

Evaluating Collaborative Process and Group-level Social Capital Literature Review

Lauren Pidot*

*Completed as part of an internship with the Sonoran Institute in Bozeman Montana as a Doris Duke Conservation Fellow. She is pursuing her Masters of Science at the University of Michigan School of Natural Resources and the Environment.

Executive Summary

Evaluation of collaborative conservation initiatives can take numerous forms and be undertaken in the pursuit of a range of objectives. Evaluations can be conducted after the completion of an effort in order to understand its effectiveness or can be conducted during the life of an effort to allow for course correction and the assessment of progress towards goals. Tools ranging from step-by-step guides to developing and monitoring indicators to web-based checklists are available to assist participants in collaborative efforts in evaluating various aspects of their processes. Research has also been conducted to evaluate participant satisfaction with collaborative conservation more broadly. In general participants seem to believe that collaborative processes are more effective and efficient than other alternatives, though these participant satisfaction studies have been criticized for only surveying individuals directly involved with the efforts under consideration.

Research has also been conducted to evaluate the impact of collaborative conservation on social capital. While interdisciplinary debate over the precise definition of social capital continues, one reasonable definition is the networks and norms that facilitate collective action. Social capital can accrue at the individual, group, community, or national level. The concept also encompasses the bonds between members of a group that shares an identity, the bridges that connect disparate identity groups, and the links that connect these groups to those in power. Those interested in economic development and civic participation have spent significant energy in devising measurement tools for social capital, though, as of yet, no universal means of measurement has been developed. In recent years, studies have found that collaborative conservation initiatives may be instrumental in developing social capital among collaboration participants.

Evaluating Collaborative Process and Group-level Social Capital

Literature Review

Introduction

This literature review was conducted to inform the development and testing of a set of survey tools for evaluating collaborative processes and group-level social capital. The tools are intended to help participants in collaborative conservation initiatives to reflect on the strengths and weaknesses of the processes with which they are involved. They are also designed to gauge, ideally over time, how these processes build trust, norms of reciprocity, and communication networks among participants and between participants and external groups. The term collaborative conservation initiative (CCI) is intended to encompass a wide variety of processes that engage diverse stakeholders on a voluntary basis to address natural resource management or land-use planning issues (Cestero, 1999).

The literature review below is divided into two main parts. The first addresses the available literature on evaluating collaborative processes, while the second gives an overview of social capital theory and measurement techniques. The latter section concludes with a review of the existing work addressing the effect of CCIs on social capital. An annotated bibliography concludes this document. I have also appended a much shorter list of web-based resources that those engaged in CCIs may find useful (Appendix A).

Evaluating Collaborative Processes

Evaluation of collaborative processes, or indeed any process or project, can take many forms and can be undertaken for a wide variety of purposes. The three major audiences for evaluation of CCIs are the collaborative participants themselves, academics or government officials interested in better understanding the effectiveness of collaborative conservation, and foundations that have, or are interested in, supporting CCIs (Moote, Conley, and Firehock, 2000; W.K. Kellogg Foundation, 1998). Given the

interests of the relevant audience, the scope of evaluation can range from encompassing the organizational elements of the collaborative process and its ecological, social, economic, and organizational outcomes (Orr, Undated) to assessing only organizational process success (Borden and Perkins, 1999) or a specific type of impact (Saguaro Seminar, 2002). Evaluations for audiences that care primarily about overall effectiveness or outcomes generally take place after a process has concluded, while evaluations designed to facilitate course correction and progress measurement will be integrated into the life of a collaborative process (W.K. Kellogg Foundation, 1998). This review primarily focuses on CCI self-evaluation, although the concluding sub-section covers some of the academic work on assessing collaborative participant satisfaction and the effectiveness of CCIs.

Methods of Self-Evaluation

Numerous guides and tools are available to assist collaborative efforts in conducting evaluations of various scopes. It is generally advised that full-scale evaluations addressing a range of desired outcomes begin with participants meeting to define clear objectives, identify indicators or measures of progress towards those objectives, and develop a strategy for monitoring such progress (Anderson et al., 2001; Bergstrom et al., 1995; Ecosystem Management Initiative, 2004; Yaffee et al., 2006). CCI's engaged in a full-scale evaluation of this type may sometimes make use of, or tailor, pre-existing indicators that have been tested by other groups or adopted nationally or internationally (Schueller et al., 2006; U.S. Forest Service et al., 2003).

When specifically evaluating the process by which a CCI is undertaken, there are numerous existing sets of success factors and criteria upon which evaluators can draw (Amherst H. Wilder Foundation, Undated; Bergstrom et al., 1995; Borden and Perkins, 1999; Center for Collaborative Planning, undated-b; Cestero, 1999; Toupal, 1997). While there is general agreement that there is no "recipe book" for designing collaborative processes (Cestero, 1999; Moote et al., 2000; Toupal, 1997), these sets of broad principles, criteria, and factors are intended to draw attention to features which must be in place for collaboration to successfully function. Factors and criteria common to many of these lists include active and inclusive participation, effective communication, effective leadership and facilitation, strong working relationships, and sufficient

resources. Numerous web-based self-assessment survey tools and checklists have been developed around measurable indicators of many of these factors and criteria, though most are either quite general or have been tailored to very specific types of collaborative efforts (Amherst H. Wilder Foundation, Undated; Anderson et al., 2001; Borden and Perkins, 1999; Center for Collaborative Planning, undated-b; Center for the Advancement of Collaborative Strategies in Health, 2007; NRCS Social Sciences Team, 2006b).

While it is possible to develop objective measures of some process criteria and factors (e.g. number of participants attending volunteer events), most must be assessed, or are most easily assessed, though subjective measures (e.g. participant agreement with the statement “meeting facilitation is effective”). Data for such measures can be collected through the use of standardized surveys, questionnaires, or interview tools (Dudwick et al., 2006; The Western Consensus Council and The Consensus Building Institute, 2003; Wagner and Fernandez-Gimenez, 2007). While the CCI participants are the most obvious and necessary audience for such tools, evaluators may also want to include non-participants in the survey group where feasible (Coglianese, 2002). Exclusively collecting data from participants on measures of criteria such as perceived success or process inclusiveness, could lead to somewhat biased results (e.g. participants are probably more likely to think the process is inclusive than interested non-participants).

Self-evaluation of any scope is generally intended to measure success and allow participants to learn from experience and remediate weaknesses. Thus, evaluation is ideally set within a cyclical process of periodic planning and reflection. A number of different models of this cycle have been developed, but all more or less show a progression from planning to acting to evaluating and back to planning (Anderson et al., 2001; Center for Collaborative Planning, undated-a; Schueller et al., 2006). Given that this approach necessitates periodic evaluation, all collection of data should be done with the greatest consistency possible over time (W.K. Kellogg Foundation, 1998).

Benefits and Challenges of Self-Evaluation

Evaluation is touted by those who study collaboration as an essential component of a strong, sustainable process. Potential benefits of integrating evaluation into a collaborative process include increased ability to strategically use limited resources, improved group dynamics, enhanced ability to build support by demonstrating success,

and identification and remediation of weaknesses (Daly, Undated; Schueller et al., 2006). Full-scale evaluation should also bring participants together to clarify objectives and potentially enhance working relationships and understanding of the process. When combined with social activities and eating, it may also be an enjoyable source of group bonding (Yaffee et al., 2006). The challenges associated with full scale evaluation include the significant effort and resources required to undergo indicator selection, monitoring, analysis, and adaptation over the lifetime of the process (Yaffee et al., 2006).

Third-party evaluations of collaborative efforts

As collaboration has become an increasingly prevalent feature of natural resource management in the West, the effectiveness of CCIs has become a source of significant interest to academics and government officials (Western Consensus Council and The Consensus Building Institute, 2003). Until recently much of the academic work in this area was carried out via case-studies, rather than with consistent data collection methodologies lending themselves to comparison or broad conclusions (Moote et al., 2000; The Western Consensus Council and The Consensus Building Institute, 2003). Despite the argument that CCIs are too context specific for generalizations to be made across cases (Moote et al., 2000), recent studies have sought to make overarching statements about the outcomes and effectiveness of CCIs (Lubell, 2005; The Western Consensus Council and The Consensus Building Institute, 2003). Following this trend standardized logic models and criteria have now been developed for certain types of collaborative processes (Orr, Undated).

In perhaps the most sweeping study to date of the success of CCIs, the Western Consensus Council and the Consensus Building Institute distributed standardized surveys to participants in 48 completed community based collaborations focused on federal land management. Survey responses indicate that a significant majority of respondents believe the CCI with which they were involved was both more efficient and more effective than alternative processes (The Western Consensus Council and The Consensus Building Institute, 2003). This study, as well as other studies exclusively surveying collaborative participants, has been criticized sharply for neglecting to include responses from non-participants. Cary Coglianesse argues that a high level of perceived success does not necessarily mean that a collaborative process has arrived at outcomes that will effectively

serve the general public. He also suggests that participant surveys exclude a large percentage of the affected population, and biases the study towards positive results (Coglianese, 2002).

Social Capital: Definition, measurement, and collaborative processes

Social capital is a conceptually “slippery” concept that has received tremendous multidisciplinary attention in the past decade, yet lacks a robust, universally agreed upon definition (Onyx and Bullen, 2000; Woolcock and Narayan, 2000). It is based on the intuitive concept that social relationships “constitute an important asset, one that can be called on in a crises, enjoyed for its own sake, or leveraged for material gain” (Woolcock and Narayan, 2000, 226). However, finding a single empirical measure of social capital has proved daunting, and debate continues as to the appropriate scope of a multifaceted definition (Fukuyama, 1999; Krishna and Shrader, 1999). Despite this lack of consensus, research has moved ahead on understanding the function of social capital at a variety of scales (e.g. group or organization, community, national) and its impact on civic engagement, community action and well-being, economic development, and sustainable resource use (Kahkonen et al., 2002; Onyx and Bullen, 2000; Pretty and Ward, 2001; Saguaro Seminar, 2002). While the scope of the social capital definitions used for these applied studies have varied, most encompass a “bare bones” definition describing social capital as *the networks and norms which facilitate collective action* (Putnam, 1995; Woolcock and Narayan, 2000).

A Brief History of Social Capital

The term social capital was first used in its contemporary sense in 1919 by a superintendent of schools in West Virginia to describe the importance of community engagement with schools (Saguaro Seminar, 2007). Since that time the concept has been “reinvented” in slightly different forms by scholars in four different branches of social science, spawning several different lineages of interpretation (Woolcock and Narayan, 2000). It was Robert Putnam’s work on civic engagement and social capital in the 1990s, however, that popularized the term in the non-academic world and ushered in an explosion of interest across social science disciplines (Pretty and Ward, 2001; Woolcock and Narayan, 2000). Putnam’s argument that the United States is facing a major decline

in civic participation and a loss of social capital (Putnam, 1995) spurred the creation of several national level efforts to measure social capital (Edwards, 2004; Harper, 2002; Saguaro Seminar, 2000). The concept has also taken on particular importance in the field of economic development, as the World Bank has both sponsored research and incorporated social capital assessment into its poverty reduction strategy (Kahkonen et al., 2002).

Forms of Social Capital

Social capital is commonly broken into two primary forms: horizontal social capital and vertical social capital. These forms are intended to distinguish between networks that exist between people and groups of relatively similar levels of authority or social status and connections that link between multiple levels of authority or social status (e.g. a link between a community-based organization and a federal agency) (Grootaert et al., 2004). Horizontal social capital is further broken into bonding (strong) and bridging (or weak) social capital (Putnam, 2000). Bonding social capital refers to trust, networks, and norms of reciprocity formed between people who share a common identity. Bridging social capital refers to the weaker trust, networks, and norms that may exist between disparate individuals or groups. The importance of understanding these weaker links between diverse communities and groups became clear as researchers began to notice that high levels of bonding social capital were sometimes associated with low levels of tolerance and trust of outsiders (Fukuyama, 1999; Onyx and Bullen, 2000).

More recently, theoretical and applied consideration has been given to vertical, or linking, social capital (Pretty and Ward, 2001; Wagner and Fernandez-Gimenez, 2007). It has been argued that linking social capital is highly important to connecting community-based groups to political and economic resources (Pretty and Ward, 2001). It is possible, however, that very high levels of linkages may lead to rent seeking or heavy top-down control of community processes (Woolcock and Narayan, 2000).

Measuring Social Capital

There seems to be general agreement in the social science and public policy worlds on the importance of understanding how social capital functions and how it is formed at various levels of society (Woolcock and Narayan, 2000). There is, however, as of yet no universally used framework for measuring social capital, a circumstance which

is perhaps inevitable given the continuing interdisciplinary debates over the scope and content of the concept (Krishna and Shrader, 1999). However, numerous measures and indicators of the component elements of social capital have been tested and incorporated into research tools which have been applied at numerous levels of inquiry (Grootaert et al., 2004; Onyx and Bullen, 2000; Saguaro Seminar, 2002; Wagner and Fernandez-Gimenez, 2007). While concern has been expressed about the proliferation of unrelated measures and tools, it has also been suggested that some diversity is necessary given the highly contextual nature of social capital (e.g. a measure of trust in India might by necessity be different than a measure of trust in Iceland) (Krishna and Shrader, 1999). As testing of the stability of social capital measures has been carried out, some have been found to be impressively consistent; one group of researchers was able to predict the community a participant was from based on their social capital score (Onyx and Bullen, 2000).

Data for such measures of social capital components can be collected using both quantitative and qualitative methods, though the use of fixed response surveys and questionnaires seems to be a favored technique across disciplines (Grootaert et al., 2004; Onyx and Bullen, 2000; Saguaro Seminar, 2002; Wagner and Fernandez-Gimenez, 2007). There are, however, several examples of the use of qualitative methods (Dudwick et al., 2006; Sturtevant, 2006). In addition to using questionnaires and interviews, World Bank assessors sometimes collect data through oral histories, role playing and games among focus groups, small group discussions, transect walks, and village mapping (Dudwick et al., 2006).

Though not as prevalent as those designed to assist CCIs with collaborative process evaluation, a limited number of web-based tools do exist to assist interested collaborative efforts in understanding and measuring their impact on social capital (Center for Whole Communities, 2006; NRCS Social Sciences Team, 2006a; Saguaro Seminar, 2007) .

Social Capital and Collaborative Conservation Initiatives

While less well-developed than the literature on the implications for economic development or civic participation, recent years have seen the publication of several studies on the relationship between social capital and locally-based CCIs. Several of

these studies have supported the theory that social capital may be a product of, as well as an input to, collaborative efforts (Sturtevant, 2006; Wagner, 2007a), with social capital production tending to increase as such efforts mature (Pretty and Ward). Victoria Sturtevant's interview-based analysis of the collaborative Applegate Partnership in Oregon, suggested that the Partnership both built upon and generated various elements of social capital (Sturtevant, 2006). Likewise, a study measuring bonding and bridging networks, norms of reciprocity, and trust in 8 CCIs in Colorado found that most group-level social capital measures increased over time (Wagner, 2007a). It was also found that these increases tended to correlate more highly with certain characteristics of CCIs, particularly high levels of perceived success (Wagner, 2007b). Lastly, a study of locally-based environmental groups in Vermont suggested that these efforts were an increasing source of bonding, bridging, and linking social capital in their communities (Klyza et al., 2004), presenting a possible counter-trend to the decline in civic participation described in Putnam's work (Putnam, 1995).

Annotated Bibliography

Amherst H. Wilder Foundation. (Undated). Wilder Collaboration Factors Inventory Retrieved June 10, 2007, from http://surveys.wilder.org/public_cfi/index.php

This web-based interactive survey is designed to inventory 20 factors influencing the success of collaborative efforts. Factors include a history of collaboration or cooperation in the community, flexibility among participants, and skilled leadership. The survey, which uses a likert scale, is easy to use and once completed offers an assessment of the presence of each factor.

Anderson, J., Battikha, A.-M., Bloomer, E., Clark, E., deLeon, R., Gorder, J., et al. (2001). Check Your Success: A guide to developing indicators for community based environmental projects. Retrieved July 5 2007, from www.uap.vt.edu/checkyoursuccess/manual.html

This guide was created by a group of Virginia Tech students in collaboration with the U.S. EPA. It guides groups through the importance of selecting indicators and conducting evaluation as well as the process of convening an indicators workshop and selecting appropriate measures of success. The site includes case-studies of community-based groups selecting and using indicators to measure their success as well as sample economic, social, and organizational indicators.

Bergstrom, A., Clark, R., Hogue, T., Iyechad, T., Miller, J., Mullen, S., et al. (1995). *Collaboration Framework - Addressing Community Capacity*: National Network for Collaboration. <http://crs.uvm.edu/ncco/collab/framework.html>

This framework, developed by the National Network for Collaboration, lays out the core foundation of collaborative processes (e.g. shared vision, mission, principles and values) and goes on to list factors that can either contribute to or inhibit collaborative work. It also emphasizes the importance of identifying desired outcomes and defining indicators and impact measures of those outcomes.

Borden, L. M., and Perkins, D. F. (1999). Assessing Your Collaboration: A self evaluation tool. *Journal of Extension*, 37(2), online. <http://www.joe.org/joe/1999april/tt1.html>

This self-evaluation checklist allows participants in collaborative efforts to rank how their process is functioning in terms of 12 factors. The factors include: goals, communication, political climate, resources, and leadership

Center for Collaborative Planning. (undated-a). *Assessing Progress and Recognizing Success*: Public Health Institute. www.connectccp.org/resources/9evaluation.pdf

This brief document explains the very basics of evaluation and its benefits for collaborative efforts. The second page includes a graphic of an evaluation cycle going from planning to acting to reflecting and back to planning.

Center for Collaborative Planning. (undated-b). *Keeping Fit in Collaborative Work: A Survey to Self-Assess Collaborative Work* Public Health Institute www.connectccp.org/resources/10fit.pdf

This self-assessment tool asks participants in collaborative efforts to rank how challenging the initiative has found it to achieve various measures of success. The assessment is based on 5 criteria for success: shared vision, sound decision-making, facilitative leadership, effective communication, and sustainability. The document also provides straightforward guidelines for using the assessment.

Center for the Advancement of Collaborative Strategies in Health. (2007). Partnership Self-Assessment Tool. Retrieved July 18, 2007, from <http://www.cacsh.org/psat.html>

This tool is designed to measure "partnership synergy" or the ability of groups and individuals to combine knowledge, skills, and resources. It also identifies the strengths and weaknesses of a partnership in the areas of leadership, efficiency, administration and management, and sufficiency of resources, as well as the level of general participant satisfaction. This well put together, but rather lengthy, survey tool is accompanied by a coordinator's guide, though the site no longer offers an online component to produce and analyze partnership scores.

Center for Whole Communities. (2006). Measures of Health Retrieved August 3, 2007, from <http://www.measuresofhealth.net/>

The goal of the Measures of Success program is to broaden the concept of success for conservation organizations to include contributions to social, economic, civic, and natural wealth. An online tool (free registration required) assists those engaged in conservation-oriented programs or organizations to evaluate the impacts of their effort in a variety of areas including civic engagement and social capital, stewardship, and community vitality.

Cestero, B. (1999). *Beyond the Hundredth Meeting: A Field Guide to Collaborative Conservation on the West's Public Lands*: Sonoran Institute,,. (S. Institute) westcanhelp.org/index.php?option=com_remository&Itemid=4&func=fileinfo&id=29

This "field guide" provides an introduction to the diversity of public land collaborative initiatives in the West. The guide offers a selection of indicators and ingredients for successful collaboration, descriptions of seven efforts representing the diversity of public land collaborative initiatives, and a taxonomy intended to promote clearer and more consistent dialogue around these issues.

Coglianesi, C. (2002). *Is Satisfaction Success? Evaluating Public Participation in Regulatory Policy Making*. Cambridge, MA: John F. Kennedy School of Government, Harvard University. papers.ssrn.com/sol3/papers.cfm?abstract_id=331420

Coglianesi criticizes the use of participant satisfaction surveys in determining the success or effectiveness of collaborative policy-making and management. His two criticisms are that a high level of participant satisfaction does not necessarily mean a good result for the public at large and that the exclusion of non-participants may cause sampling bias.

Daly, C. (Undated). *The Collaboration Handbook*: Red Lodge Clearinghouse Retrieved July 3, 2007, from [www.redlodgeclearinghouse.org/resources/handbook.html\(7/03/07\)](http://www.redlodgeclearinghouse.org/resources/handbook.html(7/03/07))

This handbook provides advice to those initiating collaborative efforts and those engaged in on-going processes. In addition to covering the basics of topics such as the first meeting, strategic planning, and monitoring and evaluation, there is a section on dealing with addressing specific problems (e.g. lack of clear decision-making, changes in the participants, etc...)

Dudwick, N., Kuehnast, K., Veronica Nyhan Jones, and Woolcock, M. (2006). *Analyzing Social Capital in Context: A Guide to Using Qualitative Methods and Data*: World Bank Institute. (World Bank)

This handbook is designed to assist World Bank researchers in incorporating qualitative methods into their studies. It offers an explanation of why qualitative methods are useful and offers an overview of useful qualitative tools.

Ecosystem Management Initiative. (2004). *Measuring Progress: An Evaluation Guide for Ecosystem and Community Based Projects* Ann Arbor, Michigan: School of Natural Resources and Environment, University of Michigan. Retrieved July 6, from

snre.umich.edu/ecomgt/evaluation/documents/Measuring%20Progress.pdf

This guide includes worksheets and checklists designed to assist participants in ecosystem and community based projects in undertaking on-going evaluation. The guide explains why evaluation is important and assists groups in developing metrics for measuring progress towards ecological, socioeconomic, and organizational process objectives.

Edwards, R. W. (2004). *Measuring Social Capital: An Australian Framework and Indicators*: Australian Bureau of Statistics
[www.ausstats.abs.gov.au/ausstats/free.nsf/0/13C0688F6B98DD45CA256E360077D526/\\$File/13780_2004.pdf](http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/13C0688F6B98DD45CA256E360077D526/$File/13780_2004.pdf)

This document presents the federally developed Australian framework for assessing social capital at the national scale. The framework encompasses and identifies indicators for a large number of social capital factors including norms, trust, network density, friendship, economic participation, and negotiation.

Fukuyama, F. (1999). *Social Capital and Civil Society*: The Institute of Public Policy, George Mason University
<http://www.imf.org/external/pubs/ft/seminar/1999/reforms/fukuyama.htm#I>

In this paper, Fukuyama argues that many definitions of social capital do not appropriately make the distinction between manifestations and outcomes of social capital. He goes on to propose a mathematical model for measuring social capital at the community-level and theorizes on the origin and generation of social capital.

Grootaert, C., Narayan, D., Jones, V. N., and Woolcock, M. (2004). *Measuring Social Capital: An Integrated Questionnaire* (Working Paper). Washington, DC: The World Bank. (World Bank)
web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALDEVELOPMENT/EXTSOCIALCAPITAL/0,,contentMDK:20193049~menuPK:418220~pagePK:148956~piPK:216618~theSitePK:401015,00.html

This document provides a conceptual framework for measuring social capital at the household level in developing countries. It includes a literature review and introduction to basic concepts.

Harper, R. (2002). *The Measurement of Social Capital in the United Kingdom*: Office of National Statistics
www.oecd.org/dataoecd/22/52/2382339.pdf

This paper describes the approach to social capital measurement adopted by the United Kingdom. It describes the framework of dimensions and measures through which measurement will be carried out.

Kahkonen, C. G. S., Krishna, A., Pantoja, E., Reid, C., Salmen, L. F., Shrader, E., et al. (2002). *Understanding and Measuring Social Capital: A multidisciplinary tool for*

practitioners. Washington, DC: The World Bank. Retrieved June 17, 2007 from web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALDEVELOPMENT/EXTSOCIALCAPITAL/0,,contentMDK:20193049~menuPK:418220~pagePK:148956~piPK:216618~theSitePK:401015,00.html

This describes the development and application of the Social Capital Assessment Tool (SCAT), which is used by the World Bank to assess social capital in communities targeted by development efforts. It also offers a good literature review and explanation of social capital concepts.

Klyza, C. M., Savage, A., and Isham, J. (2004). *Local Environmental Groups, the Creation of Social Capital, and Environmental Policy: Evidence from Vermont*. Middlebury, Vermont: Middlebury College. Retrieved July 6, 2007, from www.middlebury.edu/services/econ/repec/mdl/ancoec/0407.pdf

This discussion paper examines the activities, level of participation, and effectiveness of local environmental groups in two counties in Vermont and the extent to which these groups are contributing to bonding, bridging, and linking social capital.

Krishna, A., and Shrader, E. (1999). *Social Capital Assessment Tool*. Paper presented at the Conference on Social Capital and Poverty Reduction. Retrieved June 20, 2007 from <http://lnweb18.worldbank.org/External/lac/lac.nsf/51105678feaadaea852567d6006c1de4/d2d929b5fff4b555852567ee000414ad?OpenDocument>

Krishna and Shrader attempt to address the need for a uniform methodology for social capital measurement with their introduction of the Social Capital Assessment Tool (SCAT). The first half of the paper traces the history and challenges of defining and measuring social capital. The second half describes the structure and application of the SCAT, which is now used by the World Bank in communities designated for economic development projects.

Lubell, M. (2005). Do Watershed Partnerships Enhance Beliefs Conducive to Collective Action? In P. A. Sabatier (Ed.), *Swimming Upstream: Collaborative Approaches to Watershed Management*. Cambridge, MI: MIT Press. <http://www.des.ucdavis.edu/faculty/lubell/Research/CollectiveActionBeliefs.pdf>

Lubell studies the impact of collaborative processes on participant beliefs related to collective action and the ability of such processes to alleviate tension between traditionally conflicting interest groups. He surveys stakeholders in both watersheds that have undergone collaborative management through the federal National Estuaries Program and in watersheds that have not. He primarily surveys process participants in NEP watersheds, leading to criticism of participant bias from Cary Coglianese.

Moote, A., Conley, A., and Firehock, K. (2000). *Assessing Research Needs: Summary of a Workshop on Community Based Collaboratives*: Community-Based Conservation Research Consortium <http://www.cbrc.org/assess.pdf>

In 1999 the Community-based Collaborative Research Consortium convened academics, government officials, CBC participants, and professional mediators and facilitators to discuss research questions and needs to better understand the impact and organization of CBCs. This summary of the workshop gives an overview of the research questions, priorities, and methods discussed by the group. The section on evaluation of CBCs also describes different types of evaluation and various possible criteria by which CBCs should be evaluated.

NRCS Social Sciences Team. (2006a). Adding Up Social Capital: Community Participation, Assets, Resources, and Processes. Retrieved June 25, 2007, from <http://ssiapps.sc.egov.usda.gov/SocialSciences/Forms/Evaluations.aspx?apptype=socialcapital&querytype=cachedxmlfile>

This tool is intended to measure social capital at the community level and asks for respondents to assess the strength of various elements (e.g. level of participation in public meetings). After submitting responses a score and level of social capital (high, moderate, low) is issued.

NRCS Social Sciences Team. (2006b). Evaluation Tool for Locally Led-Planning Processes. Retrieved June 25, 2007, from <http://www.ssi.nrcs.usda.gov/locallyled/index.html>

This web-based interactive tool is designed to assess locally-led planning efforts based on 9 elements the Natural Resources Conservation Service Social Science Team has identified as ideally part of locally-led planning.

Onyx, J., and Bullen, P. (2000). Measuring Social Capital in Five Communities. *The Journal of Applied Behavioral Science* 23-42. Retrieved June 15, 2007, from <http://jab.sagepub.com.proxy.lib.umich.edu/cgi/reprint/36/1/23>

This article seeks to empirically identify major factors of social capital by looking at the interdependence of eight community factors. The study found that trust and feelings of safety, social proactivity, and networks seem to be basic factors of social capital at the community-level. It also identifies measures of each of the eight factors considered.

Orr, P. (Undated). Evaluating Mediations and Facilitations: Design Document: U.S. Institute for Environmental Conflict Resolution, Morris K. Udall Foundation. http://www.ecr.gov/multiagency/pdf/EVAL_MedFac.pdf

In 1999 U.S. Institute for Environmental Conflict Resolution began the process of designing a consistent system for the evaluation of environmental mediations and facilitations; this paper presents the logic model and evaluation method developed.

Pretty, J., and Ward, H. (2001). Social Capital and the Environment. *World Development*, 29(2), 209-227.

Pretty and Ward describe the importance of social capital to facilitating community collective action on natural resource issues. They argue that significant new sources of social capital have been created by the recent surge in local groups working on natural resource issues. They also describe stages of local group maturity and related shifts in social capital. The importance of vertical linkages between such groups and external agencies is noted, as is the benefit of local groups creating federations as they reach maturity.

Putnam, R. (1995). Bowling Alone: America's Declining Social Capital. *The Journal of Democracy*, 6(1), 65-78. Retrieved July 6, 2007, from [http://xroads.virginia.edu/~hyper/DETOC/assoc/bowling.html\(07/10/07\)](http://xroads.virginia.edu/~hyper/DETOC/assoc/bowling.html(07/10/07))

Robert Putnam's well-known work has greatly shaped the dialogue on social capital in the United States in the last decade. The article, which was later expanded into a popular book of the same title, argues that the United States has seen a serious decline in civic engagement, social connectedness, and social trust in the past 40 to 50 years.

Putnam, R. (2000). *Bowling Alone: The Collapse and Revival of American Community*. New York, NY: Simon-Schuster.

Robert Putnam's seminal book spurred the increase in applied and theoretical work on social capital in the past decade. He argues that the United States is facing a significant decline in social capital and civic engagement. He also introduces the concepts of bonding and bridging social capital.

Saguaro Seminar. (2000). The Social Capital Community Benchmark Survey. Retrieved August 2, 2007, from <http://www.ksg.harvard.edu/saguaro/communitysurvey/index.html>
Robert Putnam's Saguaro Seminar, which is conducted through Harvard's Kennedy School, undertook this effort to survey dozens of communities on social capital measures. This survey, which was repeated in 2006, was intended to gauge the level of civic engagement and social capital in the United States.

Saguaro Seminar. (2002). *Social Capital Community Benchmark Survey Short Form*. Cambridge, MA: Civic Engagement in America Project, John F. Kennedy School of Government, Harvard University
www.ksg.harvard.edu/saguaro/pdfs/socialcapitalshortform.pdf

This is one version of a tool created by the Saguaro Seminar at the Kennedy School of Government to measure social capital in communities and across the United States. The survey is based around 11 facets of community or society level social capital and measures that have been identified to assess them. For example social trust and giving and volunteering are facets while aggregated community trust of local police officers and money contributed to secular causes are respectively measures of those facets.

Saguaro Seminar. (2007). *Community Organizations and Social Capital: A Guide to Program Evaluation* Retrieved August 6, 2007, from <http://www.ksg.harvard.edu/saguaro/EVALGUIDE/evaluationguide.htm>

This evaluation guide assists organizations in understanding their impact on social capital in the communities they serve (e.g. whether they have changed the way the people they serve feel about their communities and interact with community members). The introduction has a fairly good, if brief, section on the history and definition of social capital, while the section on the forms of social capital goes into further detail.

Schueller, S., Yaffee, S., Higgs, S., Mogelgaard, K., and DeMattia, E. (2006). *Evaluation Sourcebook: Measures of Progress for Ecosystem and Community-Based Projects*. Retrieved July 5, from www.snre.umich.edu/ecomgt/evaluation/tools.htm

The Evaluation Sourcebook is designed as a guide to some of the basic concepts involved in evaluation (e.g. indicators, measures, setting objectives). It encourages groups to identify and evaluate objectives, threats, assets, and strategies. The sourcebook offers sample evaluation questions and indicators for identifying and assessing objectives, threats, assets, and strategies addressing ecological, management, social, and organizational issues.

Sturtevant, V. (2006). Reciprocity of Social Capital and Collective Action. *Community Development*, 37(1), 52-64.

Sturtevant analyzes the emergence and development of the Applegate Partnership forest stewardship group. She uses Flora and Flora's Entrepreneurial Social Infrastructure (ESI), which is intended to explain how social capital both facilitates and is created by collective action. Sturtevant uses a case-study methodology primarily based on in-depth interviews.

The Western Consensus Council, and The Consensus Building Institute. (2003). *Community-based Collaboration on Federal Lands and Resources: An Evaluation of Participant Satisfaction* http://www.cbuilt.org/publications/cbireports/Spring2003/Article_2/index.html

This study uses a participant satisfaction survey to look at the perceived success of various aspects of 48 completed community-based collaborations in the West. During their lifetime the collaborations were all engaged in federal land management issues. The study finds that, in general, participants found the CBC processes to be efficient and effective, and ranked indicators of working relationships and process quality as being of more importance than outcomes.

Toupal, R. (1997). *The Effectiveness of Public/Private Conservation Partnerships as Measured by Common Characteristics of Success*. Unpublished MLA, University of Arizona, Tucson, AZ.

The objective of Toupal's study is to develop a guide for developing successful public/private conservation partnerships based on characteristics of successful

partnerships drawn from the literature and reduced to those of greatest importance. Importance was indicated by the frequency with which a particular characteristic of success appeared in the literature on public private partnerships. Analysis of three case-studies is included in the document, as are her interview tools.

U.S. Forest Service, American Forests, and Sustainable Measures. (2003). *Forest Sustainability Indicator Tools for Communities: Indicator Tool Kit*
<http://www.communitiescommittee.org/fsitool/ToolKit.pdf>

This document is intended to assist forestry-based communities to adopt the criteria and indicators laid out in the Montreal Process framework to their local context. The intent is to help these communities assess ecological, social, and economic health as associated with forest management.

Wagner, C., and Fernandez-Gimenez, M. E. (2007). Does Community Based Collaborative Resource Management Increase Social Capital. Department of Forest, Rangeland, and Watershed Stewardship, Colorado State University.

This study suggests that group-level bonding and linking social capital increases over time through community-based collaboration. While most social capital measures were shown to increase, those related to linking social capital between the groups and relevant agencies increased more than those related to bonding social capital. Data was collected for this study through a survey instrument and interviews. The change in social capital was assessed by asking identical sets of questions from the perspective of two different time periods.

Wagner, C. L., and Fernandez-Gimenez, M. E. (2007b). Effects of Community-based Collaborative Group Characteristics on Social Capital. Colorado State University

This paper looks at the correlation between various characteristics of collaborative conservation initiatives and measures of social capital over time. Findings indicate that perceived success, of the eight characteristics considered, is most highly correlated with social capital building once initial social capital is controlled for.

Woolcock, M., and Narayan, D. (2000). Social Capital: Implications for Development Theory, Research, and Policy. *World Bank Research Observer*, 15(2), 225-249.

Woolcock and Narayan clearly explain the concepts of bonding and bridging social capital at the community level and trace the history of the concept and how various disciplines have contributed. They also outline four disparate schools of social capital interpretation and discuss measurement challenges.

Yaffee, S., Higgs, S., Schueller, S., and Spalding, L. (2006). *Evaluation Methods for RCC-Supported Collaborations in the American West: Development, Pilot Application, and Capacity Building*. Ann Arbor, Michigan: Ecosystem Management Initiative

This report summarizes the lessons learned from the testing of evaluation training methods with representatives from several community-based collaborative conservation efforts. Lessons learned from this effort highlight both the significant advantages (increased clarity of group objectives, ability to work more strategically and adaptively, ability to demonstrate success) and challenges (long term resource commitment and enthusiasm, limited capacity of many collaborative groups) of evaluation.