EVALUATION OF THE B.C. STRATEGIC LAND-USE PLAN IMPLEMENTATION FRAMEWORK

by

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Abstract

Land-use plan implementation is a complex process influenced by a multitude of factors. In all, eighteen factors are identified as key to implementation. Key factors include strong stakeholder support, sound land-use plans, and a supportive institutional structure that draws heavily on a collaborative design. However, focusing solely on any single factor or group of factors will undermine the implementation process. Robust and effective systems require careful attention of all factors. Government support lays the foundation for many of these factors. If government demonstrates a commitment to implementation—particularly through collaboration—then other stakeholders get on board, and successful implementation is likely.

The strengths of the B.C. strategic land-use plan implementation framework include the collaborative planning process that developed the plans, plan clarity, flexibility, innovative leadership, stakeholder involvement, and adequately understood problems. The only major weakness of the framework is the prevalence of unfavorable stakeholder characteristics. However, there are numerous deficiencies in B.C. plan implementation systems. While strategic land-use planning has succeeded in implementing the *Protected Areas Strategy* and a number of other plan recommendations, much remains to be achieved to reach social, economic, and environmental sustainability. Strategic land-use planning can be an effective tool for achieving sustainability, but to do so, it must be better supported by government and meet all eighteen factors for effective implementation.

Acknowledgements

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Acronyms

ADR	Alternative dispute resolution
B.C.	British Columbia
CORE	Commission on Resources and Environment
CP	Collaborative planning
EMS	Effectiveness monitoring system
EMZ	Enhanced management zone
GMZ	General management zone
HLP	Higher level plan
IAMC	Interagency Management Committee
IEI	Implementation evaluation index
IMS	Implementation monitoring system
IMZ	Integrated management zone
IRPC	Integrated Resource Planning Committee
KLRMP	Kamloops Land and Resource Management Plan
LRMP	Land and Resource Management Plan
LUCO	Land Use Coordination Office
MSRM	Ministry of Sustainable Resource Management
NDP	New Democrat Party
PA	Protected area
REM	School of Resource and Environmental Management
RMZ	Resource management zone
SDM	Shared decision making
SLUP	Strategic land-use plan; strategic land-use planning
SMZ	Special management zone
SRMP	Sustainable resource management plan

Chapter 1
Introduction

1.1 Introduction

In the early 1990s, the provincial government of British Columbia introduced new policies aimed at achieving economic, environmental, and social sustainability. These policies—including forest practices legislation, the expansion of the protected area system, and "strategic land-use planning"—stem from a history of conflict between industrial resource users and environmental stakeholders over the allocation of natural resources on Crown lands (Day, Gunton, and Frame, 2003). Strategic land-use planning (SLUP) in B.C. has been successful in resolving land and resource conflict (Frame, Gunton, and Day, 2004). In B.C., SLUP develops land-use plans through a shared decision-making (SDM) process that involves all affected parties in face-to-face negotiations in an effort to achieve a consensus agreement.

SDM was formally initiated in B.C. with the establishment of the Commission on Resources and the Environment (CORE) in 1992 (Day, Gunton, and Frame, 2003). CORE developed a SDM process and initially implemented it in the most contentious regions in the province. In 1993, while the CORE process was underway, the provincial government initiated a similar SDM process called Land and Resource Management Planning (LRMP) to develop plans for areas of the province not covered by CORE. LRMP now serves as a model for how "strategic level" planning occurs in the province. At the time of writing, strategic land-use plans have been completed and approved for

almost three-quarters of the provincial land base. These plans are now in the process of being implemented.

1.2 Study Rationale

One of the primary challenges in planning is to achieve effective plan implementation. During implementation, strategies and activities proposed in a land-use plan are acted upon so that plan goals can be realized. Regardless of the quality of a planning process, or of a plan, little can be expected to emerge from the exercise without effective implementation (Pal, 2001; Vedung, 1997; Morah, 1990; Gray, 1989; Mazmanian and Sabatier, 1989).

Despite the importance of implementation, there has been relatively little research on this topic. Although a number of researchers have reviewed implementation theory from a broad public policy perspective, few have investigated the theory in the context of land and resource management planning. Even fewer have examined implementation of plans developed through SDM processes. As British Columbia is the only jurisdiction in the world to have systematically applied SDM to land-use planning, an unprecedented opportunity exists for research in this field.

This study has three objectives. The first objective is to develop a method for evaluating plan implementation systems. The second objective is to develop best practice guidelines for effective plan implementation. The final objective is to apply the implementation evaluation method to a case study evaluation of the B.C. SLUP implementation system.

1.3 Method

A six-step method is used in this study (figure 1). In the first step, implementation theory literature is reviewed in order to identify the components of successful implementation systems. The second step is to develop criteria that characterize the components of successful implementation systems in the context of SDM in land-use planning. These criteria, which are based on the literature review, form a 'measuring tool' to evaluate SLUP implementation systems currently in use. The third step involves describing the B.C. strategic land-use plan implementation framework by reviewing relevant planning documentation and legislation.

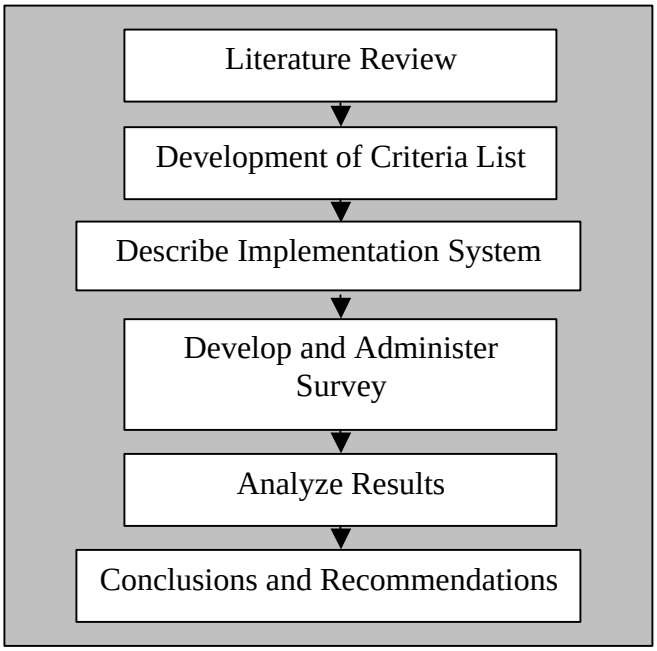

Figure 1. Method of research.

In the fourth step, a survey is developed and administered to officials responsible for implementing SLUPs. The purpose of the survey is twofold. First, the survey asks

implementation officials to rate the significance of factors affecting implementation success. This rating is used to verify the importance of the implementation criteria developed in step two. Second, the survey asks implementation officials to assess the degree to which these criteria are met in the B.C. SLUP process. Next, the results of the survey and the policy review are analyzed using quantitative and qualitative techniques. In the final step, the results are used to develop best practice guidelines to achieve successful plan implementation, describe the quality of the B.C. SLUP implementation framework, and make recommendations for improving SLUP implementation in British Columbia.

Chapter 2
Theory and Practice of Planning Implementation

2.1 The Planning Process

Planning is normally described as a decision-making process which follows a sequence of steps. Hall (2002), for example, identified six basic steps in the planning process. First, a decision is made to initiate a planning process. Next, goals, objectives, and targets are developed to guide the planning process. Goals are general aims of the planning activity, such as land-use sustainability. Objectives are more specific and define actual programs of activity to reach goals. Targets are performance criteria that measure success. In the third step, alternative courses of action are developed. The fourth step entails evaluation of alternatives. Normally a small number of plan options are evaluated based on how well they meet plan goals. Next, a plan alternative is chosen and implemented. Throughout implementation, adjustments are made with the guidance of modeling and interim evaluation. In the sixth and final step—plan review—a plan's goals and design are evaluated and the process is repeated. For the purposes of this study, both of the last two steps are considered 'implementation.'

Strategic land-use planning (SLUP) in B.C. generally follows this generic planning process model with a few adjustments to meet the specific requirements of shared decision-making (SDM). The objective of SLUP in B.C. is the achievement of economic, environmental, and social goals by involving all relevant stakeholders in a consensus-based process to develop land-use plans for large geographic areas called

subregions (Brown, 1996). Brown (1996, 29) identified seven phases in the SLUP process (figure 2).

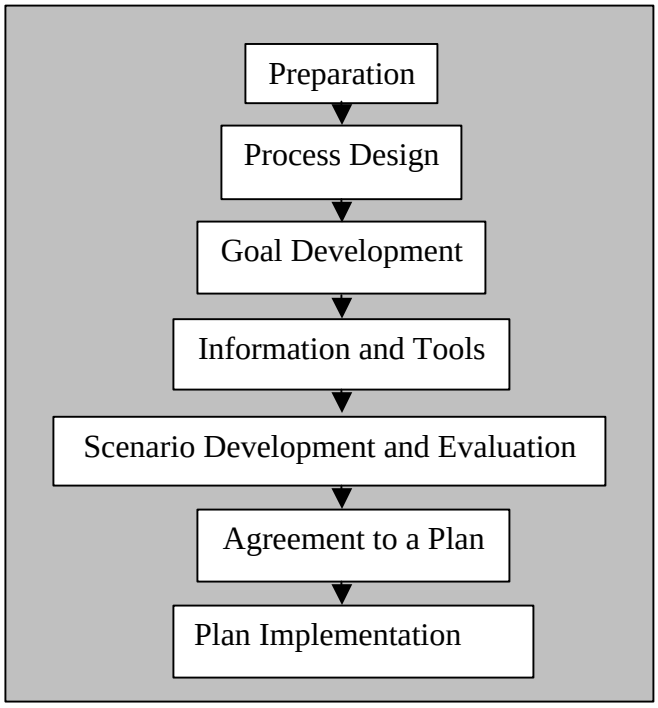

Figure 2. Phases in the strategic land-use planning process (Brown, 1996).

In the first phase, a government agency responsible for planning undertakes necessary preparations. Government commitment is secured and necessary resources are acquired. Following this, a planning team contacts participants to form a planning table, identifies planning boundaries, assesses policy and information frameworks, assembles and organizes preliminary information, assembles orientation materials, and drafts a planning table's terms of reference.

In phase two, planning table members are convened to define their mode of operation. A table defines its purposes and process, and representatives are oriented to

their roles and responsibilities and are trained in interest-based negotiation. In addition, a table clarifies process mechanics, finalizes terms of reference, and commits to a process.

Plan goals are developed in the third phase. The table documents issues, identifies interests, and assesses opportunities. As part of this phase, a table develops a vision of the future of a planning area to guide the process.

During the next phase, a table collects information and develops analytical tools. Utilizing the help of experts, government agencies, and technologies such as geographic information systems, a table gathers and transforms information into a useable form. To identify and demarcate where land-use practices will be suitable, a table generates a land-use designation system together with an evaluation system to aid land-use decision making.

In the fifth phase, a table develops land-use plan alternatives. Once guiding principles are adopted to determine land allocation, a table assesses parcels of land within its subregion in terms of land-use suitability for alternative resource uses. The land-use designation system developed in phase four is applied to the land base to develop alternative scenarios for each parcel within a subregion. A table then evaluates each alternative against planning objectives using multiple account analysis or other similar evaluation techniques. This process continues until a table reaches consensus on a preferred scenario.

In phase six, a table finalizes a preferred land-use scenario. Based on projected implications of a scenario, more specific plan details are developed and the public reviews a plan. Following further modification of plan details through iteration, a table

agrees to a final land-use plan. In the last step in this phase, a table submits its recommended plan to government for approval.

Plan implementation begins in phase seven. Relevant government agencies and personnel receive a plan and incorporate it into policy and their work agendas. Nongovernmental stakeholders may also be compelled to modify their practices and agendas consistent with plan objectives and requirements. This phase may involve legislative designation, investment, more detailed planning, institutional reform, use of mitigation and transition strategies, and dispute resolution. In addition, a monitoring process is established to periodically review plan progress and guide plan amendment over time. The focus of this research project is on this phase of the planning process: implementation.

2.2 Implementation Theory - Context

Researchers have investigated public policy implementation since the 1970s in an effort to determine keys to implementation success. This body of theory applies to all forms of public policy and can thus help in designing effective implementation strategies for strategic land-use planning.

The broader social ideals of law and democracy form the basis of the traditional "top-down" model of policy implementation (Hill and Hupe, 2002). In this model, policy implementation is a purely administrative duty where control is exerted over the implementation process to ensure success (Mazmanian and Sabatier, 1989). Democratic accountability is maintained because elected officials make policy. As such, policy makers control implementation by designing and structuring the process, determining

who is involved, ensuring that sufficient money and other resources are provided, and assuring that implementation is properly overseen.

In reality, though, many of the factors affecting implementation success are beyond the control of policy makers. Often, “the very things which top-down theorists . . . urge must be controlled are the elements which are difficult to bring under control” (Hill, 1997, 139). Policy makers, for example, generally have little control over socioeconomic conditions, technological capacity, or the degree of support for a policy within or outside government. In turn, implementation may be undermined by organizational complexities and the political dynamics between actors in implementation (Rein and Rabinovitz, 1978; Bardach, 1977; Hood, 1976).

The alternative “bottom-up” model views implementation as part of the policy design process. In this approach, policy is conceived as an output of the implementation process rather than an input from the top (Hill, 1997); the process of implementation is conceived as circular and iterative rather than linear and singular.

The core concept of the bottom-up model is its recognition of policy transformation by all parties involved in implementation. In land and resource management, implementation involves a number of government agencies and personnel, private industry, nongovernmental organizations, special interest groups, and the general public. Political mediation among these actors inevitably modifies policy, potentially resulting in significant changes (Barrett and Fudge, 1981; Rein and Rabinovitz, 1978; McLaughlin, 1975). Consequently, actors within a policy process are policy designers. As critics point out, democracy may be subverted in the process (Hill, 1997; Nakamura and Smallwood, 1980).

Policy modification through implementation can be beneficial, however. Interactions among actors in policy making can allow for creative problem solving (Margerum, 1999a; Berman, 1980), especially in situations where there is a limited understanding of a problem (Rothstein, 1998; Rein and Rabinovitz, 1978). Thus, strict adherence to the top-down model may not be in the best interest of those wishing to solve complex problems.

Recent models of implementation synthesize the two models and recognize the importance of networks and dynamics connecting actors as well as the importance of the circumstances in which policy implementation is attempted (Hill and Hupe, 2002; Margerum, 1999a; Goggin et al., 1990; Mazmanian and Sabatier, 1989, Berman, 1980). Similarly, these models carefully consider the political, socioeconomic, institutional, and other conditions that characterize a policy environment when defining an optimal implementation strategy (Hill and Hupe, 2002; O'Faircheallaigh, 2002; Margerum, 1999a; Hargrove, 1983; Berman, 1980). Consequently, the implementation system should be structured appropriately to the context of a policy environment, and to the unique nature of a policy problem. In doing so, implementers' capacity for achieving successful implementation is enhanced (Goggin et al., 1990).

A number of investigators argue that the complexity of an implementation environment can be addressed by balancing a mix of strategies, structures, and activities. Berman (1980, 205), for instance, argued that appropriate balances of top-down and bottom-up strategies might achieve "implementation proof" policy. Nonetheless, implementation is more likely to be successful when actors are strategically coordinated to work towards common goals (Margerum, 1999a; Mazmanian and Sabatier, 1989).

Margerum (1999a) argued that implementation structures should adopt appropriate balances of coordination and cooperation among actors, and appropriate blends of administrative and operational activities among actor agendas. Clearly, each implementation environment is different and consideration must be given to designing implementation processes accordingly.

Following a lengthy investigation into the contexts of implementation, Hill and Hupe (2002) concluded that the way in which power is distributed among actors, and the way in which decisions are made, may be the most important considerations in designing implementation systems. This "mode of governance" provides a context in which successful implementation frameworks can be defined. The SLUP process in B.C. brings a network of actors, or stakeholders, together to collaboratively develop sustainable land-use plans. This context guides the following discussion of the factors—or criteria—contributing to a successful implementation system for land-use plans.

2.3 Defining a Successful Implementation System for Land-use Plans

Successful plan implementation depends on meeting many conditions. While a number of authors conceptualize successful policy implementation systems and categorized factors (Vedung, 1997; Goggin et al., 1990; Morah, 1990; Mazmanian and Sabatier, 1989), none has been developed with the unique characteristics of land-use plan implementation specifically in mind.

The majority of investigators define successful implementation systems based upon their judgment and observations. However, two studies conducted in the School of Resource and Environmental Management (REM) surveyed implementation stakeholders

to determine their perceptions of the most important criteria for implementation. Albert, Gunton, and Day (2004; 2002) developed a set of criteria from the literature and tested them in the context of LRMP implementation. They assessed the Kamloops LRMP (KLRMP) implementation system by asking stakeholders involved in implementation to rate implementation success and also the importance of various factors to implementation. Calbick, Day, and Gunton (2004; 2003) examined six land management agencies in western North America and identified their most important implementation practices. Thus, both studies identified key factors defining successful implementation systems for land-use plans.

These two studies have advantages in comparison to other implementation research for three reasons. These studies specifically investigated land and resource policy implementation. Secondly, the studies used implementation practitioners to identify and rate the importance of implementation factors instead of relying on investigators' perceptions of importance. These two studies are complementary because while their target sample populations are engaged in similar activities, they investigate implementation in different geographic and institutional environments. Albert, Gunton, and Day (2004; 2002) specifically engaged stakeholders involved in KLRMP implementation, while Calbick, Day, and Gunton (2004; 2003) investigated six agencies in western North America that are implementing strategies dealing with similar broad-scale land-use issues. The diversity of experiences examined in these two studies provides a solid empirical foundation.

Taken together, the results of these two studies provide an innovative basis for examining B.C. SLUP implementation. The following discussion identifies key criteria

for successful plan implementation based on a review of the implementation literature with special attention to the Albert, Gunton, and Day (2004; 2002) and Calbick, Day, and Gunton (2004; 2003) studies.

2.3.1 Solid Stakeholder Support

Implementation success depends on the level of stakeholder support. Stakeholders normally support implementation if a number of conditions are satisfied. While these conditions are not necessarily dependent upon one another, some are interrelated.

Stakeholder Receptivity. Stakeholder support is most likely when the "receptivity climate" in a planning region is supportive—that is, when external conditions are receptive to a land-use plan. The receptivity climate has political, social, economic, historic, and other dimensions that all affect the response that stakeholders have to a plan (Sterner, 2003; Goggin et al., 1990; Gray, 1989; Mazmanian and Sabatier, 1989). For example, a community that has historically been concerned about water quality issues may be supportive of a land-use plan that places high priority on resolving such issues. In contrast, during downturns in the forest industry, rural communities may not be supportive of a plan that reduces timber production if the economy is weak. The receptivity climate can also be considered in terms of stakeholder imperatives (Rein and Rabinovitz, 1978). When imperatives—such as legal obligations—are consistent with plan implementation, then stakeholder support is greater. Conversely, there may be disincentives or constraints that weaken stakeholder support. The media can play an influential role in building, maintaining, or reducing support for implementation (Goggin et al., 1990). Albert, Gunton, and Day (2004; 2002) reported that supportive political and

socioeconomic conditions were instrumental to successful implementation of the KLRMP.

Consistent Policy Environment. Another critical condition influencing implementation success is the consistency of the policy environment with the plan. When the policy environment is inconsistent with the plan, implementation may be stalled, modified, or subverted (Goggin et al., 1990). Consequently, conflicting policies and objectives can undermine the implementation process (Albert, Gunton, and Day, 2004; 2002; Vedung, 1997; Goggin et al., 1990; Gray, 1989; Ingram and Mann, 1980; Rein and Rabinovitz, 1978). Conversely, when the policy environment is consistent with implementation directives, a plan's objectives are legitimized and the implementation process is facilitated.

Stakeholder Characteristics. The character of stakeholders is another criterion shaping stakeholder support. As land-use issues are significantly comprised of "people problems" (Wang, 2002; Allen and Gould, Jr., 1986), Mazmanian and Sabatier (1989) identified three human factors that decrease the probability of implementation success. Implementation is less likely to be successful the larger the behavioral change required to comply with the plan, the larger the target population affected by the plan, and the greater the diversity in values of the target population affected by the plan. Mazmanian and Sabatier (1989) indicated that these relationships are not linear. For instance, they observed that if little change in behavior were required of target groups, those groups would make little effort to change; if great change were required, momentum may build to bring about those large transformations. The Mazmanian and Sabatier hypothesis was not supported, however, by Albert, Gunton, and Day (2004; 2002), who found that

diversity of values, the relative size of target groups, or the extent of behavioral change required were not important in determining implementation success.

Strong Leadership. Stakeholders are more likely to support implementation when there are leaders or "champions" involved. Leaders can help resolve conflicts between parties that impede implementation (Gray, 1989; Mazmanian and Sabatier, 1989; Nakamura and Smallwood, 1980). Further, leaders who are exceptionally committed to a policy can help overcome any implementation difficulties that present themselves (Goggin et al., 1990; Mazmanian and Sabatier, 1989). These so-called "fixers" can be extremely helpful at ensuring that policy implementation remains high on a government's agenda (Vedung, 1997; Bardach, 1977). In the context of SDM, Margerum suggested that the most important quality of leaders is their facilitation skills, as "leaders must depend upon the power of consensus rather than the power of hierarchical authority" (2002, 191). Consequently, implementing officials should be skilled in working collaboratively with other stakeholders (Albert, Gunton, and Day, 2004; 2002; Margerum, 2002; Mazmanian and Sabatier, 1989).

Comprehensive Stakeholder Support. Implementation is facilitated when stakeholder support is comprehensive. Consequently, implementation success is most likely when all stakeholders are supportive (Albert, Gunton, and Day, 2004; 2002; Margerum, 2002). Thus, plan implementation has the greatest chance for success when all actors within government, industry, and the public are supportive. To be such, stakeholders must be satisfied that plan recommendations and strategies make sense in the face of the challenges the plan confronts (Calbick, Day, and Gunton, 2004; 2003; Sterner, 2003; Hill and Hupe, 2002; Booth, Poxon, and Stephenson, 2001; Ingram and

Mann, 1980). For example, plans that tackle problems of appropriate scale and use cost-efficient strategies are most likely to garner stakeholder support.

Adequate Resource Support. A final criterion concerns resources. In land-use planning, high-quality information, money, staff, time, technical expertise, and other resources are critical ingredients that enable stakeholders to fulfill their implementation responsibilities (Sterner, 2003; Margerum, 1999a; Vedung, 1997; Gunton, 1991; Goggin et al., 1990; Mazmanian and Sabatier, 1989; Hogwood and Gunn, 1984; Ingram and Mann, 1980; Rein and Rabinovitz, 1978). As might be expected, Albert, Gunton, and Day (2004; 2002) found that information, financing, and staff were critical resources in the KLRMP implementation. They also stated that stable funding is key for implementation strategies and programs (Albert, Gunton, and Day, 2004; 2002). Similarly, Calbick, Day, and Gunton (2004; 2003) reported that financial support constituted one of the most critical factors to success in the minds of implementation officials. They argue that implementation is more likely to be successful when agencies have the capacity to fund external projects that are congruent and complementary with policy objectives. Thus, successful implementation demands that stakeholders 'buy in' to policy actions, but also commit their own resources to the process. While land and resource management are generally a government responsibility, the support of other stakeholders remains important as they often control many reserves and assets that can aid implementation and, in turn, provide many services that are components of implementation.

2.3.2 Sound Plan Characteristics

Problem is Adequately Understood. Successful plan implementation depends on the quality of a plan. Mazmanian and Sabatier (1989, 26) argued that good plans are built upon "sound causal theories" such that "the principal causal linkages between intervention and the attainment of program objectives are understood." Albert, Gunton, and Day (2004; 2002) reported that a sound causal theory was important to implementation personnel in the KLRMP. As such, plans must be built upon an accurate conception of why a problem exists, and must adequately explain how interventions can address and solve a problem. Given adequate understanding, implementation is more likely to be successful because stakeholders understand what a plan proposes to do and they are more likely to support its implementation (Vedung, 1997; Goggin et al., 1990; Mazmanian and Sabatier, 1989; Hogwood and Gunn, 1984).

Collaboratively Developed Plan. The best plans with the most stakeholder support come from planning processes that utilize collaborative planning (CP) techniques (Frame, Gunton, and Day, 2004; Albert, Gunton, and Day, 2004; 2002; Burby, 2003; Calbick, Day, and Gunton, 2004; 2003; Gunton and Day, 2003). Through CP, more alternatives are generated through the interaction of all affected stakeholders. Also, because of a consensus-rule, the interests of all stakeholders are at least partially met. Thus, plans developed through CP are better because they represent a resolution of conflict among stakeholders. Indeed, Albert, Gunton, and Day (2004; 2002) concluded that when stakeholders develop policy, implementation is not constrained by the relative size and diversity of target populations. Furthermore, since stakeholders must devote significant time and effort to develop a plan, and knowing that they have a stake in its outcome, they

work harder to ensure successful implementation. Thus, the CP process creates a commitment to a plan and its successful implementation by stakeholders (Albert, Gunton, and Day, 2004; 2002; Burby, 2003; Calbick, Day, and Gunton, 2004; 2003; Gunton and Day, 2003; Hall, 2002; Knopman, Susman, and Landy, 1999; Goggin et al., 1990; Gray, 1989).

Furthermore, plans developed through CP have a greater chance of overcoming the detrimental effects of changing conditions, or time, than those developed in top-down planning processes. Changing realities both within governments—such as leadership, institutional structure, and policy—as well as external to government—such as economic conditions, and nongovernmental stakeholder support—make time one of the most pressing obstacles to effective implementation (Mazmanian and Sabatier, 1989; Hargrove, 1983; Ingram and Mann, 1980). Plans developed through CP are often the highest quality, have the highest levels of stakeholder commitment, and thus are the most adept at countering changing conditions.

Clear and Consistent Plan. While high-quality plans are based upon solid understandings of a problem and have been developed through successful CP processes, they must also clearly communicate their purpose and intent to implementers. Plan objectives and its strategies must be stated clearly and consistently for those who will be interpreting them (Albert, Gunton, and Day, 2004; 2002; Jackson and Curry, 2002; Margerum, 2002; Goggin et al., 1990; Mazmanian and Sabatier, 1989). It is critical that objectives are clear because while a planning table designed them collectively, table members inevitably have different perceptions of what each objective entails. In turn,

many more people will be interpreting them at the implementation stage (Margerum, 2002).

2.3.3 Supportive Institutional Structure

Strategic Implementation Plan. Implementation should be guided by a plan that outlines details of activities as well as the sequence in which each is performed (Gunton and Day, 2003; Margerum, 1999b). Each activity and objective should be prioritized to facilitate decision making under uncertainty and constraint (Margerum, 1999b). Albert, Gunton, and Day (2004; 2002) report that a lack of prioritization of strategies weakened implementation of the KLRMP. Further, an implementation plan should have milestones to check progress (Gunton and Day, 2003).

Clear Delineation of Stakeholder Roles and Responsibilities. In concert with a strategic implementation plan, stakeholders' roles and responsibilities must be clearly delineated (Albert, Gunton, and Day, 2004; 2002; Gunton and Day, 2003; Hogwood and Gunn, 1984). A clear delineation of stakeholders' roles and responsibilities helps ensure that stakeholders understand their roles in implementation; this, in turn, helps ensure accountability.

Supportive Decision-Making Authority. Any implementation process involves decision making; thus one more criterion which is essential in a sound implementation framework concerns a supportive decision-making structure. Decision makers need to have adequate authority and jurisdiction over mechanisms, resources, and target groups to achieve implementation objectives (Calbick, Day, and Gunton, 2004; 2003; Margerum, 2002, Knopman, Susman, and Landy, 1999; Goggin et al., 1990; Gray, 1989; Mazmanian and Sabatier, 1989). Similarly, decision makers require sufficient discretion to

accommodate unexpected circumstances. Nonetheless, Margerum (1999b) noted that inappropriately liberal levels of discretion could undermine the achievement of plan objectives if they go unchecked.

Adequate Regulatory System. To ensure that plan objectives are met, an adequate regulatory system must be in place to guide and influence stakeholder behavior (Calbick, Day, and Gunton, 2004; 2003; Sterner, 2003; Victor and Skolnikoff, 1999; Goggin et al., 1990). Such mechanisms can include rules of conduct, enforcement of those rules, penalties for noncompliance, and incentives for stakeholders to behave in prescribed manners. Providing stakeholders with written material to guide them through compliance is helpful (Calbick, Day, and Gunton, 2004; 2003).

Effective Mitigation Strategies. Trade-offs must be made between competing users in land-use planning. A special and significant form of incentive is the provision of transition and mitigation strategies to negatively affected stakeholders (Frame, Gunton and Day, 2004; McAllister, 1998).

Sound Monitoring and Information Flow. A sound monitoring system must be in place to ensure that implementation is progressing satisfactorily, to ensure that plan objectives are being met, and to enable adaptive management (Albert, Gunton, and Day, 2004; 2002; Victor and Skolnikoff, 1999; Lessard, 1998; Owen, 1998). As with other aspects of the implementation process, many ingredients are conducive to monitoring success. A sound monitoring system needs to provide accurate and timely information, be accountable to stakeholders, and be appropriately resourced. Monitoring can be expensive and staff-intensive, and requires sufficient support and commitment from stakeholders.

Sound monitoring tracks progress in implementing plan recommendations and initiatives, as well as the achievement of plan objectives (Knopman, Susman, and Landy, 1999; Victor and Skolnikoff, 1999; Talen, 1996). To do so, appropriate indicators and targets are necessary (Albert, Gunton, and Day, 2004; 2002; Calbick, Day, and Gunton, 2004; 2003; Margerum, 2002; Mazmanian and Sabatier, 1989).

Accountability and transparency of monitoring can be enhanced by a number of mechanisms. One of the most effective means to maintaining accountability is to ensure that a committee composed of stakeholders oversees monitoring. A monitoring table should be representative of all stakeholders, including those involved in the preparation of a plan. Monitoring committees should meet regularly to ensure that implementation is routinely assessed and to facilitate communication and commitment among stakeholders (Albert, Gunton, and Day, 2004; 2002). In turn, monitoring committees should maintain detailed records (Frame, Gunton, and Day, 2004). Accountability can be further improved if an implementation process stipulates mandatory remedial action if plan objectives are not being attained, and if there is an automatic and regular plan review and amendment program. Finally, monitoring should be overseen by external advisory bodies to ensure that broader policy goals are also achieved (Calbick, Day, and Gunton, 2004; 2003; Williams, Day, and Gunton, 1998).

Timely flow of pertinent information among stakeholders is perhaps the most important aspect of effective monitoring programs. As information is dynamic, it is important that stakeholders are all working with a common information set, and that the information itself sufficiently informs the management and decision-making structure (Albert, Gunton, and Day, 2004; 2002; Margerum, 1999b). Thus, information generated

through monitoring must be thoroughly disseminated among stakeholders (Calbick, Day, and Gunton, 2004; 2003; Knopman, Susman, and Landy, 1999) and should be publicly reported (Albert, Gunton and Day, 2003, 2002; Calbick, Day, and Gunton, 2004; 2003; Gunton and Day, 2003). Lessard (1998) suggested interagency committees could be used to manage information. Calbick, Day, and Gunton (2004; 2003) found that structured information dissemination and education programs are important.

Sufficient Flexibility. The implementation process should retain some flexibility in both process and mandate to accommodate new information and changing conditions (Calbick, Day, and Gunton, 2004; 2003; Margerum, 2002; 1999a; Berman, 1980). Similarly, a level of discretion in decision making helps implementers achieve plan objectives (Margerum, 1999b, Berman, 1980). In combination with a sound monitoring and information flow system, this flexibility contributes significantly to an adaptive management approach to plan implementation.

Solid Legislative Basis. The implementation structure should also be based in legislation (Calbick, Day, and Gunton, 2004; 2003; Mazmanian and Sabatier, 1989). Legislation provides legitimacy and stature which are conducive to garnering further stakeholder support. Legislation can also help establish a resource base for implementation, define decision-making structures, roles, and responsibilities, implementation procedures, regulatory systems, mitigation strategies, monitoring structures, and specify mechanisms for adaptive management.

2.3.4 Collaborative Implementation Design

Comprehensive Involvement. Much of the above discussion leads to the notion that implementation should be a collaborative effort among stakeholders. The first component

of collaboration is ensuring that all stakeholders are involved in all aspects of implementation. In concert with top-down theory, Gray (1989) and Hogwood and Gunn (1984) suggested that only one, or a small number of agencies, should implement plans so that the number of 'hands' in the system is minimized. In contrast, others argued that all stakeholders should be involved throughout all phases of implementation (Calbick, Day, and Gunton, 2004; 2003; Margerum, 1999b; Lessard, 1998; Goggin et al., 1990; Gray, 1989; Mazmanian and Sabatier, 1989). In this latter view, government—including elected officials, and also members at the provincial, regional, and local levels—First Nations, nongovernmental stakeholders, experts and advisory bodies, the public, and any other identified stakeholders should be involved in producing outputs, assessing outcomes, and amending policy.

Second, stakeholders at all levels in the process, especially those at "the bottom," require sufficient freedom to explore ideas and change the course of implementation by altering objectives and operations (Hill, 1997; Goggin et al., 1990; Berman, 1980). By involving all stakeholders, and providing them with opportunities for genuine influence, implementation benefits from all of the unique abilities and perspectives that each contributes to implementation.

It is also important that those involved in plan development continue to play a role in implementation (Albert, Gunton, and Day, 2004; 2002; Penrose, Day, and Roseland, 1998; Gray, 1989; Rein and Rabinovitz, 1978). Gunton and Day (2003) referred to this advantage as "institutional memory." This 'memory' can be further maintained when new members to implementation processes are properly oriented to a plan's history, principles, values, ground rules, and decision-making processes to ensure a smooth

transition upon their inclusion (Albert, Gunton, and Day, 2004; 2002). Indeed, comprehensive opportunities for all stakeholders throughout the many components of implementation leads to better results, helps ensure accountability and legitimacy, and also helps build and maintain the support of stakeholders.

Adequate Networking and Consensus Building During Implementation. Consensus-building techniques should be used throughout implementation to prevent and address conflicts among stakeholders. Relationship building continues to be important to implementation success long after the development of the plan (Margerum, 1999b; Carr, Selin, and Schuett, 1998; Gray, 1989). When problems are not particularly complex, stakeholders only need to join together to build consensus at key decision points; when problems are complex, independent approaches to implementation should be abandoned in favor of more cooperative strategies (Margerum, 1999b). Both Albert, Gunton, and Day (2004; 2002) and Calbick, Day, and Gunton (2004; 2003) found that cooperation among stakeholders to be very important to plan implementation success.

True collaboration demands that stakeholders are linked together in a cooperative network such that information and ideas flow freely (Albert, Gunton, and Day, 2003, 2002; Calbick, Day, and Gunton, 2004; 2003; Hill and Hupe, 2002; Margerum, 1999a; Goggin et al., 1990; Rein and Rabinovitz, 1978). Effective networks link actors in two ways: within levels of organizations, such as within “regional” governments; and between levels of organizations, such as between upper and lower levels of government. Ideally, networks should provide constant and effective communication, and regular and constructive interaction (Margerum, 2002).

It is important that interests are pursued through the opportunities provided in planning and evaluation forums, but never behind closed doors; otherwise a process might break down (Albert, Gunton, and Day, 2004; 2002). However, to address deficiencies in collaboration, an implementation framework should possess a system for resolving conflicts (Calbick, Day, and Gunton, 2004; 2003; Margerum, 2002; Mazmanian and Sabatier, 1989).

2.3.5 Summary

A successful implementation system for land-use plans must address many interrelated factors. The system must be founded upon a solid base of stakeholder support and a sound land-use plan. These components are sustained by a supportive institutional structure that relies on a collaborative implementation design. Essentially then, there are four conditions defining a successful land-use plan implementation system:

- solid stakeholder support
- sound plan characteristics
- supportive institutional structure
- collaborative implementation design.

2.4 Criteria to Evaluate Land-use Plan Implementation

The above literature review provides a description of the criteria that enable an assessment of land-use plan implementation systems. These criteria are assembled into an evaluative framework (table 1). According to theory, implementation will be more successful the greater the degree to which these criteria are met.

Table 1. Criteria Defining Sound Land-Use Plan Implementation Systems.

Criteria		Reference(s)
Solid Stakeholder Support		
Stakeholder Receptivity	Exogenous conditions—such as social, economic and political—are favorable to implementation success.	Albert, Gunton, and Day, 2004; 2002; Sterner, 2003; Goggin et al., 1990; Gray, 1989; Mazmanian and Sabatier, 1989; Rein and Rabinovitz, 1978
Consistent Policy Environment	Existing policy does not conflict with plan implementation and plan objectives.	Albert, Gunton, and Day, 2004; 2002; Vedung, 1997; Goggin et al., 1990; Gray, 1989; Ingram and Mann, 1980; Rein and Rabinovitz, 1978
Favorable Stakeholder Characteristics	Limited numbers of stakeholders are affected; minimal behavior change is required of target groups; and limited diversity in values among stakeholders.	Albert, Gunton, and Day, 2004; 2002; Mazmanian and Sabatier, 1989
Strong Leadership	Implementation is lead by committed people with adequate facilitation and management skills.	Albert, Gunton, and Day, 2004; 2002; Margerum, 2002; Vedung, 1997; Goggin et al., 1990; Gray, 1989; Mazmanian and Sabatier, 1989; Nakamura and Smallwood, 1980; Bardach, 1977
Comprehensive Stakeholder Support	All stakeholders are consistently supportive of implementation.	Albert, Gunton, and Day, 2004; 2002; Sterner, 2003; Hill and Hupe, 2002; Margerum, 2002; Booth, Poxon, and Stephenson, 2001; Ingram and Mann, 1980
Adequate Resource Support	Stakeholders have ample access to resources including money, staff, information, and any other tools required for implementation.	Albert, Gunton, and Day, 2004; 2002; Calbick, Day, and Gunton, 2004; 2003; Sterner, 2003; Margerum, 1999a; Vedung, 1997; Gunton, 1991; Goggin et al., 1990; Mazmanian and Sabatier, 1989; Hogwood and Gunn, 1984; Ingram and Mann, 1980; Rein and Rabinovitz, 1978
Sound Plan Characteristics		
Problem is Adequately Understood	Implementation is based upon an adequate understanding of the policy problem and how implementation activities will lead to plan objectives.	Albert, Gunton, and Day, 2004; 2002; Vedung, 1997; Goggin et al., 1990; Mazmanian and Sabatier, 1989; Hogwood and Gunn, 1984
Collaboratively Developed Plan	A successful, shared decision-making process was used to develop a plan.	Frame, Gunton, and Day, 2004; Albert, Gunton, and Day, 2004; 2002; Burby, 2003; Calbick, Day, and Gunton, 2004; 2003; Gunton and Day, 2003; Hall, 2002; Knopman, Susman, and Landy, 1999; Goggin et al., 1990; Gray, 1989

Criteria		Reference(s)
Clear and Consistent Plan	The plan, its objectives, and recommended actions are clear and consistent.	Albert, Gunton, and Day, 2004; 2002; Jackson and Curry, 2002; Margerum, 2002; Goggin et al., 1990; Mazmanian and Sabatier, 1989
Supportive Institutional Structure		
Strategic Implementation Plan	The implementation process is guided by a plan that specifies clear priorities and milestones.	Albert, Gunton, and Day, 2004; 2002; Gunton and Day, 2003; Margerum, 1999b
Clear Delineation of Stakeholder Roles and Responsibilities	The roles and responsibilities of stakeholders in the implementation process are clearly defined and specified.	Albert, Gunton, and Day, 2004; 2002; Gunton and Day, 2003; Hogwood and Gunn, 1984
Supportive Decision-Making Authority	Decision makers possess adequate authority and discretion to achieve implementation objectives.	Calbick, Day, and Gunton, 2004; 2003; Margerum, 2002, 1999b; Knopman, Susman, and Landy, 1999; Goggin et al., 1990; Gray, 1989; Mazmanian and Sabatier, 1989
Adequate Regulatory System	A diversity of implementation instruments, including rules as well as written guidelines for compliance, enforcement, penalties, and incentives exist to support implementation objectives.	Calbick, Day, and Gunton, 2004; 2003; Sterner, 2003; Victor and Skolnikoff, 1999; Goggin et al., 1990
Effective Mitigation Strategies	There are mechanisms to help mitigate the effects to parties that are negatively affected by implementation.	Frame, Gunton and Day, 2004; McAllister, 1998
Sound Monitoring and Information Flow	A monitoring mechanism is in place to track both progress in implementing plan recommendations as well as progress in achieving plan objectives. The monitoring mechanism uses appropriate indicators to gauge implementation progress. Monitoring is supported by strategies that ensure accountability and transparency, and effectively disseminate information to stakeholders. This criterion contributes to adaptive management.	Frame, Gunton, and Day, 2004; Albert, Gunton, and Day, 2004; 2002; Calbick, Day, and Gunton, 2004; 2003; Gunton and Day, 2003; Gunton, Day and Frame, 2002; Margerum, 2002; 1999b; Knopman, Susman, and Landy, 1999; Victor and Skolnikoff, 1999; Lessard, 1998; Owen, 1998; Williams, Day, and Gunton, 1998; Talen, 1996; Mazmanian and Sabatier, 1989
Sufficient Flexibility	Implementers possess the capacity to alter the course of implementation in accordance with new information or changing conditions. This criterion contributes to adaptive management.	Calbick, Day, and Gunton, 2004; 2003; Margerum, 2002, 1999a, 1999b; Berman, 1980

Criteria		Reference(s)
Solid Legislative Basis	Implementation is based in legislation.	Calbick, Day, and Gunton, 2004; 2003; Mazmanian and Sabatier, 1989
Collaborative Implementation Design		
Comprehensive Involvement	All stakeholders are comprehensively involved throughout all phases of implementation and all have a genuine opportunity to influence implementation. Stakeholders who were involved in plan development remain involved in implementation, and stakeholders who are involved now were involved in plan development.	Albert, Gunton, and Day, 2004; 2002; Calbick, Day, and Gunton, 2004; 2003; Gunton and Day, 2003; Margerum, 1999b; Lessard, 1998; Penrose, Day, and Roseland, 1998; Hill, 1997; Goggin et al., 1990; Gray, 1989; Mazmanian and Sabatier, 1989; Hogwood and Gunn, 1984; Berman, 1980; Rein and Rabinovitz, 1978
Adequate Networking and Consensus Building During Implementation	Implementation decisions are reached collaboratively through a network that links stakeholders and facilitates problem-solving.	Albert, Gunton, and Day, 2004; 2002; Calbick, Day, and Gunton, 2004; 2003; Hill and Hupe, 2002; Margerum, 2002; 1999a; 1999b; Carr, Selin, and Schuett, 1998; Goggin et al. 1990; Gray, 1989; Mazmanian and Sabatier, 1989; Rein and Rabinovitz, 1978

Chapter 3
Strategic Land-use Planning in British Columbia

3.1 Evolution of Strategic Land-use Planning in B.C.

Land and resource management planning in British Columbia has evolved significantly since the late 1980s. In large part, this evolution was due to public protest over forestry land-use practices throughout the province. As almost 95% of the B.C. land base is owned by the province, these protests drew significant attention to the provincial government's role in land and resource management.

Prior to the 1990s, conservationists, recreationists, First Nations, and other stakeholders held little influence over provincial land and resource policy. Crown land planning resided with the Ministry of Forests with little input from other ministries and little public consultation (Gunton, 1991). Planning occurred on an ad hoc basis (WCEL, 1999), and values other than resource extraction received little consideration in land and resource decision making (Cashore et al., 2001). A new direction in land-use management was adopted as a significant component of the New Democrat Party's (NDP) 1991 provincial election platform in an effort to correct these problems.

During the time leading up to the election, attempts had been made to resolve disputes among stakeholders over land uses by means of various alternative dispute resolution (ADR) techniques. In spite of these efforts, there was little success in resolving land-use disputes until policies introduced by the New Democrat Party in the early 1990s began to take shape.

Alongside new forest practices legislation and an ambitious *Protected Areas Strategy*, the new provincial government introduced consensus-based decision making to land-use planning. Termed shared decision making (SDM), or collaborative planning (CP), stakeholders were brought together to seek consensus outcomes that met the needs of all involved through interest-based negotiations. Public accountability was maintained because elected officials retained final decision-making authority, yet democracy was vastly improved by sharing decision-making power with a wide spectrum of stakeholders.

Under the new land-use planning regime introduced by the NDP, land-use planning occurs at a number of scales. This nexus of planning is termed "integrated land-use planning " where decision making "consider[s] the full range of resources and values present on public lands, and aims to blend or coordinate management strategies and implementation requirements across jurisdictions" (B.C., 1997). Integrated land-use planning in B.C. occurs at: the provincial level, such as through the *Protected Areas Strategy*; at the regional and subregional levels, as exemplified by LRMPs; and at local levels, such as through landscape unit plans (figure 3). An overarching planning hierarchy exists that guides all small-scale, more detailed planning.

This hierarchy emerged through a series of policies introduced by recent provincial governments. The NDP first introduced "strategic land-use planning" (SLUP) as a CP technique at the regional and subregional scale through the 1992 establishment of the Commission on Resources and Environment (CORE). CORE's mandate was to develop a CP process and then to apply the process to four regions in the province experiencing intense land and resource conflicts. CORE defined SLUP as a style of planning for large geographic areas in the province that brings stakeholders together to determine land and resource goals and strategies for

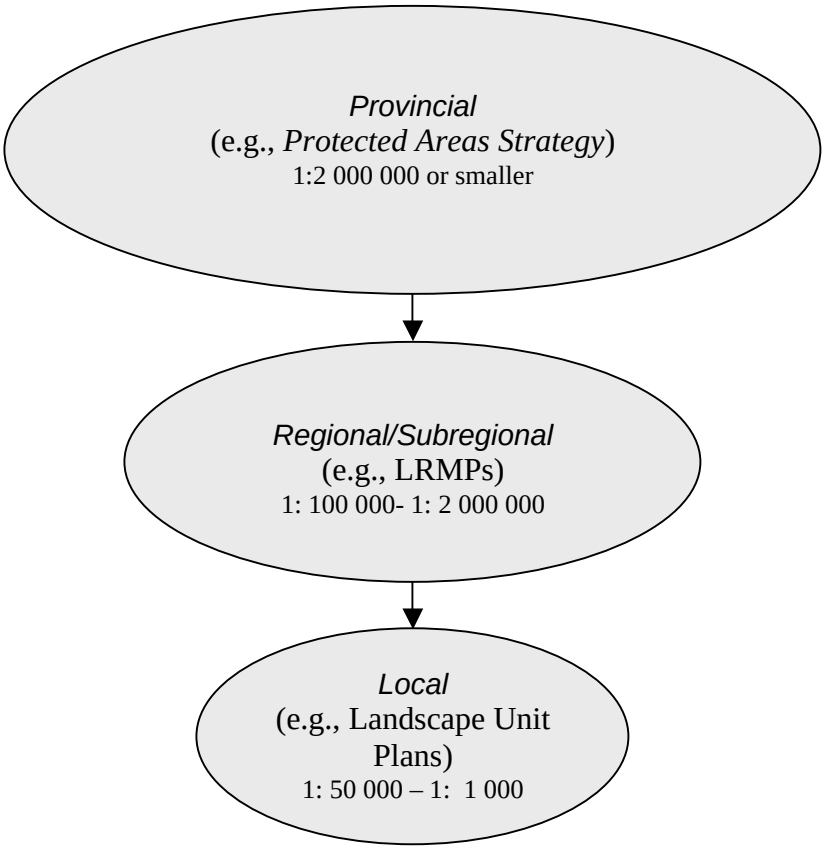

Figure 3. Typical scales of integrated land-use planning (after B.C., 1997).

achieving them (B.C. CORE, 1996, in WCEL, 1999).

CORE's strategy fundamentally changed how land and resource planning was done in British Columbia. CORE sought to bring all stakeholders together to reach consensus on land and resource decisions, and if no consensus was reached, to make recommendations to Cabinet based upon the progress made by stakeholders through the process. Each plan was intended to provide high-level direction for all types of land uses on public land. To do so, CORE developed a series of zones to establish land-use priorities for parcels of land within plan boundaries. Less

than two years were provided to each regional planning table to develop a plan and reach consensus. In the end, none of the regional planning tables reached consensus, and after subsequent negotiations with interest groups, CORE made recommendations to Cabinet. Further negotiations between stakeholders and government lead to the four land-use plans in existence today[1].

Concurrent with CORE's work, the government initiated a similar CP process called Land and Resource Management Planning (LRMP) for areas of the province outside the four CORE planning regions. The Land Use Coordination Office (LUCO) was established to administer the LRMP process[2]. Modeled after CORE, LRMP is "an integrated, subregional, consensus building process that produces a Land and Resource Management Plan for review and approval by government . . . establish[ing] direction for land use and specifies broad resource management objectives and strategies" (B.C. IRPC, 1993). Still in use today, the LRMP process is currently overseen by the Ministry of Sustainable Resource Management (MSRM). The process is defined by a number of key principles:

- Land and resource management plans provide direction for more detailed resource planning by government agencies and the private sector, and create a context for local government planning.
- All resource values are considered in the land and resource management planning process to ensure that land use and resource management decisions are based on a comprehensive assessment of resource values.

[1] While the West Kootenay-Boundary and East Kootenay Land-use Plans were planned for separately in the CORE process, the two were amalgamated into the Kootenay-Boundary Land-use Plan for the purposes of implementation.
[2] CORE was disbanded in 1996 and its residual responsibilities were transferred to LUCO

- Public participation is required in each planning process.
- Aboriginal people are encouraged to actively and directly participate in land and resource management planning to ensure that decisions are sensitive to their interests. The planning process is consistent with the recognition of aboriginal title and the inherent right of aboriginal people to self-government. Land and resource management planning occurs without prejudice to treaty negotiations.
- Land and resource management plans are based on resource sustainability and integrated resource management. Land use and resource management recommendations must be within the environmental capacity of the land to sustain recommended uses.
- The objective is consensus on decisions and recommendations in land and resource management planning.
- Projects are prepared within the constraints of available information, funding, and participants' time.
- The objective of the land-use planning process is to present to Cabinet ministers designated by the Cabinet Committee on Sustainable Development a recommended consensus agreement including a description of any scenarios considered.
- Land and resource management plans are reviewed and revised regularly when major issues arise. (Adapted from B.C. IRPC, 1993).

3.2 SLUP Content

The key ingredient of a SLUP is its "management intent and direction" which guides and directs land and resource decision making within plan boundaries and subsequent, more detailed levels of planning (B.C., 2000). While SLUPs are not independent of other government policy, the guidance they provide is intended to apply to all land and resource uses, as well as all land and resource users.

SLUPs provide policy direction on a regional or subregional scale, primarily by designating resource management zones (RMZs) within plans (Brown, 1996). Most plans use four types of RMZs. Protected areas (PAs) are designated to prohibit resource extraction by legislation to protect unique environmental values. Special resource management zones (SMZs) allow resource extraction but use special regulations to protect important environmental values, such as visual quality or recreation. Intensive management zones (IMZs) provide development uses—such as logging—the highest priority. Integrated management zones—also known as general management zones (GMZs) are used to designate areas subject to "normal" resource extraction. Settlement and private land zones designate lands for existing communities, their anticipated growth areas, and various land uses administered by local governments. Agriculture zones are designated for agricultural land reserves and other lands suitable for food production activities. Some LRMP planning tables developed variations on these zones.

There are two other mechanisms that may be used to achieve SLUP goals. Resource management subzones may be designated to guide land and resource use at specific locations within RMZs. Transition strategies and land use plan reports may also be used to facilitate and communicate changes to land and resource uses following approval of a plan.

3.3 Current Status of Strategic Land-use Planning in B.C.

As of December 31, 2003, 18 SLUPs covering three-quarters of the province have been completed and are in the process of implementation (table 2). Six more SLUPs are currently being prepared covering a further 12% of the land base.

These plans have resulted in significant changes to land-use. By 2001, the amount of provincial land base in protected areas increased from 5.6% to 12.5%. By the same time, areas zoned for general management decreased from 91.6% to 52.4%; special management zones grew from 0% to 16.4%; and intensive resource extraction zones increased from 0% to 15.9% (Pierce Lefebvre Consulting, 2001; table 3).

3.4 SLUP Implementation Framework

The implementation framework of SLUPs is specified in the Strategic Land-use Plan Monitoring Procedures (B.C., 2000) and is described below. However, as each planning area has its own individual concerns and issues, unique components or adaptations to the implementation process may exist within the implementation system of individual SLUPs.

3.4.1 Actors Within Implementation

The provincial government is responsible for implementation of SLUPs (B.C. IRPC, 1993). The key actors in implementation within the provincial government are a) agencies, led by MSRM, b) interagency management committees, and c) monitoring coordinators (figure 4). While MSRM coordinates the SLUP processes, implementation is generally performed through other government agencies. Each agency is responsible for preparing implementation plans relevant to its mandate for each SLUP and performing implementation tasks as provided in work

Table 2. Summary of British Columbia Strategic Land-Use Planning Processes (B.C. LUCO, 2002a; 2002b).

Strategic Land-use Planning Process (or Region)	Area (ha)	Date Initiated	Date Approved (in principle): Final Approval	Phase
Atlin-Taku	5,537, 000	-	-	No Planning
Bulkley LRMP	762,000	January 1992	(June 1997) April 1998	Implementation
Cariboo-Chilcotin Land-use Plan	8,375,000	January 1992	October 1994	Implementation
Cassiar-Iskut-Stikine LRMP	5,200,000	February 1997	October 2000	Implementation
Central Coast LRMP	4,800,000	July 1996	In progress	Plan Preparation
Chilliwack	1,563,000	-	-	No Planning
Dawson Creek LRMP	2,900,000	June 1992	March 1999	Implementation
Dease Liard	2,385,000	-	-	No Planning
Fort Nelson LRMP	9,800,000	February 1993	October 1997	Implementation
Fort St. James LRMP	3,174,000	October 1992	March 1999	Implementation
Fort St. John LRMP	4,600,000	January 1993	October 1997	Implementation
Kalum South LRMP	2,100,000	1991	April 2001	Implementation
Kamloops LRMP	2,200,000	October 1989	June 1995	Implementation
Kispiox LRMP	1,200,000	September 1989	(May 1995) April 1996	Implementation
Kootenay-Boundary Land-use Plan	8,232,000	January 1992	March 1995	Implementation
Lakes District LRMP	1,580,000	April 1994	(August 1999) May 2000	Implementation
Lillooet LRMP	1,100,000	June 1996	In progress	Plan Preparation
MacKenzie LRMP	6,400,000	August 1996	November 2000	Implementation
Merritt	1,109,000	-	-	No Planning
Morice LRMP	1,509,000	October 2002	In progress	Plan Preparation
Nass	1,794,000	-	-	No Planning
North Coast LRMP	1,756,000	January 2001	In progress	Plan Preparation
Okanagan-Shuswap LRMP	2,500,000	July 1995	January 2001	Implementation
Prince George LRMP	3,400,000	December 1992	January 1999	Implementation
Queen Charlotte Islands LRMP	1,006,000	2003	In progress	Plan Preparation
Robson Valley LRMP	1,300,000	March 1993	April 1999	Implementation
Sea to Sky LRMP	1,069,000	September 2002	In progress	Plan Preparation
Sunshine Coast	1,090,000	-	-	No Planning
Vancouver Island Land-use Plan	3,350,000	August 1992	June 1994	Implementation
Vanderhoof LRMP	1,380,000	October 1993	January 1997	Implementation

Table 3. Changes in Land Use Resulting from CORE and LRMP Plans (Pierce Lefebvre Consulting, 2001).

Land Use Zone	1991 (%)	2001 (%)
Protected areas	5.6	12.5
Special management zones	0.0	16.4
Intensive resource extraction	0.0	15.9
General resource zones	91.6	67.7

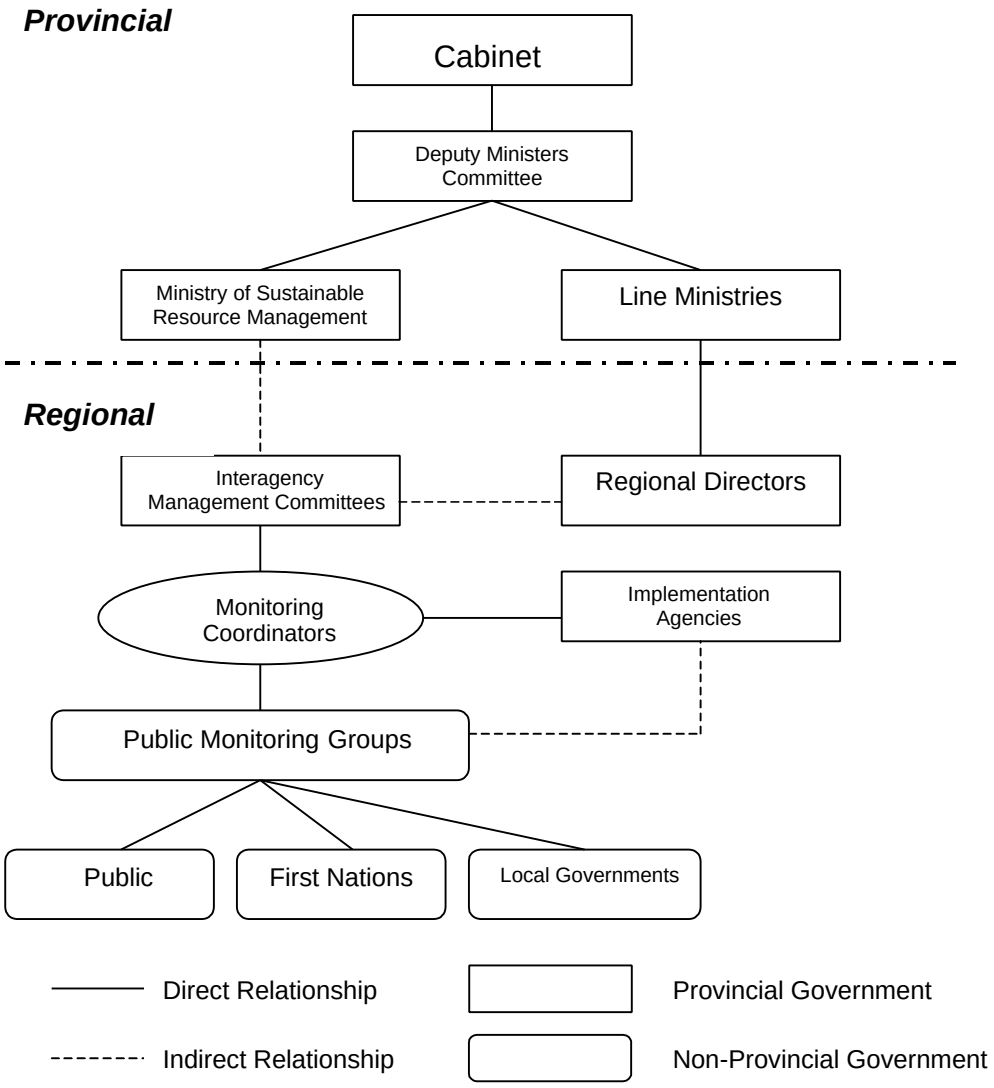

Figure 4. Organizational structure for SLUP implementation (adapted from B.C., 2000, by perm.).

plans set out for each project within the implementation plan. Secondly, agencies are responsible for performing implementation monitoring, annual reporting, and representing themselves on SLUP monitoring committees. Decision making resides with agency officials as provided for in relevant legislation.

Seven interagency management committees (IAMCs) throughout the province provide horizontal communication and coordination for plan implementation. Each IAMC is composed of regional managers or directors of involved agencies. Within implementation, IAMCs are responsible for providing staff teams and budgets, interpreting plan objectives and strategies, assisting with plan implementation and issue resolution, reviewing recommendations for amendments from public monitoring committees, developing long-term monitoring systems for plan implementation, and monitoring implementation progress and compliance by agencies (B.C. MSRM, n.d., B.C., 2000). Interagency implementation teams may also be established to manage implementation at the operational level. Monitoring coordinators are government staff members who coordinate implementation and act as semi-independent observers monitoring the implementation process (B.C., 2000).

Stakeholders outside of the provincial government also play a role in implementation (figure 4). The public has a role in plan implementation, though the degree of participation depends upon each SLUP's implementation approach. Monitoring committees provide the most significant opportunity for public involvement. However, the role of monitoring committees is solely advisory. Monitoring committees are composed of nongovernmental stakeholders, many of who participated in plan development. Monitoring committees typically help interpret plan documents, review implementation efforts, provide recommendations, and otherwise help guide

implementation (B.C., 2000). The public may also participate in the SLUP implementation process when public comment on government policy is requested. Finally, municipal and federal governments may be responsible for implementing aspects of a plan where appropriate (B.C. IRPC, 1993).

3.4.2 Process of Implementation

Once a plan is finalized by a planning table and approved by both the region's IAMC and Cabinet, the plan provides policy direction for government. A provincial implementation and monitoring process guides and structures the implementation process. The description of the process of SLUP implementation presented below is drawn from The Strategic Land-use Plan Monitoring Procedures (B.C., 2000).

The monitoring framework has two complimentary parts: implementation monitoring and effectiveness monitoring (figure 5). The implementation monitoring system (IMS) is intended to track progress in implementing recommendations in a SLUP. The effectiveness monitoring system (EMS) monitors whether plan objectives ("desired outcomes") are being achieved. Thus, the EMS seeks to ensure that progress made in implementing activities actually serves to achieve a plan's goals. Both monitoring systems involve reporting that may lead to modifications of a monitoring framework, an implementation process, as well as a SLUP itself.

Implementation Monitoring System (IMS)

The IMS structures both implementation operations and progress monitoring (B.C., 2000). The IMS describes a process for defining land-use plan projects and tracking progress on project implementation as performed by government agencies. There are six steps to the IMS.

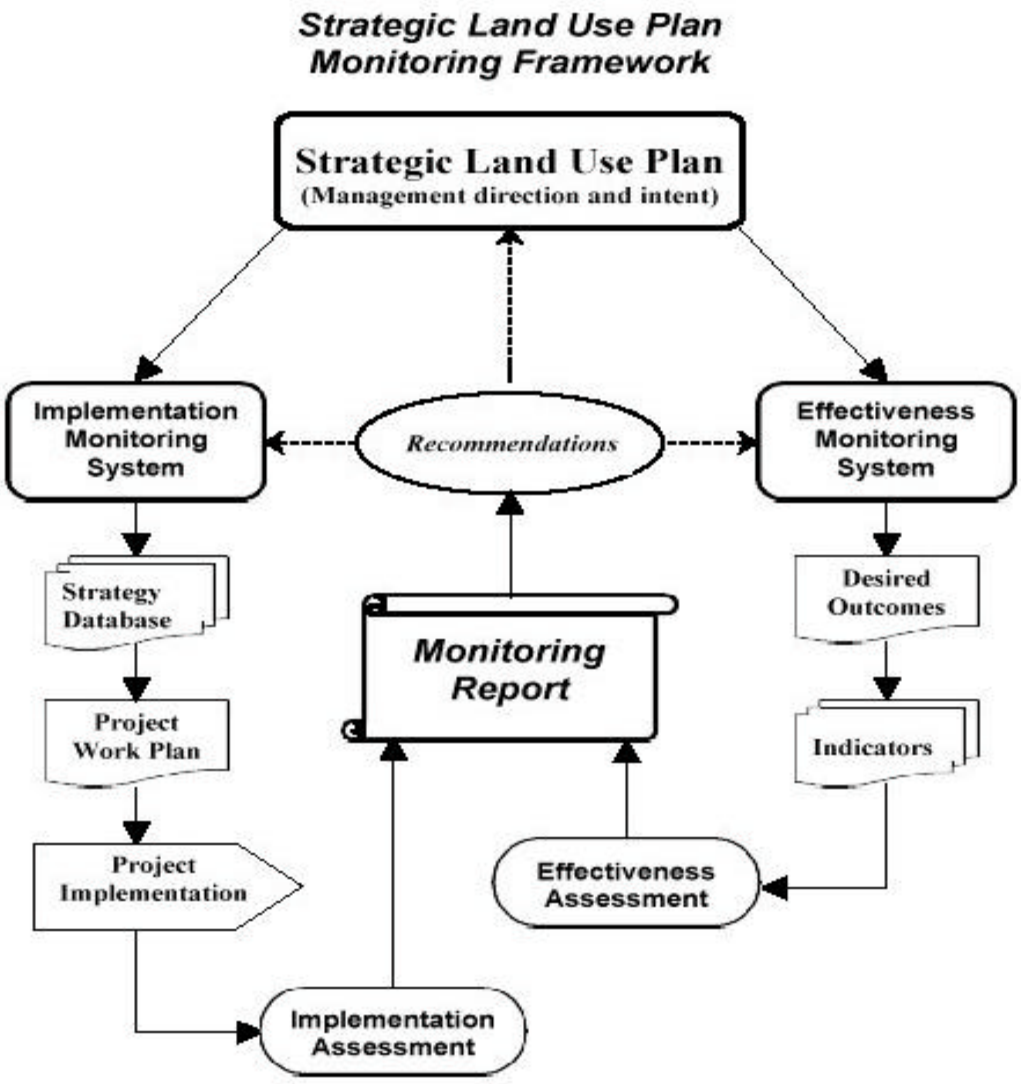

Figure 5. SLUP monitoring framework (B.C. 2000, by perm.).

1) Development of Database of SLUP Strategies

All strategies that need to be implemented are identified by each government agency involved in implementation. These strategies form the basis for agency work plans. Strategies are defined as either base activities or incremental activities. Base activities are those that are already routinely

performed by government agencies—such as forest development plans—and monitored through such processes as ministry budget estimates, auditing reports, or auditing boards such as the Forest Practices Board. Incremental activities are new activities developed to achieve plan goals. During this step, actors are identified as either lead or supporting agencies, or as participating groups; start and completion dates, resource inputs, and expected outcomes are defined. Finally, strategies are prioritized based upon how critical each is to achieving goals identified in a plan. A database of strategies is developed by involved agencies and monitoring coordinators, and is reviewed regularly and changed as necessary.

2) Preparation of Implementation Plans

An implementation plan is developed to define the responsibilities of actors to achieve implementation and to establish completion targets for strategies that utilize incremental activities. Plans are developed by both a monitoring coordinator and relevant agencies. The implementation plans detail individual tasks within strategies, identify expected results, link the strategies into related groups called projects, prioritize them, and assign projects to the appropriate agencies.

3) Implementation of Projects

Agencies implement projects in accordance with expected results and the completion of targets defined in the implementation plan. Each agency develops annual work plans in accordance with its SLUP implementation responsibilities. Barring any revision to these work plans by an IAMC, each agency implements its annual work plan.

4) Assessment of Implementation Progress

Implementation progress is assessed on an annual basis. Using annual agency status reports for each project, assessments evaluate progress on work completed relative to the

previous year's commitments, cumulative progress, whether or not expected results have been achieved, and what issues or constraints have arisen during implementation. Within such an assessment, highlights of base activity implementation are summarized. Status reports are provided by each project's lead agency though monitoring coordinators, or by external auditors.

5) Preparation of Monitoring Report

Annual monitoring reports are released to the public that document implementation progress and provide recommendations on individual projects. In years when an effectiveness monitoring report is also prepared, each implementation monitoring report discusses how well the management intent of a SLUP is being met. Monitoring reports are prepared by monitoring coordinators or external consultants. An example of a component of an implementation monitoring report is shown in table 4.

6) Recommendations

Finally, monitoring coordinators or external auditors make recommendations based upon the results of the implementation assessment. Recommendations may include revisions to a process or changes in a project list. Both the IAMC and the public monitoring group review an implementation monitoring report to ensure implementation is proceeding as planned. While details and possible decisions are discussed between an IAMC and its public monitoring group, an IAMC makes the final decisions regarding any changes to the system. The report is publicly distributed and changes are made to either the monitoring system and/or the implementation process to incorporate IAMC direction.

Table 4. Implementation Monitoring Results in the KLRMP. Implementation success is measured on a five-point scale that includes *not started (NS), initiated (I), midway (M),*

***substantially complete (SC),* and *complete (C)* (adapted from B.C., 2001, from Albert, Gunton, and Day, 2004, by perm.).**

Kamloops LRMP Project	Implementation Status				
	NS	I	M	SC	C
A. Watershed Management (WLAP)					
B. Fisheries Management (MAFF)					
C. Ecosystem Management Strategies (MSRM)					
D. Commercial Recreation Plans (B.C.LW Inc)					
E. Protected Area Management Plans (WLAP)					
F. Grazing Enhancement Fund (MAF)					
G. Mineral Strategies (MEM)					
H. Watershed Management (MoF)					
I. Biodiversity Emphasis Analysis (MoF)					
J. Landscape Unit Plans (MoF)					
K. Strategies for Grazing in Protected Areas (WLAP)					

Acronyms:
B.C. LW Inc.: B.C. Land and Water Inc.
WLAP: Ministry of Water, Land and Air Protection
MSRM: Ministry of Sustainable Resource Management
MEM: Ministry of Energy and Mines
MAFF: Ministry of Agriculture, Food and Fisheries
MoF: Ministry of Forests

Effectiveness Monitoring System (EMS)

An EMS assesses the extent to which SLUP goals are being met. There are five steps to an EMS.

1) Identification of Desired Outcomes

Measurable performance targets for plan goals and objectives are developed to reflect the desired outcomes for each resource category. A monitoring coordinator and relevant agencies define desired outcomes. Public monitoring groups may also review and recommend changes.

2) Selection of Indicators

Monitoring coordinators and relevant agencies develop indicators for each desired outcome in order to assess progress. Indicators allow the monitoring of change relative to baseline conditions. Indicators should be accurate, relevant, informative, and consistent to measure performance in attaining each desired outcome over time. Also, indicators should be supported by readily available and affordable data, many of which come from government sources. The public monitoring table reviews the desired outcomes and indicators prior to finalization.

3) Effectiveness Assessment

Every three to five years an effectiveness assessment is conducted to assess the degree to which desired outcomes of a SLUP are being achieved. This assessment includes an evaluation of the implementation progress of each project and an analysis of indicator results—relative to an established baseline—for each desired outcome. An interpretation of the reasons why desired outcomes are not met is produced when necessary. An effectiveness assessment is conducted by all involved agencies along with either a monitoring coordinator or an external auditor.

4) Monitoring Report Preparation

An effectiveness monitoring report is prepared by a monitoring coordinator, or an external auditor, following each assessment to publicly report the findings. Such a report includes the findings of both the implementation monitoring assessment for a specific year as well as an effectiveness monitoring assessment. This report also may include recommendations for improving the effectiveness monitoring system. Recommendations provided in such a report are used to modify the implementation and monitoring process for that SLUP. The monitoring coordinator and involved agencies are then responsible for implementing approved recommendations. An example of effectiveness monitoring findings is shown in table 5.

Table 5. Effectiveness Monitoring Results in the KLRMP (adapted from Albert, Gunton, and Day, 2004, by perm.).

Environment	Desired Outcomes	Indicators	Effectiveness Assessment
Ecosystems	• Healthy ecosystems with a diversity and abundance of native species and habitats	• Biogeoclimatic zone representation in protected areas • Old forest management targets by biogeoclimatic zone • Animal species at risk • Plants and plant communities at risk	**v** (may take several years to achieve results)
Agriculture	• A prosperous mining industry with access to Crown resources especially land, water, and range land to support development • Sustainable and productive agricultural and range lands	• Agricultural Land Reserve • Grazing tenures • Grazing tenures that overlap protected areas • Irrigation water licenses • Range land, Farms • Gross Domestic Product (GDP) • Employment	**v**
Cultural Heritage	• Protection of important archeological sites • Completion of First Nation Traditional use Studies • Designation and management of historic trails	• Archeological sites • Traditional use studies • Designated historic trails	**v**

3.4.3 Review and Amendment

Eight years after a SLUP has been approved, a major review is initiated and concluded upon a plan's tenth anniversary (B.C. IRPC, 1993). The review recommends any changes necessary to reflect newer government policies, recommendations from monitoring reports, or other pressing concerns. No SLUP has yet reached its eighth anniversary at the time of writing.

3.5 Implementation Mechanisms

SLUP implementation entails changes to the policy and operation of governmental and nongovernmental actors according to the direction provided in the terms of a plan and its RMZs. This direction is implemented either through policy guidance or through legislation. Generally, there are four types of SLUP implementation mechanisms:

- provincial land use designations
- higher level plans
- contractual obligations and agency policies
- actions taken by federal and municipal governments.

3.5.1 Provincial Land Use Designations

As the vast majority of the province lies within provincial jurisdiction[3], provincial land-use designations with a legislative basis provide one of the most important implementation tools to achieve the goals of a plan and its RMZs. Designations guide and control land uses within plan boundaries. Each designation is distinguished by the manner in which it was enacted; generally, the more senior the authority that made a designation, the more significant the impact a designation will have on land and resource use (WCEL, 1999). There are five types of provincial land-use designations:

[3] As provided by the *Constitutional Act*, 1867, the provinces have jurisdiction over public lands and the resources on, below, and within public lands, excepting fisheries and waters containing fisheries, and reserve lands of First Nations.

- natural resource management designations such as Agricultural Land Reserve, Forest Land Reserve, Forest Regions, Land Act Reserves, Mineral Reserves, Provincial Forests
- park, recreation, and protection designations such as Ecological Reserves, Provincial Parks, Greenbelt Land, Heritage Rivers, Interpretive Forest Sites
- wildlife designations, such as Critical Wildlife Areas, Forest Ecosystem Networks, Old Growth Management Areas
- cultural heritage designations such as Heritage Sites
- community water supplies, including fee simple ownership of watershed lands, various designations under the *Land Act* [RSBC 1996, c. 245], or community watershed designation under the *Forest Practices Code of British Columbia Act* [RSBC 1996, c. 159] (after WCEL, 1999).

Generally, the most unambiguous—and thus powerful—designations are protected areas. Protected areas are chiefly designated under the *Park Act* [RSBC 1996, c. 344], but also under the *Ecological Reserves Act* [RSBC 1996, c.103], the *Environment and Land Use Act* [RSBC 1996, c.344], and other less important legislation. Such designations provide strong protection to the natural resources within their boundaries because their supporting legislation clearly defines allowable and prohibited activities and prevails over all other provincial legislation.

3.5.2 Higher Level Plans (HLPs)

Higher level plans may be designated under the *Forest Practices Code of British Columbia Act*[4] (hereafter the *Forest Practices Code*) for portions or all of a SLUP to establish legal certainty to plan goals concerning forest practices[5]. A higher-level plan is "an objective a) for a resource management zone, b) for a landscape unit or sensitive area, [and] c) for a recreation site, recreation trail or interpretive forest site" that guides forest practices on a parcel of land (*Forest Practices Code of British Columbia Act* [RSBC 1996, c. 159]). In practice, either whole SLUPs, or portions of them have been turned into HLPs. HLPs are intended to link strategic level plans with operational plans; when SLUP objectives are established as HLPs, all underlying operational plans and operations must adhere to its restrictions and guidance.

Generally, there are two reasons for designating HLPs. First, HLPs enable planning tables to ensure that lands and resources are managed to a standard that is different and/or stricter than the default provisions provided under the *Forest Practices Code*. Second, HLPs provide legal certainty for plan objectives.

Typically, HLPs are designated following approval of SLUPs by Cabinet. If all or part of a SLUP is not designated as a HLP under the *Forest Practices Code*, then it is up to the discretion of the appropriate statutory decision maker to decide if operational practices

[4] The *Forest Practices Code of British Columbia Act* is currently being reformulated into the Forest and Range Practices Act.

[5] Forest practice "means timber harvesting, road construction, road maintenance, road use, road deactivation, silviculture treatments, botanical forest product collecting, grazing, hay cutting, fire use, control and suppression and any other activity that is (a) carried out on land that is (i) Crown forest land, (ii) range land, or (iii) private land that is subject to a tree farm license, community forest agreement or a woodlot license, and (b) carried out by (i) any person (A) under an agreement under the *Forest Act* or *Range Act*, (B) for a commercial purpose under this Act or the regulations, or (C) to rehabilitate forest resources after an activity referred to in clause (A) or (B), or (ii) the government [R.S.B.C. 1996, c.159].

adequately address SLUP concerns. Of the 24 SLUPs that were initiated through the CORE and LRMP processes, eight have been designated as HLPs (table 6).

Table 6. SLUPs with HLP Designations.

Strategic Land-use Plan	HLP Declared?	Strategic Land-use Plan	HLP Declared?
Bulkley LRMP	Yes	Lakes District LRMP	Yes
Cariboo-Chilcotin Land-use Plan	Yes	Lillooet LRMP	No
Cassiar-Iskut-Stikine LRMP	No	MacKenzie LRMP	No
Central Coast LRMP	No	Morice LRMP	No
Dawson Creek LRMP	No	North Coast LRMP	No
Fort Nelson LRMP	No	Okanagan-Shuswap LRMP	No
Fort St. James LRMP	No	Prince George LRMP	No
Fort St. John LRMP	Yes	Queen Charlotte Islands LRMP	No
Kalum South LRMP	No	Robson Valley LRMP	No
Kamloops LRMP	Yes	Sea to Sky LRMP	No
Kispiox LRMP	Yes	Vancouver Island Land-use Plan	Yes
Kootenay-Boundary Land-use Plan	Yes	Vanderhoof LRMP	No

3.5.3 Contractual Obligations and Agency Policies

Successful implementation demands that policies of the provincial government and other actors be consistent with plan objectives. SLUP objectives may be implemented through a number of means. For example, the government may be obliged to carry out new "incremental" activities to comply with RMZ objectives. Plan terms may also be incorporated into contracts—such as licenses, permits, or tenure, or may be integrated into agency policies through policy manuals and letters of direction from ministers. Additionally, plan objectives may guide research activities, public education programs, application of guidelines and best-management practices, protocol agreements, interagency memoranda of understanding, and adjustments to resource

uses. Examples of such changes include amendments to tree farm licenses and the annual allowable cut. While some of these mechanisms use powers provided in policy and legislation to ensure plan objectives are achieved, others rely on good will, moral suasion, or other pressures on government and other stakeholders.

3.5.4 Federal and Municipal Government Cooperation

While holding jurisdiction over very small portions of the provincial land base, federal and municipal governments are also expected to act in accordance with SLUP goals and objectives. In addition to contractual obligations and policies, the legislative frameworks of the federal and municipal governments provide numerous land-use designations that can be used to achieve SLUP objectives. For example, the federal government can apply designations such as national parks, national wildlife areas, migratory bird sanctuaries, and national historic sites. In turn, while constrained under the *Local Government Act* [RSBC 1996, c. 323], municipalities may also implement elements of SLUPs.

3.6 Recent Provincial Policy Changes

There have been a number of changes in both the forest and planning policy arenas in B.C. since the Liberal government came to power that may have a significant effect on SLUP implementation. Provincial forest policy is evolving through two avenues. The Working Forest, which at the time of writing has not yet been established in legislation, aims to provide greater legal certainty to lands outside of protected areas for industrial purposes. Also, the "results-based" *Forest and Range Practices Act*, due by 2005, will transform the current *Forest Practices*

Code of British Columbia Act. Both these institutional changes may significantly affect land-use plan implementation.

Provincial planning policy is also evolving. Sustainable resource management planning (SRMP) was recently introduced and is intended to provide three benefits to SLUP implementation (B.C. MSRM, 2002). First, SRMP will replace HLPs as the legal tool for establishing landscape-level objectives of SLUPs, although at the time of writing the legislation enabling this function has not yet been created. Second, SRMP will be used to amend and maintain SLUPs in the future. Third, SRMP will aid implementation by providing greater detail to SLUP goals.

Finally, a new model for SLUP monitoring has been established in the Skeena Region of British Columbia and may shape all monitoring elsewhere in the province (B.C., 2003). There are four types of monitoring in this model. Implementation monitoring retains the same purpose as it is currently understood to fulfill—tracking project implementation progress and status. Stewardship monitoring will monitor the health of individual resources using discrete indicators specific to each resource such as forests, wildlife, and soils. Sustainability monitoring will monitor broad social, environmental, and economic concerns using integrated indicators. Finally, effectiveness monitoring will be based on stewardship and sustainability monitoring to assess whether or not desired outcomes are being achieved through implementation. This new system acknowledges the significant amount of time and resources required for effectiveness monitoring and the complexity inherent in assessing implementation effectiveness (B.C., 2003). Further, this new framework recognizes that without more detailed planning and data, sustainability monitoring will be very difficult—if not impossible—to achieve (B.C., 2003).

Chapter 4
Methods and Results

4.1 Study Methodology

The objectives of this study are to develop a method for evaluating plan implementation systems, develop best practice guidelines for effective plan implementation, and apply these to an evaluation of the B.C. SLUP implementation system. This study addressed these objectives through three avenues.

First, a list of criteria defining a sound implementation system was developed through a literature review of implementation theory. The review—and consequently the criteria list—focused on material relevant to land use plan implementation within the context of shared decision making. Second, relevant provincial policy was reviewed to provide both a background context for the case study evaluation as well as to address aspects of the evaluation. In the third step, implementation practitioners were surveyed.

4.1.1 Survey

Implementation practitioners were surveyed to 1) verify the validity of the "best practices" implementation criteria, and 2) to evaluate the SLUP implementation process. Relying on practitioners who have direct experience with implementation instead of investigators' observations to answer research questions is an important strength of this study

relative to most other related studies. The questionnaire used for the survey is presented in appendix 1.

The first step in the research was to have respondents rate the relative importance of various factors affecting implementation success. Respondents were provided with a list of the implementation criteria developed from the literature review to rate. They were also asked to identify and rate any additional criteria they considered important. There were five possible ratings available to respondents: 'very important, 'important,' 'somewhat important,' 'not important,' and 'don't know/not applicable.' These ratings were assigned scores of 3, 2, 1, and 0, respectively, except in the case of a rating of 'don't know/not applicable' which was not assigned a score (table 7). To calculate a value of the collective importance of each criterion to all

Table 7. Numerical Scores and Rating Categories Used in the Questionnaire.

Score Assigned	Importance Ratings	Degree-Met Ratings	Success Ratings
3	very important		
2	important	strongly agree	very successful
1	somewhat important	agree	somewhat successful
0	not important	neither agree nor disagree	neither successful nor unsuccessful
-1		disagree	somewhat unsuccessful
-2		strongly disagree	very unsuccessful

respondents, respondents' scores were averaged. In many cases, criteria were represented by multiple questions, and so criteria importance scores were calculated by averaging the results to questions that matched those criteria. Average numerical responses were then converted back into the verbal rating categories based on the following interpretations: 2.5-3.0 denoted very

important, 1.5 to 2.49 was important, .5 to 1.49 was somewhat important and 0 to .49 was not important.

Respondents were also asked to identify the degree to which criteria had been met in the SLUP implementation system they were involved with. In most questions, there were six possible ratings available to respondents: ‘strongly agree, ‘agree,’ ‘neither agree nor disagree,’ ‘disagree,’ ‘strongly disagree,’ and ‘don't know/not applicable.’ Ratings were assigned scores of 2, 1, 0, -1, and –2, respectively, except in the case of a rating of ‘don’t know/not applicable’ which was not assigned a score (table 7). To calculate the degree to which criteria were met in plan implementation systems, respondents’ scores were averaged. In many cases, criteria were represented by multiple questions, and so degree-met scores were calculated by averaging the results to questions that matched those criteria. Average numerical responses were then converted back into the verbal rating categories based on the following interpretations: 1.5 to 2.0 denoted ‘strongly agree,’ 0.5 to 1.49 is ‘agree,’ -0.5 to 0.49 was ‘neither agree nor disagree,’ –1.5 to -0.51 was ‘disagree,’ and –2.0 to –1.51 was ‘strongly disagree.’ There were also a number of yes/no questions posed to respondents. A response of ‘yes’ was assigned a score of 2; a response of ‘no’ was assigned a score of –2.

To test the success of implementation, respondents were asked a series of questions regarding different aspects of SLUP implementation success. There were six possible ratings available to respondents: ‘very successful,’ ‘somewhat successful,’ ‘neither successful nor unsuccessful,’ ‘somewhat unsuccessful,’ ‘very unsuccessful,’ and ‘don't know/not applicable.’ Ratings were assigned scores of 2, 1, 0, -1, –2, respectively, except in the case of a rating of ‘don't know/not applicable’ which was not assigned a score (table 7). To characterize the

provincial implementation framework in terms of the different aspects of implementation success, respondents' scores were averaged by question. To calculate the degree of success of implementation of individual plans, respondents' scores to each question to were averaged to give an overall plan-success score. The success scores of plan implementation are averaged to calculate a mean implementation success score for all 18 SLUPs. Average numerical responses were then converted back into the verbal rating categories based on the following interpretations: 1.5-2.0 was 'very successful,' 0.5 to 1.49 was 'successful,' -0.5 to 0.49 was 'neither successful nor unsuccessful,' –1.5 to -0.51 equals 'unsuccessful,' and –2.0 to –1.51 equals 'very unsuccessful.'

In addition, a series of open-ended questions were posed to give respondents an opportunity to comment on key aspects of implementation. Common themes in the answers were distinguished for analysis by content analysis.

The sample population was composed of senior government official involved in the implementation of each of 18 SLUPs currently undergoing implementation. A list of possible participants was developed by reviewing SLUP documentation, checking with various government officials, and by reviewing past REM survey participant lists. Then, a composite inventory of potential participants was developed based upon their position and history of involvement with each SLUPs' implementation process. Each potential participant was contacted by telephone or email to discuss the survey and to ensure his or her appropriateness for the study. Participants were selected on the basis that they were the most senior government official involved in the SLUP implementation process, or they agreed that they were the most

knowledgeable regarding the SLUP implementation process, and that they were willing and able to participate in the survey.

The questionnaire was pretested by a provincial government implementation specialist as well as a number of faculty and graduate students in REM, and modified accordingly. Next, the survey was reviewed and approved by the Office of Research Ethics at Simon Fraser University. The letter of approval is presented in appendix 2. Questionnaires were administered to respondents and returned via email. The questionnaire was followed with phone interviews to clarify responses and to further explore implementation issues where appropriate. In some cases, additional correspondence was conducted via email.

Comparisons with Other Studies

The results of this study were compared to those of Albert, Gunton, and Day (2004; 2002) and Calbick, Day, and Gunton, (2003). Criteria used in the other studies were matched as close as possible to those used in this study. In cases where the other studies had a number of criteria that matched a single criterion used in this study, the results obtained in those studies were averaged.

Rating scales reported in the other studies were matched with scales used in this study to allow for a comparison of results. Albert, Gunton, and Day (2004; 2002) used a rating scale with five possible ratings available to respondents: ‘very important,’ ‘important,’ ‘somewhat important,’ ‘not very important,’ and ‘not important at all.’ These ratings were assigned scores of 2, 1, 0, -1, and –2, respectively. For the purposes of this study—and different from the method used by Albert, Gunton, and Day —scores were then converted back into the verbal rating categories based on the following interpretations: 1.5 to 2.0 was ‘very important,’ 0.5 to 1.49

equals ‘important,’ -0.5 to 0.49 was ‘somewhat important,’ –1.5 to -0.51 was ‘not very important,’ and –2.0 to –1.51 was ‘not important at all.’ Calbick, Day, and Gunton (2004; 2003) used a rating scale with three possible ratings available to respondents: ‘most critical,’ ‘neutral,’ and ‘least critical.’ Calbick, Day, and Gunton assigned numerical values to their ratings to provide importance score ranges of 1 to 1.66 as “most critical,” 1.67 to 2.33 as “neutral,” and 2.34 to 3 as “least critical.”

Analysis

Results were summarized by calculating an implementation evaluation index (IEI). The IEI is a numerical value of the degree to which criteria were met weighted by the relative importance of criteria as determined by the collective importance ratings of survey respondents. To compare individual plan implementation systems, an IEI score for each plan was calculated by taking an average of the products of degree-met scores for individual plans with collective importance scores so that plan implementation systems could be compared based upon a “province-wide measuring stick.” To calculate an overall IEI score of the B.C. SLUP implementation framework, the IEI scores for all plans were averaged. High, positive IEI scores indicate strong implementation systems; low, negative IEI scores indicate weak systems. In order to derive IEI scores on a scale from –2 and 2, the products of importance and degree-met scores were divided by 3.

Relationships among the data were also investigated. Pearson’s r correlations were calculated in Microsoft Excel to compare success scores with degree-met scores and IEI scores.

4.2 Results

4.2.1 Response Rate

All 18 respondents completed the survey, and thus data were collected for all 18 SLUPs currently undergoing implementation in B.C. Follow-up phone interviews were requested for all 18 respondents and 14 (78%) follow-up interviews were completed .The other 4 respondents were unavailable.

4.2.2 Characterization of Respondents

All respondents were government officials involved in the implementation of each SLUP assessed. While participating in this survey, twelve respondents were employed by the Ministry of Sustainable Resource Management; four worked for the Ministry of Forests; and one worked by the Ministry of Water, Land, and Air Protection. One respondent did not provide a place of employment. Most respondents were either senior supervisors or managers in the implementation process. Ten respondents were planners, and five were managers of some form. Other respondents were biologists, stewardship officers, and tenure officers. Respondents' job descriptions involved interagency coordination, plan implementation, chairing and facilitation, statutory decision making, monitoring, and government implementation oversight. On average, respondents had been involved in implementation for 42 months. Ten respondents had been involved in planning processes that developed plans.

4.2.3 Importance of Criteria to Successful Plan Implementation

Survey results reveal that although the ratings varied from 0.38 to 2.72, 18 of the 19 criteria were rated important (figure 6). Only one criterion, favorable stakeholder characteristics,

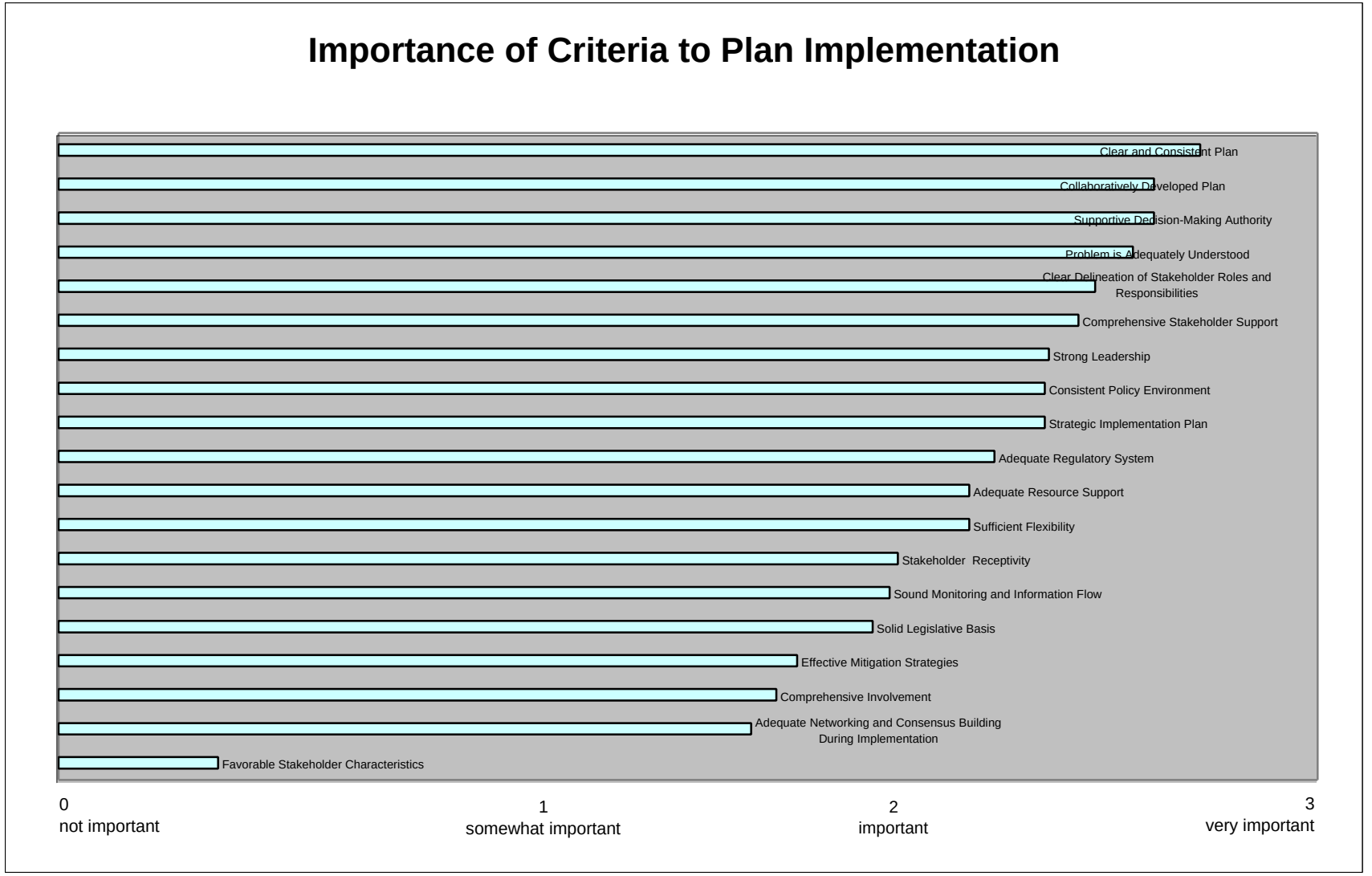

Figure 6. Importance of criteria to plan implementation. Criteria are ordered in terms of importance.

is rated not important. Thus, this study reveals that successful implementation systems should attempt to meet all 19 best practices criteria. The ratings for each criterion will be discussed in more detail in the following section in the order that they are presented in table 1.

Solid Stakeholder Support

Stakeholder Receptivity. According to respondents, it is important (2.0) that external conditions in a region—such as economic and social conditions—are supportive of plan implementation (figure 6). One question tests this criterion.

Consistent Policy Environment. It is important (2.4) to respondents that other government policies must not conflict with plan objectives (figure 6). One question tests this criterion.

Favorable Stakeholder Characteristics. In contrast, favorable stakeholder characteristics are not important (0.4) to implementation success according to respondents (figure 6). Three questions test this criterion. It is somewhat important (0.8) to respondents that new practices required of stakeholders by a new plan do not differ dramatically from preplan practices. However, the differences in values among stakeholders were not important (0.1). Similarly, it is not important (0.3) to respondents that the stakeholders required to change practices as a result of the plan make up a small percentage of the total population of all stakeholders.

Strong Leadership. Strong leadership is important (2.4) to respondents (figure 6). Two questions test this criterion. It is important (2.2) that there is at least one highly influential person who is exceptionally committed to plan implementation. It is very

important (2.5) to respondents that senior implementation staff members are skilled in working collaboratively with other stakeholders.

Respondents elaborate on the necessary leadership skills in their open-ended responses. While there is some diversity in responses, a number of themes emerge. Five respondents (28%) note that leaders required solid collaborative skills. In this vein, one respondent comments that leaders should have the "ability to work with stakeholders and other implementers in a coordinated fashion." Another respondent remarks that leaders should be "able to understand all stakeholder values and needs." Four respondents (22%) note that leaders should be skilled at getting resources for implementation. Two respondents (11%) suggest that leaders needed to be skilled at interagency coordination. Respondents also note that skills in marketing and innovation are important, and that leaders should be involved in policy making, be knowledgeable about the implementation process, be charismatic, and be committed to implementation.

Comprehensive Stakeholder Support. Not surprisingly, respondents rate stakeholder support important (2.4; figure 6). Four questions test this criterion. Respondents rate support of the provincial government very important (2.8). Respondents rate support from elected officials (2.2) and support from the public (2.2) important. Finally, strong support from other nongovernmental stakeholders is rated very important (2.5).

Two respondents accompany their numerical responses with a number of comments. One respondent expresses concern about how changing public and government interests over time can undermine the lengthy process of implementation. She writes, "if society changes its expectations about what they want, then there is less

chance of implementation success for decisions made in the past." A second respondent comments that:

> . . . while stakeholders may have very different values, and may be required to significantly change their practices, if they are all very committed to the plan and its implementation, then things will work . . . . Buy-in and shared commitment to the plan is, as I see it, the most important factor for implementation—stakeholders will then keep each other on-track, and will be more willing to change practices if necessary, or accept things that may go against their values, as long as it is for the 'greater good' of the plan.

Adequate Resource Support. Resource provisions are rated important (2.2) by respondents (figure 6). Three questions test this criterion. It is very important (2.4) to respondents that sufficient information is available to make appropriate decisions for plan implementation. Similarly, a high level of resources committed for plan implementation is very important (2.3). One respondent adds that there is a "very small proportion of money spent on implementation compared to what was spent on the process . . . only those tasks that are taken care of by default are occurring." Respondents also note that it is important (1.8) that stakeholders have the capacity to fund external, third-party projects that are consistent with plan implementation objectives.

Sound Plan Characteristics

Problem is Adequately Understood. It is very important (2.6) to respondents that implementation strategies are based on a clear understanding of how implementation activities lead to plan objectives (figure 6). One question tests this criterion.

Collaboratively Developed Plan. It is very important (2.6) to respondents that plans are developed through a CP process involving key stakeholders (figure 6). One question

tests this criterion. One respondent adds that the former SLUP process has "proven itself" though the current version under the MSRM is "seriously flawed."

Clear and Consistent Plan. It is very important (2.7) to respondents that plans provide clear recommendations to guide those involved in implementation (figure 6). One question tests this criterion. To accompany his numerical response, one respondent adds:

> The objectives and strategies in plans must be written in a manner that is clear, easy to interpret, and not subject to different interpretation. Since line managers make daily land-use decisions, there needs to be a speedy way to clarify the proper interpretation of the objective or strategy within the context of the decision that the land or resource manager is faced with . . . existing plans need to be re-looked at to ensure wording is clear and readily applicable and not subject to various interpretations. To me this is the key issue that would simplify implementation.

Supportive Institutional Structure

Strategic Implementation Plan. Respondents rate strategic implementation plans very important (2.4; figure 6). Three questions test this criterion. It is very important (2.5) to respondents that a planning process establish a clear strategy for plan implementation. Additionally, adequate prioritization of implementation objectives (2.3) and setting milestones to gauge implementation objectives (2.3) are important to respondents.

Clear Delineation of Stakeholder Roles and Responsibilities. Respondents rate clear delineation of stakeholder roles and responsibilities very important (2.5; figure 6). Two questions test this criterion. It is very important to respondents that stakeholder responsibilities for implementing a plan are clearly delineated (2.4), and that plan objectives are well integrated into individual agency work plans (2.5).

Supportive Decision-making Authority. According to respondents, it is very important (2.6) that implementation decision makers possess adequate authority and

jurisdiction to achieve implementation objectives (figure 6). One question tests this criterion.

Adequate Regulatory System. Respondents rate an adequate legal/regulatory framework important (2.2) for plan implementation (figure 6). Four questions test this criterion. Respondents note that it is important (1.9) that there were adequate penalties to enforce stakeholder compliance with the rules and regulations necessary for plan implementation. Adequate incentives to encourage stakeholders to work towards implementation objectives are rated very important (2.5) by respondents. Finally, it is important that there is adequate enforcement of the rules and regulations necessary for plan implementation (2.3), and that stakeholders are provided with adequate written guidelines illustrating how to comply with the rules and regulations relevant to plan implementation (2.2).

Effective Mitigation Strategies. Strategies to mitigate any negative effects to stakeholders resulting from plan implementation are important (1.8) to respondents (figure 6). One question tests this criterion.

Sound Monitoring and Information Flow. Overall, monitoring and information flow is rated important (2.0) to implementation success (figure 6). Eight questions test this criterion. It is very important (2.6) to respondents that a monitoring mechanism is present to effectively track whether or not plan objectives are being achieved. Appropriate indicators for monitoring progress towards achieving plan objectives are also very important (2.6). It is important to respondents to use a monitoring committee representing stakeholder interests to oversee the monitoring process (2.1). It is also important to respondents that the monitoring process produce publicly available reports documenting

implementation status (2.1), and it is important (1.6) that an outreach program is in place for educating and building support for implementation among the public. Similarly, it is important to respondents that remedial action is mandatory when objectives are not being achieved (1.6), and that there is an automatic plan review and amendment process (1.8). Finally, it is somewhat important (1.4) to respondents that plan implementation throughout the province are overseen by an independent agency to ensure that the goals of the SLUP process are being attained.

Sufficient Flexibility. Respondents reveal that it is important (2.2) that flexibility exists to alter the implementation process if necessary (figure 6). One question tests this criterion.

Solid Legislative Basis. It is important (1.9) that the implementation process is based in legislation (figure 6). One question tests this criterion. One respondent notes that raising the LRMP that he is working with to a HLP under the *Forest Practices Code* would improve the effectiveness of implementation. Another respondent argues that legal mechanisms can play a significant role in ensuring such resources are available.

Collaborative Implementation Design

Comprehensive Involvement. Comprehensive involvement of stakeholders in implementation is important (1.7) to respondents, however a mix of responses to different aspects of this criterion evidences an interesting facet to their perspective (figure 6). Six questions tests this criterion.

It is important (2.0) to respondents that stakeholders who are involved in developing a plan also remain involved in implementation. Similarly, respondents feel that it is important (1.7) that stakeholders 'on the ground' making day-to-day

implementation decisions are able to influence or modify implementation processes. In turn, respondents felt that it is important (2.4) that new implementation staff are adequately oriented to a plan and its implementation process. One respondent adds that in her office, a high turnover in staff has resulted in "one new planner for every year for the last three years."

However, respondents think that it is only somewhat important that all those responsible for implementation are involved in plan preparation (1.4), and that all stakeholders were involved in implementation (1.5). Yet, one respondent writes:

> The [Ministry of Water, Land and Air Protection] no longer has a seat on the planning tables . . . [There is] only one government representative—MSRM—and in theory this representative is supposed to represent all government interests. All voices are not getting out, our ability to effect change is no longer there.

And still, respondents note that it is somewhat important (1.2) that implementation activities are performed by a small number of agencies dedicated to the role of implementation. Clearly, respondents have a mixture of opinions regarding the nature of comprehensive involvement.

Adequate Networking and Consensus Building During Implementation.

Respondents rate networking and consensus building during implementation important (1.6; figure 6). Three questions test this criterion. It is important (1.9) to respondents that there are adequate strategies enabling implementation staff to work effectively with stakeholders in other political jurisdictions. Similarly, it is important (1.8) that stakeholders cooperate. However, it is only somewhat important (1.2) to respondents that

implementation decisions are reached through a collaborative process involving stakeholders.

In responses to open-ended questions, respondents demonstrate their mix of opinion on the importance of collaborative decision making during implementation. One respondent is very concerned with the independence with which statutory decision makers sometimes make decisions, and writes, “no one is in a position to call” statutory decision makers on their decisions, and that these actors behave like they are in “their own little fiefdom.” Despite this, another respondent writes:

> Referring these issues to a monitoring table or an independent agency overseer is not a good option as many of these decisions have to be immediately made.

Key Factors Facilitating Successful Plan Implementation

In a series of open-ended questions at the end of the questionnaire, respondents indicate the factors that they think are key to implementation success. Two respondents (11%) note that plan clarity is a key, and five (28%) note that implementation failure is attributable to a lack of plan clarity. One respondent writes, “the [plan] is a very complex document, and some officials/stakeholders have trouble interpreting it—or wading through it to find the necessary direction . . .” Another respondent feels that sufficient decision making is not made during the planning process to facilitate adequate plan clarity. A third respondent argues that “SLUPs need to articulate clear, spatially explicit decisions on land use” and that “the most important [factor] is having a plan that is a clear simple document that is easy to interpret by stakeholders, the implementers, and the public.” A fourth respondent writes:

> After the LRMP was completed, technical experts from licensees and government convened to develop a technical interpretation of the LRMP's objectives. This produced detailed, comprehensive, spatially explicit landscape unit plans that directed operational plans. This exercise was too detailed for the public to participate in. This is the single greatest reason why implementation is as smooth as it is in [this LRMP].

In turn, respondents note that vague conservation goals often do not stand up well to more-tangible economic goals, that there is a "fuzzy distinction between SMZs and EMZs," and that "different interpretations [of RMZs] cause more problems" than these classifications solve. Clearly, plan clarity is an important factor for implementation success.

Resources—such as money and information—are also key factors in the minds of respondents. Three respondents (17%) feel that adequate resources for implementation are key factors for success; nine respondents (50%) feel that the greatest reason for poor implementation was a lack of resources. Respondents note that more resources are required for monitoring and to perform the more detailed planning necessary for various conservation initiatives. One respondent notes that the government must "throw a similar amount of resources into implementing the plan as [that which] went into making it." Another respondent thinks that legal mechanisms can play a significant role in ensuring such resources are available.

Respondents often tie resources to government support for implementation. Four respondents (22%) note that insufficient government support is the key reason for unsuccessful plan implementation; eleven (61%) respondents highlight stakeholder support as a key factor facilitating plan implementation. One respondent writes, "I would think that the main reasons [for successful plan implementation] are supportive

government policy or funding and resources for implementation." Another writes that successful plan implementation occurs when the "political will is strong."

A number of respondents note that plan legality is integral to implementation success. Four respondents (22%) indicate that the legality of plan objectives plays a very significant role in facilitating successful implementation. Outside of parks, HLP designation under the *Forest Practices Code* appears to be the most important legal mechanism supporting SLUP implementation. One respondent suggests that a mechanism under the *Land Act* similar to the HLP designation under the *Forest Practices Code* could vastly improve the ability to bring about successful plan implementation of nonforest practices.

New Criteria

Respondents do not identify any new criteria, though there is some discussion highlighting the importance of accountability in implementation. Only one respondent specifically identifies accountability of government decision makers as a possible new criterion, though many other comments—such as the call for greater 'legalization' of land-use plans—suggest that other respondents hold similar sentiments. Accountability is built into many of the criteria used in this study, including sound monitoring and information flow, clear and consistent plans, adequate networking and consensus building during implementation, comprehensive involvement, adequate regulatory systems, and solid legislative basis.

Comparison with Previous Research

The results are congruent with those of Albert, Gunton, and Day (2004; 2002) and Calbick, Day, and Gunton (2004; 2003) (table 8). No criteria are rated significantly different among studies.

Table 8. Comparison of Levels of Importance Between Results of this Study and Results of Albert, Gunton, and Day (2004; 2002), and Calbick, Day, and Gunton (2004; 2003). [6]

Criterion	This study	Albert, Gunton, and Day, 2004; 2002[7]	Calbick, Day, and Gunton, 2004; 2003[8]
Clear and Consistent Plan	very important	very important	
Collaboratively Developed Plan	very important	very important	most critical
Supportive Decision-making Authority	very important		
Problem is Adequately Understood	very important	important	
Clear Delineation of Stakeholder Roles and Responsibilities	important	very important	most critical
Comprehensive Stakeholder Support	important	very important	
Strong Leadership	important	very important	
Consistent Policy Environment	important	important	
Strategic Implementation Plan	important		neutral
Adequate Regulatory System	important		most critical
Adequate Resource Support	important	important	neutral
Sufficient flexibility	important		neutral
Sound Monitoring and Information Flow	important	very important	neutral
Stakeholder Receptivity	important	somewhat important	
Solid Legislative Basis	important		most critical
Effective Mitigation Strategies	important		
Comprehensive Involvement	important	important	neutral
Adequate Networking and Consensus Building During Implementation	important		most critical
Favorable Stakeholder Characteristics	not important	not very important	

[6] Empty spaces indicate criteria that were not used in the other studies.
[7] Albert, Gunton, and Day (2004; 2002) used a scale that included "not important at all," "not very important," "somewhat important," "important," and "very important."
[8] Calbick, Day, and Gunton (2004; 2003) used a scale that included "least critical," "neutral," and "most critical."

4.2.4 Degree That Criteria Were Met in the B.C. SLUP Implementation Framework

Across the province, criteria are inconsistently addressed in plan implementation systems (figure 7). Ratings vary from –0.5 to 1.29. On average, respondents agree that six criteria are met; they neither agree nor disagree that 12 criteria are met; and they disagree that one criterion is met. The ratings for each criterion are discussed in more detail in the following section.

Solid Stakeholder Support

Stakeholder Receptivity. Respondents neither agree nor disagree (0.3) that the receptivity climate—the social, economic, and other types of contexts in which plan implementation occurs—is supportive of SLUP implementation (figure 7). One question tests this criterion. One respondent notes that difficult economic conditions hampers implementation by stating:

> Major stakeholders . . . cannot go broke and still participate in implementation . . . [In this subregion, one] company was responsible for the vast majority of implementation activities and now obviously they aren't participating.

Consistent Policy Environment. Similarly, respondents neither agree nor disagree (-0.2) that plan objectives conflict with other provincial government policies (figure 7). One question tests this criterion. This response suggests that policy direction under the current provincial government may be detrimental to SLUP implementation success. Two respondents (11%) express concern regarding conflicting provincial government policy. One writes:

> A lot of the strategies are being implemented in the current legislative environment through the *Forest Practices Code* . . . there is some

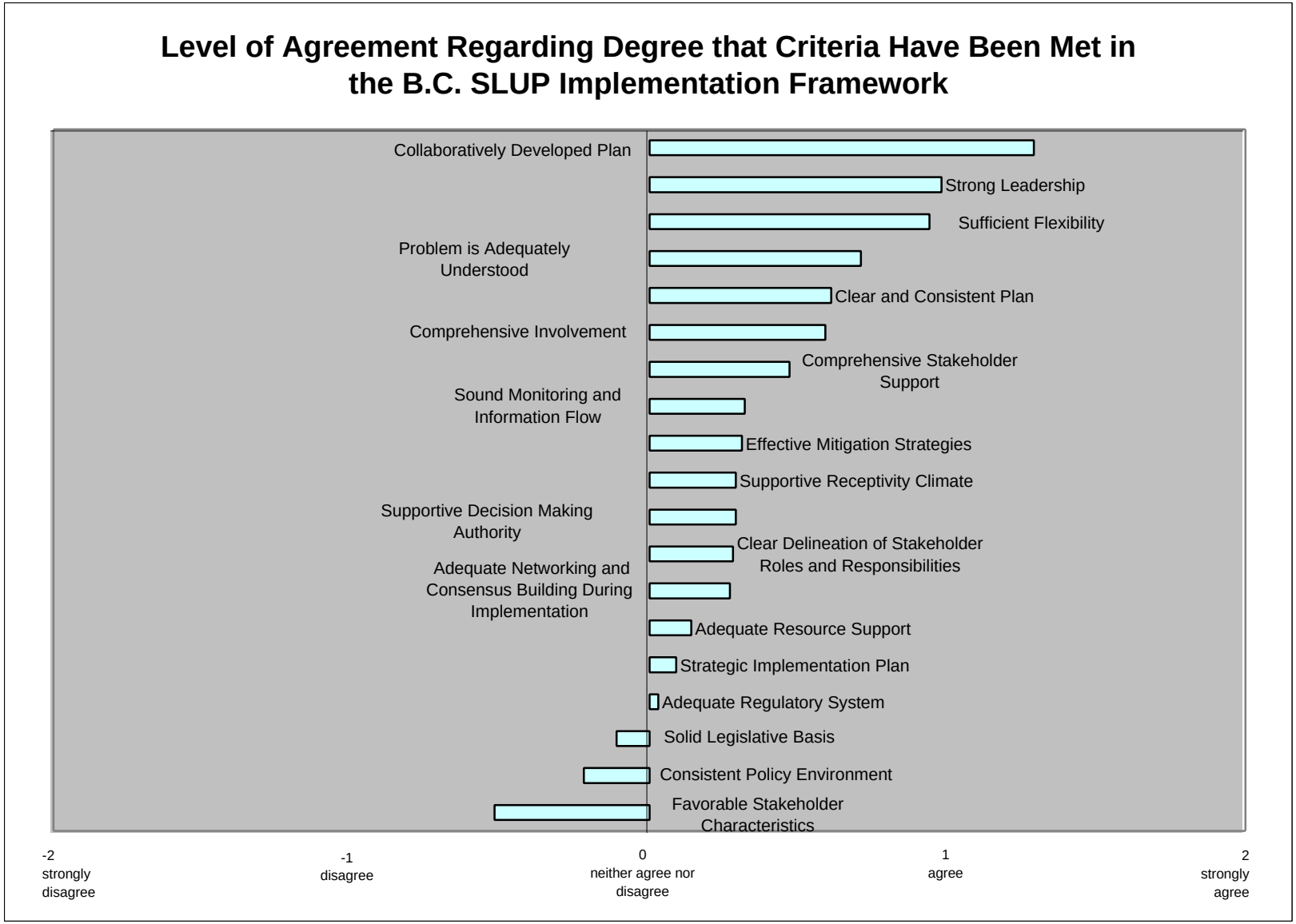

Figure 7. Level of agreement regarding the degree that criteria have been met in the B.C. SLUP Implementation Framework.

> uncertainty about how some of the strategies will be implemented through the new legislative environment under the *Forest and Range Practices Act*.

Another writes:

> The New Era agenda and 12 points of Sustainability are really principles of economic development… the balance is off—a wrong ideology, wrong philosophy, faulty policy, bad planning, poor practice, restructuring in government has been out of sync, [and] it has increased the building of silos and created dysfunctionality . . . the shared decision-making process was highly successful, it had proven itself . . . [but] in 21 years I have never seen such a dysfunctional planning environment.

Favorable Stakeholder Characteristics. Obviously, there is a long history of conflict in B.C. over land and resource issues. As expected, respondents disagree (-0.5) that stakeholder characteristics are favorable to implementation (figure 7). Three questions test this criterion. Respondents neither agree nor disagree whether implementation requires little change in stakeholder practices (-0.1), and that the proportion of stakeholders required to change practices as a result of the plan compose a small percentage of the total population of stakeholders (-0.2). However, respondents strongly disagree (-1.3) that there is little diversity in the values of stakeholders involved or affected by implementation.

Strong Leadership. Respondents agree (1.0) that implementation benefits from strong leadership (figure 7). Three questions test this criterion. Respondents agree (0.8) that there is one or more highly influential person that is exceptionally committed to implementation. Similarly, respondents agree (1.0) that senior implementation staff have sufficient management skills to achieve implementation objectives. Respondents also agree (1.1) that senior implementation staff has sufficient collaborative skills.

Comprehensive Stakeholder Support. Overall, respondents agree (0.5) that there is strong stakeholder support for implementation (figure 7). Four questions test this criterion. Respondents agree that the public strongly supports implementation (0.9), and that support from other nongovernmental stakeholders is strong (1.0). However, respondents neither agree nor disagree that the provincial government (0.1) or elected officials (-0.1) are strongly supportive of implementation. Six respondents (33%) specifically mention that support from the government and its elected officials is lacking or is low in the open- ended responses. One respondent writes, the "provincial government doesn't want to implement plans because they don't want to be held accountable." In regards to the SLUP that they were working with, another respondent writes:

> . . . not a single park has been established since approval [and] large areas of [the] province not being planned for [through the SLUP process] have candidate goal 1 and 2 protected areas but they will likely be wiped off [the] slate . . . this is very disturbing . . . a difficult environment we're dealing with.

A third respondent writes, "cabinet does not support LRMP implementation" and the "bottom-line [is that] formal LRMP implementation as per the suggested process and framework provided by the old LUCO is not a priority with senior government officials."

Adequate Resource Support. Respondents neither agree nor disagree (0.1) that there is adequate resource support for implementation (figure 7). Three questions test this criterion. Respondents agree (0.6) that adequate information is available to make decisions for plan implementation. Three respondents (17%) mention that, in general, there is adequate information available to make implementation decisions. However,

seven respondents (39%) suggest that more information would be beneficial. Three respondents identify spatially referenced data as the most deficient type of information.

In terms of resources other than information, such as funding and staff, respondents disagree (-0.8) that resources are adequate. Fourteen respondents (78%) express concern in this regard; thirteen respondents cite staff *and* funding shortfalls for implementation. One respondent writes, “implementation is proceeding, however it would proceed faster and more according to monitoring committee expectations given additional staff and money resources.”

Another respondent explains that effectiveness monitoring is being ignored due to insufficient resources. Two respondents suggest that government restructuring impeded resource allotment to implementation, and feels the “corporate mandate” and direction of agencies under the current government translates into little resource commitment for implementation. One respondent asks, “why is there only one person responsible for monitoring and effectiveness? Its an impossible task.” Nevertheless, respondents agree (0.6) that implementers have the resources to fund external third-party projects that are consistent with SLUP implementation objectives.

Sound Plan Characteristics

Problem is Adequately Understood. Respondents agree (0.7) that problems are adequately understood and that implementation strategies are based upon a clear understanding of how implementation activities will lead to plan objectives (figure 7). One question tests this criterion.

Collaboratively Developed Plan. There is strong agreement (1.3) among respondents that the CP process used to develop the SLUPs is satisfactory overall (figure 7). One

question tests this criterion. This score falls in line with recent research that concludes that the B.C. CP process is successful (Frame, Gunton, and Day, 2004; Gunton and Day, 2003). One respondent comments, though, that while it was beneficial that SDM was used to develop a plan, the planning process still has flaws.

Clear and Consistent Plan. Respondents agree (0.6) that plan recommendations are clear and consistent (figure 7). One question tests this criterion. However, three respondents (17%) comment that plans require further clarification. One respondent writes, "the LRMP uses very subjective and comprehensive language that makes it difficult to interpret; it needs to be clarified." It appears that further planning through sustainable resource management plans (SRMPs) will be helpful in this regard.

Supportive Institutional Structure

Strategic Implementation Plans: Respondents neither agree nor disagree (0.1) that high-quality implementation plans are being used (figure 7). Three questions test this criterion. Respondents agree (0.7) that there is a clear strategy for plan implementation, however the plans are not perfect. One respondent writes:

> The province has an implementation strategy for completing implementation plans for LRMPs . . . this process is based on identifying basic and incremental tasks . . . how these tasks are defined is not consistent and only incremental tasks are included in the implementation plan . . . this is gravely inadequate. Since the restructuring of government (following the election), responsibilities for implementing specific tasks have changed [among agencies and] unfortunately no one is updating the implementation plan to reflect the new government structure.

Respondents neither agree nor disagree that milestones are set to gauge implementation progress (-0.2) and that objectives are adequately prioritized (-0.2).

Clear Delineation of Stakeholder Roles and Responsibilities. Respondents neither agree nor disagree (0.3) that stakeholder roles and responsibilities are clearly delineated (figure 7). Two questions test this criterion. While respondents agree (0.5) that stakeholder responsibilities are clearly delineated, they neither agree nor disagree (0.1) that plan objectives are well integrated into individual agency work plans. One respondent comments that restructuring in government has resulted in some confusion over the roles and responsibilities of agencies and personnel in terms of plan implementation.

Supportive Decision-making Authority. Respondents neither agree nor disagree (0.3) that implementation decision makers possess adequate authority to achieve objectives (figure 7). One question tests this criterion.

As described in chapter two, implementation is as much a bottom-up process as a top-down process. Thus, given the hierarchical nature of bureaucracies, one might expect that those lower down might wish to have greater decision-making capacity. Hence, it would be easy to attribute this result to a top-down institutional system if the respondents were in fact low-level decision makers. But given that many respondents were higher-level managers, this result suggests that even those at higher levels within the provincial government lack adequate decision-making authority to achieve plan objectives.

Adequate Regulatory System. The implementation process can utilize a variety of regulatory tools. However, respondents neither agree nor disagree (0) that the regulatory system for plan implementation is adequate (figure 7). Five questions test this criterion. Respondents neither agree nor disagree that both the legal and regulatory framework necessary for plan implementation are adequate (0.1), and that the penalties to enforce

compliance with the rules and regulations necessary for plan implementation are adequate (-0.1). Similarly, respondents neither agree nor disagree (0.2) that adequate incentives to encourage stakeholders to work towards implementation objectives exist. One respondent elaborates by identifying some examples of incentives that are employed in his SLUP, but asks, “are these enough?” In turn, respondents neither agree nor disagree that the enforcement of the rules and regulations necessary for plan implementation are adequate (-0.1), and that adequate written guidelines steering stakeholders toward compliance with the rules and regulations relevant to plan implementation exist (0).

The extent that legal land designations are used across the province likely has something to do with the results. One respondent writes:

> . . . since some of the [plan] objectives have been established as HLP objectives under the *Forest Practices Code* (notably those which deviate from the normal legislated or policy defaults), there is some confidence that these legally binding provisions are being implemented.

However, only eight SLUPs are currently designated as HLPs. Clearly, the use of available regulatory tools to aid implementation is inconsistent.

Effective Mitigation Strategies. Mitigation strategies are used to ease the burden of stakeholders negatively affected by plan implementation. Respondents neither agree nor disagree (0.3) that such strategies are adequately used (figure 7). One question tests this criterion.

Sound Monitoring and Information Flow. Respondents rate strategic land-use plan monitoring throughout the province as patchy at best. Overall, respondents neither agree nor disagree that a sound monitoring and information flow system is in place (0.32;

figure 7). In addition to three yes/no questions and two open-ended questions, eight Likert-type scale questions test this criterion.

Respondents agree that monitoring programs were in place (0.89). However, this hides that fact that only 13 SLUPs of 18 throughout B.C. are being monitored. In one case, monitoring was underway but recently stopped; in another case, the monitoring system was developed but not implemented. Similarly, respondents agree that monitoring committees are in place (1.11), though only 14 of the 18 SLUPs actually use them. As a consequence, only 12 SLUPs are scrutinized by monitoring committees. Of the SLUPs that have active monitoring committees, five meet once per year, one meets twice to three times per year, and one meets eight times per year. No information is provided regarding the frequency with which the other five tables meet.

While specified to do so in policy, respondents neither agree nor disagree (0) that progress reports are provided to the public. In fact, only nine SLUP implementation systems provide reports to the public. One respondent note that “in theory” progress reports are provided to the public but “this [is] not happening.” Another respondent adds that only meeting minutes go to the public, not the full report. Additionally, there is significant inconsistency in the frequency with which reports are provided. Three respondents indicate that reports have been provided once. One respondent answers “always,” and another indicates that reports are provided “at least once every two years.” One respondent indicates that reports have “only been circulated to members to the committee,” and another writes, “progress is [reported] to public through the LRMP committee.” Respondents disagree (-0.94) that an adequate outreach program with the

public is in place. Indeed, three respondents (17%) note that information flow is discontinuous among stakeholders.

Respondents agree (1.1) that monitoring effectively tracks implementation progress, however they neither agree nor disagree (0.4) that monitoring is effective at tracking the achievement of plan objectives. One respondent blames “shifting government priorities” on the lack of effectiveness monitoring in the SLUP he is involved with. As government is currently discussing modifications to the effectiveness monitoring system, one might expect a result such as this. Respondents agree that appropriate indicators are used in monitoring (0.5), and that adequate records are kept of all monitoring activities and meetings (1.0).

Respondents neither agree nor disagree (0.2) that remedial action is undertaken in instances when plan objectives are not being met. Similarly, respondents neither agree nor disagree (-0.39) that remedial action is mandatory if plan objectives are not being achieved. Respondents disagree (-0.5) that there is adequate independent oversight ensuring that the goals of the SLUP process are being attained.

According to policy (B.C. IRPC, 1993), a major review is conducted every eight years and completed ten years after plan approval. However, respondents neither agree nor disagree (0) that there is an automatic plan review and amendment process. Three respondents express concern over plan review and amendment. One respondent suggests that review and amendment isn’t happening because of a lack of resources. Interestingly, another respondent writes that they “personally don't think there should be periodic amendment, but ongoing tweaking” of the plans.

Eight respondents (44%) express concern over the current state of monitoring of SLUPs. Many of these respondents express concern regarding the lack of government commitment to monitoring; three respondents express concern specifically in regards to effectiveness monitoring. One respondent writes, “the LRMP [policy framework] established high-quality monitoring frameworks and procedures, but changing government policies and priorities don't allow for those to be implemented.”

Sufficient Flexibility. There are scant details provided in provincial policy regarding flexibility in implementation, however respondents agree (0.9) that there is sufficient flexibility to alter an implementation process if necessary (figure 7). One question tests this criterion.

Solid Legislative Basis. Respondents neither agreed nor disagreed (-0.1) that implementation is adequately based in legislation (figure 7). One question tests this criterion. The SLUP implementation process, as with the planning process itself, is not based in legislation, though implementation may use some legal mechanisms to achieve goals. In the open-ended responses, three respondents (17%) discuss the importance of HLPs under the *Forest Practices Code*. One respondent writes, “until plans are raised to a "HLP," they have the effect of a policy document . . .” and are thus not mandatory.

Collaborative Implementation Design

Comprehensive Involvement. Roles for nongovernmental stakeholders are described in monitoring policy. On the whole, respondents agree (0.6) that all stakeholders are comprehensively involved in all phases of implementation (figure 7). Six questions test this criterion. Respondents agree (0.9) that stakeholders involved in developing the plan remain involved in implementation. Similarly, respondents agree

(0.7) that those involved in plan implementation are involved earlier in plan development. In contrast, respondents neither agree nor disagree (-0.1) that stakeholders are adequately involved during implementation. However, respondents strongly agree (1.5) that all relevant stakeholders are represented on monitoring committees. Further, respondents agree (0.6) that stakeholders working "on the ground" are able to influence or modify an implementation process. Despite this, respondents neither agree nor disagree (-0.1) that new implementation staff are adequately oriented to the plan and the implementation process.

Adequate Networking and Consensus Building During Implementation. In implementation, decisions are generally made by IAMCs, though other actors may play a role in decision making. Perhaps as a consequence of this structure, respondents neither agree nor disagree (0.3) that implementation decisions are reached collaboratively (figure 7). Three questions test this criterion. Respondents agree (0.6) that there is a high level of cooperation among stakeholders involved in implementation. However, respondents neither agree nor disagree that implementation decisions are reached through a collaborative process involving stakeholders (-0.1), and that adequate strategies exist to enable implementers to work effectively with stakeholders in other political jurisdictions (0.3). One respondent writes, "government appears to be moving away from SDM back to a public advisory [model] . . . [it is] sad to me that there are people that are involved but are not being used or taken advantage of." Another respondent comments that in the LRMP he is involved with, there is no interagency coordination as a result of a lack of implementation planning, and thus implementation is "unilateral."

4.2.5 Quality of B.C. SLUP Implementation

An implementation evaluation index (IEI) can be constructed to provide an overall assessment of implementation systems. To compare plan implementation systems, an IEI is constructed by calculating the average rating for all implementation criteria for each plan. This average rating can be calculated as a simple arithmetic average, or a weighted average that weights each rating score for individual plans by the importance of each criterion based on the average criteria importance ratings by all respondents (figure 6).

The weighted average is used to assess the overall rating of each SLUP (figure 8). Generally, plans with high, positive scores have strong implementation systems;

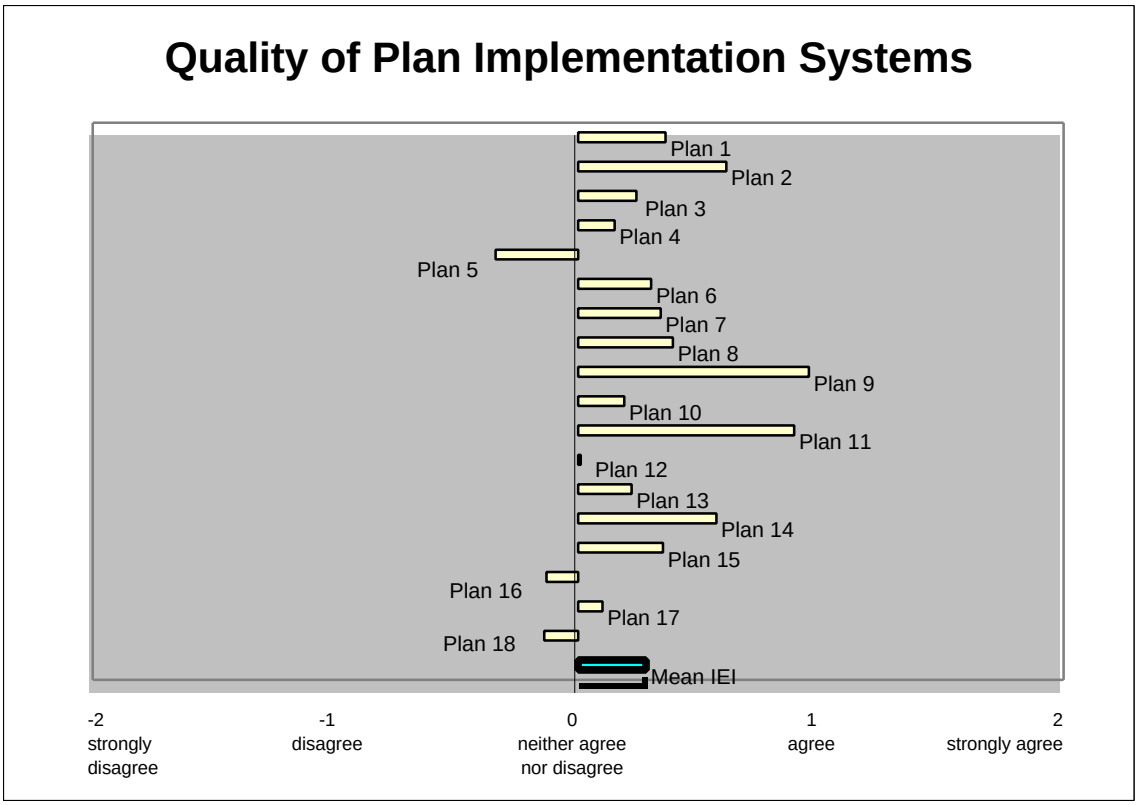

Figure 8. Comparison of quality of plan implementation systems by IEI scores.

plans with low, negative scores have weak implementation systems. According to respondents, four plan implementation systems have addressed criteria adequately, albeit weakly. No plan implementation systems have unequivocally not met criteria adequately, though clearly there are a number of SLUPs with weak systems.

In turn, an IEI score for the whole B.C. SLUP implementation framework can be calculated by averaging the IEI scores of each individual plan implementation system. The B.C. framework has an IEI score of 0.28.

4.2.6 Success of SLUP Implementation

SLUP implementation success in British Columbia thus far is mixed (figure 9). Four questions are used to test success. Respondents rate implementation somewhat successful in reaching plan goals (0.8) and in meeting respondent expectations (0.7). However, respondents rate implementation neither successful nor unsuccessful in meeting the timelines that were set out in agency work plans (0) and in terms of meeting the goals of other stakeholders (0.4).

Implementation Successes

Respondents note numerous plan recommendations were implemented successfully. Six respondents (33%) note that the SLUP process was successful in attaining the goal of protecting 12% of the province as part of the *Protected Areas Strategy*. Three (17%) note that a number of wildlife strategies were implemented successfully, including those pertaining to ungulate winter ranges, caribou, and fish. Two (11%) note that the Muskwa-Kechika Management Area was implemented very

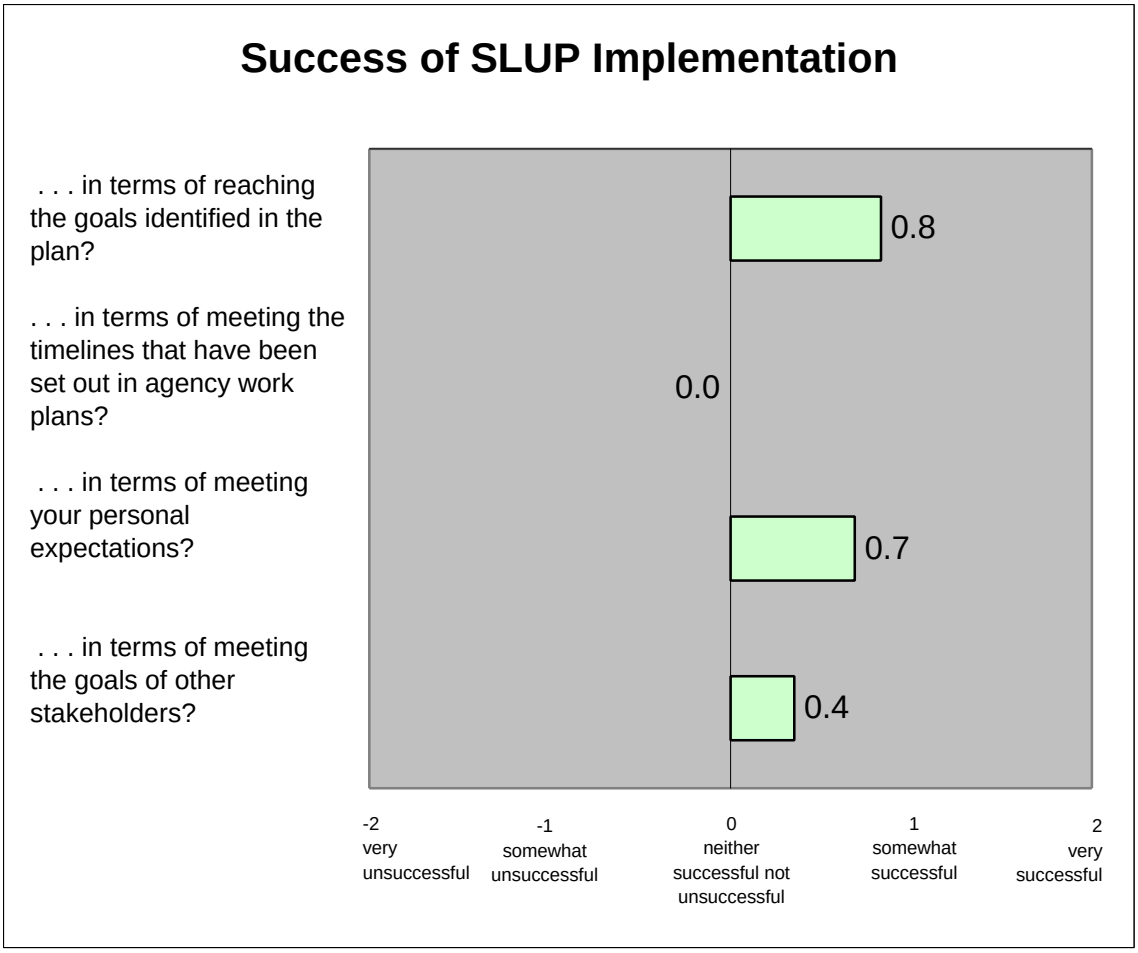

Figure 9. Success of SLUP implementation.

successfully. Finally, two respondents (11%) feel that recommendations that were legally binding under the HLP for their SLUP had been implemented successfully, such as forest practices that had been mandated as "Code plus."[9]

Implementation Challenges

While one respondent notes that no recommendations are “specifically noted” to be difficult to implement, most others are less positive. One respondent notes that

[9] In this case, “Code plus” meant that under the HLP, forest practices were restricted to a greater extent than allowed under the *Forest Practices Code*.

"many" recommendations were difficult to implement; another writes, "completion of any of the recommendations has been difficult."

Clarity of plans and policies appears to have been the greatest obstacle. Five respondents (28%) note that various resource management zones were difficult to implement. Special management zones are most often cited as difficult to implement, though respondents also argue that enhanced and integrated resource management zones were difficult to implement. Other respondents note difficulty in implementing recommendations related to information gathering, more detailed planning, park designation through orders-in-council, and recommendations that dealt with balancing conflicting values and interests.

Success of Implementation by Plan

In order to assess implementation success of individual plans, respondents' scores to each question are averaged to give an overall 'plan success score' (figure 10). Implementation is at least somewhat successful in 11 plans. Three plans, however, are at least somewhat unsuccessful in implementation thus far. Across all 18 SLUPs, implementation is neither successful nor unsuccessful (0.49).

4.2.7 Implementation Criteria and Success

The validity of the implementation evaluation index can be partially tested by comparing the IEI for each plan with implementation success. The results show that implementation tends to be more successful when criteria are well met. A positive correlation (0.56) exists between individual plans' success scores and individual plans' IEI scores (figure 11).

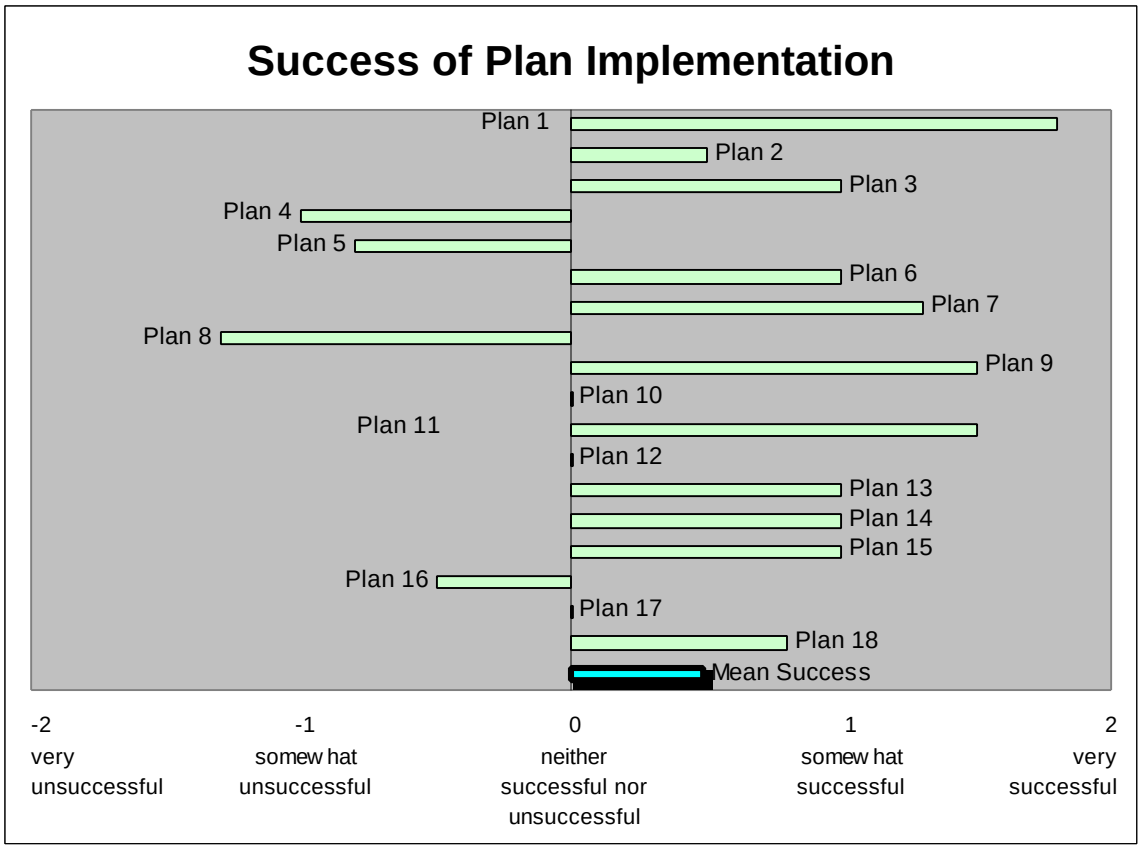

Figure 10. Success of implementation of SLUPs. Mean success is success rate of implementation all 18 SLUPs across province.

4.2.8 Recommended Changes to Facilitate Plan Implementation

Respondents advocate a number of changes in the open-ended portion of the questionnaire. Eight respondents (44%) call for increased stakeholder support; four respondents (22%) identify a need for more resources; and three respondents (17%) request that implementation be more legalized. In concert with these sentiments, one respondent writes:

> The cycle of strategic land use planning has to be recognized as a top priority for the politicians. I have been in the business for almost 30 years and it seems that certain political parties are less motivated to ensure long term land use and resource certainty based on collaborative processes. The concept of having implementable land use plans that incorporate effectiveness monitoring will never happen unless politicians are

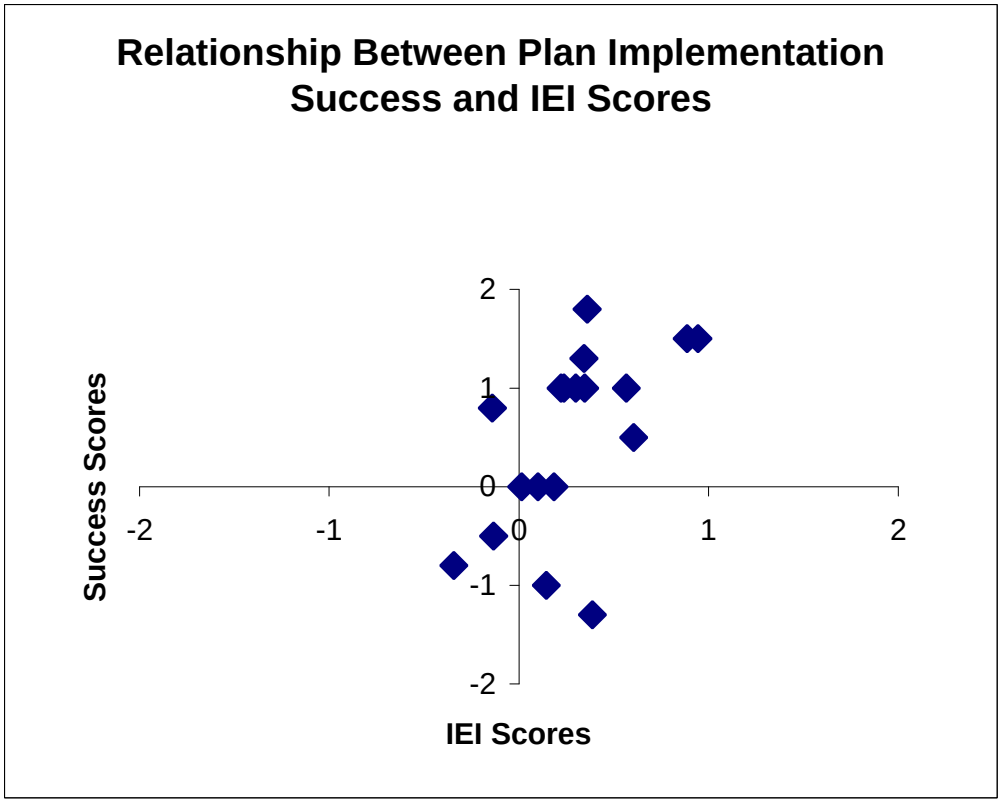

Figure 11. Relationship between plan implementation success and IEI scores.

> committed to it or unless the people force politicians to put the requirement for these types of collaborative plans into law.

To some respondents, legal establishment of the SLUP process—possibly through HLP designation—will help raise the process in the eyes of the top politicians and will give implementation much greater capacity.

A number of other changes are proposed. Respondents observe that objectives require further clarification, and information quality and flow among stakeholders needs to be improved. In turn, others believe that the process of implementation must become more accountable and adaptable. Finally, respondents note that because implementation is so complex and so difficult in some cases, the government should not expect to perform everything; other stakeholders should be more involved.

Chapter 5
Conclusions

Plan implementation is an important, yet relatively neglected, field of research. This study helps fill this gap by investigating the factors for implementation success through an innovative research method. The method is based on a literature review to identify key factors for successful plan implementation, and from this, defines these factors in terms of discrete criteria. Criteria are then used to develop a survey instrument, composed of quantitative and qualitative data gathering elements. Implementation practitioners are surveyed to validate implementation criteria and to evaluate the degree to which these criteria have been met in the case study evaluation. The use of implementation officials as data sources is a more robust data-gathering method than has been used in most other implementation studies, which normally rely on investigators' observations. An implementation evaluation index (IEI) is used to assess the quality of implementation systems. Finally, the relationship between criteria and implementation success is tested by comparing the IEI to actual outcomes.

5.1 Best Practices for Land-use Plan Implementation

Table 9 lists the factors that should be addressed in designing effective plan implementation systems. Sound land-use plan implementation requires that attention be paid to all eighteen factors. Attention to any one or a sub-group of these factors is insufficient to achieve successful implementation.

Table 9. Best Practices for Sound Plan Implementation Systems.

Sound Plan Implementation Systems…
1. clarify plan details to facilitate comprehension
2. ensure that plans are built from a sound collaborative planning process
3. provide implementers with the authority and jurisdiction to make decisions necessary to achieve success
4. tackle problems that are well understood
5. clearly delineate stakeholder roles and responsibilities
6. foster the support of all stakeholders
7. ensure that implementation is led by individuals with strong collaborative and managerial skills
8. exist within a policy environment that is supportive of implementation and plan objectives
9. use an implementation plan that strategically structures implementation actions
10. provide a regulatory system that enhances the legitimacy and strength of implementation actions and mechanisms
11. supply implementers with ample financial, staff, and information resources
12. equip implementers with the flexibility to accommodate new or changing conditions
13. utilize a monitoring process that is effective, accountable, transparent, and facilitates timely information flow
14. exist within external conditions that are conducive to implementation success
15. are grounded in legislation to provide a mandate for success
16. involve stakeholders comprehensively throughout an implementation process
17. utilize effective mitigation strategies
18. integrate stakeholders in a constructive network such that implementation decisions are reached in a collaborative fashion

The factors identified in table 9 are generally consistent with the results of other studies of policy implementation. The only major exception is that this study does not support the findings in Mazmanian and Sabatier (1989) that stakeholder characteristics are an important factor determining implementation success. Consistent with the results of Albert, Gunton, and Day (2004; 2002) and Calbick, Day, and Gunton (2004; 2003), this study finds that stakeholder characteristics—such as the extent of behavioral changes required to comply with new policy, the extent of value differences among stakeholders, and the number of stakeholders required to change behavior—are not important. There are good *a priori* and empirical reasons to assume that these factors identified by Mazmanian and Sabatier (1989) are important. The fact that they do not register as

important in this study may be that the CP process used in B.C. overcame these constraints by creating broad stakeholder support, thereby making these constraints appear to be insignificant. These results support the notion that CP can bring diverse stakeholders together to find common ground and develop creative solutions to land and resource issues. Albert, Gunton, and Day (2003) came to this same conclusion.

It is also important to realize that implementation systems should be designed with local conditions and context in mind. Best practices should be considered with attention to this caveat—the relative importance of criteria may differ depending upon where, and under what conditions, land-use plan implementation is taking place.

Successful implementation goes hand in hand with adequate attention to the criteria presented here. A relationship exists between plan implementation success and the degree that criteria are met in SLUP implementation systems. Thus, the definition of sound land-use plan implementation systems generated in this study is a solid foundation from which to design, evaluate, and improve plan implementation systems. The definition of satisfactory implementation is based on previous similar work, is connected to the broader body of implementation theory, and is verified by implementers themselves. While some factors appear to be more important than others, the definition captures all of the concerns of implementers.

5.2 Evaluation of the SLUP Implementation Framework

The B.C. framework has a number of strengths and weaknesses. The CP process used to develop the plans is a major strength that helped overcome implementation constraints. Indeed, CP lays the foundation for implementation success. Other strengths

include leadership, flexibility, plan clarity, comprehensive involvement of stakeholders, and an adequate understanding of problems. Many individual plan implementation systems possess a number of other strengths.

The only definite weakness in the B.C. framework is the prevalence of unfavorable stakeholder characteristics. However, this factor does not appear to be an important deficiency. However, significant weaknesses in the framework do exist in terms of other factors within individual plan implementation systems. In some systems, for example, the quality of the monitoring system is a major deficiency. A number of implementation systems lack even the most basic elements of a sound monitoring and information flow system. Elsewhere, implementation plans are poorly formulated, decision makers lack adequate authority, mitigation strategies are weak, and plans lack adequate legal bases to achieve the prescribed goals. Further, in some systems, implementation is plagued by inadequate resources, insufficient government support, and poor plan clarity.

Clearly, while the B.C. SLUP implementation framework has some strengths, there are a number of weaknesses. Many of these weaknesses are not obvious based on the available published policy on SLUP implementation. Indeed, this study demonstrates an inconsistency between what is happening “on the ground” with what is asserted in policy.

The track record of plan implementation in B.C., however, is mixed. Respondents rated success in achieving plan goals and respondents’ expectations as somewhat successful. Implementation of eleven of the eighteen plans was rated as somewhat successful to successful. Implementation of t the *Protected Areas Strategy* was identified

as a particularly successful outcome of the planning process. On the other hand, respondents rated the performance in meeting timelines and the goals of other stakeholders as neither successful nor unsuccessful. The implementation of four of the plans was rated as somewhat unsuccessful. Although more research is required to assess implementation success, the results show that there is clearly room for improvement.

5.3 Recommendations to Improve the SLUP Implementation Framework

There are a number of ways in which the B.C. SLUP implementation framework can be improved. While recommendations can be considered and implemented in isolation, the best results would be achieved by implementing all recommendations together in an integrated fashion. The changes recommended below will bolster implementation success by generating greater stakeholder support and commitment, improving the mechanics of implementation, and enhancing the accountability of the implementation process. In doing so, the success of the SLUP process as a whole can be improved.

To improve the B.C. SLUP implementation framework, the provincial government should:

1. ensure that policy is consistent and supportive of LRMP or land-use plan implementation
2. enhance the legislative basis for plan implementation
3. establish a regulatory system that provides greater assurance that plan recommendations will be implemented successfully

4. mandate implementers to develop and use plans that strategically guide the implementation process
5. supply implementers with greater resources
6. provide opportunities for stakeholders to build networks and solve problems collaboratively
7. enhance strategies to mitigate any negative effects to stakeholders from plan implementation
8. foster economic, social, and other external conditions such that stakeholders are receptive to plan implementation
9. clearly delineate stakeholder roles and responsibilities so that implementers know what others are doing and what is expected of them
10. empower implementers with the authority and jurisdiction to make the decisions necessary to achieve plan success
11. ensure that the monitoring system established in policy is used consistently throughout the province, and support recent efforts to improve upon this system
12. involve stakeholders comprehensively throughout the implementation process
13. actively demonstrate support for implementation, and in turn garner the support of the rest of stakeholders

14. support efforts to improve the clarity of land-use plans currently in existence, ensure that all forthcoming plans are sufficiently detailed to permit successful implementation, and clarify the mechanisms used to achieve SLUP objectives
15. ensure that when problems are inadequately understood, that adequate research and investigation are undertaken in a timely manner to resolve these knowledge gaps
16. maintain and enhance the flexibility of the implementation process to accommodate new and changing conditions
17. place leaders with strong collaborative and managerial skills in charge of implementation
18. ensure that land and resource decisions are made through sound collaborative planning processes.

Clearly, support from the provincial government is the foundation for many—if not most—of the factors required for successful implementation. For example, government support helps ensure effective implementation by paying for implementation activities—such as monitoring—which is necessary to ensure that implementation proceeds at an appropriate pace and achieves its goals. Government support, as exemplified in legislation and policy, also ensures that actors possess the capacity to fulfill their responsibilities, that plans get sufficiently clarified, and that stakeholders have genuine opportunities to contribute to implementation. In turn, government support is the basis for the support of other stakeholders. Early experience with CP in B.C.

demonstrates that if stakeholders know the government is committed, then they too will commit, because they know that the best solutions to land and resource issues are created collectively. Should the government endorse all of these recommendations, SLUP implementation would become more consistent, more coordinated, more efficient, more inclusive, more powerful, more accountable, and thus, more effective at resolving the many complex yet critical land and resource problems facing British Columbia today.

5.4 Limitations of Results

This study draws its strength from the fact that it used implementation officials as data sources instead of investigators' observations. However, reliance on implementation officials as data sources also had limitations. The results may exhibit a selection bias whereby some factors may exhibit more or less value than what a broader body of stakeholders may value. For example, many of the criteria that are rated the least important to plan implementation are those that concern other stakeholders; favorable stakeholder characteristics, effective networking and information flow, adequate networking and consensus building during implementation, and comprehensive involvement of nongovernmental stakeholders are not exceptionally important to respondents. It appears that the study respondents place more value on government- and institution-related factors than other types.

Second, due to the fact that single respondents represent whole plan implementation systems, the integrity of the results is weaker than it would have been given larger sample populations. In this study, all analyses rely upon a single respondent

for each plan to accurately understand and portray individual plan implementation systems.

In addition, the ratings of success captured in this study must be taken with caution. Only four questions were posed to respondents to rate success of implementation thus far. No objective measures of implementation success were used.

5.5 Future research

Future research could improve upon this study by exploring plan implementation in a broader and more rigorous manner. Subsequent research should explore these topics through broader sample populations involving nongovernmental stakeholders. Similarly, the characteristics of sound plan implementation systems should be explored in other locales and contexts. While the factors identified in this study are based upon the broad body of implementation theory, systems elsewhere may require attention to factors that have eluded theorists as of yet.

In addition, implementation success should be investigated using more objective measures, such as examinations of monitoring reports. Also, the relationship between success and characteristics of systems could be tested more rigorously through more in-depth quantitative analyses.

Finally, other key aspects of SLUP and its implementation warrant exploration. For example, First Nations and treaty negotiations remain major forces acting on land and resource decision making in B.C. Such aspects must be very influential on SLUP implementation.

5.6 Final Remarks

Over the last decade, significant progress was made in moving towards sustainable land and resource management in British Columbia. Strategic land-use planning has dramatically reduced conflict among land users, doubled the amount of land in protected areas, and created an expectation on behalf of stakeholders that land and resource issues can be resolved effectively through collaboration. However, the plans generated through this process are intended to accomplish much more. Land-use plans are blueprints for sustainability, but to move British Columbia further along this path, plans must be implemented successfully.

Of the many factors that influence implementation success, institutional and social factors are the most important. Successful implementation demands that the dominant institution overseeing the process—the government— lays substantial groundwork, and demonstrates a commitment to the process. When this commitment is demonstrated, successful implementation becomes possible. And when such a commitment is demonstrated—particularly through collaboration—other stakeholders get on board. When all stakeholders are on board, successful implementation is not just possible, but is likely.

Appendix One
Questionnaire

Questionnaire for SLUP Implementation Officials

Part 1: Respondent Background Information

Information gathered in this section will remain confidential. This information is for use by the researcher for tracking purposes only. Please either fill in the appropriate answer or check the most appropriate category.

- Name:
- Name of the Strategic Land-use Plan you are involved with:
- How long has implementation of this plan been in progress?

  ☐ 0 to 1 years

  ☐ Between 1 and 3 years

  ☐ Between 3 and 5 years

  ☐ Over 5 years
- Are you a Provincial Government representative?

  ☐ Yes ☐ No

  If yes, which ministry or agency?
- What is your job title?
- In a few sentences, please describe your role in plan implementation.

- How long have you been involved in the implementation of this plan (# months)?
- Were you a member of the original planning table that developed the plan?

  ☐ Yes ☐ No

Part 2: Overall Success of the Plan

Below, please select your response to the following questions from the drop-down menu. Please evaluate how successful the land-use plan with which you are involved has been.

1) Overall, how successful do you think implementation of this plan has been to date in terms of reaching the goals identified in the plan?	
2) Overall, how successful do you think implementation of this plan has been to date in terms of meeting the timelines that have been set out in agency work plans?	
3) Overall, how successful do you think implementation of this plan has been to date in terms of meeting your personal expectations?	
4) Overall, how successful do you think implementation of this plan has been to date in terms of meeting the goals of other stakeholders?	

If you have any further comments regarding the overall success of this plan, please write them here:

Part 3: Plan Implementation Factors

Below, there are three types of questions. Please either choose the most appropriate response from the drop down menu to indicate your level of agreement with each of the following statements, answer "yes" or "no", or enter the requested information into the field provided when prompted. Please reflect on the achievement of plan goals overall, rather than specific goals.

Please note: *The term "stakeholder" is used in this questionnaire to refer to all persons or parties that have a stake in the outcome of plan implementation or are otherwise involved in plan implementation. Stakeholders thus include staff at all levels within government agencies, NGOs, private businesses, and public organizations that are involved in plan implementation.*

Support from Stakeholders	
1) The support of the provincial government for plan implementation is strong.	
2) The support of elected officials within the provincial government for plan implementation is strong.	
3) Public support for plan implementation is strong.	
4) The support of other nongovernmental stakeholders for plan implementation is strong.	
5) Implementation requires little change in the behavior and/or management practices of stakeholders.	
6) There is little diversity in values among the stakeholders involved in or affected by plan implementation.	
7) The stakeholders required to change practices, as a result of the plan, composes a small percentage of the total population of all stakeholders.	
8) There is at least one highly influential person who is exceptionally committed to plan implementation.	
Resources and Information	
9) Sufficient information is available to make appropriate decisions for plan implementation.	
10) If you think existing information is inadequate for plan implementation, please identify the type of information that is missing:	

11) Sufficient resources (e.g., money, staff, effort, etc.) are provided for plan implementation.	
12) If you think provided resources are inadequate for plan implementation, please specify the type of resources that are missing:	
Supportive Conditions	
13) Exogenous factors, such as social, economic, political and/or other conditions in the region are favorable to plan implementation.	
14) Implementation strategies are based upon a clear understanding of how implementation activities will lead to plan objectives.	
15) The planning process that led to the plan was a good process overall.	
Policy Characteristics	
16) The implementation process is adequately based in legislation.	
17) The recommendations of the plan document are clear enough to guide plan implementation.	
18) Other provincial government policies do not conflict with plan objectives.	
Strategic Planning	
19) The planning process established a clear strategy for plan implementation.	
20) Milestones have been set to gauge implementation progress.	
21) Implementation objectives are adequately prioritized.	
22) Plan objectives are well integrated within individual agency work plans.	
23) There is sufficient flexibility to alter the implementation process if necessary.	

24) There are adequate strategies enabling implementation staff to work effectively with stakeholders in other political jurisdictions, such as municipalities, regional districts, townships, or others.	
Participation	
25) Stakeholders involved in developing the plan remain involved in implementation.	
26) Those responsible for implementing the plan were involved in plan preparation.	
27) All stakeholders are adequately involved during plan implementation.	
Stakeholder Characteristics	
28) Stakeholder responsibilities for implementing the plan are clearly delineated.	
29) Stakeholders have the capacity to fund external, third-party projects that are consistent with plan objectives.	
30) New implementation staff is adequately oriented to the plan and the implementation process.	
31) Senior implementation staff has sufficient management skills to achieve implementation objectives.	
32) Senior implementation staff is skilled in working collaboratively with other stakeholders.	
33) There is a high level of cooperation among stakeholders involved in plan implementation.	
34) Stakeholders “on the ground” making day-to-day implementation decisions are able to influence and/or modify the implementation process.	
35) An adequate outreach program is in place for educating and building support for plan implementation among the public.	

Decision-Making Framework	
36) Implementation officials possess adequate authority and/or jurisdiction to achieve plan implementation.	
37) Implementation decisions are reached through a collaborative process involving stakeholders.	
Mechanisms for Compliance	
38) There is an adequate legal/regulatory framework necessary for plan implementation.	
39) There are adequate penalties to enforce compliance with rules and regulations necessary for plan implementation.	
40) There are adequate incentives to encourage stakeholders to work towards implementation objectives.	
41) There is adequate enforcement of the rules and regulations necessary for plan implementation.	
42) Stakeholders are provided with adequate written guidelines steering them toward compliance with the rules and regulations relevant to plan implementation.	
43) There are adequate strategies in place to mitigate negative effects to stakeholders resulting from plan implementation.	
Monitoring	
44) Is there an implementation monitoring mechanism in place?	

If you answered "yes" to question 44 above, please answer questions 45 through 49 below:

45) The monitoring mechanism effectively tracks implementation progress (i.e., progress in completing implementation activities).	

46) The monitoring mechanism effectively tracks whether or not plan objectives are being achieved.	
47) The monitoring mechanism uses appropriate indicators for monitoring progress towards achieving plan objectives.	
48) Has a monitoring committee been established to operate and oversee the monitoring process?	

If you answered "yes" in question 48 above, please answer questions 'a' through 'e' below:

a. All relevant stakeholders are represented on the monitoring committee.	
b. Please append a list of all stakeholders represented on the monitoring committee or write them here .	
c. How often does the monitoring committee meet (#/year)?	
d. Does the monitoring committee provide progress reports to the public?	
e. How often are progress reports provided to the public?	
49) Adequate records are kept of all monitoring activities and meetings.	
50) Remedial action is undertaken if plan objectives are not being achieved.	
51) Remedial action is mandatory if plan objectives are not being achieved.	
52) There is an automatic plan review and amendment process.	
53) The implementation of plans throughout the province receives adequate independent oversight ensuring that the goals of the Strategic Land-use Planning process are being attained.	

If you have any comments related to any of the above sections, please write them here:

Part 4: Factors Contributing to Successful Plan Implementation

Generally, how important do you consider each of the following factors in ensuring plans are implemented successfully and plan objectives are achieved? Please consider the factors listed below for their utility in achieving successful implementation of <u>any</u> land-use plan and not specifically for the Strategic Land-use Plan that you are involved with. Below, please select your response to each statement from the drop-down menu.

Support from Stakeholders	
1) The support of the provincial government for plan implementation must be strong.	
2) The support of elected officials within the government for plan implementation must be strong.	
3) Public support for plan implementation must be strong.	
4) The support of other nongovernmental stakeholders for plan implementation must be strong.	
5) The new practices required of stakeholders by a new plan must not differ dramatically from pre-plan practices.	
6) The stakeholders involved in the implementation process must not have large differences in values.	
7) The stakeholders required to change practices, as a result of the plan, must make up a small percentage of the total population of all stakeholders.	
8) There must be at least one highly influential person who is exceptionally committed to plan implementation.	
Resources and Information	

9) There must be sufficient information available to make appropriate decisions for plan implementation.	
10) The level of resources (e.g., money, staff, effort, etc.) committed for plan implementation must be high.	
Supportive Conditions	
11) Exogenous factors, such as social, economic, political, and/or other conditions in the region must be favorable to plan implementation.	
12) Implementation strategies must be based upon a clear understanding of how implementation activities will lead to plan objectives.	
13) The land-use plan must be developed through a collaborative planning process involving key stakeholders.	
Policy Characteristics	
14) The implementation process must be based in legislation.	
15) The plan must provide clear recommendations to guide those involved in implementation.	
16) Other related government policies must not conflict with plan objectives.	
Strategic Planning	
17) The planning process must establish a clear strategy for plan implementation.	
18) Milestones must be set to gauge implementation progress.	
19) Implementation objectives must be adequately prioritized.	
20) Plan objectives must be well integrated within individual agency work plans.	
21) There must be flexibility to alter the implementation process if necessary.	

22) There are adequate strategies enabling implementation staff to work effectively with stakeholders in other political jurisdictions, such as municipalities, regional districts, townships, or others.	
Participation	
23) Stakeholders involved in developing the plan must remain involved in plan implementation.	
24) Those responsible for implementing the plan must have been involved in plan preparation.	
25) All stakeholders must be involved in the implementation process.	
26) Implementation activities should be performed by a small number of dedicated agencies.	
Stakeholder Characteristics	
27) Stakeholder responsibilities for implementing a plan must be clearly delineated.	
28) Implementers must have the capacity to fund external, third-party projects that are consistent with plan implementation objectives.	
29) New implementation staff must be adequately oriented to the plan and the implementation process.	
30) Senior implementation staff must be skilled in working collaboratively with other stakeholders.	
31) What other skills must senior implementation staff possess in order to bring about successful plan implementation?	
32) There must be a high level of cooperation among stakeholders.	
33) Stakeholders “on the ground” making day-to-day implementation decisions must be able to influence and/or modify the implementation process.	

34) An outreach program must be in place for educating and building support for implementation among the public.	
Decision-Making Framework	
35) Implementation officials must possess adequate authority and/or jurisdiction to achieve plan implementation.	
36) Implementation decisions must be reached through a collaborative process involving stakeholders.	
Mechanisms for Compliance	
37) There must be an adequate legal/regulatory framework necessary for plan implementation.	
38) There must be adequate penalties to enforce stakeholder compliance with the rules and regulations necessary for plan implementation.	
39) There must be adequate incentives to encourage stakeholders to work towards implementation objectives.	
40) There must be adequate enforcement of the rules and regulations necessary for plan implementation.	
41) Stakeholders are provided with adequate written guidelines steering them toward compliance with the rules and regulations relevant to plan implementation.	
42) There must be strategies in place to mitigate negative effects to stakeholders resulting from plan implementation.	
Monitoring	
43) There must be a monitoring mechanism that effectively tracks whether or not plan objectives are being achieved.	

44) There must be appropriate indicators for monitoring progress towards achieving plan objectives.	
45) There must be a monitoring committee representing stakeholder interests overseeing the monitoring process.	
46) The monitoring process must produce publicly available reports documenting implementation status.	
47) There must be mandatory remedial action if objectives are not being achieved.	
48) There must be an automatic plan review and amendment process.	
49) The implementation of plans throughout the province must be overseen by an independent agency to ensure that the goals of the Strategic Land-use Planning process are being attained.	

Are there other important factors that should be present to improve the probability of success of plan implementation?

Part 5: Open-ended Questions Regarding Plan Implementation

1. Have any recommendations of the plan been implemented particularly successfully? If so, which ones?

2. If you identified any recommendations in question 1 above, what do you think may be the key reasons for their successful implementation?

3. Have any recommendations of the plan been particularly difficult to implement? If so, which ones?

4. If you identified any recommendations in question 3 above, what do you think may be the reasons for the lack of progress towards their implementation?

5. Overall, what are the key factors that facilitate successful implementation of plans?

6. Overall, what are the key factors impeding successful implementation of plans?

7. What changes could be made to facilitate plan implementation?

Thank you very much for taking the time to complete this questionnaire!

Appendix Two
Ethics Approval

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