

**Societal Effects Of Collaborative Decision-Making In Florida: The Impact Of
Environmental Conflict Resolution Institutions On Public Choice, Civic
Culture and Environmental Management Systems**

by

Michael Elliott, Presenting Author
City and Regional Planning Program, Georgia Institute of Technology
245 Fourth Street, Atlanta, GA 30332-0155
michael.elliott@coa.gatech.edu; +1.404.894.9841

Bruce Stiftel, Co-Author
Department of Urban and Regional Planning, Florida State University

February 14, 2005

presented to:
17th Annual Conference of the
International Association for Conflict Management

Societal Effects Of Collaborative Decision-Making In Florida: The Impact Of Environmental Conflict Resolution Institutions On Public Choice, Civic Culture and Environmental Management Systems

ABSTRACT

Hailed as a route to improved public decision making, civic engagement, and power sharing in an increasingly contentious world, collaborative decision making (CDM) has become an important mainstay of contemporary environmental planning and policy practice. As described by CDM theorists, collaborative decision making not only improves substantive outcomes, but also transforms participants, professional behaviors and institutional structures in ways that broadly improve the substance and process of societal decision making. Few empirical studies demonstrate these broader claims, however. The present research outlines a conceptual framework for assessing decision process, decision outcome and social/environmental system impacts of collaborative planning. The framework anticipates three scales of impact: participant/group, professional/organizational, and societal/environmental system. We go on to apply the framework to the design of a study of the systemic and cumulative effects of 20 years of extensive collaborative policy processes in Florida. This study utilizes comparative case histories, a survey of professionals, and content analysis of stakeholder newsletters to compare planning outcomes in Florida today with those in Florida twenty years ago, before the advent of extensive collaborative processes, and to compare planning outcomes in Florida with those in Georgia, a neighboring and similar state which has not implemented collaborative processes with vigor.

Keywords: collaborative decision making, public policy, cumulative impacts

Societal Effects Of Collaborative Decision-Making In Florida: The Impact Of Environmental Conflict Resolution Institutions On Public Choice, Civic Culture and Environmental Management Systems

I. Overview

Public policymaking must often build upon numerous sources of knowledge, resources and interests. In particular, effective policymaking for complex and spatially interactive systems—such as environmental, resource, and growth management—increasingly must combine specialized expertise with multi-disciplinary perspectives, expansive demands on financial and human resources, and vocal claims made by interest groups and electorates. Moreover, these systems frequently cross jurisdictional boundaries, affecting neighborhood, regional and national interests simultaneously.

In this context, collaborative policymaking, ranging from proactive deliberative consensus building to more situational conflict management, offers potential advantages over traditional processes. Proponents claim that collaborative processes—including mediation, facilitation, negotiated rule-making, and a host of similar consensus-based decision process devices—promotes interactive rationality and leads to decisions that are better thought-out and more fair, implementable and durable (Campbell and Floyd 1996; Sipe 1998; Beierle and Cayford 2002; O'Leary and Yandle 2000). Proponents further hail collaborative processes as a route to providing meaningful voice to concerned citizens in a democratic society (Susskind and Field 1996); as a vehicle for sharing power amongst multiple agencies and interest groups in a postmodern world (Bryson and Crosby 1992; Healey 1997); and as an epistemological safety valve to overcome the impossibility of objectivity in policy science (Forester 1989; Blanco 1994; Flybjerg 2001).

Through these many claims, advocates of public policy collaboration and conflict management see its impacts as extending well beyond the cases in which collaboration is used, to affect larger systems of interaction and decision making. Collaboration is viewed as potentially transformative, leading to new understandings on the part of its participants (Bush and Folger 1994; Folger 2001), as changing relationships among participants (D'Estree and others 2001; Forester 1999), as leading to new forms of professional behavior (Healey 1997, 263-268), as well as to new institutional structures that promote more productive and less contentious decision making (D'Estree and others 2001; Innes and Booher 1999).

The empirical evidence in support of most of these claims is surprisingly scant. The best evidence concerns claims about the immediate consequences of particular collaborative processes: that collaboration leads to better outcomes or that these outcome are obtained more quickly and cheaply than competitive decision frameworks. But, even here, the findings are most often anecdotally argued and are contested (Andrew 2001; Sipe 1998).

Studies that empirically assess the impact of collaboration on more long-term and systemic variables are rare (Mayere and Stiftel 2002; Frank and Elliott 2002). Schultz and Gerber (2002) report enhancements in the use of science in the habitat protection programs of the U.S. Fish and Wildlife Service that resulted from planning processes conducted under the Endangered Species Act. Margerum (2002) shows that trust among parties is built through collaborative planning for growth management in Australia. Innes and Connick (1999) find collaborative process associated with California water policy build civic capacity amongst participant organizations and interest groups.

We believe that the paucity of evidence about the higher-order impact of collaborative process on professional norms, institutional structures and environmental systems relates to two conditions. First, the use of collaborative interventions in most jurisdictions and professional

communities is short lived. To change norms, structures and other system variables, innovations must be applied repeatedly and sustained over time. This has seldom been the case, with the result that measurement of changes in norms and structures has been difficult or impossible. Second, when sustained application of the innovation does take place, the conditions necessary for direct empirical substantiation of effects are difficult to achieve. Sustained use implies longevity of use and multiple pathways of treatment, with the result that various threats to validity in inference loom large: including history, maturation, regression, and mortality (Campbell and Stanley 1966).

Florida's widespread use of collaborative processes for environmental and land-use decisions since the mid-1980s is a notable exception to the normal pattern of episodic use. Partly stemming from the successes of early ad hoc consensus building efforts in the environmental arena, such as movement toward restoration of the Kissimmee River, Florida institutionalized dispute resolution processes in executive, legislative and judicial branches of state government, and in regional and local governments, particularly in environmental and land use contexts (Stiftel 1989). These processes have been widely used in Florida to address complex environmental issues, such as restoration of the south Florida ecosystem and simpler concerns such as compliance with environmental effluent limits and zoning ordinances (Jones forthcoming, Sipe and Stiftel 1995; FCRC 2001). Two institutions have played important roles in the adoption and use of these techniques: the Florida Dispute Resolution Center, formed through action of the state's Supreme Court in 1986 and the Florida Conflict Resolution Consortium, formed by legislative action in 1987 (Stiftel 1989; Schultz 1990). This exceptional empirical laboratory suggests the possibility of serious assessment of the systemic impacts of two decades of widespread collaborative planning.

In this report, we outline the nature of higher-order impacts of collaborative decision making (CDM) in the environmental and land use arenas, focusing on the systemic impacts of CDM on

professional norms, institutional and political structures, and cumulative impacts. We first identify a core set of expected impacts of CDM and discuss their import. Second, we examine how these potential impacts manifest themselves within the individual conflict as well as systemically, exploring the interplay between specific uses of CDM and longer ranged, larger scaled decision making systems. We then examine the state of knowledge and the factors that might enhance or mitigate against these potential impacts. Finally, we develop a framework for field testing whether the systematic and widespread use of collaborative decision making in Florida substantively improved the quality of environments and communities, enhanced social capital and decision making capacity in the environmental and land use arena, and promote more effective decision making processes.

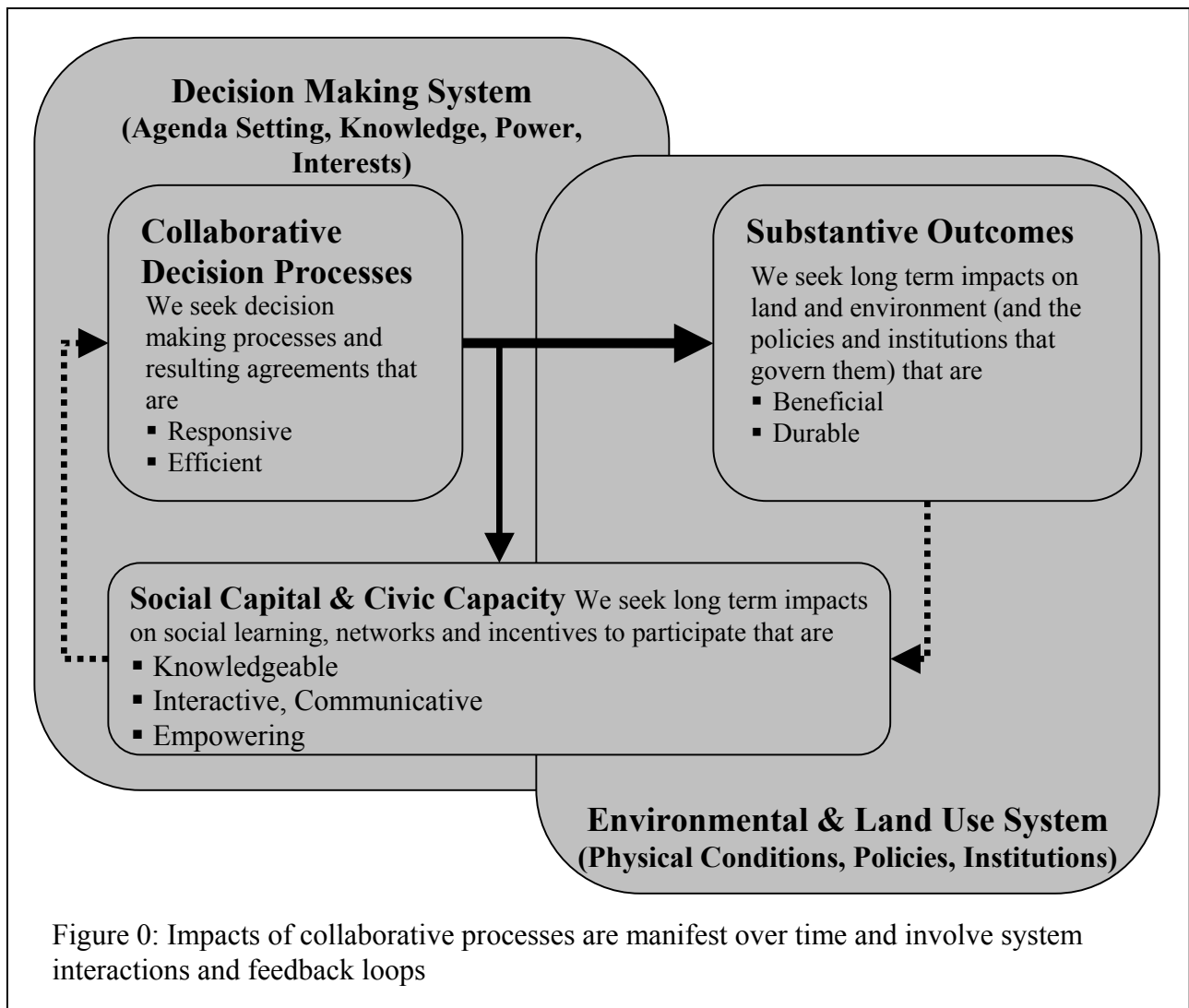
II. Expected Impacts of Collaborative Environmental and Land Use Decision Making Processes

The theoretical framework recognizes that the impacts of collaborative processes occur within an interactive system. A collaborative process does not stand alone, but rather interacts with other aspects of the decision making and environmental systems. The impacts of importance to us, then, include the ability of the collaborative process to promote effective decision-making within the collaborative process itself, to enhance social capital and civic capacity, thereby improving policy decision making generally, and to improve the quality of the environment and communities through good decisions.

As shown in Figure 1, the interactions between the collaborative process and these other elements occur both temporally and as feedback loops within the decision and environmental systems. Boundaries between these elements are blurred in practice (Innes and Booher 1999, D'Estree et al. 2001). The figure indicates that we expect collaborative decision processes—

including both process dynamics (interactions within the process) and short-term process outputs (agreements)—to most directly impact environmental conditions because the substantive agreements, if implemented, are designed to accomplish this end. We further expect that collaborative processes will less directly alter social capital because such successful processes often promote social learning, interactive networks and incentives to participate amongst the various stakeholders. In turn, changes in environmental conditions will also alter social capital as various actors in the decision making system make judgments about the efficacy and usefulness of the perceived substantive outcomes. Finally, changes in civic capacity will alter the willingness and capacity of future disputants to design and implement effective collaborative process dynamics. For each element, Figure 1 also identifies the types of impact most indicative of CDM success (or failure). As with the elements, it is difficult to draw sharp boundaries between the types of impact. The framework may be generalized to all kinds of decision-making processes, but the impacts identified here were selected to match the theoretical fortes of collaborative processes.

To generate this framework, we built upon and modified existing collaborative process evaluation criteria (Innes 1999, McEwen 1999, Conley and Moote 2000, d’Estree et al. 2001). Innes (1999), for instance, identified a set of twenty-one criteria intended to enable researchers to comprehensively assess collaborative processes and their outcomes, i.e., to identify the full range of



impacts. The process criteria include whether all relevant interests participated, the quality of deliberations, and the use of information. The outcome criteria range from whether the process

produced a high-quality agreement to whether it resolved the conflict or increased participant knowledge. Similarly, other authors paid attention to higher order impacts. D’Estree et al. (2001) presented a framework for identifying the impacts of “interactive conflict resolution” in terms of changes in participant knowledge, changes in participant relationships, the mechanisms by which group decisions are transferred to the larger organizations and community, and the structures that support decision implementation. D’Estree et al. (2001) further organized impacts by time (i.e., according to the implementation phases following a collaborative process) and the social scales at which they are observed.

What variables might be of most use in defining success both in terms of long term, systematic outcomes and shorter term, specific outcomes? While the above authors have identified a wide range of possible variables, we seek to identify a more limited set of variables as a basis for our conceptual framework, largely because we will need to measure these variable both localized in particular processes and disputes and systemically in larger decision making processes and environmental systems. We have therefore identified classes of impacts as the basis for the framework.

To be successful in the near-term, collaborative processes must be integrated into decision making systems such that the individual process is responsive and efficient in its execution, while successfully drawing on the knowledge, communicative rationality and legitimate power imbedded in the system as a whole to produce a beneficial and durable outcome. The impacts of collaborative processes go well beyond the individual process and outputs, however, and are manifest within the decision-making context: the social relationships, knowledge, values, institutions, language, etc. that when combined represent society’s capacity for decision-making. To be successful in the long-term, collaborative processes must not only produce repeated short-term successes, but also must be

responsive and efficient for organizations and social systems writ large, enhance social capital and civic capacity by expanding the knowledge, communicative rationality and legitimate power found in the decision-making system, and produce outcomes that cumulatively prove beneficial to society and durable for the environmental and planning system as a whole. A successful collaborative process increases the effectiveness of the decision-making context.

More specifically, effectiveness can be measured (both within the individual process and at larger scales of social interaction and decision making) by the following variables:

- **Beneficial:** Collaborative process outputs, once implemented, produce results deemed valuable to society or the environment. Meets interests and promotes values, both public and private, of stakeholders.
- **Durable:** Collaborative process outputs – such as findings, recommendations, or commitments – possess the intrinsic characteristics and external support necessary for implementation and sustaining momentum over time, thereby coming to fruition either in part or in whole.
- **Knowledgeable:** Process participants draw upon expert and local intelligence, produce new information where needed, and encourage long-term and broad-based social learning about the issues central to the process, such that the decision making context becomes more knowledgeable over time.
- **Interactive; Communicative:** Processes draw upon and promote interactions between individuals, organizations, and communities in ways that recognize and respond to societal problems consistent with the process ideal of communicative rationality, both within the limits of a specific process and by enhancing the capacity of communities to engage in effective decision making over time.
- **Empowering:** Able to reach decisions when appropriate and to leverage resources to orchestrate decision-making processes and to implement their results. The resources range from the tangible – money, individuals, and organizations – to the intangible – conventions, legitimacy, values, and trust. Appropriateness is measured by the legitimacy afforded to the use of power in CDM processes and within the larger political system.
- **Efficient:** Decision making processes incorporate activities best suited to reaching objectives and accruing other benefits with minimum cost to participants and society.

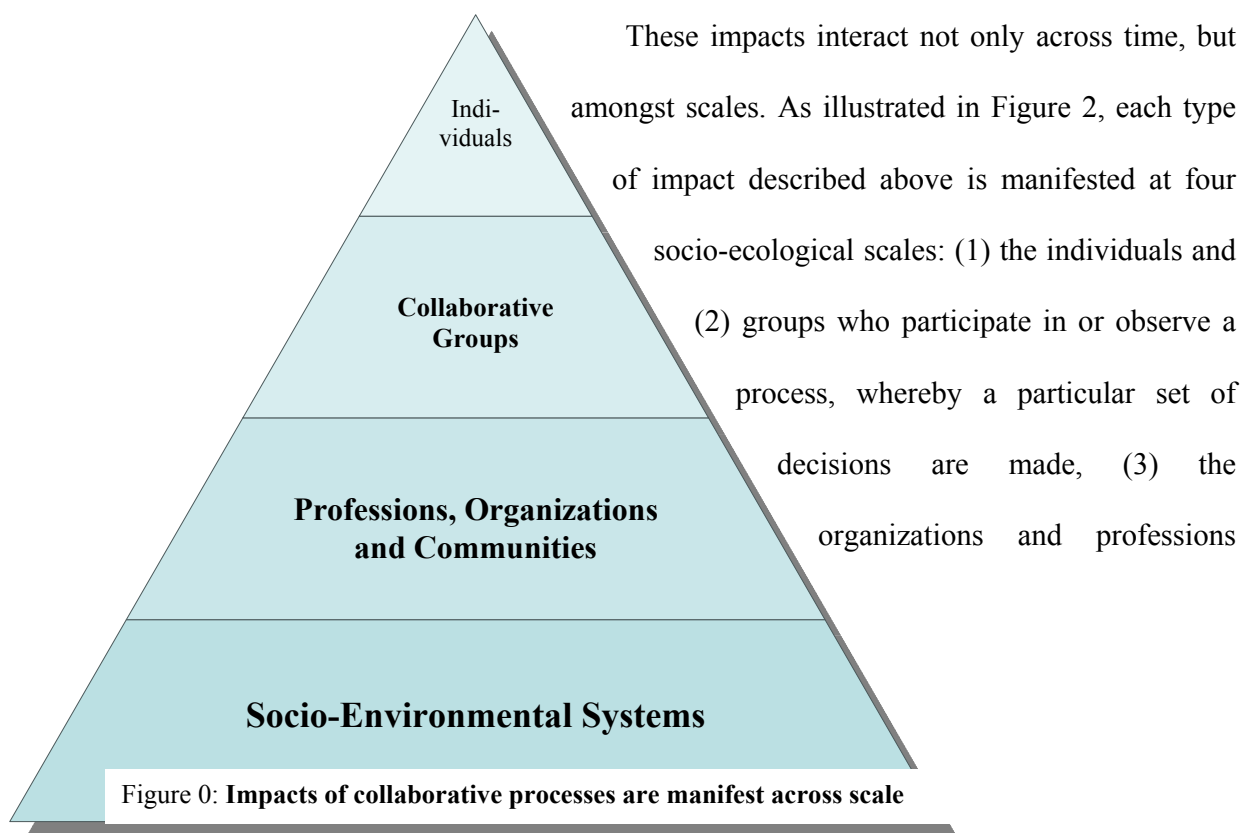
- **Responsive:** Processes are appropriate and sympathetic forums that meet the needs of participants and the interests they represent, the supporting systems (e.g., organizations, the judicial system, or the administrative system) and society.

These variables can be grouped according to the desired impact that they produce, including improving the decision making process, improving social capital and civic capacity and improving the quality of environments and communities (see Table 1).

Overall Desired Impact	Variables for Measuring Impacts
Improve quality of environment and communities	<ul style="list-style-type: none"> ● Beneficial ● Durable
Improve social capital and civic capacity	<ul style="list-style-type: none"> ● Knowledgeable ● Interactional, Communicative ● Empowering
Improve decision making process	<ul style="list-style-type: none"> ● Responsive ● Efficient

Table 1: Types of Impact

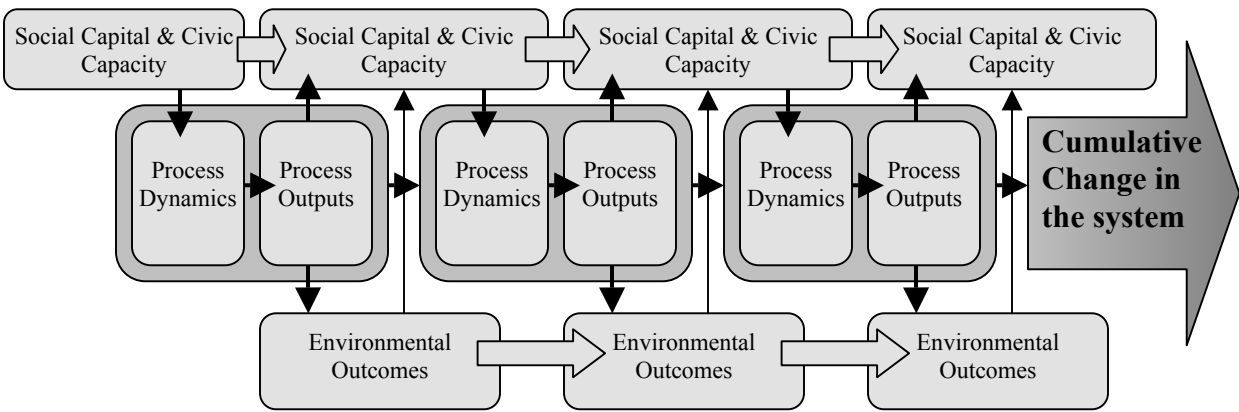
III. Relationship Between Variables, Scale and System Effects



who engage in collaborative processes, wherein standard operating procedures, best management practices and programs embody patterns of decision making and implementation, and (4) society or the environment, wherein civic culture, political structures and environmental systems are altered by the impacts (cumulative and particular) of decision processes.

To measure impacts at larger scales, we cannot simply aggregate the impacts CDM processes found at smaller scales. As illustrated in Figures 3 and 4, we believe that collaboration will have systemic and cumulative consequences. We base this hypothesis on a number of reasons. The involvement of agency and stakeholder personnel in collaboration for the purpose of resolving certain decisions might be expected to change the way these personnel view and prepare for other decision processes. Engineers, planners, lawyers and other professionals working for agencies as well as for firms engaged by stakeholders who have been participants in collaborative planning processes, may be expected to come to see that rigorous preparation in understanding the goals of their own agency or client group is vital to representing the interests of that agency or client effectively. They should be more likely to prepare well for future decision processes. These same professionals should come to understand, through collaboration, that there is value in seeking common bases or criteria for choices with other stakeholders prior to the direct addressing of these choices. They should come to see the value of brainstorming options in order to find potentially innovative alternatives more likely to maximize joint gains to the stakeholders. Finally, they should develop more extensive networks of allies and enhance their capabilities at working with adversaries through improvements in social capital including mutual trust, obligations and expectation.

Figure 0: Cumulative Effects from Processes in Series



If professionals learn from collaboration, organizations might be expected to adjust their standard operating procedures to take advantage of the knowledge gained by their employees. Procedures should be adjusted to improve goal determination, to more clearly delineate decision

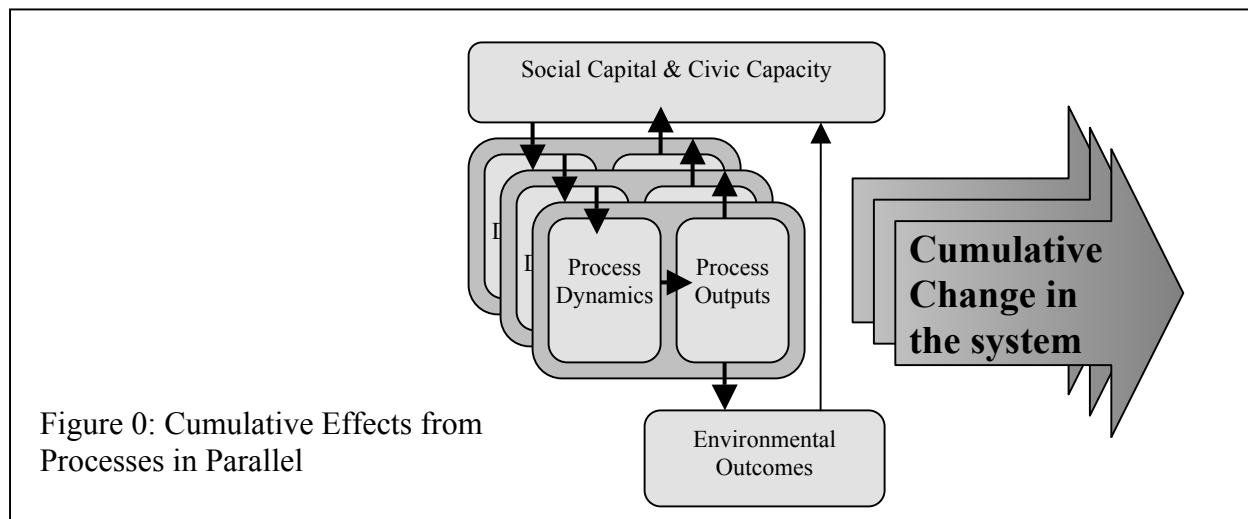


Figure 0: Cumulative Effects from Processes in Parallel

criteria, to promote generation of innovative alternatives, and to facilitate productive interactions with opponents and other interest representatives. Moreover, the substantive result of many collaboratively made decisions together with collaboratively-based standard operating procedures

should be wiser resource management outcomes, reflecting anticipation of inter-media and cross-regional impacts and overall more sustainable policies.

As a result of these cumulative and systemic impacts of collaborative planning processes, we should also expect to observe improved decisions and decisions processes even when formal collaborative processes are not specifically used. We expect this because for each instance of the use of a formal collaborative process, there should be scores of instances of professionals and agencies working collaboratively, individually and informally, on decisions that do not require formal adoption or that do not reach impasse.

At the same time, we would expect that CDM processes would also produce some level of political struggle at higher levels of social organization. CDM processes, even if they improve overall decision making and prove beneficial to society, will disrupt existing power relationships and patterns of political decision making. As such, those groups who believe their interests will not be as readily served and who prefer expressions of power other than those that are most readily imbedded in collaborative processes will seek to either block or control CDM processes. This struggle should be discernable both within individual processes (in efforts to co-opt or control the process) and at systemic levels (through control over decision rules, standard operating procedures, and institutions that contribute to decision making processes). It is possible, therefore, that CDM processes can mask deeper power imbalances, such that CDM processes become a form of political control, masking ongoing exclusion, inequality and systematic distortion rather than promoting inclusion, equality and more effective communicative rationality (Amy, 1987).

Whatever the impact of CDM processes, the mechanisms by which collaborative processes impact these various scales therefore include:

- Participation in process
- Observation of process
- Implementation of outputs
- Creation of new networks or knowledge
- Changes in Standard Operating Procedures
- Changes in Best Management Practices
- Institutionalization
- Policy

Equally important, each scale that is impacted by a particular process or series of processes will then serve as context to future decision making processes, thereby either facilitating or hindering the potential for ongoing use of collaborative processes.

Table 2 provides examples of impacts CDM processes can generate to individuals, groups and larger system (organization or society) levels. To illustrate: to measure the responsiveness of collaborative process, it is necessary to consider whether (1) an individual collaborative process is responsive to participant and interest groups, (2) an organization's use of collaborative processes improves its overall responsiveness to its clients and professionals, and (3) societal use of collaborative processes improves community-level responsiveness to public values. At each scale, either an individual collaborative process or a collection of collaborative processes may be behind the observed impacts. As shown in Figure 3 and 4, cumulative impacts may be generated by a series of processes over time, or by multiple processes occurring simultaneously.

		Scale of impact (impact of individual process and cumulative effects)		
Type of Impact		Participants in collaborative Process (first order impacts)	Organizations, professions and communities associated with policy making (second order impacts)	Socio-political-environmental systems (third order impacts)
Desired Impact	Impact Variable			
Improved Quality of Environment and Communities	Beneficial	Achieves goals of process; enhances environment; benefits equitably distributed	Promotes substantive objectives of organizations and professions	Leads to cumulative social and environmental improvement; integrates systems across media and jurisdictions
	Durable	Enacts and implements decisions; support for decisions is resilient	Enhances environmental commitment; imbeds decisions into organizational priorities and activities	Produces enduring social and environmental policies; promotes long-term sustainability
Improved Social Capital and Civic Capacity	Knowledgeable	Brings appropriate knowledge to bear on decision; improves individual knowledge & learning	Improves organizational knowledge and learning	Improves social learning
	Interactional, Communicative	Improves relationships and communication amongst individual and groups involved in the process	Improves networks within organizations and partnerships between organizations	Improves social networks and civic engagement
	Empowering	Reaches decisions when appropriate; matches decision-making authority to process	Increases capacity of organizations and professions to make decisions; supports collaborative efforts through resources, SOPs and BMPs	Enhances societal decision making; replicable over time; adaptable to changing context; improves legitimacy, trust; supports collaborative efforts through resources, policies and institutions
Improved Decision Making Processes	Efficient	Reduces transaction costs; provides decision-making resources that correspond to potential benefits	Provides benefits corresponding to costs of engagement	Lowers policy process costs
	Responsive	Addresses process concerns of participants and stakeholders; Participants satisfied with involvement equitable; fair	Meets process needs of organizations and community at-large	Addresses broader process concerns of society

Table 2: Types of Impact of Collaborative Processes by Scale

To assess the higher order impacts of collaborative decision making, then, we have identified three fundamental values associated with CDM processes (increases in the quality of environments and communities, in social capital and civic capacity, and in the quality of decision making processes). In turn, we have explored how these three fundamental values can be measured through seven variables, each of which is manifested within the collaborative process itself (first order impacts) and at higher orders of social organization (professions, communities, and societal systems). In the next section, we examine our current state of knowledge as manifested in existing literature. We follow this up in Section V with a framework for more effectively assessing these impacts through research.

IV. State of the Field

The literature on the impacts of collaborative processes is quite extensive, with over 1,400 articles published in scholarly journals in the past decade. Yet of these, we could identify only 85 references that explicitly examined the impacts of collaborative processes and based their observations and conclusions on explicit models of research. The literature focuses primarily on mediation and conflict management studies (49%) and collaborative planning and policymaking. About half (54%) of the studies fall within the substantive area of environmental or natural resource decision-making, where use of collaborative processes has been most pronounced, with the remainder addressing a wide range of issues from employment disputes to community visioning. The research almost exclusively focuses on the impact of single or clustered interventions, relying on single cases studies (39%), multiple case studies (38%), and cross-sectional survey analysis (29%) techniques, with some studies incorporating both cross-sectional data and case studies. Relatively few seek to

assess impacts on and within the context of a system of decision making, with interactive elements and feedback loops.

The literature does not fall neatly along the variables and scales we have developed. Rather, researchers have tended to focus on specific subsections of the framework. Research in the field tends to focus on either first-order or higher-order impacts associated with outcomes, social capital or the collaborative process itself. Visually, we can show this using our framework table, as shown in Table 3 below.

	Scale of Impact	
	1 st Order	Higher Order
Improved Quality of Environment and Communities	1	2
Improved Social Capital and Civic Capacity	3	4
Improved Decision Making Process	5	6

Table 3: Relationship Between Framework Table and Literature

Research Focused on Improvements in Environments and Communities

Collaborative processes have a purpose—to produce commitments, recommendations, plans, policies, programs, organizations, and information—that will impact society. To be successful, decisions and other outputs must be both *beneficial* and *durable* to the parties, society, or the environment. The quality of these outputs are ultimately of more interest to society than the process dynamics of interaction and decision making, yet most research focuses on the latter rather than the former. In particular, the methodological difficulties of measuring the quality of

outputs is complicated both by the longer time horizons of these impacts and the relatively diffuse impact of specific decision processes on complex societal problems. As a consequence, most studies restrict their attention to the dynamics within a process and its immediate impact.

Outcome-oriented studies are relatively rare.

Research Focused on Improvements in Social Capital and Civic Capacity

Impacts of and on social capital and civic capacity are manifest as changes in the capacity to manage future social and environmental issues. The impacts remain after the process is completed, and the process outputs accomplish more than their original intentions. These residual impacts affect how *knowledgeable*, *interactive*, and *empowering* the decision-making context is, ultimately changing society's effectiveness at addressing problems. In return, social capital is manifested within any particular process by creating the conditions within which new knowledge, interactive networks and effectiveness are created. Theorists and researchers speculate that the impacts on social capital and civic capacity may be even more significant than the impacts associated with process dynamics and substantive outcomes.ⁱ

Research Focused on Improvements in Decision Making Processes

An effective decision making process efficiently engages diverse interests in deliberation and reaches agreement to the satisfaction of the participants and others. To be a successful decision-making model, collaborative processes respond effectively and efficiently to stakeholders within a single process and across a variety of problems and contexts.

Summary of Previous Research

Based upon the weight of evidence and the significance of the findings, we provide a summary of the empirically observed impacts of collaborative processes as follows. Within collaborative processes:

- Collaborative processes promote more effective consideration of diverse interests and may produce more effective environmental and community decision making, but the public policy changes are typically incremental rather than radical. Few studies directly evaluate the impact of collaborative decision making on the quality of the environment or communities. The technical qualities of agreements have received mixed reviews.
- Collaborative process agreements are being implemented, but the evidence does not suggest that the agreements have a better track record compared to those from traditional approaches. Several noted deficiencies of collaborative process agreements are that they sometimes lack the details, authority, or accountability necessary for implementation.
- Collaborative processes improve individual and collective understanding of social and environmental conditions, perhaps moving society toward a greater degree of consensus on the issues. Collaborative processes can lead people to think and act more holistically.
- Collaborative processes initiate and strengthen relationships among diverse stakeholders, resulting in more open communication and resource sharing among groups.
- Collaborative processes strengthen public trust in government and allow agencies to achieve their missions. Although power structures are maintained, collaborative processes lead to greater agency responsiveness to stakeholder concerns.
- When addressing public issues, collaborative processes have involved a wide range of stakeholders, but participants may not be entirely representative of the public.
- When collaborative processes are conducted using the best practices developed by the supporting disciplines, including activities that are normally associated with the traditional decision-making approaches such as the use of experts and technical analysis, individual and collective learning is a key result.
- Collaborative processes are fairly successful at reaching agreement, although not necessarily more efficiently than alternative processes. Participants are consistently satisfied with collaborative processes, and surveys indicate that people favorably view the collaborative process model. Despite the positive perceptions, organizations attempting to

institutionalize collaborative processes often make only half-hearted attempts, and employees find it difficult to change their routines towards more collaboration.

- The effectiveness of any specific process is highly dependent on organizational, professional and societal supports to the process in that the use of best collaborative practices often requires resources and commitment from these higher-level institutions. At the same time, processes that use best practices tend to improve social capital and civic capacity not just within the single process, but in ways that may alter professions, organizations and societal decision making.

Overall, the emerging picture is that the characteristics of collaborative processes – interest representation, deliberation, and flexibility – permit the processes to address problems too complex, unique, or burdensome for the existing power structures and institutions to either acknowledge or dispense with. Along the way, social learning occurs and social capital is built. On the other hand, the lack of standardization and clear assignment of responsibility make decisive action a challenge. The trends towards professionalism and institutionalization may address these issues as well as other perceived deficiencies. Power and interests remain important considerations in understanding why stakeholders choose to participate in collaborative processes and the range of societal impacts that may be reasonably expected. The fact that collaborative processes are useful but not a panacea corresponds with the frequent comment that collaborative processes are complements to and supported by the more formal decision-making systems and processes.ⁱⁱ

Implications for Research

The collaborative process literature has now matured to incorporate political and social theories, policy analysis, and the natural sciences. We found empirical research addressing each of the types of impacts identified, but there were very few studies comparing different decision-making models and most research was restricted to the case level with few studies reporting on organizational or socio-ecological effects. The latter is not surprising given the prerequisite of

understanding the case-level impacts, the longer timeframes required for system-level impacts to occur, and the difficulties in recognizing and assessing large-scale changes. The type of impact receiving the least treatment by the empirical literature was whether process outputs were beneficial. Moreover, empirical research to date has not often examined higher-order impacts nor, of particular importance, has it examined the interaction between the first-order and higher-order impacts. As many scholars have suggested, these interactions between decision levels may be as important to the success of collaborative processes as the specific characteristics found within the collaborative processes themselves. It is these system interactions that we herein propose to examine.

V. A Framework for Field Testing

As we have discussed above, research into higher-order impacts of collaborative processes poses several methodological difficulties. Impacts are cumulative, coming from multiple application of collaborative processes over time and across space. Interactions between collaborative processes and the overall decision making process confounds simple cause-effect relationships; collaborative processes are both shaped by and shape the overall decision system. In this section, we shall first discuss the research setting upon which we will build our analysis, followed by a description of the research design.

Research Setting: Florida and Georgia

To tease out these patterns, we identified two states with significantly differing uses of collaboration but which are comparable along many other socio-political dimensions. Unlike cities, states encompass reasonably complete environmental systems and whole regions. Further, they allow us to look at interactions between various jurisdictions within each state and between states, local

government and federal agencies. Moreover, they are relatively internally cohesive decision making systems, distinct from their neighbors and therefore provide clearer comparisons than is possible at either the local or federal levels of government.

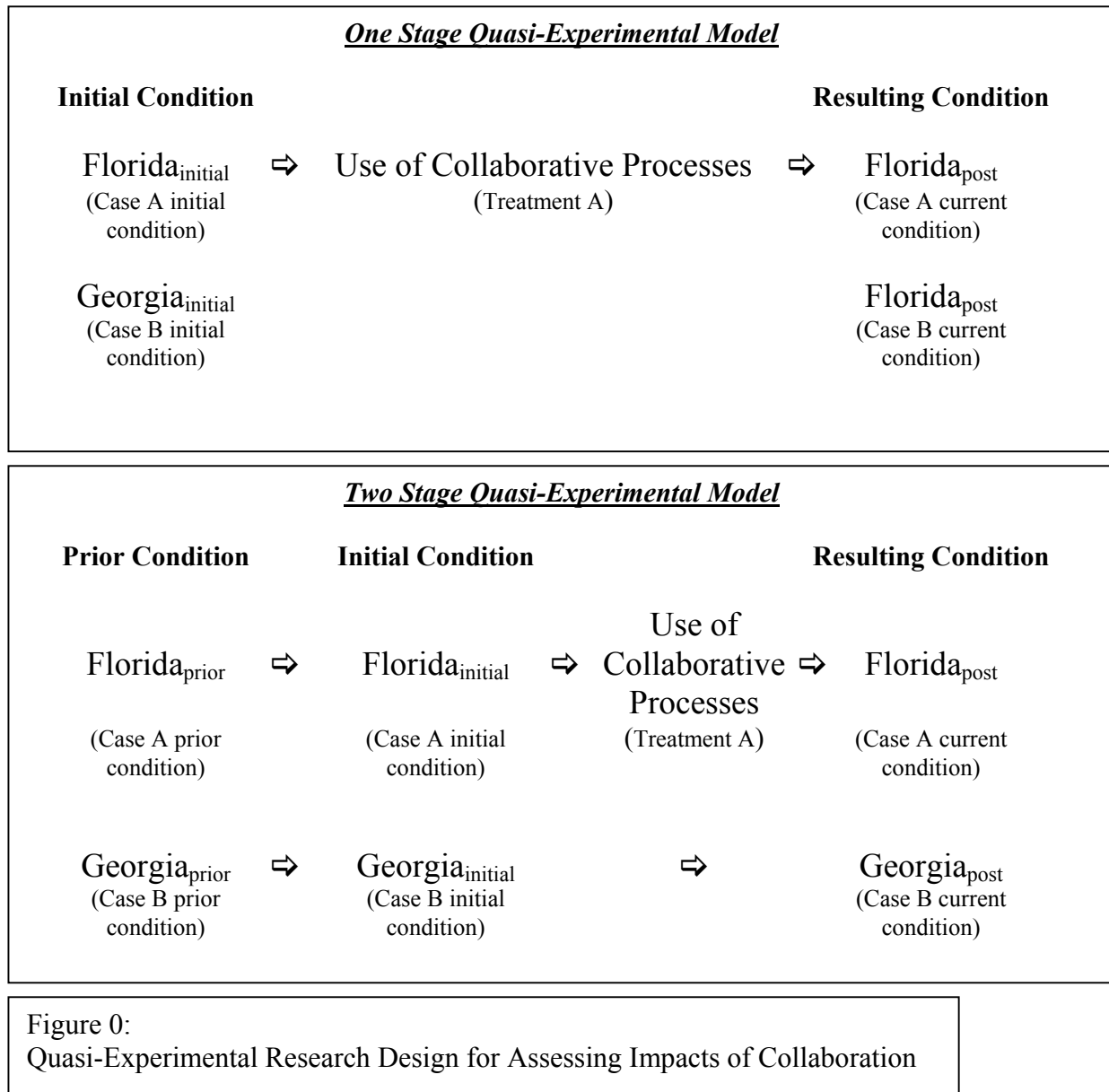
The two states that we will examine include Florida and Georgia. As discussed below, we selected Florida because of its exceptionally long and effective use of collaborative processes in environmental and land use decision making, as well as its relatively comprehensive institutionalization of consensus-building into this decision making. We selected Georgia as a comparison state because the two states share many environmental resources and have significant commonalities, yet Georgia has used collaborative processes less frequently and on a more *ad hoc* basis.

Research Design

Conceptual Design

Through case-level research, we seek to understand higher order impacts of collaborative decision making on environmental and land use systems. To do this, our research will employ a two stage quasi-experimental research design, as modeled in Figure 5. We adopt this methodology both because no pure natural experiments exist between perfectly parallel cases and because we cannot isolate out the treatment.

Consider the assumptions behind the single stage model. This model seeks to determine the change in Florida's environmental and land use systems from 1985 (initial condition) through 2003 (resulting condition) as a result of the increasingly widespread use of collaborative processes (treatment) by comparing it to a similar system in which collaborative processes were not used extensively (lacked the treatment). Yet, because the two systems are dynamic but not identical,



variability would be found even if both systems had used collaborative processes to the same degree between 1985 and 2003. To separate out this variability from changes created by the use and institutionalization of collaborative decision making, we must calibrate the two systems – to understand not just their initial conditions but also the dynamics of how they change over time. We

can do this by comparing both systems to their initial conditions in 1985 and to the dynamics of change that existed within each system prior to 1985, as shown in the two stage model.

The second methodological challenge exists because cases are not fully independent from each other. Quasi-experimental designs assumes that cases are independent, and examines changes between initial and resulting conditions by comparing cases with treatment with those in which there was no treatment. But, the widespread utilization of collaborative processes in Florida leads to the potential for so-called reactive effects of the experimental variable. That is, persons involved in environmental decision-making which did not use collaborative processes might be affected by the use of collaborative processes used in other cases, leading them to behave, in part, as if they were in the experimental group rather than the control group. This is a difficult challenge to determining even the first order impacts (direct impacts of specific decision processes), which we initially imagined would be the most straightforward to assess.

The same reasoning helps to explain why we might expect to find systemic and cumulative impacts of the collaborative processes. If the persons involved in decision processes that are not explicitly collaborative are influenced by the use of collaborative processes in other decision, then they are evidencing spin off effects of collaborative processes. These effects may well be coming from changes in professional norms and organizational S.O.P.s, as well as from cumulative effects of many cases in which collaborative processes were used.

Demonstrating the effects of collaborative processes then, will require that we either compare $\Delta(\text{Florida}_{\text{post}} - \text{Florida}_{\text{initial}})$ with $\Delta(\text{Florida}_{\text{initial}} - \text{Florida}_{\text{prior}})$, or we find cases far enough removed from the dynamics within Florida that we could be confident of the absence of bleed-over influence from collaborative processes. We propose to take both these approaches.

First, we will compare Florida planning cases today, with Florida planning cases conducted twenty years ago, before the introduction of collaborative process as a treatment. This is a $\Delta(\text{Florida}_{\text{post}} - \text{Florida}_{\text{initial}}) : \Delta(\text{Florida}_{\text{initial}} - \text{Florida}_{\text{prior}})$ comparison. Second, we will compare Florida planning cases, over the 20 year time horizon, with cases in Georgia which has not experienced widespread collaborative treatments. This is a *Florida Cases : Georgia Cases* comparison.

Research Questions

We envision four general research questions:

- 1) Are environmental and land-use decision processes in Florida today more responsive, efficient, empowering, rationally interactive and communicative, knowledgeable, durable, and beneficial than similar decision processes in Florida in 1983? Is the improvement in environmental and land-use decision processes in Florida today when compared with Florida in 1983 significantly greater than the improvement in environmental and land-use decision processes in Georgia over the same period?
- 2) Do professionals involved in environmental and land-use decisions in Florida today approach their work in ways more likely to prove responsive, efficient, empowering, rationally interactive and communicative, knowledgeable, durable, and beneficial outcomes than those involved in these decisions in Florida in 1983? Is the improvement in professional approaches in Florida today in comparison with Florida in 1983 significantly greater than the improvement in professional approaches in Georgia over the same period?
- 3) Do organizations responsible for environmental and land-use decisions in Florida today organize their efforts in ways more likely to prove responsive, efficient, empowering, rationally interactive and communicative, knowledgeable, durable, and beneficial than they (or their counterpart organizations) did in Florida in 1983? Is the improvement in organizational approaches in Florida today in comparison with Florida in 1983 significantly greater than the improvement in organizational approaches in Georgia over the same period?
- 4) Does Florida's environment management system more responsive, efficient, empowering, rationally interactive and communicative, knowledgeable, durable, and beneficial today than it was in 1983? Is this improvement significantly greater than the improvement in Georgia's environment management system over the same time period?

Data Sources

To examine these four research questions, we expect to use three data sources, as follow:

- 1) **Case Histories:** We will compile case histories of five matched pairs of cases from the two states. Each case history will be based on review of agency case files and court filings, interviews with stakeholder representatives for all major stakeholder groups, and interviews with key agency personnel. The five pairs are expected to be drawn in such a manner as to sample both state and local/regional decisions involving policy planning, project planning, siting and permitting, and enforcement. The cases will be selected from those with documentation indicating how similar cases were managed prior to 1985.
- 2) **Survey of Professionals:** We will conduct an internet or mail survey of attorneys, planners/policy analysts, engineers, architects, landscape architects, public administrators, and building construction professionals involved in environmental and land-use decisions in the two states.
- 3) **Newsletter Content Analysis:** We will compile and analyze newsletters from key developer and environmental stakeholder groups in the two states at the beginning and end of the twenty-year study period, seeking to characterize the ways in which the two sets of groups describe each other and each other's positions, together with the frames used to characterize the decision processes.

Table 4 show variables expected to be assessed in each of the data collection methods. Each of the three data collection methods will be discussed in turn in greater detail.

	Data Source		
	Case Histories	Professional Surveys	Newsletter Content Analysis
Benefits	achievement of joint gains; environmental quality enhanced; equity/fairness	organizational goals achieved; x-media integration; equity/ fairness	IG goal achievement
Durability	implementation	changes in priorities; enforcement mechanisms; sustainability	
Knowledgeability	individual learning	organizational learning; group learning	group learning
Interactivity/ Communicative Rationality	relationship improvements	relationship improvements; internal interactivity; civic engagement	relationship improvements; civic engagements

Empowerment	group capacity	organizational capacity; professional capacity; SOPs BMPs	group capacity; trust; social networks
Efficiency	transaction costs	transactions costs	
Responsiveness	IG concerns reflected	societal concerns reflected; organizational concerns reflected; legitimacy; adaptability	IG concerns reflected

Table 4: Variables and Data Collection Methods

VI. Summary: Does Collaboration Change the Collaborators?

The nationally exceptional level of use of collaborative processes for environmental and land use decision making in Florida begun in 1986 and the paucity of such processes in neighboring Georgia provide a fine setting for examining the systemic and cumulative effects of collaborative process. This research will use paired case histories, a survey of environmental professionals, and content analyses of stakeholder newsletters to assess changes in the responsiveness, efficiency, empowerment, interaction and communicative rationality, knowledgeability, durability, and benefits of decision processes in Florida and Georgia over a twenty year period from 1983 to 2003.

We expect our findings to be of important theoretical value in understanding the wider results of collaborative planning practices. But also we expect practical uses for government officials, agencies and advocacy groups concerned with improving environmental decision making and considering whether and how to support the use of collaborative approaches.

VII. REFERENCES

- Amy, D. J. (1987). The Politics of Environmental Mediation. New York, Columbia University Press.
- Andrew, J.S. (2001). "Examining the claims of environmental ADR: evidence from waste management conflicts in Ontario and Massachusetts." Journal of Planning Education and Research 21:166-183.
- Beierle, T. C. and J. Cayford (2002). Democracy in Practice: Public Participation in Environmental Decisions, Resources for the Future.
- Blanco, H. (1994). How to Think About Social Problems. Wesport, Connecticut, Greenwood Press.
- Bryson, J., B. Crosby (1992). Leadership for the Common Good: Tackling Public Problems in a Shared-Power World. San Francisco, Jossey-Bass.
- Bush, R.A.B., J.P. Folger (1994). The Promise of Mediation: Responding to Conflict Through Empowerment and Recognition. San Francisco, Jossey-Bass.
- Campbell, M. and D. W. Floyd (1996). "Thinking critically about environmental mediation." Journal of Planning Literature 10: 235-247.
- Campbell, D.T., J.C.Stanley (1966). Experimental and Quasi-experimental Designs for Research. Boston: Houghton Mifflin.
- Conley, A. and A. Moote (2000). Evaluating collaborative and community-based natural resource management: an assessment. Alternative Dispute Resolution and Natural Resources: Building Consensus and Resolving Conflicts in the Twenty-First Century, Tucson, AZ.
- D'Estree, T. P., L. A. Fast, et al. (2001). "Changing the debate about 'success' in conflict resolution efforts." Negotiation Journal 17(2): 101-113.
- Elliott, M. (1999). "Reconceiving historic preservation in the modern city: conflict and consensus building in Atlanta." Journal of Architectural and Planning Research 16(2): 149-163.
- Florida Conflict Resolution Consortium (2001) Progress Report. Tallahassee.
- Flyvbjerg, B. (2001). Making Social Science Matter: Why Social Inquiry Fails and How It Can Succeed Again. Oxford, New York, Cambridge University Press.
- Folger, J.P. (2001). "Mediation research: studying transformative effects" Hofstra Labor and Employment Law Review (18): 385ff.
- Forester, J. (1989) Planning in the Face of Power. Berkeley and Los Angeles: University of California Press.
- Frank Kathryn, Michael Elliott. (2002). "Impacts of Collaborative Processes: Theoretical Framework and Literature Review." Paper presented at the 44th annual conference of the Association of Collegiate Schools of Planning Baltimore, MD, November 23.
- Healey, P. (1997). Collaborative Planning: Shaping Places in Fragmented Societies. Vancouver, UBC Press.

- Innes, J. E. (1999). Evaluating consensus building. The Consensus Building Handbook: A Comprehensive Guide to Reaching Agreement. L. Susskind, S. McKearnan and J. Thomas-Larmer. Thousand Oaks, CA, Sage.
- Innes, J. E. and D. E. Booher (1999). "Consensus building and complex adaptive systems: a framework for evaluating collaborative planning." Journal of the American Planning Association **65**(4): 412-423.
- Innes, J. E. and S. Connick (1999). San Francisco Estuary Project. The Consensus Building Handbook: A Comprehensive Guide to Reaching Agreement. L. Susskind, S. McKearnan
- Jones, R.M. (forthcoming) "The Everglades mediation: reframing the politics of consensus." In *Finding the Common Ground*, P. Adler, G.K. Lowry, eds. (available online at: consensus.fsu.edu/staffarticles)
- Margerum, R. D. (2002). "Evaluating collaborative planning: implications from an empirical analysis of growth management." Journal of the American Planning Association **68**(2): 179-193.
- Mayer, Severine, Bruce Stiffl (2002) "How do we substantiate the effects of process innovation in environmental decision making: a review of prior research." Paper presented at the 44th annual conference of the Assn. of Collegiate Schools of Planning, Baltimore MD, November.
- McEwen, C. A. (1999). "Toward a program-based ADR research agenda." Negotiation Journal **15**(4): 325-338.
- O'Leary, R., T. Yandle (2000). "Environmental management at the millennium: the use of environmental dispute resolution by state governments." Journal of Public Administration Research and Theory **10**:137-155.
- Schultz, K. D. (1990). Florida's Alternative Dispute Resolution Demonstration Project: An Empirical Assessment. Tallahassee, FL, Florida Dispute Resolution Center.
- Sipe, N. (1998). "An empirical analysis of environmental mediation." Journal of the American Planning Association **64**(3): 275-285.
- Sipe, N. and B. Stiffl (1995). "Mediating environmental enforcement disputes: how well does it work?" Environmental Impact Assessment Review **15**: 139-156.
- Stiffl, Bruce. (1989) "Florida mechanisms for resolving growth disputes." Pp. 299-307 in *Dispute Resolution and Democracy in the 1990s: Shaping the Agenda*, C. Cutrona, D.M. McCabe, W. Wilkins, eds. Washington DC: Society of Professionals in Dispute Resolution.

VIII. Citations

ⁱ Innes, Margerum

ⁱⁱ Bingham 1986, Rabe 1988, Crowfoot and Wondolleck 1990, Weidner 1998