinely emphasize the presence of a network or network connections that facilitate flexible and adaptable learning processes (Armitage et al., 2008; Berkes, 2004; Folke, 2006; Folke et al., 2005; Olsson et al., 2007; Plummer and Armitage, 2007). Bridging organizations enable networking, which helps address conflict, builds trust, provides access to resources, and promotes common visions and shared goals (Berkes, 2009). Bridging organizations also link local actors and communities with other organizational levels (Olsson et al., 2004), and may encourage conflict resolution by acting as liaisons between opposing organizations (Olsson et al., 2007).

In the South Unit, the OSPRA acted as a bridging organization. As a bridging organization, the OSPRA functioned as a structural mechanism that supported social networks and encouraged adaptive co-management. During the general management planning process the OSPRA was appointed by the Tribal council to be a liaison between the Tribe and the Park Service. Multiple interviewees noted the importance of OSPRA's continued role as a bridging organization in the co-management relationship. A retired OSPRA employee noted,

> They need to be the backbone, so to speak, because the purpose of the OSPRA, when I worked with them, was to one, protect the natural resources, protect the wildlife that's there, and two, be a liaison between the state and federal government and the National Park Service. OSPRA needs to pretty much take full rein, so to speak, and make certain that everything is done the right way.

As a liaison, promoting consistent communication between the Park Service and the Tribe, the OSPRA bolstered these groups' capacity to deal with change and uncertainty (Olsson et al., 2007). For example, a Park Service employee noted,

> What happens in anything, especially when you are talking government to government, sovereign to sovereign, the Tribe has an election every two years and we have one every four years, when that happens a lot of things change. Others may have a different opinion about all the work that has been done. It is a matter of being patient, because as the officials change, their perspective on how to proceed may change. That is why it is such a long, slow process.

Through their networked connections and credibility among stakeholders, built over time and through consistent communication, the OSPRA served as a bridging organization that encouraged the continuation of the co-management process in the South Unit despite political instability.

Separate Motivations for Shared Goals

The creation of the Tribal National Park is dependent on Congressional approval. In the interim between the signing of the record of decision and the approval of legislation for the Tribal National Park, the Park Service and the Tribe have committed to co-managing the South

Unit. If the Tribal National Park is approved by Congress, the Tribe and the Park Service have agreed that they will institute a training period in which Tribal members will be trained by Park Service employees to manage and operate the new park (United States, 2012). If the Tribal National Park is not approved, the Tribe and the Park Service have agreed to continue to co-manage the South Unit and implement the preferred resource management alternative which calls for improved interpretation programs that emphasize Lakota knowledge, expanded law enforcement and increased biological monitoring (United States, 2012). In either instance, the Park Service and the Tribe will continue to collaborate in the South Unit. While they share the goals of a Tribal National Park and continued co-management in the South Unit, the motivations for these shared goals vary widely between the Tribe and the Park Service.

Parties enter into adaptive co-management processes strategically. With this in mind, Pinel and Pecos (2012) argue that we should study, not assume, the motivations behind participant goals in collaborative processes. While the adaptive mechanisms we have identified have encouraged a more inclusive and adaptive co-management process, without a thorough consideration of Park Service and Tribal motivations for continued co-management, these adaptive mechanisms may lose their power to promote progressive changes in the South Unit. In light of the adaptive mechanisms we have identified, using the qualitative data we collected during responsive interviews, we examine how the motivations of the Park Service and the Tribe converge and diverge as they work toward their shared goals.

During the interview process, we asked interviewees, "What are your goals for the South Unit?" Tribal members and OSPRA employees often cited Tribal empowerment as a key goal for the future of the South Unit. Through tourism, the Tribal National Park could improve Tribal member's opportunities for education, job training, and employment. On a reservation that is

often listed as one of the poorest in the country (Pickering, 2000), the creation of employment

opportunities would be a major contribution to the local economy of the Tribe.

For many Tribal members, the creation of the Tribal National Park could address some of

the historical offenses committed against the Tribe by the federal government, and build Tribal

empowerment through a connection with the landscape. A Tribal member noted,

> I always thought the South Unit could be a way of reconciling those hurts. There
> has got to be something there that provides healing. When we did the public
> comment meetings you would have individuals crying because it was their family
> that lost land. Someone died on the way. They had to live in tents with no home
> and no land. That was really hard.

Many of the Tribal members who attended the public comment meetings during the general

management planning process were unaware that the land in the South Unit is currently held in

trust for the Tribe. For these individuals, the Tribal National Park could provide a renewed sense

of place and ownership in the South Unit.

Other Tribal members focused on how the Tribal National Park could build

empowerment through collaboration. Referring to the Tribal National Park, a Tribal member

noted,

> It's gonna benefit everybody. And I think we need to do something, we need to
> maintain, retain control of it, the ownership of it. But I think we need the Parks
> (Service) in there for the money, moneywise, and their expertise, technical
> assistance, and that was what I had always talked to Paige (previous
> superintendent of Badlands National Park) about.

This Tribal member recognized the value of collaboration, which allows the Tribe to access the

technical and bureaucratic expertise of the Park Service through social learning, but supported

the Tribal National Park because she did not want to compromise Tribal sovereignty by

relinquishing ownership of the South Unit.

Tribal members and OSPRA employees often mentioned ownership of the land and decreased dependency on federal funding as key components of Tribal empowerment. Referring to the Tribal National Park, a former OSPRA employee noted,

> (I want) to let the world know that Native Americans can do something instead of being dependent on the federal government for handouts. That is one thing that when I was on the Tribal council I told a lot of constituents, that I'm not gonna be an enabler.

This response alluded to the pride associated with owning and managing the Tribal National Park. In this case, the interviewee saw the Tribal National Park as an opportunity for the Tribe to improve their economic circumstances, and to rely less on federal funding.

While Park Service employees supported the creation of the Tribal National Park as an economic opportunity for the Tribe, motivations for support varied. Echoing the sentiment expressed by the former OSPRA employee, the current Superintendent of Badlands National Park noted,

> I think it is very important that the Tribal National Park becomes a cornerstone of tourism upon which to build and it is not a giveaway. This is an opportunity for the Tribe to start with something relatively small and build it.

Park Service employees also mentioned concerns about Tribal management and control over businesses associated with the Tribal National Park. A Park Service employee noted,

> I think everybody agrees that they will want concessionaires (for the Tribal National Park) to be Tribal members, but what kind of controls, checks and balances go into that? I don't think the Tribe will want that to be a free for all. At the same time I don't think they will want our regional office to oversee the contracting for the concessionaires. So how do you deal with that?

The collaboration between the Park Service and OSPRA during the general management planning process diminished participant's desire for retribution for the historical taking of the land expressed by many Tribal members. Instead of retribution, OSPRA employees focused on reciprocal relationships with the Park Service. However, many Park Service employees remained

hesitant to fully endorse Tribal ownership and management without federal oversight. The

hesitation on the part of Park Service employees may act as a barrier to continued collaboration

if the Tribe cannot gain federal support for increased responsibility.

Political Concerns

To explore the potential problems faced by the Tribe and the Park Service, we asked

interviewees, "Are there any issues remaining before the Tribal National Park can be created?"

This question prompted a variety of responses, and illuminated other motivations for the shared

goal of the continued co-management. A lack of political support was a common concern, both

for the Park Service and the Tribe. Referring to Congressional support, a Park Service employee

noted,

> We don't have a whole lot of people behind us right now. There is great doubt that
> we can figure this out, so we have a long path and we just have to figure out the
> strategy. The best way we can do it is to sit down together and do it with the
> Tribe.

The Park Service employee recognized the need to continue to collaborate with the Tribe as they

move forward with legislation to create the Tribal National Park. However, he was not optimistic

about federal-level political support for the Tribal National Park.

Concerns about political support varied among members of the Tribe. Often, OSPRA

employees cited concerns about a lack of support from Park Service employees. For instance, an

OSPRA employee noted,

> The first issue I see is convincing some of the managers in the Park Service that
> this is going to work. We have naysayers out there that are still there. That is one
> of our biggest goals; to educate them, and to make sure they understand.

OSPRA employees focused less on Congressional approval, and more on continued support from

the individuals they collaborated with during the general management planning process.

Conversely, Tribal members who had not directly participated in the planning process voiced

concerns related to instability within the Tribal council, and rarely mentioned concerns about a

lack of political support from the Park Service or other components of the federal government.

Referring to political instability within the Tribal council, a Tribal member said,

> Our political system, where we change over every two years doesn't help us
> because it means we have to educate quite a few people in the process. These
> people have not been part of the process and they are trying to backtrack us. We
> have to say, no, we have already talked about that, we have already done that.
> That is our problem on our side, that turnover.

OSPRA has acted as a bridging organization between the Tribe and the Park Service. As such,

the individuals that work for the OSPRA have different perspectives about the relationship

between the Park Service and the Tribe than Tribal members who have not closely collaborated

with the Park Service. Interviewees from the Tribe and the Park Service often fixated on

political issues within their own organizations and groups. For example, while Tribal members

focused on political instability within the Tribal council, Park Service employees often

mentioned concerns about a lack of federal support for the Tribal National Park. As members of

a bridging organization, OSPRA employees voiced concerns related to maintaining supportive

relationships between the Park Service and the Tribe. While a lack of political support from the

federal and Tribal governments may undermine the success of the Tribal National Park initiative,

a lack of political support from Park Service employees and Tribal members may be a barrier to

continued co-management as a whole.

Financial Concerns

Along with concerns related to a lack of political support and political instability,

interviewees cited uncertain funding for the South Unit and the future Tribal National Park as a

major concern. Although the final general management plan provides the analysis and

justification for future South Unit funding proposals, this plan does not guarantee funding for the

Tribal National Park (United States, 2012). OSPRA employees were particularly concerned by

the Park Service's perceived withdrawal after the signing of the record of decision for the general

management plan. An OSPRA employee noted,

> When it was decided that the preferred alternative for the general management
> plan was to be a Tribal National Park, it was like they all started backpedaling
> because now we are supposed to get our own funding.

While the Park Service and the Tribe have agreed to collaborate to create legislation to present to

Congress, the Tribe has been designated as the lead organization. OSPRA employees often

expressed a desire to work with the Park Service to build their financial capital during the interim

between the signing of the record of decision and the creation of the Tribal National Park. An

OSPRA employee noted,

> Even in this interim between now and when we go to Congress, the next two to
> three, to five years, we need to have them helping us make this transition. I
> understand they have set money for set things, but are there places they can help
> us apply for money to do this? There have to be.

Multiple Park Service employees noted that a common argument between the Tribe and the Park

Service relates to the amount of money that is currently spent on the South Unit. Badlands

National Park receives approximately $4.5 million dollars annually in appropriations from the

federal government (United States, 2012). During our interviews, multiple Tribal members

argued that because the South Unit is co-managed as part of Badlands National Park, and

constitutes roughly half the land area of the park, it should receive half of the annual funding.

For example, an OSPRA employee argued,

> My opinion is that, because it (the South Unit) is a National Park, and part of the
> National Park system, and Badlands National Park, they should be doing
> everything in the South Unit that they are doing in the North Unit, and they are
> not. Yes, they can initiate it with us, or we can make the initiations to make it
> happen, but they don't. Their resources are their resources.

However, a Park Service employee noted that this argument does not consider that over 95 percent of annual visitation is centered in the North Unit, which requires a substantial portion of the federal appropriations.

Conflict can occur when groups have different rules about reciprocity or evaluate the worth of these items or relationships differently (Pinel & Pecos, 2012). In the case of the South Unit, the distribution and use of financial resources was a prominent concern for both Tribal members and Park Service employees, which formed the catalyst for previous conflicts and may encourage future disagreements.

While OSPRA and Park Service employees recognized that obtaining federal appropriations for the new Tribal National Park would be a difficult challenge, many Tribal members argued that the funding for the new Park was owed to the Tribe because of previous grievances, such as the taking of the gunnery range in 1942. A Tribal member argued,

> Those costs need to be covered by the National Park Service. I don't care how they do it, if it is project funding they get, if it is appropriations I don't care. Those costs should be funded by the National Park Service. I think just to stay in tune with that (1976) memorandum of agreement, I don't want the language to be watered down this round.

The Park Service and the OSPRA discussed concerns about funding the Tribal National Park during the general management planning process. While members of the Tribe were able to comment on the general management plan, they have not participated in the ongoing negotiations related to future funding of the Park. This lack of communication between the Park Service and the Tribal community may contribute to Tribal member's desire to have the Park paid for in full by the Park Service.

Conclusion

Adaptive co-management processes take time, are complex, and do not advance in a linear fashion. Frequently these initiatives may not meaningfully attain hoped for outcomes within a prescribed period of time (Reed, 2008). A Park Service employee noted,

> There will be a long-term partnership and a hand-in-hand working down the road. It will be probably five or ten years before it is fully implemented. We all recognize that in any point in time we may stumble, but it is important not to step back. We need to pick ourselves up, realize what we have done wrong, correct it and move forward.

Equitable and adaptive co-management processes are slow to develop, and trust and communication pathways are easily lost (Armitage et al., 2011). Trust is often cited as a key component of successful and sustainable adaptive co-management processes (Berkes, 2009; Hahn, Olsson, Folke, & Johansson, 2006; Selin, Pierskalla, Smaldone, & Robinson, 2007). To build trust, individuals and organizations must recognize and value the contributions of their collaborators. When asked about reasons the Tribal National Park might fail, multiple Park Service employees noted concerns about a lack of unified support from the Tribe. A Park Service employee noted,

> I think the most important role that the Tribe could play, at least from my selfish view of the world, is they come together with one voice. So I think the biggest role of the Tribe is helping to envision what they want on their side without their being a lot of different coalitions coming after us or coming at us. I'm a little concerned about that.

To call for a unified voice from the Tribal community undermines the Tribe's ability to negotiate about the future and express their goals and motivations freely. In the case of the South Unit, the Park Service and the OSPRA have built a collaborative and trusting relationship over the past decade during the general management planning process. While Tribal members contributed their comments during public scoping for the general management plan, communication between

the Park Service and the Tribe has waned since the initial scoping meetings. It is easy to marginalize the motivations and goals of groups that are left out of conservation conversations.

As they move forward to craft legislation, the Park Service and the OSPRA must reach out to Tribal members and recognize the legitimacy of their motivations and concerns. By communicating with Tribal members during the drafting of legislation, the Park Service and the OSPRA may improve their capacity to adapt to political and financial challenges by incorporating diverse voices and envisioning novel solutions. Without participation from Tribal members, the Tribal National Park initiative may fail to gain the public support it needs to become a reality.

While it is may be difficult to promote open communication between the entire Tribal community on Pine Ridge Indian Reservation and the Park Service, *tiospayes* may function as bridging organizations between the Park Service and the Tribal community. A *tiospaye* is a traditional extended kin network among the Lakota people that historically "…included the immediate family, by blood and law, of a particular leader and those people who chose to live with him as relatives" (Deloria Jr., 1999: 109). Despite government programs that sought to dismantle this traditional governance structure, today, members of the Lakota community on Pine Ridge Indian Reservation recognize multiple *tiospayes* and the individuals that lead them (Steinbuck, 2013). This indigenous governance system, and the leaders within it may be an excellent avenue through which the Tribe can communicate their goals and concerns with the Park Service, and vise versa. To ensure the sustainability of the adaptive co-management process, the Park Service and the Tribe must recognize the benefits of diversity, build networks within and between collaborating organizations, and iteratively evaluate their relationship to learn from the mistakes of the past and adapt to the uncertainties of the future.

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APPENDICES

Appendix A

Interview Guide

An Exploration of the History and Future of the South Unit

History of the South Unit
- What is your personal relationship with the badlands of South Dakota?

  o What is your relationship with Badlands National Park – including the South Unit?

- From your experience, how has the relationship between the Tribe and Badlands National Park *changed* during the South Unit process?

- What is the current character of the relationship between the Tribe and the Park?

Future of the South Unit
- What did the loss of the land in the South Unit in 1942 mean to you personally?
  o What do you think it meant to the Lakota people?

- What are your goals for the South Unit?

- How might Lakota values be expressed through a Tribal National Park?

- Are there any issues remaining before a Tribal National Park can be created?
  o How could we address these issues?

- What are some reasons the Tribal National Park might fail?

- In your opinion, would it be worthwhile for other Tribes to pursue a similar co-management relationship with their neighboring National Parks?

Snowball Sampling/Conclusion
- Who is currently involved in the South Unit process?
  o Who else should I speak with to gather a variety of voices about this process?

- Is there anything else you would like to tell me about the South Unit process?

Appendix B

Facesheet and Consent

      The Oglala Sioux Parks and Recreation Authority (OSPRA) and Badlands National Park want to explore how the process of managing the South Unit has evolved to better understand the expectations of all stakeholder groups regarding the creation of a Tribal National Park. In this case, stakeholders are defined as individuals, groups, organizations, or agencies who affect or can be affected by the South Unit project.

Respondent ID: Gender:

Location: Education:

Date: Ethnicity/Race:

Time: Place of Birth:

Age: Occupation:

Unless you specify otherwise all of your responses will be kept confidential and your name will not be connected with your responses. There will probably be publications about the results of this research. These publications will not identify you directly unless you specifically request to be identified by checking the box below. [If you have no objection, your answers will be audio recorded. The tapes will be stored at the Ethnographic Lab at Colorado State University and used for purposes of this research only. The tapes will be labeled by number and date without reference to your name.] Your participation is completely voluntary. You may stop participating at any time. There are no experimental aspects to this research. There are no known risks inherent in this research. It is not possible to identify all potential risks in research procedures, but the researcher has taken reasonable safeguards to minimize any known and potential, but unknown, risks. Your signature acknowledges that you consent to participating in this research.

   I agree to have the interview audio recorded.
   I do not want to have the interview audio recorded.   I request to be identified in the study.

Your name (printed) _____

Your signature _____ Date_____

Mailing address_____

City _____ State _____ Zip Code_____

Email _____ Phone _____