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Collaborative planning and public participation in the review and update of the Critical Areas Ordinance in Whatcom County Washington

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COLLABORATIVE PLANNING AND PUBLIC PARTICIPATION IN
THE REVIEW AND UPDATE OF THE CRITICAL AREAS
ORDINANCE IN WHATCOM COUNTY, WASHINGTON

by
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B.A. Western Washington University, 2003

Presented in partial fulfillment of the requirements
for the degree of
Master of Arts
The University of Montana
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5-19-06
Date
In the United States, wetlands management is often the job of local planning agencies. Collaborative planning has emerged as a widely used tool in the planning process along with a growing movement toward greater local participation in environmental management strategies. Various terms including community-based environmental management, collaborative environmental management, partnering, and ecosystem management, among others, a common theme is collaboration among stakeholders. Rather than relying on government officials or agencies to solve environmental problems, this approach calls for community stakeholders to contribute meaningfully. This study investigates the application of the collaborative planning approach in Whatcom County, Washington. The Whatcom County Planning and Development Services, the agency charged with developing, implementing, and updating the county’s Critical Areas Ordinance (CAO) mandated by state law, completed the most recent update in September of 2005. The agency utilized a collaborative planning approach in accomplishing this task and the purpose of this study was to obtain an insight into the planning process, more specifically the process of public participation, by asking the question: was the process of reviewing and updating the CAO in Whatcom County, truly a collaborative planning process? In order to answer this research question qualitative data were collected in the form of in-depth interviews consisting of open ended questions in order to learn about the perspectives and opinions of members of the Citizen’s Advisory Committee (CAC). Questions covered the following topics: perceptions about wetlands, wetland mitigation, and wetland banking prior to and following involvement in the CAO update process; reasons for getting involved initially; personal experiences and opinions about the CAO update process; and thoughts on the effectiveness of the CAO update process (i.e. final CAO update).
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“Turns out not where but who you’re with, that really matters” ~ djm
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CHAPTER ONE: INTRODUCTION

Wetlands exist as integral components of larger landscape ecosystems. They are not solitary systems, but interact with the surrounding environment and are part of an overlying, functioning ecosystem. Primarily as a result of the growth of human settlement, wetlands are destroyed or degraded daily. Today, in the United States, this is only to be done with the agreement that they will be mitigated for elsewhere. Research has shown that in a majority of cases, the promise to replace a destroyed wetland is not kept and in other cases it is created haphazardly without any intention of creating a living and functioning wetland system.

In the 1600s, over 220 million acres of wetlands existed in the lower 48 states (Mitsch and Gosselink 1993). Since then, extensive losses have occurred with many of the original wetlands drained and converted to farmland. By 1992, 45-50 percent of the original wetlands in the lower 48 States had been converted to other uses, with losses approaching 90 percent in Illinois, Indiana, Iowa, Missouri, and Ohio (Hemlich et al. 1998).

In recent decades, a trend toward greater wetland conservation has occurred. Although attitudes are changing, the future of wetland ecosystems is of concern. In the United States, wetland management is often the job of local planning agencies. Collaborative planning has emerged as a widely used tool in the planning process. According to Koontz (2005, 459) "one of the most remarkable trends in environmental policy... over the past few decades has been the growth in more inclusive, participatory efforts to involve multiple stakeholders in decisions."

Although these new arrangements for citizen involvement take many forms, the focus of this study is collaboration.
Conley and Moote (2003, 372) state that “collaboration is... a way to reduce conflict among stakeholders; build social capital; allow environmental, social, and economic issues to be addressed in tandem; and produce better decisions.” In addition, Fainstein (2000, 175) stated that “within collaborative planning, the planner’s primary function is to listen to people’s stories and assist in forging a consensus among differing viewpoints.”

Public participation is the major driving force behind collaborative planning approaches, because decisions affecting the public and public resources, like the environment, should be made in discussion with the public (Randolph 2004). This kind of planning process, with early and continuous public input, also leads to greater acceptability of projects and programs by the public. Acknowledgment of this has led to increasing use of collaborative decision making (Randolph 2004).

Whatcom County, located in the most northwest corner of Washington State, recently completed a collaborative planning process. In September of 2005, Whatcom County finished the review and update of their Critical Areas Ordinance (CAO) and throughout the update process they utilized various collaborative planning and public participation techniques, such as public meetings and hearings, citizen and technical advisory committees, workshops, posting updates online and sending e-newsletters, and the acceptance of written comments.

Given the relative currency of this project, a study focusing on the manner in which collaborative planning was conducted was warranted. The purpose of this study was to obtain an insight into the planning process, more specifically the process of public participation, by asking the question: was the process of reviewing and updating the CAO in Whatcom County, truly a collaborative planning process? In order to answer this research question and to learn about the perspectives and
opinions of those who participated in the Whatcom County CAO review and update, qualitative data were collected in the form of in-depth interviews using open ended questions with members of the Citizen's Advisory Committee (CAC).

Critical areas in Whatcom County include frequently flooded areas, geologically hazardous areas, fish and wildlife habitat conservation areas, critical aquifer recharge areas and wetlands. For the purpose of this study only those sections of the CAO pertaining to wetlands and wetland mitigation were focused on. The reason for this decision is that wetlands are often the center piece of conflict and frustrations within and around land use planning decisions and regulations, due to their relative frequency and the often lack of property owners knowledge regarding wetlands and their benefits.

This is a case study of one particular geographic region and looks at the human interaction with one environmental system within that region. Discussions of human and environmental interactions are at the very heart of the field of geography. This study encompasses both human and physical geography, while at the same time exploring land use planning, which is repeatedly investigated through the field of geography.

This report will begin with a literature recap of wetland ecology, history and regulations, land use planning, collaborative planning, public participation, and growth management. Next there will be brief descriptions of both the study area and methodology used. Then results will be outlined, concluding with a discussion of the results and recommendations.
CHAPTER TWO: LITERATURE REVIEW

The literature review will begin by outlining the definition of a wetland and the ecology of a wetland, historical wetland losses and regulation, which will provide a foundation for discussion of wetland mitigation and banking. Then the second half of the literature review will start with a discussion of land use planning, which will lead into such topics as collaborative planning, public participation, evaluation methods of collaborative planning, and growth management.

Wetland Ecology, History and Regulation

Wetlands are lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. Wetlands vary widely because of regional and local differences in soils, topography, climate, hydrology, water chemistry, vegetation, and other factors, including human disturbance (Mitsch and Gosselink 1993). Under the Clean Water Act (CWA), the term wetlands means "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas." Wetlands are typically defined by the appearance of water, hydric soils, and hydrophytic vegetation.

Wetlands provide invaluable ecosystem functions that cannot be duplicated by any other natural system. These include improving water quality, flood protection, shoreline erosion control, important wildlife habitat, and opportunities for recreation and nature appreciation. Wetlands serve as natural water filtration
systems and water storage areas that provide flood protection, they serve as important aquifer recharge areas, and the plants in wetlands retain excess nutrients and physically hold soil in place with their root systems for erosion control (Mitsch and Gosselink 1993). The high value of ecosystem services provided by wetlands is largely attributable to their high rate of biological productivity and habitat diversity as well as their beneficial role in stabilizing hydrologic processes at a watershed scale (Mitsch and Gosselink 1993).

The value of the ecological functions that wetlands provide were not recognized in the past and major wetland destruction has taken place in the United States. Most historical wetland losses that have occurred in the United States resulted directly or indirectly from programs supported by government policy, such as the United States Department of Agriculture's (USDA) Agricultural Conservation Program, which led to the drainage of twenty-three million hectares between 1940 and 1977 (Mitsch and Gosselink 1993). An estimated 52 percent of the original 220 million acres of wetlands in the United States have been converted to other uses, about 80 percent for agricultural use (Randolph 2004). However, according to the latest National Resource Inventory, agriculture succeeded in achieving net wetland gains of nearly 263,000 acres between 1997 and 2003 (USDA and NRCS 2006).

Beginning in the 1970s a series of legislation passed that drastically changed the tide of wetland loss. The call for wetland preservation came along the wave of renewed interest in conservation that was sweeping across the United States. The defining piece of wetland legislation came in 1972 with Section 404 of the CWA and the amendment following in 1977 (Mitsch and Gosselink 1993). Section 404 is administered by both the Environmental Protection Agency and the U.S. Army Corps of Engineers and specifically regulates the discharge of dredged or fill materials into
waters of the United States, which include wetlands. Section 404, though, is not a wetland protection law; Section 404 is a management tool and it is not meant to preserve wetlands and does not prohibit wetland drainage.

Since 1990 the federal government has had a policy of 'no net loss' of wetlands. In his 1988 and 1990 budget addresses to Congress, President Bush recommended decreasing wetland losses and increasing wetland restoration, which led to the concept of 'no net loss' as a national goal. The policy of 'no net loss' means that for every wetland acre lost, another will be restored or created.

Since the national policy of 'no net loss' was implemented, the rate of wetland loss has appeared to have experienced a complete turnaround, as supported by the 2003 Annual Natural Resources Inventory, which states that the United States had reached an overall net gain of wetlands between 1997 and 2003 (NRCS 2003). However, issues about the quality of wetlands conserved or created are now being discussed, researched and debated. Maintaining and improving the quality of remaining wetlands is an important goal, because fully functioning wetlands provide services valued by society that degraded wetlands cannot. The debate related to 'no net loss' is often centered on the numbers and what is lost in the debate is the fact that wetlands continue to be lost or degraded and the wetlands designed to replace them do not function similarly to the natural one (Kentula 1996).

**Wetland Mitigation**

The current trend, and the law in the United States, is to mitigate impacts from development on wetlands. Mitigation is the avoidance, minimization, rectification, and reduction or elimination of negative impacts, or compensation by replacement or substitution. This means that the compensatory wetland must equal or exceed the performance of the damaged site.
Until the 1990s, compensatory mitigation had not been studied very intensively and the long-term effects are still uncertain. These practices have been debated and researched for the last 20 years due to the uncertainty about what is necessary to create and restore these important ecosystems and what constitutes "success" of the new wetlands (Mitsch et. al. 1998). Proponents push the potential benefits of increasing wetland area and function toward an overall net gain in the resource. Opponents argue that mitigation is merely reason to impact natural wetlands, and that the resultant projects have little resemblance to the wetlands they are meant to replace.

In 2002, federal resource agencies released a National Wetlands Mitigation Action Plan designed to improve the ecological performance of wetland mitigation. The plan affirmed a commitment to a goal of no net loss of wetlands through improved accountability, monitoring, and research (Environmental Protection Agency 2005). Numerous studies of the effectiveness of wetland mitigation have been conducted.

A study in Southern California found that there was a net loss of about 7.8 acres of wetlands throughout a two-year period and recommended that better monitoring, mitigation in-kind (on site), mitigation banking, and planning on a regional or watershed scale could greatly improve the effectiveness of the Section 404 permitting program (Allen and Faddema 1996).

The Washington State Department of Ecology conducted a two-phase study examining both permit compliance and ecological success. They found that 71 percent of compensatory wetland mitigation projects were failing to meet basic permit requirements. They also noted that only 65 percent of the total acreage of wetlands lost was replaced by creating new or restoring existing wetlands area, and

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that only 63 percent of projects were at least partially compensating for the permitted wetland losses. In addition, a number of problems were discovered that were the result of a lack of organization on the part of the administrators (Johnson et al. 2000, 2002).

Another study of forty mitigation projects in South Florida reported that the failure or incomplete creation of 24 projects (60 percent), causing a 50 percent loss of wetland area (Erwin 1991). Failure was judged to be a result of inappropriate hydrology in all cases. Another study, conducted by the Florida Department of Environmental Regulation, found that fewer than 50 percent of the permitted projects could be considered ecologically successful (Erwin 1991).

The numbers of studies appear to be endless, as are the reasons why mitigation projects fail. According to Kentula (2000), compensatory mitigation results have generally been poor due to inadequate planning, faulty design and implementation, lack of technical information, inadequate or non-existent monitoring, poor development and implementation of contingency plans, and insufficient resource management after project implementation.

Many different recommendations have been proposed to help alleviate some of the problems faced when conducting wetland mitigation. Three topics often discussed include more time and effort spent during the design process, improved performance standards (success criteria) detailed within the permit and better assessment techniques to determine the overall success of the mitigation site (Mitch and Wilson 1996; Zedler and Callaway 2000).

Constructed wetlands frequently do not function as anticipated; natural systems are innately complex, with elaborate interactions and relationships that prove difficult for humans to replicate. Success is dependent upon understanding
these interrelationships and restoring the physical and hydrologic features which support them (Kentula and Kusler 1990).

Wetlands exist as integral components of larger landscape ecosystems. Both hydrologic and ecological processes are strongly influenced by activities occurring throughout the watershed. A careful evaluation of the relationship between the wetland and its surrounding watershed is essential to the success of any wetland restoration project. Bedford and Preston (1988, 753) argue that:

... the inability to document cumulative impacts has resulted in a continued focus on impacts limited by the random definitions of a given project, without consideration of the linkages between communities and ecosystems. Wetlands are not solitary systems, but they interact with the surrounding environment and are part of an overlying, functioning ecosystem. The functional capacity of whole watersheds has changed as a result of historical drainage and development of wetlands.

**Wetland Banking**

In addition to wetland creation, enhancement and restoration, many states have turned to the use of wetland banks as a form of compensatory mitigation. A wetland bank is the creation, restoration, or enhancement of wetlands that will be sold or exchanged in the future to compensate for wetland losses (Brown and Lant 1999). They are created to mitigate unavoidable wetland losses prior to development. The value of the banked wetland is quantified and assigned credits, which can be sold in the future to developers or public agencies for compensation.

Wetland banking emerged in the 1980s as a possible solution to the problems experienced with compensatory mitigation. The first private commercial banks emerged in the 1990s, and since that time have increased in number. Between 1992 and 2002, the number of approved banks quadrupled from 46 to 219, and today, about 400 mitigation banks exist in 41 states (USDA and NRCS 2006).
Positive aspects of wetland banking include consolidation of small wetland losses, mitigation in advance, better design and implementation, greater environmental value, accelerated permit processing, and economic efficiency (Brown and Lant 1999). Proponents question whether wetland banking results in a true net gain of wetland acreage or the complete restoration of wetland types. Additionally, the geographic location of wetland banks appears to be of foremost concern (Brown and Lant 1999). The debate on the geographic location asks the question: should developers in Washington State have the ability to buy credits from a wetland bank in Louisiana? Or a wetland bank in another county within the state or even within another watershed?

In 2004, the Society of Wetland Scientists (2004) released a position statement supporting the use of wetland mitigation banks, stating that:

Wetland mitigation banking allows already restored or created wetlands to be used for compensatory mitigation. The functions of these already restored wetlands may be evaluated objectively and compared directly to the wetland to be altered. This eliminates the risk that the compensatory wetland will not be comparable to the altered wetland. Advanced mitigation allows wetland functions to be established in the watershed before they are lost; there is no net loss of wetland function in time or in space. In addition, it is easier to monitor wetlands and enforce mitigation goals in larger bank sites as compared to numerous individual mitigation wetlands.

The United States has had a national wetland policy of 'no net loss' since 1990 and on paper it may appear that the policy has been successful in maintaining wetlands. However, countless studies on wetlands and wetland mitigation on the ground have determined that although wetland acreage is being sustained, wetland quality is going by the wayside. The move towards wetland banking has been supported by many, but is worrisome to others. Although science has continued to support the need and benefits of wetlands for the natural and human environment,
these systems continue to be destroyed or degraded, and persist at being at the center of many arguments between the environmental and development communities.

**Land Use Planning**

According to Randolph (2004, 16), "planning involves setting objectives, gathering and analyzing information, and formulating and evaluating alternative policies, projects, or designs to meet the objectives." Finding a simple definition for land use planning is not easy. Wikipedia (2006), an electronic encyclopedia, defines land use planning as a 'term used for a branch of public policy which encompasses various disciplines which seek to order and regulate the use of land in an efficient way." Land use planning has its roots in urban or city planning, which until the 1960s, was primarily concerned with the physical aspects of planning (Randolph 2004).

In the 1960s planning became more political as social and environmental problems emerged and began to shift to a larger or regional way of planning, moving beyond the central urban or city planning method and taking into account societal and environmental influences or effects. Randolph (2004, 48) states that land use planning "integrates population and economic forecasting, environmental and land use analysis, urban and development design, engineering infrastructure, stakeholder perspectives, and growth management mechanisms.”

Environmental planning can be looked at as a specialization within land use planning, but these terms are often seen as one and the same, as land use planners often deal largely with planning issues related to environmental systems. Environmental planning is a relatively new field of study that aims to merge the practice of urban planning with the concerns of environmentalism (Randolph 2004).
Within the literature, terms such as planning, land use planning, regional planning, and environmental planning are often used interchangeably; for the purpose of this study these terms will be treated as equal in their definitions.

Environmental planners deal with a full range of environmental regulations from federal to state and city levels and a rigorous process has to be undertaken to examine the impacts and possible mitigation of any development project. The environmental reviews encompass areas such as land use, socioeconomics, transportation, economic and housing characteristics, air, noise, wetlands, endangered species, flood zones, and coastal zones among others (Randolph 2004).

**Collaborative Planning**

There is a growing movement toward greater local participation in environmental management strategies. Collaboration emerged as a strategy for addressing environmental and natural resource disputes in the 1970s. Since then, its use has extended to a wide range of problems at state, regional, community, and neighborhood levels (Chrislip 2002). Rather than relying on government officials or agencies to solve environmental problems, this approach calls for community stakeholders to contribute meaningfully.

Variously termed community-based environmental management, communicative planning, collaborative environmental management, partnering, and ecosystem management, among others, a common theme is collaboration among stakeholders (Koontz 2005). Chrislip (2002, 42) cites previous research by Chrislip and Larson (1994) when describing collaboration:

> Collaboration goes beyond communication, cooperation and coordination. As its Latin roots – com and laborare – indicate, it means 'to work together.' It is a mutually beneficial relationship between two or more parties to achieve common goals by sharing...
responsibility, authority and accountability for achieving results. It is more than simply sharing knowledge and information (communication) and more than a relationship that helps each party achieve its own goals (cooperation and coordination). The purpose of collaboration is to create a shared vision and joint strategies to address concerns that go beyond the purview of any particular party.

Collaboration is characterized by diverse stakeholders working together to resolve a conflict or develop and advance a shared vision (Koontz 2005). Collaboration, in practice, has focused largely on land use planning. According to Koontz (2005, 460) “governments and citizens have sought, through land use planning, to combine the interests and insights of multiple stakeholders to develop plans for watershed management, habitat protection, wetland management, farmland preservation, and other purposes.” According to Kenney (1999, 498), for interest groups and citizens, stakeholder partnerships “...represent an opportunity to inject their views into the decision-making processes of government agencies. From the agency perspective, partnerships represent an opportunity to cultivate local community buy-in while tackling very complex problems that (a) transcend political boundaries, (b) involve multiple agencies, and (c) require detailed local knowledge.”

At the local level around the world collaborative groups are being established in various forms. Collaborative planning methods engage the participants directly in conversation with one another and with decision makers (Innes and Booher 2000). The motivation for collaboration comes from agencies and stakeholders alike and it is based on the failings of past planning decisions and processes that have not engaged stakeholders effectively (Randolph 2004).

The defining characteristics of collaborative planning are discussion, dialogue and communication. According to Innes and Booher (2000, 18) the central idea of the collaborative model is that “...planning should be done through face-to-face
dialogue among those who have interests in the outcomes, or stakeholders." And for this dialogue to be most effective and produce reasonable and well informed choices, various conditions must hold:

(1) the full range of interests must be involved; (2) the dialogue must be authentic in the sense that people must be able to speak sincerely and comprehensibly to each other; that what they say must be accurate and that they must speak as legitimate representatives of a stakeholder interest; (3) there must be both diversity and interdependence among the collaborators; 4) all issues must be on the table for discussion with nothing off limits — the status quo cannot be sacred; (5) everyone in the discussion must be equally informed, equally listened to and thus empowered as members of the collaborative discussion; and (6) agreements are only reached when consensus is achieved among the vast majority of participants and only after substantial serious effort has been made to satisfy the interests of all players.

Ecosystem management is frequently associated with collaborative planning. Environmental decisions are both political and scientific and in order to resolve environmental issues, the interests and values of the public must be addressed along with scientific work (Beierle 2002). Ecosystem management has emerged as a term for identifying the need to look beyond individual pieces of property and recognize that the management and planning of environmental systems must be done at an ecosystem level; with humans included as a key species within the system.

In nature, resources are inextricably linked not only to each other but also to human activities. It makes sense to look at them as a whole, to manage them as ecosystems... Human society is an important component and must be viewed as part of the ecosystem to be managed (Randolph 2004, 245).

Environmental issues can be scientifically complex and exist along ecological, not political, boundaries; therefore, collaboration and the formation of partnerships across land ownership is essential (Brody 2003). Brody (2003, 409) continues:

Public participation is often cited as a central component of an effective planning process for ecosystem management and environmental planning in general... ecosystem management is by definition a transboundary, multi-party issue, [and] the participation
of key stakeholders is widely viewed as the single most important element of a successful outcome.

Ecosystem management requires looking beyond specific areas and focusing on broad spatial scales. Local decisions related to the long term health and viability of natural resources are primarily done at the local level and it is important for local land use planners to recognize this. The vast majority of decisions affecting larger ecosystems and issues of connectivity will be made at smaller scales, where they will have greatest impact. Some of the most powerful tools that threaten or protect natural habitats are in the hands of local government agencies and the participating public (Brody 2003).

A 1996 report by The National Research Council concluded that stakeholder involvement:

... is critical to ensure that all relevant information is included, that it is synthesized in a way that addresses parties’ concerns, and that those who may be affected by a risk decision are sufficiently informed and involved to participate meaningfully in the decision” (30).

Murdock and Sexton (1999) have noted that protecting and managing natural systems is a challenge and should be approached with community in mind. A clear grasp of the desires of the community should be an integral part in the planning process and in the design and implementation of any natural resource management plan. Any movement toward better wetland management will need collaboration from the community. There should be an open and honest line of communication between elected officials, planners, consultants, developers, and private citizens. These different groups have a shared responsibility for safeguarding public health, protecting environmental quality, or improving the use of natural resources (Murdock and Sexton 1999).
The concerns of different people are interrelated, and when developing solutions to address the problems it is important to know whether there are conflicting views and values. A clear understanding of how people understand and perceive natural systems should be an important part of generating a reliable policy that is ecologically and politically sustainable. Lachappelle and McCool (2005, 280) stress that “when both citizens and agencies are intimately engaged in planning processes, a sense of ownership in the plan is created, leading to greater chances for political support and implementation.” Wondelock and Yaffee (2000, 42) describe ownership as “… the responsibility, obligation, and caring imbued by citizens and agencies for both the problem and the process of public resource planning and management.”

Collaborative approaches to natural resource management are being generally endorsed as good ways to deal with complex natural resource issues. As collaborative efforts become more widespread and are incorporated into official policies, both supporters and critics will seek to evaluate these new approaches. According to Conley and Moote (2003, 372), an important question to ask is “do they [collaborative planning methods] really lead to improved resource management?” Evaluation of collaborative planning is necessary, in order to determine if this kind of planning process is succeeding in the development of sound resource management plans that are representative of the larger community.

Collaborative planning theory and the collaborative model of planning is growing in popularity as agencies seek ways to develop and implement effective and useful public participation methods. This form of planning is and will continue to be important in the growth and advancement of land use planning methods, as it
promises to produce better management plans, as well as lead to a more interested and knowledgeable public.

**Public Participation**

It is said that much of the political discussion surrounding the founding of the United States centered on the role of local participation. The Bill of Rights contains language that protects local participatory action. The 1st amendment states that “Congress shall make no law... prohibiting... the right to peaceably assemble, and to petition the government for a redress of grievances”. In addition, the 13th amendment states that “The powers not delegated to the United States by the Constitution... are reserved to the states respectively, or to the people”.

For more than a hundred years, the day to day operations of most American local governments were managed directly by elected officials. By the late 1800s, however, elected officials could not handle increasingly complex urban problems and widespread corruption, which led to demands for local government reform (Langton 1978). This reform led to professionalized city management, with an unexpected side effect that saw a decline in hands-on citizen control of local places.

After World War II, and especially since the 1960s, citizen's participation in planning and decision making has become routine. The civil rights movement of the 1960s is often credited for reawakening interests in local participation and community design (Hester 1999). In the 1960s, many Americans became troubled by the mistreatment of the country's minority and poor citizens, which led to a call for urban renewal. These stirrings eventually led to the passage of President Lyndon Johnson's Great Society legislation. Concerned that these programs not fall victim in implementation to the same problems that had exhausted previous urban renewal
efforts, "federal officials added legislative language requiring that programs be
developed and administered with the highest viable participation of residents of the
areas and members of the groups served" (Thomas 1995, 3).

The civil rights struggle led to the creation of advocacy planning, which
required extensive community participation, in addition to rekindling local
participatory democracy in every aspect of city life and changed the way citizens
participated in city making, forever changing American city design (Hester 1999).
Following the heightened years of the civil rights movement, public participation
requirements spread rapidly throughout federal programs between the late 1960s
and mid 1970s. By providing avenues for public participation, decision making could
become an expression of the broad public interest and policymakers could receive
input from all affected parties (Chrislip 2002).

Public participation is a broad field. The definition of public participation is
the subject of debate, leading to recent use of terminology such as citizen
involvement, community involvement, citizen participation, public involvement,
citizen action, political participation and participatory decision making, among
others (Langton 1978; Chess 2000; Sarno and Wagner 2002). In the past, the term
'public participation' was often used to refer to opportunities for providing
comments at public hearings, being a member of a social movements, or political
activities, such as voting, campaigning and lobbying (Webler and Tuler 2001; Sarno
and Wagner 2002).

The subject of public participation has been discussed widely, and numerous
definitions have been offered. One of the earliest definitions used by planners comes
from the classic article by Arnstein (1969, 216), who defined citizen participation as
citizen power:
It is the redistribution of power that enables the have-not citizens, presently excluded from the political and economic processes, to be deliberately included in the future... In short, it is the means by which they can induce significant social reform which enables them to share in the benefits of the affluent society.

Identifying the need for public participation was important; however, identifying the goal and desired outcome of public participation is even more significant and proving tougher. There is a lack of consensus on what public participation is supposed to accomplish; is a program successful if it simply involves more of the public, or should it have to result in noticeably better decisions?

Innes and Booher (2000, 17) identify a number of purposes for public participation in planning and policy decision making:

One is simply for decision makers to acquire information about the public’s preferences so they can play a part in the decisions about projects, policies or plans... A second and closely related purpose is to improve the decisions that are made by incorporating the knowledge of the public or members of the public into the calculus of the decision. Third, public participation is ostensibly also about fairness and justice... public participation gives at least the opportunity for people to be heard who were overlooked or misunderstood in the early stages. A fourth purpose follows from these others. That is, public participation is about getting legitimacy for public decisions... Last, but not least, public participation is something planners and public officials do because the law requires them to.

Constructively engaging a diverse group of citizens adds great value and at the same time presents great challenges. Chrislip (2002) acknowledges that people with different experiences, knowledge, and perspectives make more creative and better decisions. Communities and regions strengthen their capacity to solve problems and implement solutions when those involved and affected participate in decision making.

When successful, public participation can bring substantial benefits, such as more effective public decisions, a satisfied and supportive public, and stronger
democracy; but when it fails, public participation can lead to an unhappy and unsupportive public, ineffective decisions, and a weakened democracy (Thomas 1995). Thomas (1995, 7) elaborates on strong democracy:

A strong democracy should promote strong citizenship and a strong society. Giving people more and better opportunities to take part in their own governance can transform them from subject of particular governmental arrangements to citizen vested in and supportive of those arrangements. Similarly, the broadening of participatory opportunities can strengthen society by assuring that the actions of government are embedded in society, rather than imposed on society.

Public participation increases government commitment to the principles of democratic governance (Brody 2003). These principles include “the rights of individuals to be informed, to be consulted, and to have the opportunity to express their views on governmental decisions. They also stress the need for better representation of the interests of disadvantaged and powerless groups in governmental decision making” (Brody 2003, 246).

The literature also points to the challenges of public participation. Irvin and Stansbury (2004) and Randolph (2004) outline some complaints and challenges associated with the public participation process, such as the time commitment required for citizens to be involved or insufficient time, in addition to the related cost for government agencies, lack of commitment and responsibility, entrenched positions, uneven authority or the lack of authority for citizen groups in making final decisions, and, the most common complaint, revolves around the lack of representation. Thomas (1995, 24) further highlights the issues of representation:

... public participation is often nonrepresentative. No matter what the circumstances, many who are eligible to participate do not, and those who do participate are seldom a cross section of all who were eligible. In particular, participants usually have higher socioeconomic status – better education and higher incomes – than non participants. Those who do become involved... are frequently nonrepresentative of the larger citizen populations. Participants often represent preexisting
organized groups that speak for particular special interests rather than for citizens in general. Their participation may be defensive, designed to protect the authority of existing groups from the challenge that broader public involvement might pose.

Overall, the nature of public participation has changed in the past 30 years. The old policymaking motto of "tell us what you want, and we'll go away and decide what to do" has been superseded with a new motto of "tell us what you want and we'll all figure out what to do together" (Randolph 2004, 27). This collaborative approach seeks a more informed dialogue among stakeholders, of which hold diverse interests and values (Tuler and Webler 1999).

Participatory structures, such as citizen advisory committees and workshops, were developed in the 1980s and 1990s to improve upon the one-way flow of information in public hearings. Still, public hearings remain the most common form of face-to-face public involvement in spite of criticism of their ability to provide meaningful participation. Most are used to defend agency decisions rather than to involve the public in the decision-making process itself. According to Simrell King et al. (1998, 322):

The most ineffective technique [of public participation] is the public hearing. Public hearings do not work. Low attendance at public hearings is often construed as public apathy or silent approval of the status quo. In actuality, low attendance is more likely to be related to the structure of public hearings... the structure of public hearings and public meetings prohibits meaningful exchange.

Major problems associated with public hearings include: agencies often hold hearings late in the process, they present technical information beyond the understanding of the lay public, and they seek to do little more than fulfill administrative requirements (Innes and Booher 2000). In addition, a number of studies have determined that the majority of those who choose to attend hearings
actually represent organized interests with significant economic stakes in the outcome (Beierle 2002).

The CAC is considered one of the most stable and universal forms of public involvement found in the United States. Lynn and Busenberg (1995, 148) define a CAC as a “relatively small group of people who are convened by a sponsor for an extended period of time to represent the ideas and attitudes of various groups and/or communities for the purpose of examining a proposal, issue, or set of issues.” A CAC differs from other forms of public participation by providing the potential for thorough interaction between citizens and government representatives. Citizen advisory committees members are intended to serve as the voice of the larger public.

Lynn and Busenberg (1995, 150) sum up earlier work by Creighton and Prescolli (1983), which suggests that there are several unique benefits that a CAC can offer:

(1) provide a cross sampling of public views and concerns; (2) give citizens a chance to become informed about the issues before coming to conclusions, hence providing council to the agency which combines the citizen’s perspective with a thorough understanding of the situation; (3) promote the development of personal relations in the group which can lead to a deeper understanding of the concerns and interests of others, with the effect of moderating more extreme views; and (4) serves as a communications link back to the constituencies the CAC represents and as a means for building consensus among conflicting groups.

In addition, Lynn and Busenberg (1995, 153) point to CAC limitations and drawbacks:

(1) there is no assurance that the public will accept that the advisory group speaks on its behalf; (2) the desire to have all viewpoints represented many mean that some viewpoints will be under-represented and others over-represented when compared to broader public opinions; and (3) advisory groups may become elitist or lose touch with their constituencies, increasing the danger that the general public will not support the group’s recommendations or subsequent agency actions.
For clarification, members of a CAC are also labeled as stakeholders. Some literature differentiates between a stakeholder committee and a citizen advisory committee, but a strong majority identifies them as the same. Beierle (2002, 739) states that “the term ‘stakeholder’ ... denotes a deeper, more personalized stake in decision making than the more general and impersonal terms ‘public participation’.”

Evaluation

Collaborative approaches can enrich a planning process, but they do not always work and failure often comes at a significant loss of time, effort and money (Conley and Moote 2003). Evaluation of collaborative planning methods and/or public participation efforts concerning environmental issues has been limited and regular evaluation by government agencies is rare. Despite the growing interest in public participation, no consistent method has emerged for evaluating the success of individual participatory processes and there is little knowledge about what works in public participation (Santos and Chess 2003).

When designing an evaluation method for a participatory process, the first question to ask is, what should be evaluated? An evaluation can explore the process, such as how public participation activities took place, or it can assess the outcome, or results of the public participation processes (Chess 2000). The difficulty with this form of evaluation is that it is usually based on goals, either process or outcome goals, which are difficult to define in clear and measurable terms, and there is often no general agreement about what the goals should be (Chess 2000).
There are numerous additional methods of evaluation, three such methods are discussed, all of which are commonly associated with planning and/or resource management participatory process evaluations.

The basis for a user-based evaluation is allowing participants to reflect and define their own idea of success (Santos and Chess 2003). Interest-based evaluation is concerned with the goals and/or opinions of specific parties, such as the government agency itself, or an environmental organization, or the public, and is generally looked down upon because it forces the evaluator to determine which parties' demands are more legitimate (Beierle 1998).

Theory-based evaluation is based on theories and models that provide a lens for understanding (Chess 2000). One such example is German philosopher Jurgen Habermas's theory of communicative theory, which explored the ways members of a society use communication to create meaning and maintain reason and rationality (Santos and Chess 2003). Habermas called for free and totally voluntary discussions among all interested and affected parties in collaborative decision-making.

Drawing on Habermas's theory, T. Webler (1995) defined two goals for public participation: fairness and competence. Fairness is achieved through "broad representation and equalization of participants' power", while competence often involves the "use of scientific information and technical analysis to settle factual claims" (Beierle 1998, 32). Fairness is essential to producing a forum where equality can emerge and personal competence can grow.

It is important for government agencies involved in public participation processes to research, develop and implement a means of evaluating that process. Without evaluation, the process cannot be improved, which will only serve to inhibit the process in the future.
Growth management is defined as a set of techniques to ensure that as the population grows there are services available to meet demands. These do not only include government services. Other demands such as the protection of natural spaces, sufficient and affordable housing, and delivery of utilities, preservation of buildings and places of historical value, and sufficient places for the conduct of business are also considered (Wikipedia 2006). Randolph (2004, 39) defines growth management as:

... those policies, plans, investments, incentives, and regulations to guide the type, amount, location, timing, and cost of development to achieve a responsible balance between the protection of the natural environment and the development to support growth, a responsible fit between development and necessary infrastructure, and quality of life.... Using an array of management tools, including innovative zoning regulations, urban growth boundaries, infrastructure investments, community planning procedures, tax policies, land acquisitions, and others, many rapidly growing localities have tried to control the pace and location of development.

Growth management has emerged as an ideal issue for involving the public and the development of useful and solid public participation methods. Several states include in their state growth management laws public participation requirements that direct localities to consider the interests of citizens when adopting plans. The application of growth management techniques are often governed by the development of a comprehensive plan. The plan can be used to measure the impact that new growth will have on the community and define the method by which that impact is mitigated.

A study by Brody et al. (2003) examined state growth management legislation as a tool for bringing about greater citizen involvement in the production of comprehensive plans. They found that “...in spite of the growing emphasis on citizen
participation in the planning literature, participation requirements embodied in most state growth management laws are vague, outdated, and general. They provide little direction or guidance to planners seeking to craft effective citizen participation programs.” (Brody et al. 2003, 246)

Brody et al. (2003) used Washington State as one of their 30 case studies, because the state has a strong citizen involvement mandate. Washington was one of only two states that required local governments to establish a formal public participation program when they prepare a comprehensive plan. In addition, Washington requires “workshops or open discussions in addition to formal public hearings and provides financial and technical assistance for the preparation of plans by local governments” and requires that “groups be targeted for participation and provides direction on which groups should be included, going as far as to provide a specific list of stakeholders to include” (Brody et al. 2003, 249).

Washington’s mandate is far more substantive... its bottom up approach to local planning involves participation by a diverse group of stakeholders. Local planning agencies are required to begin public participation ‘early’ and to ensure that it is ‘continuous’ during the planning process. A wide range of participatory techniques is also designated to ensure that citizens are involved in the development of the comprehensive plan. Washington law (WA RC, sec. 37.70A.140) states that local governments ‘shall provide for broad dissemination of proposals and alternatives, opportunity for written comments, public meetings after effective notice, provision for open discussion, communication programs, information services, and consideration of and response to the public comments’.

As population continues to rise, the need for growth management will further emerge and be seen as an extremely valuable planning instrument. The advent of growth management has been synonymous with the need to better manage natural resources, such as wetlands, as communities grow and spread out. The importance of collaborative planning and the need for more public participation in planning
decisions have emerged with growth management and environmental planning. The combination of collaborative planning, public participation, and growth management has the capability of creating better wetland management plans. The key in fulfilling the promise lies in the implementation of all three at the state and local level.
CHAPTER THREE: STUDY AREA

Whatcom County is a unique place where people can enjoy the wonders of the outdoors from their backyards, where community matters, and where the environment is important. Whatcom County was selected as the study area for several reasons. First, because it is situated along the Puget Lowland adjacent to Puget Sound and the North Cascade Mountains Range, the county contains a significant amount of wetlands, including freshwater and coastal systems. Second, population growth has, and continues to impact the health and abundance of these wetlands. While the extent of historical wetlands conversion in the county has not been ascertained by any investigators, wetland losses are thought to be substantial and continued development pressure has raised wetlands management to prominence as an environmental policy issue in the county. Lastly, Whatcom County Planning and Development Services (PDS), the agency charged with developing, implementing, and updating the county's CAO, finished the most recent update in September of 2005. The agency utilized a collaborative planning approach in accomplishing this task, and given the currency of this endeavor, a case study focusing on the county's experience is both timely and merited.

Geography

Whatcom County is located in the most northwest corner of Washington State overlooking Bellingham Bay and the San Juan Islands (Figure 2.1). The county is 2,120 square miles, or 3.2% of Washington State's land mass and includes three islands: Lummi, Portage and Eliza. A very small part of the county, Point Roberts, is a unique geographic feature in the county; it is a peninsula cut by the 49th Parallel, only accessible by land passing through lower British Columbia, Canada.
Elevations in the county range from sea level to a high of 10,788 feet at the top of Mount Baker, which is located fifty miles east of Bellingham, and is the highest peak in the North Cascade mountain range. Mount Baker is the second most heavily glaciated of the Cascade volcanoes, behind Mount Rainier, and it is also one of the snowiest places in the world, setting the unofficial world record for snowfall in a single season in 1999 (93.67 feet) (Wikipedia 2006).

According to the Whatcom County Comprehensive Plan (2004, 10), “approximately 1,730 square miles or 80 percent of land in the county is either covered with forest or is managed for forest resources” and “1,370 square miles or 79 percent of that land is under federal management by either the US Department of Agriculture, Interior Department, Forest Service, or North Cascades National Park”. The remaining 20 percent of the county land is located within city boundaries (45 square miles) or outside of city limits, referred to as unincorporated (735 square miles). Water resources in Whatcom County “include 16 major lakes, 3,012 miles of rivers and streams, over 37,000 acres or 57 square miles of wetlands, 134 miles of marine shorelines, and aquifers with an unknown amount of water” (Whatcom County 2004, 14).

The eastern portion of Whatcom County consists of the Mt. Baker Wilderness Area and a portion of the North Cascades National Park. The western portion of the county consists of rolling hills, interspersed with areas of level terrain. The largest
city and county seat is Bellingham, with a 2002 population of 67,171 (U.S. Census Bureau 2000). The other major towns are Ferndale, Lynden, Blaine, Nooksack, Everson and Sumas.

**History and Economy**

The earliest inhabitants of present day Whatcom County were Native Americans. They subsisted off the region's wealth of fish, shellfish, berries and root vegetables. The Spanish are believed to have been the first European explorers in the region followed by the British. Following the discovery of gold in the 1850s, rapid settlement of the area prompted the Washington Territorial Legislature to establish Whatcom County on March 9, 1854. Over the next 100 years settlers continued to pour into the region, discovering dense stands of virgin Douglas Fir, a substantial deposit of coal, excellent land for agriculture, and prime seafood opportunities (Whatcom County Historical Resource 2005).

Agriculture, fishing, mining and forestry/wood products were traditionally the driving forces behind Whatcom County's economy (Whatcom County 2004). During the 1950s to 1970s, manufacturing of paper, chemicals, oil refining, aluminum, and food processing helped diversify the economy. During the 1980s and 1990s, more customized and technology-based industries rapidly expanded. Today, service industries, such as health care, have the largest share of the local economy and have grown the fastest over the last couple of decades. Many of the largest employers in the county are in education and local government (Whatcom County Historical Resources 2005).
Population

According to the United States Census Bureau (2000), Whatcom County saw a 98.7 percent overall population growth from 1969-1999, which surpassed the statewide increase of 72.2 percent and the national increase of 35.5 percent. More than half of all Whatcom County's residents live in cities. The 2000 Census data showed 92,583 people, or about 55.5 percent of the county's total population, living inside the city limits of Whatcom County's seven incorporated cities (Whatcom County 2004).

Projections released for the Washington State Growth Management Act in 2002 project Whatcom County's population to increase from 166,814 in the year 2000 to 297,813 in 2025 (Washington State Office of Financial Management 2006). If these projections prove true, Whatcom County's population will almost double in 25 years. With this kind of growth, Whatcom County's natural resources will be pressured and good long range planning will be increasingly important.

Relevant Laws, Regulations and Ordinances

In response to concerns regarding rapid growth occurring in the State of Washington, the Washington State Legislature passed the Growth Management Act (RCW 36.70A) in 1990. The Washington State Department of Community, Trade and Economic Development (CTED) oversees the growth management program and provides technical assistance. The Growth Management Act (GMA) requires certain counties and cities, based on population statistics and projections (Appendix A), to adopt comprehensive land use plans and development regulations to coordinate and manage growth and development, as well as protect the state's natural resources and critical areas (CTED 2006).
Thirteen planning goals are included in the GMA, with the intent of guiding the development of comprehensive plans and development regulations. These goals include, urban growth, reduce sprawl, transportation, housing, economic development, property rights, permits, natural resource industries, open space and recreation, environment, citizen participation, public facilities, and historic preservation (Appendix A). No one goal is to be given priority over others.

Currently, twenty-nine counties are planning under the GMA. These counties make up about 95 percent of the state's population (Municipal Research and Services Center of Washington 2006). The remaining ten counties must plan for critical areas and natural resource lands only. Many amendments have been made to the GMA. Most notably the 1995 amendment requires the use of best available science for counties planning for critical areas: “In designating and protecting critical areas under this chapter, counties and cities shall include the best available science in developing policies and development regulations to protect the functions and values of critical areas” (GMA 1990, RCW 36.70A.172).

Critical areas include “... the following areas and ecosystems: (a) Wetlands; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas” (GMA 1990, RCW 36.70A.030(5)).

The GMA also requires that comprehensive plans and development regulations be subject to periodic review, requiring that communities conduct a complete review of their comprehensive plan and development regulations at least once every seven years, which includes critical areas ordinances. The updates are intended to provide an opportunity for reflection, review patterns of development and incorporate any changes in the GMA:
The GMA update process includes four basic steps: (1) establish a public participation program that identifies procedures and schedules for the review, evaluation, and possible revision process; (2) review of relevant regulations; (3) analysis of need for revisions; and (4) adoption of an appropriate resolution and/or amendments (CTED 2006).

Public Participation is listed as one of the 13 planning goals in the GMA (1990, RCW 36.70A.140):

Each county and city that is required or chooses to plan under RCW 36.70A.040 shall establish and broadly disseminate to the public a public participation program identifying procedures providing for early and continuous public participation in the development and amendment of comprehensive land use plans and development regulations implementing such plans. The procedures shall provide for broad dissemination of proposals and alternatives, opportunity for written comments, public meetings after effective notice, provision for open discussion, communication programs, information services, and consideration of and response to public comments.

After several years of development, study and public input, the Whatcom County Council adopted the Whatcom County Comprehensive Plan in May 1997 and the CAO in October 1997. The Whatcom County PDS is the primary agency responsible for implementing the CAO. The provisions of the CAO apply to any land use or development within an area that meets the definitions and criteria for critical areas as established in the ordinance. As stated in the Whatcom County CAO (2005, 1), its purpose is to:

...carry out the goals of the Whatcom County comprehensive plan and the State of Washington Growth Management Act (RCW 36.70A) and its implementing rules by designating and classifying critical areas, and by protecting the functions and values of critical areas and the ecological processes that sustain them while allowing for appropriate economically beneficial or productive use of land and property.

Whatcom County published an update to the comprehensive plan in 2004 and the CAO update was completed in September of 2005. Throughout the CAO update process, Whatcom County PDS worked with citizen advisory committees,
public meetings and hearings, accepted written comments, in addition to posting updates online. Consultants were hired, based on bidding procedures, to research and draft the update, in addition to assisting with meeting facilitation.
CHAPTER FOUR: METHODOLOGY

In order to learn about the perspectives and opinions of those who participated in the Whatcom County CAO review and update, qualitative data were collected in the form of in-depth interviews using open ended questions with members of the CAC. The topics covered included: perceptions about wetlands, wetland mitigation, and wetland banking prior to and following involvement in the CAO update process; reasons for getting involved initially; personal experiences and opinions about the CAO update process; and thoughts on the effectiveness of the CAO update process (see Appendix B for questionnaire).

As stated before, Whatcom County utilized numerous methods of public participation during the CAO review and update, including hosting of a citizen advisory committee. Members of the CAC were selected based on an application process. It was intended that each member represent a specific stakeholder in Whatcom County. Officially, two members each represented the environmental community, industry, development, citizens at large and lakeshore property owners (from two different lakes). One member each represented ocean shoreline property owners and agriculture/farming. It should be noted that CAC participants for the CAO also sit on the committee for the Shoreline Management Program (SMP) review and update, which was included in the announcement requesting applications. CAC meetings were at the PDS offices and were initially held once a month, soon changing to twice a month for 3 hours. Members were given material to review prior to the meetings and were provided with dinner at the meetings. In addition to CAC members, two or more PDS staff and one hired consultant attended each meeting. Meetings were lead by both PDS staff and consultant.
Interviews were conducted in the winter of 2006. Participants were selected by contacting those who are listed as members of the CAC on the Whatcom County website. There are 12 listed members of the CAC. Initial contact was made through one member of the CAC who then facilitated contact, via email, with the other members. Eight interviews were completed in person in Whatcom County, Washington in January of 2006. Due to scheduling conflicts and time constraints, three interviews were conducted via email in February of 2006. Follow up questions were asked of all CAC members, via email, during the month of March 2006. Out of the 12 CAC members, interviews were completed with 11 of them. One member was not able to participate due to legal constraints.

Interview length ranged from 35 minutes to 1.5 hours. All interviews conducted in person were tape recorded and transcribed. These texts were then analyzed using content analysis, a process that involved coding the data for relevant concepts and themes (Berg 2003). Coding is a process of categorizing data with respect to similar characteristics (Tuler and Webler 1999). Specific computer software or techniques were not used for coding. A set of coding categories was developed for each topic covered in the interviews. Category headings include: membership, education, time, voice and respect, facilitation, wetlands, wetland mitigation, wetland banking, final product, and process value. Some categories contained sub-categories of similar characteristics. This form of methodology was chosen because it allows the research to be driven by the data, not the researcher. In presenting quotations, verbatim language is used; however, in some cases, awkward phrases or pauses (e.g. "you know" or "ummm") have been eliminated to make it easier to read. Deletions are indicated with ellipses.
In addition to the CAC members, an informal interview was conducted with one Whatcom County PDS staff member, who was directly involved in the CAO update, as well as one of the two consultants who were hired to facilitate the process, research and write the CAO. These interviews are being used as secondary data to gain a better understanding of the update process. Supplemental data was also collected in the form of meeting agendas and minutes, newspaper articles or letters to the editor, and written comments submitted by CAC members.

In order to provide anonymity, citizen advisory committee members are designated as CAC 1, CAC 2, CAC 3, etc. It should be noted that one CAC member left early on in the process and two CAC members left after the CAO update, choosing not to also participate in the SMP update process.

The success of the public participation process was determined by evaluating CAC members opinions on a number of themes, such as, inclusive participation, open and accessible process, decisions regarded as fair, relationships built or strengthened, mutual learning and gained knowledge, usefulness of the process, and development of trust and respect; in addition to opinions on the outcome, in relation to wetlands, wetland mitigation and wetland banking.

In addition to the CAC, there was also a Technical Advisory Committee (TAC) for the CAO update, which is common within public participation methods. Members of this committee represented technical stakeholders, such as Washington Department of Ecology, Washington Department of Natural Resource, Washington Department of Fish and Wildlife, Whatcom Conservation District, Lummi Nation, Nooksack Tribe, Port of Bellingham, Puget Sound Action Team, Small Cities Caucus and Whatcom County Staff from Water Resources, Public Works, River and Flood and Watershed Improvement. Due to the focus of the research, interviews were not
conducted with members of the TAC. The CAC and TAC meetings were held separately, with the TAC reviewing material before the CAC. The TAC meetings were also facilitated by county planning staff and hired consultant.
CHAPTER FIVE: RESULTS

The Whatcom County CAO update process began in 2004. The CAC members were told at the beginning of the process that the committee did not hold any sort of power over the direction of the final product, they were there in an advisory position and their recommendations would be taken into consideration. The hired consultants were responsible for the actual construction and writing the CAO. In addition, a number of CAC members submitted written comments and spoke at public hearings.

Three out of the twelve CAC members, were personally asked to submit applications due to previous involvement in local government and a professional history with PDS. As one CAC member describes:

I had previously developed a working relationship with the [PDS] staff person assigned the lead for the CAO update... via our participation in [another planning process]... so when he suggested I participate in the CAO update, I submitted an application through the proper channels, and was appointed.... (CAC 11)

Membership

The CAC began with twelve members, representing seven different stakeholder groups: environment, industry, development, lakeshore property owners, ocean shoreline property owners, agriculture/farming, and citizens at large. When dealing with issues related to land use and the environment, it is possible to divide citizens into three generic categories: environmental community, development community and neutral. The environmental community represents those who lean more towards stricter regulations protecting the environment, the development community represents those who lean more towards looser environmental regulations that do not hinder economic advancement, and neutral
represents those who do not automatically lean any which way. When CAC members are divided into these three stakeholder categories, based on conjecture stemming from interview responses, the result is five-environment, five-economy and two-neutral; it appears that the committee was balanced. The classification of environmental community, development community and neutral, is intended as a descriptive tool, not as a framework for analysis. Eleven out of the twelve CAC members were interviewed for this study.

As to why members applied and wanted to be involved in the update, responses range from "wanting to bring a different perspective" (CAC 4), a need "to safeguard the CAO from becoming lopsided" (CAC 1), "nobody else was willing to put their name in, so I did" (CAC 8), "to influence the regulatory process" (CAC 9), and to "try to prevent the abuses against property owners, the local economy, and... the natural environment, that the original CAO contained" (CAC 11). It seems as though all of the CAC members became involved out of genuine concern for local matters, "I was lucky to get on this committee. I consider myself very fortunate" (CAC 4).

**Education**

Collaborative processes must be grounded in good science in order to balance out decisions based solely on opinions and emotions (Randolph 2004). Learning together, along with focusing on the facts and realistic basis of a problem, are equally important to discovering and inventing new alternatives together (Wondellock and Yaffee 2000). As stated before, Weblor and Tuler (2001, 34) argue that a good process is information driven and emphasizes education:

.... the role of quality information in the process is central. The focus is on producing an action plan that is technically competent. For this to happen... the process needs to engage its participants with information
so that people are making better decisions. This necessarily involves educating people...

After members were appointed, the committee began meeting once a month for two hours. In order to bring everyone up to speed with terminology and science, the CAC reviewed a series of white papers and a number of speakers were brought in. The reception of the educational material presented to the CAC members is mixed. One member felt that the learning process at the beginning was helpful, stating, “I should say that one of the ways that I felt like this was structured was successful, was that we went through this series of white papers first and kind of did some group learning” (CAC 6). On the other hand, another member felt that the material presented to the CAC leaned too far over into the conservation side and was not representative of what was actually going to be covered in the CAO:

We had some people come in at the beginning of the committee ... several speakers come in and speak and showed some movies and stuff. But they were so far away from middle of the road. I think it left you wondering why we even sat through it. I think they should... I don’t think it hurt anything, it just wasn’t... some of it wasn’t relevant to what we are doing – overboard. It wasn’t balanced (CAC 4).

Informed citizens, understanding technically difficult situations, can see the big picture and, in turn, develop community wide solutions to issues (Irvin and Stansbury 2004). A CAC member provided a reason as why group learning should be an important first step in any process such as this:

.... the first couple of meetings I felt completely out of my depth. And they were talking and planning has its own language really and so it took me a while to get up to speed. But, once I started too get there, I felt as if people were listening to me and given an adequate chance to hear my views. Yes [they took the time to make sure everyone was on the same page] and what helped was I think that we were reviewing best available science to start with... (CAC 7).

In addition, ongoing education throughout the process, not just at the beginning, provides members with a chance to gain a better comprehension on some
of the material that is being reviewed. Wondellock and Yaffee (2000, 22) explain that "a process of mutual learning... sharing expertise, acquiring new information, and realizing that creative solutions are to be found by combining the perspectives of many rather than accepting the conclusions of one" is a good way to promote problem-solving. As illustrated by one CAC member:

There were things, like we had a meeting one Saturday for a few hours just to actually go out on to a wetland and look at how the new wetland classification model works and so that was a sort of a step outside of the planning library. It was good to see, it enlightened all of us. And that took a lot of strain out of the situation at that point (CAC 7).

Education is knowledge gained; and a successful process will provide opportunities for participants to truly discuss and absorb information. Eight out of 11 CAC members interviewed said that they did gain knowledge from the CAO update process. One member brought up the importance of being able to relay information back to those they represented:

....I didn’t know enough... to start with and I needed to learn from both angles. From being able to actively participate in the committee and also to be able to explain the ordinance to the [constituency] I was talking to. You start trying to get... input, and a lot of that is the same sort of stuff, it's not quite clearly directed, so the more you can tell them... then you can gage their input (CAC 7).

Another member talked about learning not just from the group facilitators, but also from other committee members:

I think I have learned a lot from it. When we were doing the critical areas it was fascinating. [Another CAC member] was amazingly helpful regarding the environmental issues... So, yes I learned a lot from the different people in the group (CAC 5).

It should be noted that the three members who stated that they did not gain new knowledge from the process, had each participated in the original CAO drafting and update, in addition to numerous other land use or environmental planning processes.
Time

Collaborative planning processes are time intensive and often tedious and participants must be committed to sustain throughout the lengthy process. It became apparent early on to the members of the CAC, that meeting once a month would not get the job done in time. A group decision was made to meet once every two weeks, as noted by one committee member:

I think there was a miscalculation of the amount of involvement or the speed at which we would slowly plug through this work load. This meant that we started off with one meeting every month and went to 2 meetings a month and in the end actually ended up having a meeting every week for 3 or 4 weeks just to try and belt through the last of it. And that started to get pretty intense. One meeting every other week all the way through probably would have been enough (CAC 7).

Nine out of 11 CAC members brought up the issue of time, or lack there of, during the interviews. Two such members, who are both familiar with the subject matter, noted the lack of time for research, as some weeks they did not receive the material that was to be covered at the next meeting until just a few days prior:

.... [we] should know more ahead of time what we are doing, so when we come, we come prepared and not rushing through anything. It doesn’t give you much time for research (CAC 4).

You know what we all need is more time. More time to review and research everything, we all need our own paid consultants (CAC 1).

Specifically, the issue of time in regards to the amount of background and experience some participants had with this kind of process or subject matter was mentioned by a number of those interviewed. This also relates to the amount of material covered at each meeting and, again, providing constructive education to the committee at the beginning, and throughout the process in order to alleviate some of the questions that will arise:

I think for all of us there is a difficulty keeping up on reading the material prior to the meeting... Some of the people on the committee,
its kind of interesting to listen to them, because they have a
tremendous history in this and so that's one of the positives of people
coming back to this is, that you have a history of the first time it went
through... I think the better versed people are on the subject the faster
it would go, but to be pretty new to the whole subject matter you
certainly have a lot of questions (CAC 5).

The quantity is so large and the material itself is so kind of a
combination of legal and technical that the normal... I think the people
on the committee are pretty intelligent people, but its really a daunting
a task, I mean I have been working on these things for [a period of
time] and it would take me an hour or two to pick up this ordinance
and really understand it (CAC 8).

Voice and Respect

A lack of time, or a lack of time for meaningful discussion, can make it
difficult for a committee to develop relationships, respect, or an understanding of
one another's perspectives. As one member illustrates:

.... we didn't really have the time for... meaningful conversation. It
would have been cool to have it set up in a way where we had a
meeting or two where we just learned about each others perspectives
before we started working... It might have been useful... once you know
your interests, rather then your positions, you can begin to really
understand what common interest we have (CAC 6).

The development of relationships helps to create a sense of ownership of the
product, or final outcome, which is important because people take care of and stay
committed to what they own (Wondolleck and Yaffee 2000). Constructive dialogue
can leave committee members with a better understanding of each other's viewpoints
and about issues, which can build trust and respect among them. It is not the
number of people present that matters, but the quality of the interaction for those
that do participate (Webler et al. 2001). Wondellock and Yaffee (2000, 23) assert
that, "Successful collaborative efforts are built on human relationships," and that
collaborative processes' can be enhanced through:
Building on common ground associated with the sense of place or community, shared fears or aspirations, and compatible interest, understanding that partnerships are people and social interactions are essential by focusing on individuals, not organizations, and ... fostering trust and respect.

A majority of CAC members felt like there was great amount of respect given to each other throughout the process. And although members did not necessarily always agree with one another’s perspectives, they did respect each other as members of their shared community:

After the first couple of meetings it became fairly clear what philosophies different members held. While I disagreed with some of the members on various issues, I did and do respect them. The meetings were cordial and friendly even during disagreements (CAC 9).

.... I am still cynical about their perspectives, sometimes, not entirely, and I think it has been good to get to know these people as people... Their sides become... they are not demonized. But when I look at what we are each arguing for I’m not going to go out of my way to embrace, I do not embrace their perspectives... in some cases it would be great if we could kind of put down our positions and try to really figure out how to work creatively with what we both want CAC 1).

Again, though, the issue of time moves to the forefront. The pressure of trying to get through all of the material didn’t allow for members to better understand one another. So, when issues of disagreement arose, members did not have the time to express and discuss one another’s perspectives, which then forced them to resort to their standard and generic stakeholder positions, in order to move on. A CAC member explains:

The challenge there was that we... I think we do this... tended to fall into our default. We never had the time, because of the volume of material we had to go through to really probe that and say – let’s look at that. There wasn’t any time for that level of conversation, which precluded really coming to understand the perspectives of the other folks at the table in a more in depth way. So it ended up often just being – okay I will give up this if you give up that kind of a thing. (CAC 6)
Only two participants claimed that they did not learn to respect the opinions of other participants. These statements were, however, strongly aligned with the underlying default argument of environment versus economy.

Building trust, allowing everyone to have their say, and encouraging respectfulness are all features of a good process. The process must also be fair; every participant should be able to speak their mind. And a majority of CAC members felt that the process allowed for all to speak. As one member explains:

.... it certainly had the feel of a group where everybody was given a fair chance to talk really. There were a couple of members in there who were very quiet, but whenever they had something to say people would listen. It was pretty fair (CAC 7).

Webler et al. (2001, 443) state that, “Creating opportunities for people to speak is not enough; they need to be heard by the decisions-makers.” Participants want to know that they had been heard and their ideas taken into consideration. Six out of eleven CAC members felt that their verbal recommendations and/or written comments were taken into consideration; three felt that there recommendations were somewhat considered; and two did not believe that their comments were given enough consideration. One such member felt that officials did not really listen, more importantly, seemed to have their minds made up in advance:

The biggest problem is that the public is not given choices; they are given options... when I say public I am talking about citizens committees and stuff. They are given a way this is supposed to be done; we have already figured it out, your okay with it. They are nice people, they are educated, but they have this mentality that we don’t know what we’re doing... (CAC 4).

A strong majority of CAC members did not feel that any one member’s statements were given more weight; however, there were two interesting comments made regarding this topic. One CAC member believed that, “the environmentalist or growth control viewpoints were given more influence. This is partly due to the
consultants and their philosophies and the requirements of the GMA and related laws stipulating what had to be in the document” (CAC 9). Another stated that recommendations were taken into consideration, “To the extent that they did not seriously conflict with the agenda of the consultant” (CAC 11).

**Facilitation**

An important variable in a successful process is good leadership and facilitation. Whatcom County PDS was the agency responsible for the CAO update, including managing the public participation process. As stated before, consultants were hired to research and draft the CAO update, in addition to assisting with the CAC meetings. All of the CAC members expressed, in some form or another, that the PDS staff did a fair and good job throughout the CAO update. However, there was not such praise for the consultants, as demonstrated by this CAC member:

The biggest problem was the consultant the county chose to lead the update process, a “wetlands scientist” with no apparent management or economic experience or background whatsoever, who seemed to be pushing the agenda of some state agencies more than working for the people of Whatcom County (CAC 11).

Five out of 11 CAC members felt that the consultants were given too much freedom in the design and content of the final product, as stated by one CAC member, “I think there should be a lot more input from the people and less from the consultants. I think that they should be... more of a resource, then a product” (CAC 4). In addition, many felt that the consultants were biased, as one member explains:

... [the consultants] were pretty key in the whole thing in terms of the actual hands on driving the meeting. There was a... certainly a feeling from [constituency] that consultants were, had too many feet in the environmental camp. But they played a very key role in that they were providing the best available science. They were a filter. That was one the complaints I heard from [constituency], was that we've got an
environmental group to put in the first filter and obviously there is going to be strong environmental bias (CAC 7).

**Wetlands**

The purpose of the CAO (2005, 1) is "... protecting the functions and values of critical areas and the ecological processes that sustain them while allowing for appropriate economically beneficial or productive use of land and property." Critical areas include geologically hazardous areas, frequently flooded areas, wetlands, critical aquifer recharge areas, and habitat conservation areas. As stated before, for the purpose of this study, only sections of the CAO pertaining to wetlands, wetland mitigation and wetland banking will be addressed.

Wetland systems are one of the most discussed and high-profile natural ecosystems managed worldwide; they play an important role in the location and health of natural environments. Whatcom County is known for its natural beauty, which is one of the reasons why the population continues to rise. However, the very thing that often brings people to the area becomes more and more at risk as residents settle and build homes and businesses, and a life in Whatcom County. One CAC member touched on this very conundrum:

... it is the wetlands and the trees and the nature that draws people here and they want to live here, but by coming they ruin it, they ruin that which brought them here in the first place... how do you accommodate the people that want to live there, including us, and not ruin the natural features that brought us here in the first place (CAC 2).

Throughout much of history wetlands were seen as areas of mystery and muck, providing habitat to only the annoying mosquitoes and bull frogs. Today it is known that wetlands provide important ecosystem functions that are extremely difficult to duplicate artificially. A fair CAC is one where the members understand, or
can gain an understanding, of the importance of wetlands for both the natural environmental and humans.

Nine out of 11 CAC members stated that wetlands were valuable ecosystems. One CAC member explains that wetlands provide numerous benefits, and it is not possible to choose any one as the most important:

Important in the hydrologic cycle and you know basically which argument are you going to use for wetlands... are you going to talk about habitat, flood control, or stormwater treatment, I think they are all important. I think that at our peril we destroy the natural features of the land, including wetlands, I think we should be preserving them for habitat purposes and the hydrology of the area, the natural systems and functions that is first and foremost. And secondly, we have to acknowledge that it affects us through flood control and stormwater treatment, etc. (CAC 1)

One CAC member agreed that wetlands are important and provide valuable services, but they went on to argue that wetlands have become more of a political tool than anything else:

Some of them... can provide flood attenuation, water storage, water quality filtering, and habitat for a variety of aquatic and other species. Some of them play perform the functions indicated above; unfortunately, their main function is as a political football and excuse for poor land use management decisions (CAC 11).

Additionally, four of the 11 CAC members felt that wetland regulations do not take into consideration that some wetlands are insignificant and do not provide any ecological services. One such CAC member stated that some wetlands were important to preserve, but they went on to say, “I don’t think a 4000 square foot wetland... I think they are marginal. I think they are important to a certain point, they are not so great, because in 10 minutes they are filled up with water and running over anyway” (CAC 4). Another CAC member adds:

Some wetlands are highly valuable and should be preserved, or even enhanced, at almost any reasonable cost. Others are not much more
than big mud puddles that aren't worth anything. The blanket mandate in the GMA to protect wetlands is thus misguided (CAC 11).

It is difficult to assess if a majority, or even a significant number of CAC members believe that the CAO adequately manages wetlands. There are a few committee members that make very clear statements on this either way, while others are unclear. One CAC member asserted that wetlands in Whatcom County are overregulated, and in turn are more at risk for degradation than if they were not regulated at all, largely due to a lack of education:

...overregulation does more damage than moderate regulation or no regulation. I think regulations... that are given out without education behind them have no value and are waste of time and money... we didn’t try to educate the people, we put the regulation in and then tried to justify it. We have not taken the time to educate the people, some people were trying to, but we don’t... we just say this is because... that is what the law is. (CAC 4)

Another CAC member brought up the importance of long term management when developing wetland regulations and lack of those writing these regulations to address this:

I think that is a real question that nobody has given much thought to... long term management. That’s an issues that these regulations kind of ignore. They look at the world as... in way they acknowledge that nature is dynamic, in other ways sort of assume that it is static (CAC 8).

It should also be noted that eight out of 11 CAC members stated that they did gain knowledge about wetland ecology and wetland policy from the update process.

**Wetland Mitigation**

As stated previously, since 1990 the federal government has had a policy of “no net loss” of wetlands. “No net loss” means that for every wetland lost, another will be restored or created. Federal and state permitting programs allow damage to
wetlands as long as mitigation is provided (Randolph 2004). Wetland mitigation refers to restoration, creation, enhancement, and in exceptional cases, preservation of other wetlands as compensation for impacts to natural wetlands. All of the CAC members stated that they had at least some familiarity with wetland mitigation.

A majority of CAC members felt that wetland mitigation was not an effective management tool. One CAC member stated that, "... it is not possible to mitigate wetlands... Each wetland is unique and irreplaceable" (CAC 10). Another CAC member felt that mitigation scared property owners, stating that, "Whether you talk to a developer, homebuilder, or whoever, it scares them. They are scared to death of it. It's overregulated. Overemphasized, I think would be a better word" (CAC 4).

Lastly, a CAC member stated:

... it doesn't make any sense to me to take a wetland here so you can build a house on it and go to another watershed or some distance away in the same watershed and improve or build another wetland. It exists where it exists because that is what works and it is really presumptuous, arrogant of man to say "we can take that one and I will just build another one over here and it will serve the same purpose"... That does not make sense to me (CAC 2).

Within the literature there are various conclusions as to why mitigation projects succeed or fail and what constitutes the success of a mitigation project. A study on the effectiveness of wetland mitigation in Whatcom County specifically has not been conducted. However, a majority of CAC members felt that it was unlikely that wetland mitigation projects in Whatcom County had been successful and their reasons as to why wetland mitigation fails vary. One CAC member stated that, "I have yet to have anyone come to me and say look here is... wetland mitigation that worked. Now if you can show me one, maybe I could change my mind, but I haven't heard of such a thing" (CAC 2). Additional statements included:
Wetland restoration and mitigation is a spotty science I would say and for every example of a successful one I can point a couple of examples of failed projects. I think partially because we... there is never enough money or time for monitoring and replanting and watering and all the maintenance that needs to happen to keep a new or restored wetland from being overrun by invasive species (CAC 6).

From what I am hearing, it is not successful. The idea of... or in the way it has been carried out. It seems if those programs start... and then it seems to be the ongoing management that fails (CAC 3).

Inadequate monitoring and/or a lack of resource management following project implementation is cited in the literature as a central reason as to why wetland mitigation fails. Four out of 11 CAC members agreed with the literature, stating lack of ongoing management and/or monitoring for failure of mitigation projects. As explained by one CAC member, "It seems if those programs start [mitigation]... and then it seems to be the ongoing management that fails" (CAC 7). Additional statements made:

I would like to see more monitoring, because I don’t think we know, when things are supposed to be monitored, when a wetland is supposed to be preserved in perpetuity, maybe we should have longer then 5 year monitoring... (CAC 1).

... much much longer term monitoring. And right now that’s not happening, partially because the county does not have the staff to review the reports over time and make recommendations for change. And there are, there is some of that in the CAO, but it’s not long enough to really establish a healthy system (CAC 6).

One CAC member felt that the way in which Whatcom County staff implemented the CAO affected the outcome of mitigation projects and suggested that in order to improve mitigation the county needs to:

... ensure that staff is not allowed to have their personal agendas affect how the CAO is implemented. Require mitigation that is realistic, reasonable, and achievable... Get rid of the requirement of no net loss since it is virtually impossible to achieve and be more specific about maintaining environmental functions etc. Focus concern on protecting significant wetlands and not just the little pasture puddles
that are seasonally wet and simply grow wetland grasses/forbs (CAC 9).

The literature identifies landscape setting or location as a critical consideration when planning and constructing a wetland mitigation project. As stated in the background section, wetlands are inherently complex, with intricate interactions and relationships and success is dependent upon understanding these intricate interrelationships and reinstating the physical and hydrologic features which support them. It is difficult to replicate the characteristics of a destroyed wetland in a new environment that may not be suited for the survival of such a system. It is recommended that mitigation occur, if possible, on-site of the destroyed wetland, or at the very least, within the same watershed. CAC members appear to be split on the topic of on site versus off site wetland mitigation. Two such examples:

... when at all possible it should be onsite, restore on site, it doesn't make sense to take, to preserve only one area .... We're interested in preserving the connected system. So to just mitigate everything off site, basically seems to be working at cross purposes. There is some truth to some cases where off site makes better sense, but I think it should be...when on site makes sense and you can make it work we prefer on site. I realize that sometimes your onsite is not going to effective, it is not going to give you any benefit to habitat or stormwater, okay in that case go ahead and do offsite, but if we do everything offsite then... we got nothing left (CAC 1).

In general, the key is choosing the right site for the enhancement and/or mitigation. I oppose mandatory on-site mitigation because often that entails wasting a lot of land and other resources on trying to keep a wetland going that isn't worth much. If it's so important, then prevent the development in the first place and use that site for enhancement, banking, whatever (CAC 11).

Wetland Banking

Mitigation banking refers to the restoration, creation, enhancements, and in some cases, preservation of wetlands for the purpose of providing compensatory mitigation in advance of wetland damage permitted under regulatory programs.
Proponents argue that wetland banking answers the major question regarding wetland mitigation: where and when will the project be implemented? Under mitigation banking, the project has already been completed, so there is more certainty that the restoration is successful. Opponents argue that promoting wetland banking will lead to more off-site mitigation, even when on-site is feasible, which will ultimately reduce the productivity of entire watersheds. Five CAC members each agreed that Whatcom County should and should not promote wetland banking, and one was neutral regarding the issue.

By again breaking down the 11 interviewed CAC members into the representative categories of environmental community, development community, and neutral, it is possible to gain a little insight into why they might agree or disagree with wetland banking. Four environmental representatives and one neutral representative stated that Whatcom County should not promote wetland banking; four development representatives and one neutral representative stated that Whatcom County should promote wetland banking; and one environmental representative was undecided.

One CAC member stated that wetland banking was “a good idea that has not been used enough” (CAC 9). Another stated that wetland banking was an excellent tool for “rational natural resource management policy”, continuing with:

...am a big fan of the idea. Emphasis is placed on preserving and enhancing wetlands that are performing important functions within the context of their location in the landscape; those wetlands are expanded to compensate for others of lesser or no functional value that are permitted to be filled/drained; whomever fills/drains the one wetland contributes financially to the wetland bank, or dedicates other wetlands into the bank, which would remain there in perpetuity (CAC 11).
Another CAC member argued that banking can help to eliminate all of the small mitigation projects that have little significance or ultimately fail, by allowing the property owners to buy credits in a larger wetland bank with more ecological significance:

...it seems as if mitigation banking and the off-site mitigation is right down at the bottom of the totem pole when it comes to forms of mitigation. But...my thought would be that a large-scale mitigation bank would probably offer a better chance of success then 100 different projects put in by homeowners and business owners who just needed to have something there in order to be able to develop the property in a way they wanted to develop it. I would have thought, that it would offer a greater opportunity for policing and for continued viable management then 800 different block of 1 acre compared to one 800 acre block. (CAC 7)

Those who oppose wetland banking question the long terms survival of these wetlands:

I could see making an argument for, if you were to bank, a higher quality wetland within the same hydrologic system. But otherwise it makes no sense from an ecological or hydrological point of view. It's cheaper and way easier to just draw a circle around a wetland and say nope. Then it is to engage in expensive mitigation and restoration or banking. Those are all just expensive, for one, if you are just looking at economic benefit. And the jury is really out on whether these things really work, in 50 or 100 years we could talk about it, but as far as a means to protect the functionality of a system? I view it as a great way to do what Americans are really good at, which is not looking at the consequences of our actions (CAC 6)

I still don't necessarily think that it fixes anything. Sounds like a lot of double talk, actually. How is that going to be any better...20 years down the road, on some of this other stuff, it doesn't work. 20 years down the road that this doesn't work and I don't think that we can afford that (CAC 2).

One CAC member felt that banking was better then continuing to allow bad mitigation projects to be implemented:

...there were people on the committee who certainly had concerns about whether new wetlands could perform the functions of existing wetlands, so I know its very easy for developers to say look it will be just fine, but that's not always the case, so I think that banking is a
possibility, but I don't know if the science shows adequately enough that you can replace a function to the same degree. I think that if it is done well, that it is certainly better than just allowing development to go on without addressing that (CAC 5).

It should be noted that a majority of those who did not agree with wetland banking on a whole, can see the argument for allowing it in special cases, as shown by one such example:

I think it is... my understanding is that it [wetland banking] is down the list of mitigation possibilities and that is where it should be. I think it is fine to be there, it is a good possibility, but it shouldn't be used in stead of onsite mitigation. I think the placement makes sense... I realize that sometimes your onsite is not going to effective, it is not going to give you any benefit to habitat or stormwater, okay in that case go ahead and do offsite, but if we do everything offsite then... we got nothing left (CAC 1).

**Final Product**

A common theme among a majority of CAC members is that the CAO is the product of compromise. Although, they did not have any formal power over the final product, they were able to make some changes, before the update draft was complete, that they feel were a result of collaboration and compromise. Two CAC members explain:

I mean nobody is ever going to get all the things they wanted. It is very much a compromise - all of our thoughts have been taken into consideration (CAC 5).

I think as a group, we agreed to disagree on some things. We're still as different as we were when we started the process and I know there are places in the ordinance that I'd be happier if they were different, but then I know everyone feels that way about different places (CAC 7).

A number of CAC members made mention of concerns on how the CAO is implemented. Although the document may be solid in its intentions, there is quite a bit of flexibility that allows for a fair amount of discretion on the part of the planning staff. And many of the CAC members feel that there is not enough staff personal
within Whatcom County PDS to implement this ordinance properly. Two such examples:

Great document, how are you going to enforce it? ... It can be applied... the challenge is that it leaves a lot open to the discretion of the administrator. So, there's some county employee, in the end, who gets to make the call on a lot of things and I kind of think that's not really all that fair to whoever that is. And I feel that it could be a danger of inconsistent application and implementation (CAC 6).

As a document it is fine. How is it going to be applied? Unfortunately, that is what brings up questions... like what is the real world way this is going to be applied? What can I expect? Who is the person at planning, who is the initial contact at the planning department all the way up to the county executive, is setting the tone for how developers, whether they be individuals... how are these people going to treated? How strict is it going to be? I don't think that you could say the document reflects a consensus of... even from that small group. But... we tried to balance it and ultimately how is it applied is the bottom line and that we have no control over or input to (CAC 2).

Education was a term brought up by four out of 11 CAC members. These four agreed that regulation isn't significant without also educating the public. Webler et. al. (2001, 445) state that "... informed people are more likely to understand the logic behind the leaders' decisions, the process should also educate the public about the problems and about the interests and concerns of other groups," People respond better to what they understand, and including a public education campaign with an ordinance like the CAO, that garners many conflicting responses and emotions, will lead to greater public buy in. Two CAC members emphasize education when implementing a new or updated ordinance:

I think regulations, I feel very strongly I have been saying this before I got on any of these organization, regulations that are given out without education behind them have no value they are waste of time and money. As the county grows we need regulation more so than before, but we need the education. People make mistakes, and the way they are treated sometimes... You need to get citizens involved; you need to make it their idea; so that they have some ownership in it.... I see more need for education and involvement from the public (CAC 4).
... whether it is going to be an effective document remains to be seen...
If we’re going to actually be serious about our CAO, education and staffing, it can’t just be this piece of paper (CAC 1).

Once again returning to the representative categories of environment, economy and neutral, there is a mixture of responses towards opinions about the final product. For example, three environment representatives, two economy representatives, and one neutral representative responded that they were generally satisfied with the final product, but had some reservations.

**Process Value**

A successful collaborative planning process should be useful to the participants, meaning a majority should not feel like it was a waste of their time.

Eight out of eleven CAC members stated that their involvement in the CAO update was positive. One CAC member sums up the needs for citizen involvement:

... it is an important exercise. The process does allow for public comment, but it is only a few people who will get involved and care, but that is not the processes fault. Yes, I would probably participate again, simply because I know that each little bit contributes to the whole of... the value of a community. If I don’t participate in that process how does the county know that there are people that care about this issue in Whatcom County? (CAC 2).

Time was the major response when members were asked how they would change the process in the future. Time in regards to the need for more meetings; or more time for getting the reading done in advance; or more time for members to understand one another better; and more time for education in the beginning and throughout.

A good measure of the usefulness and quality of a process like this is whether or not members would participate again in the future. And ten out of 11 CAC members said that, yes, they would participate again.
CHAPTER SIX: CONCLUSION

The purpose of this study was to gain insight into the process of public participation within planning, by asking a single question, was the process of reviewing and updating the CAO in Whatcom County a true collaborative planning process? Some limitations of this study include the small sample size of those that were interviewed. For the scope of this study and time, it was not possible to look at all aspects of the CAO update, such as the TAC, public hearings, written comments, and meetings agendas and minutes. In regards to wetland resources, the intention of this study was to determine if members of the CAC had some understanding of these resources, and their perspectives on their management. This study was not meant to determine if Whatcom County adequately manages its wetland resources on the ground; the intention was to determine if they manage wetlands adequately on paper.

Although this was not discussed in the results section, it should be noted that at least six members of the CAC were paid to be a part of the committee. This brings attention to whether or not the CAC could be referred to as a “citizens” committee if there were members who were being paid by specific interested parties. The question needs to be asked, were these members truly representing Whatcom County citizens at large, or merely the interested parties who funded their participation? In addition, did those who were being paid for their time give more to the committee? Did they have more time, and therefore, more time for research and to gain a better understanding of the issues? These are not questions that can be answered within this study, but they are of importance and Whatcom County should be sure to take them into consideration for future public participation processes. It is recommended
that Whatcom County make the decision to either have a fully paid CAC or a fully non-paid CAC, in order to balance out interests and commitment.

Representation, or a cross sampling of public views and concerns, is mentioned in the literature as often being a major problem with collaborative planning methods. The members of the CAC appear to be representative of stakeholders in Whatcom County. Those who were not represented on the CAC were amply represented on the TAC. Although there were some minor comments made regarding citizen's who should, but were not, on the committee, representation did not emerge as a common concern. This leads to the conclusion that Whatcom County PDS did well with advertising, recruiting and selecting citizen's to be a part of the CAC.

The ability to participate does not equal the ability to influence decision making. The CAC was able to influence PDS, but the extent of their power was limited. They were told from the beginning that they did not have final decision making power; they were there to provide representation and opinions. Because Whatcom County stated this at the beginning of the process, it is not an issue for evaluation and none of the CAC members mentioned that this was an issue for them or affected their opinion on the process.

Although only one CAC member stated that they had developed new professional relationships through the update process, it should be mentioned that a majority felt that they could contact any of the other CAC members in the future as a source of information. It is clear that the CAC members did not go out of their way to understand one another's perspectives, but it appears as though they did respect each other, and allowed for each member to have an influence.
Education emerged as a major theme in the analysis. Many felt that Whatcom County did not provide a balanced educational experience at the beginning of the process. Education at the beginning should be based only on best available science and should explain why the Growth Management Act has 13 goals and how they can be balanced. In addition, the lack of public education was brought up multiple times. It is recommended that Whatcom County PDS more strongly advocate public education, in order to inform the public about what the CAO is and how it affects property owners in the county.

Time was the most significant theme to emerge from the data. A majority of CAC members stated that there was a miscalculation on the part of county staff on what speed the group would move through the document and how many meetings would be needed. In the future, Whatcom County PDS should over estimate the amount of time that will be needed for the CAC process. With the increased amount of meeting time, it will be more possible for members to have meaningful conversation about issues, and possibly allow them to gain a better understanding of each others perspectives. A better understanding will lead to even greater respect among members and, ultimately, and a stronger sense of ownership of the CAO, more so then just a mere compromise.

In regards to the themes related to wetlands, wetland mitigation, and wetland baking, it appears as though the CAC was balanced in regards to opinions on these topics. It would have been unfair to stack the committee with all pro-banking representatives, or vise versa. These sections were a good indicator of the kind of balance that the committee had.

Members of the CAC were mixed on their opinions of the sections related to wetlands, wetland mitigation, and wetland banking. They all came into the process
with some basic knowledge, if not advanced knowledge, on these topics. It is important that those on the committee have some familiarity with wetlands in order to make decisions about them and being involved in the planning process helps them to gain an even greater understanding. A majority of CAC members stated that they did gain knowledge through this process in regards to wetlands, wetland mitigation and wetland banking. In addition, approximately four CAC members made mention of the learning process involved, in regards to wetlands, and how it helped them to either mold their opinions or develop them altogether, and the ability to gain knowledge allowed them to actively participate in the discussion and provide knowledgeable input.

Wetland banking is a hot button topic in the literature, and also within the CAC. Members of the CAC were split on whether or not Whatcom County should promote wetland banking more. However, even those who oppose the concept of wetland banking altogether understand that it might be a useful option in some situations, but only when all other avenues have been exhausted. One recommendation made by three CAC members, is to encourage wetland banking for small projects, and possibly creating a situation where multiple property owners with small mitigation requirements, could get together and purchase credits for a wetland with greater ecological value. One last suggestion by a number of CAC members was for Whatcom County to actively pursue purchasing wetlands for banking purposes; there is currently not a wetland bank within the county, which limits its possibilities.

Also, looking at changes made to the CAO in regards to wetlands (Appendix C) – is it a better document then it was? The purpose of this study was not to analyze the changes made to the CAO, but to look at the CAO through the perspectives of those on the CAC. A strong majority of the CAC feel that it is a good document, but
have uncertainties about how it will be applied and implemented. Although a few CAC members stated that the CAO over-regulates wetlands, a majority support the document and believe that it has the potential to be a great document, but that will be up to county staff and how it is applied. Whatcom County PDS needs to ensure that the staff is capable of taking the words on the paper and applying them. In the same vein, there is some fear from a small number of CAC members that the uncertainty of the CAO could lead to staff projecting their own opinions and perspectives onto their work. Whatcom County PDS should make sure that the staff is justifying any judgments that are made.

Any collaborative planning process should serve as a communication link back to the public. Members of the CAC should have been discussing their involvement in the update and the issues with their constituencies that they represented. It is important to note that six CAC members often responded to questions for this study as representing their constituency. As representatives of the greater community, all CAC members should keep in mind those of which they are representing. It is crucial, that for future such processes, Whatcom County PDS select members for the CAC who do not represent just themselves or serve for only their self-interest, but as committed members of the greater community.

This particular evaluation of the CAC, and the CAO update process, lacked the ability to capture changes in perspectives over the course of the entire update process. The collaborative planning literature often mentions the need for evaluation in these types of planning methods, because it is important to always be asking questions about how a process can be improved. CAC members were not aware of any evaluation being conducted by Whatcom County of them or the update process as a whole. It is recommended that Whatcom County develop an approach for the
next CAO update that will evaluate the CAC at the beginning, middle and end, in order to truly gain an understanding of how effective their public participation program is.

A key conclusion from this study is that CAC members were able to compromise in an attempt to help create a better CAO. And although a majority of the CAC members would prefer the CAO be different, either more or less rigorous, a strong majority agreed that being involved in this process was useful and important. The fact that only one member said that they would definitely not participate again, is testimony to how well this process was developed and managed, in addition to how committed those on the CAC are to civic engagement and public participation. There was a sense within the group that their community mattered and it was worth the time and effort to engage in a process like this, in order to have a voice and be heard.

Was the process of reviewing and updating the CAO in Whatcom County, truly a collaborative planning process? Based on the opinions of perspectives of members of the CAC, although there were some sections of the process can be improved for future CAO updates, such as dealing with the issues related to time, it can concluded that Whatcom County PDS facilitated a good and useful collaborative planning process. The true test for the CAO is within its interpretation and implementation by Whatcom County PDS staff. The next step of this study would be a follow up study looking at the implementation of the CAO on the ground. It is recommended that Whatcom County consider such a study in order to determine if they are properly managing wetland resource on paper, in addition to on the ground.
APPENDIX A

Sections of
Washington State Growth Management Act
RCW 36.70A.040
Who must plan — Summary of requirements — Development regulations must implement comprehensive plans.

(1) Each county that has both a population of fifty thousand or more and, until May 16, 1995, has had its population increase by more than ten percent in the previous ten years or, on or after May 16, 1995, has had its population increase by more than seventeen percent in the previous ten years, and the cities located within such county, and any other county regardless of its population that has had its population increase by more than twenty percent in the previous ten years, and the cities located within such county, shall conform with all of the requirements of this chapter. However, the county legislative authority of such a county with a population of less than fifty thousand population may adopt a resolution removing the county, and the cities located within the county, from the requirements of adopting comprehensive land use plans and development regulations under this chapter if this resolution is adopted and filed with the department by December 31, 1990, for counties initially meeting this set of criteria, or within sixty days of the date the office of financial management certifies that a county meets this set of criteria under subsection (5) of this section. For the purposes of this subsection, a county not currently planning under this chapter is not required to include in its population count those persons confined in a correctional facility under the jurisdiction of the department of corrections that is located in the county.

Once a county meets either of these sets of criteria, the requirement to conform with all of the requirements of this chapter remains in effect, even if the county no longer meets one of these sets of criteria.

(2) The county legislative authority of any county that does not meet either of the sets of criteria established under subsection (1) of this section may adopt a resolution indicating its intention to have subsection (1) of this section apply to the county. Each city, located in a county that chooses to plan under this subsection, shall conform with all of the requirements of this chapter. Once such a resolution has been adopted, the county and the cities located within the county remain subject to all of the requirements of this chapter.

(3) Any county or city that is initially required to conform with all of the requirements of this chapter under subsection (1) of this section shall take actions under this chapter as follows: (a) The county legislative authority shall adopt a county-wide planning policy under RCW 36.70A.210; (b) the county and each city located within the county shall designate critical areas, agricultural lands, forest lands, and mineral resource lands, and adopt development regulations conserving these designated agricultural lands, forest lands, and mineral resource lands and protecting these designated critical areas, under RCW 36.70A.170 and 36.70A.060; (c) the county shall designate and take other actions related to urban growth areas under RCW 36.70A.110; (d) if the county has a population of fifty thousand or more, the county and each city located within the county shall adopt a comprehensive plan under this chapter and development regulations that are consistent with and implement the comprehensive plan on or before July 1, 1994, and if the county has a population of less than fifty thousand, the county and each city located within the county shall adopt a comprehensive plan under this chapter and development regulations that are consistent with and implement the comprehensive plan by January 1, 1995, but if the governor makes written findings that a county with a population of less than fifty thousand or a city located within such a county is not making reasonable
progress toward adopting a comprehensive plan and development regulations the governor may reduce this deadline for such actions to be taken by no more than one hundred eighty days. Any county or city subject to this subsection may obtain an additional six months before it is required to have adopted its development regulations by submitting a letter notifying the department of community, trade, and economic development of its need prior to the deadline for adopting both a comprehensive plan and development regulations.

**RCW 36.70A.020**
Planning goals.

The following goals are adopted to guide the development and adoption of comprehensive plans and development regulations of those counties and cities that are required or choose to plan under RCW 36.70A.040. The following goals are not listed in order of priority and shall be used exclusively for the purpose of guiding the development of comprehensive plans and development regulations:

(1) **Urban growth.** Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.

(2) **Reduce sprawl.** Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.

(3) **Transportation.** Encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans.

(4) **Housing.** Encourage the availability of affordable housing to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.

(5) **Economic development.** Encourage economic development throughout the state that is consistent with adopted comprehensive plans, promote economic opportunity for all citizens of this state, especially for unemployed and for disadvantaged persons, promote the retention and expansion of existing businesses and recruitment of new businesses, recognize regional differences impacting economic development opportunities, and encourage growth in areas experiencing insufficient economic growth, all within the capacities of the state's natural resources, public services, and public facilities.

(6) **Property rights.** Private property shall not be taken for public use without just compensation having been made. The property rights of landowners shall be protected from arbitrary and discriminatory actions.

(7) **Permits.** Applications for both state and local government permits should be processed in a timely and fair manner to ensure predictability.

(8) **Natural resource industries.** Maintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries. Encourage the conservation of productive forest lands and productive agricultural lands, and discourage incompatible uses.
(9) **Open space and recreation.** Retain open space, enhance recreational opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water, and develop parks and recreation facilities.

(10) **Environment.** Protect the environment and enhance the state’s high quality of life, including air and water quality, and the availability of water.

(11) **Citizen participation and coordination.** Encourage the involvement of citizens in the planning process and ensure coordination between communities and jurisdictions to reconcile conflicts.

(12) **Public facilities and services.** Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards.

(13) **Historic preservation.** Identify and encourage the preservation of lands, sites, and structures that have historical or archaeological significance.
APPENDIX B

Interview Guide
INTRODUCTION. Thank you for agreeing to participate in this interview. These interviews are part of my thesis study. The purpose of this study to obtain insights into the planning process, more specifically the process of public input and recommendations, in regards to the review and update of the Critical Areas Ordinance in Whatcom County, Washington.

Before we get started, I want to let you know that your identity as a participant in this study will remain confidential. Your name will not be used in any presentations or written reports. Also, you have the right to skip any questions or to stop the interview at any time.

CAO UPDATE PARTICIPATION.

- How did you get involved in the CAO update?
- Why did you get involved in the CAO update?
  PROBE: How important was it be involved in the Critical Areas Ordinance (CAO) Update Process?
- What role did you play in the CAO review and update?
  PROBE: Can you explain the process and/or experience to me?
  PROBE: How many meetings were there? How many did you attend?
- Did you come to understand and respect the perspectives of other participants?
  PROBE: Can you give me any examples?
  PROBE: Did participating in the CAO update lead to the development of new professional relationships with other participants?
- Did participants collaborate?
  PROBE: Was there much discussion?
- Who lead the meetings?
  PROBE: What did the leader do?
- Do you feel your recommendations and opinions were taken into consideration?
  PROBE: Were any of them included in the update? Explain.
  PROBE: Were any opinions paid more attention to?
- Do you feel the final outcome represents the opinions and recommendations of those who participated?
- How productive and/or useful was the CAO Update Process?
- Would you participate again in the future?
• How would you alter or change the CAO update process in the future?

**WETLAND PERCEPTIONS AND PARTICIPATION.** I would like to start by asking a few questions about your background and your opinion on the importance of wetlands.

• How familiar are you with wetlands?

• What is your involvement or interest in wetlands?

• How important is it to you to know that wetlands will be there for future generations?

• What is your educational and/or professional background?

• Did you gain knowledge from the CAO update process?
    
    **PROBE:** Regarding wetland ecology or policy?

    **PROBE:** Regarding land use development?

• What functions do wetlands provide?

• What role do wetlands play in Whatcom County?
    
    **PROBE:** Do you see them more as a tool to be used by humans, or more as a natural resource that should be preserved for the sake of preservation?

**MITIGATION/BANKING.** Now that I have a better understanding of your outlook on wetlands, I would like to ask a few questions about wetland mitigation and wetland banking.

• What do you know about the wetland mitigation program in Whatcom County?
    
    **PROBE:** Do you think it has been successful?

    **PROBE:** Can you give me any examples of projects you have been involved in?

• What factors lead to the success and/or failure of wetland mitigation projects?

• What steps can Whatcom County take, if any, to improve their wetland mitigation program?
    
    **PROBE:** What recommendations do you have?

• Are you familiar with Wetland Banking?
    
    **PROBE:** Can you explain it to me?

• What is your opinion on wetland banking?

• Do you think Whatcom County should promote Wetland Banking

**FINAL QUESTION.**

• Has being involved in the CAO update caused you to reevaluate your opinions on wetland management/planning or mitigation?

**WRAP UP.** Thank you for participating in this study.
APPENDIX C

Whatcom County Planning and Development
Natural Resource Management
Draft Critical Areas Ordinance
Update Info and Summary Changes
Draft Critical Areas Ordinance

Update Info & Summary of Changes

Public Comment on the CAO Draft

Download a copy of the draft CAO from our website: http://www.whatcomcounty.us/pds/shorelines_critical_areas/workproducts.jsp, or pick one up at the PDS building, 5280 Northwest Drive, Bellingham, Suite A.

The public comment period began on February 4th, and will proceed as outlined below.

- Whatcom County Planning Division is accepting written public comment on the draft from until March 4th. Send comments to Elizabeth Hartsoc, Whatcom County PDS, 5280 Northwest Drive, Bellingham, WA 98225, or email e.hartsoc@co.whatcom.wa.us. See the back of this handout for details.
- Following this official public comment period, County staff will consider comments made by the public and revise the draft.
- The Planning Commission will review the revised draft, hold public hearings (tentatively scheduled to begin on March 24th), and make a formal recommendation to County Council.
- Upon receipt of the recommendation from the Planning Commission the County Council will review the draft along with any changes made by the Planning Commission, may hold public hearings, and adopt an updated CAO.

Value of Resources in the Landscape

As the population of Whatcom County increases, development is creating greater challenges for the preservation of valuable natural resources within the County's jurisdiction. The Whatcom County government is charged with protecting the functions and values of designated critical areas for the benefit of all the citizens, and protecting County citizens from hazards associated with critical areas such as frequently flooded...
areas and geologically hazardous areas. It is important that the County consider the total value of resources at the landscape level when planning for the future.

Whatcom County's natural environment comprises many valuable resources. Resources have a basic economic value that is realized through market transactions, but when left undisturbed, resources such as wetlands and aquifer recharge areas also serve economically valuable functions that are frequently overlooked. In economic terms, these values are called "positive externalities" meaning that there are benefits that may not be fully realized by the land steward or landowner. Storage of floodwaters in wetlands is a good example of this. The benefit of this storage is realized by property owners downstream of the wetlands and in reduced capital costs associated with flood control infrastructure. The natural environment has many intangible values as well, such as aesthetics, which are difficult to measure. What is the value of a mountain vista?

**Vision Statement**

**Critical Areas Ordinance Update**

The County's vision is to develop policies and regulations for critical areas management and protection that:

- Comply with Growth Management Act mandates for no net loss of critical area function and value;
- Ensure predictability, accountability, and efficiency during development review and decision making;
- Have a strong basis in science;
- Integrate and support County development plans, policies, and regulations; and
- Maintain quality of life and economic opportunity for citizens of Whatcom County.

**Mandate**

New Growth Management Act guidelines require that Whatcom County make some specific changes to the current CAO, including:

- The County must use "best available science" in developing policies and regulations to protect the functions and values of Critical Areas (RCW 36.70A.172(1)).
- "Special consideration" must be given to conservation or protection measures necessary to preserve or enhance anadromous' fisheries (RCW 36.70A.172(1)).

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1 Anadromous fish spend most of their lifecycle in salt water, but return to freshwater to reproduce. Many of Whatcom County's salmon species are anadromous.
• The County must record all sources considered in the development of policies and regulations, and explain any deviation from best available science.
• The County must ensure "no net loss" of ecological function.

**Deadline**
December 2004: Adoption of Updated Critical Areas Ordinance. The County has been granted an extension and plans to adopt the new CAO in Spring of 2005.

**Challenges and Opportunities**
Updates must be driven by "best available science", but science cannot provide all the answers. As a result the County is seeking public input and has worked closely with a Technical Advisory Committee and Citizen Advisory Committee to develop policy recommendations for County Council consideration. Your participation is welcome and encouraged.
In developing the new regulations, the County is developing an "integration strategy" to guide the integration of various related County regulations, such as the CAO, Shoreline Management Program (Title 23), and Flood Damage Prevention Ordinance (Title 17). The integration strategy details opportunities to create consistency and reduce confusion associated with the administration of County regulations. The goal is appropriate, fast, and effective management of development in the County.

**Important Changes and Additions to the CAO**

**Top 12**

*Predictability and Consistency*
Clear requirements and roles and responsibilities for permit applicants, county staff and consultants. Integrates with other regulations to reduce conflicts. All applicants subject to the same standards.

*Reasonable Use Provisions*
Provides for all property owners to have reasonable use of their property when constrained by critical areas. Administrative process for all single-family residential applications except for geologically hazardous areas (due to liability issues).

*Wetlands*
Larger buffers for high quality (category I) wetlands (up to 300-feet) and smaller buffers for low quality (category IV) wetlands (down to 25-feet). Generally status quo for medium quality (category II and III) wetlands (100-feet +/-). Quality of the wetlands will be based on a rating system that is easy to review and ensures all wetlands are evaluated using the same criteria. Also improves consistency with state regulations.
**Wetland Mitigation Banking**
Provides flexibility to property owners by including a process to allow them to compensate for critical area impacts within mitigation banks in Whatcom County. Includes requirement for a public review process if banking occurs on agricultural lands.

**Streams**
Larger buffers for large streams and rivers with fish habitat (150-feet) and reduced buffers for non-fish bearing streams (50-feet). Buffers for medium sized fish bearing streams remain the same (100-feet). Buffers for rivers and streams with channel migration zones are measured from the edge of the channel migration zone not the water line.

**Channel Migration Zones**
Prohibits development of new permanent structures within channel migration zones (where river migrates). Regulations will not come into effect until channel migration zones have been formally identified. No channel migration zones have been identified at this time. PDS will work with Flood Division and the flood advisory committees to identify channel migration zones later this year.

**Wildlife Habitats**
Specifies how developments are regulated within sensitive wildlife habitats including allowed encroachments, prohibitions and when wildlife studies are required.

**Chuckanut Corridor**
Identifies a wildlife corridor extending from the marine waters to the National Forest Boundary east of Chuckanut Mountain. Represents the last remaining area in the Puget Trough where natural land cover of the Cascades extends to the marine shoreline.

**Improved Farm Plans**
Continues the farm plan provisions to limit impacts on agricultural activities in Whatcom County. Provides clearer direction and clarifies roles and responsibilities between applicants, the Conservation District, consultants and County staff. Allows for better oversight and adaptive management of the farm plan program.

**Watershed Based Management Plans**
Provides for land owners in designated watersheds to develop their own comprehensive resource management plans as an alternative way to achieve with environmental objectives (Bertrand Creek Comprehensive Irrigation District Management Plan).

**Geologically Hazardous Areas**
Requires that developments avoid geologically hazardous areas such as alluvial fan hazard areas. Protections now include tsunamis, volcanic hazards, and erosion hazards.

**State Requirements**
The draft CAO update will satisfy state requirements while integrating local conditions and community needs.
Administration

Improvements and changes to the administration of the Critical Areas Ordinance include:

- More effective process and criteria for Reasonable Use exceptions
- Special provisions for agriculture (CPAL) - farm plan requirements have been updated based on new information
- Expedited review process for single family developments in many cases
- Clear process for dispute resolution
- More detailed standards to improve consistency and predictability
- Built-in flexibility. Process and standards are tiered to fit potential development impacts
- Clear emphasis on impact avoidance, the first step in protecting critical areas
- More detail for technical analyses to ensure sound decision making and predictability
- Recognition of watershed processes

Geologically Hazardous Areas

Improvements and changes to Geologically Hazardous Areas section include:

Volcanic Hazard Areas

Volcanic Hazard Areas are subject to lava flows, pyroclastic flows, pyroclastic surges, mud flows, lahars, debris flows, debris avalanche, caldera collapse, ash (tephra) clouds or ash (tephra) fall, lateral blast, ballistic debris, or flooding resulting from volcanic activity.

Erosion Hazard Areas

Surface erosion areas are slopes greater than 15 percent with soils identified by the Natural Resources Conservation Service as having a "severe," or "very severe" rill and inter-rill erosion hazard because of natural characteristics, including vegetative cover, soil texture, slope, gradient, and rainfall patterns, or human induced changes to natural characteristics.

Coastal and riverine erosion areas, which are subject to impacts from lateral erosion related to moving water such as river channel migration and shoreline retreat.

Tsunami and Seiche Hazard Areas

Tsunami and Seiche Hazard Areas are coastal areas and lake shoreline areas susceptible to flooding, inundation, debris impact, and/or mass wasting as the result of coastal or inland wave action generated by seismic events.

Frequently Flooded Areas

Improvements and Frequently Flooded Areas section include:
• Provides for protection of floodplain ecology along with flood hazard management
• Can require mitigation for floodplain impacts consistent with health and safety standards
• Clarifies roles and responsibilities between County departments

Critical Aquifer Recharge Areas
Designation and classification of a CARA in the draft code is based on one of the following:
• Meeting criteria for hydrogeologic characteristics established by the Washington State Department of Ecology. These criteria are also used to classify the susceptibility of the CARA to water quality and quantity threats as low, moderate, or high.
• The area around a wellhead defined by the boundary of the 10 year time of ground water travel. High, moderate, and low susceptibility classification is assigned to the 1 year, 5 year, and 10 year time of ground water travel respectively.
• Special groundwater management areas, or susceptible groundwater management areas established in accordance with WAC 173-200-090 or WAC 173-100-010 will be classified as highly susceptible.

Wetlands
Improvements and changes to the Wetlands section include:

Categories
Wetland categories are assigned based on the Western Washington Wetland Rating System.

Category I wetlands are of exceptional value in terms of protecting water quality, storing flood and storm water, and/or providing habitat for. These are wetland communities of infrequent occurrence that often provide documented habitat for sensitive, threatened or endangered species, and/or have other attributes that are very difficult or impossible to replace if altered.

Category II wetlands have significant value based on their function. They do not meet the criteria for Category I rating but occur infrequently and have qualities that are difficult to replace if altered.

Category III wetlands have important resource value. They occur commonly in Whatcom County.

Category IV wetlands are of limited resource value. They typically have vegetation of similar age and class, lack of special habitat features, and/or are isolated or disconnected from other aquatic systems or high quality upland habitats.
Buffers

Standard buffer width is based on the following factors:

- Wetland category: category I wetlands have the largest buffers.
- Habitat function score: high quality habitat is valuable and protected with a larger buffer.
- Land use intensity: wetlands adjacent to high intensity land use require larger buffers for protection.

The range of standard buffers for each wetland category:

I: 50-300 feet  
II: 50-275 feet  
III: 50-150 feet  
IV: 25-50 feet

Standard buffers may be averaged, reduced or increased based on site-specific factors at the discretion of the Technical Administrator, and with certain minimum widths.

Fish and Wildlife Habitat Conservation Areas

Improvements and changes to the Fish and Wildlife Habitat Conservation Areas section include:

- Distinguishes listed, priority, and locally important species
- Regulates development in and adjacent to streams and other important habitats
- Contains new standards for culverts, storm water facilities, bank and shore protection, etc.
- Beaches are designated as locally important habitats along with Chuckanut corridor

Buffers

Streams

- Shoreline streams – 150 feet
- Other fish bearing stream – 100 feet
- Non-fish bearing streams – 50 feet

Marine shorelines – 150 feet

Other habitats – on a case by case basis

Comment on the Draft CAO

Again, your participation is encouraged. Public comment is being accepted at this workshop and in writing.

Written comments should include:

- Your name and contact information.
The topic and section number that you are commenting on,
Details of the issue you are raising, and
Suggested changes.
Comments must be received by the Whatcom County Planning Division by March 4th, 2005. Send written comments to:
- Whatcom County Planning Division, c/o Elizabeth Hartsoch, 5280 Northwest Drive, Bellingham, WA 98226-9097
- Email ehartsoch@co.whatcom.wa.us
To learn more, visit our website www.whatcomcounty.us/criticalareas. If you would like to receive periodic updates or ask additional questions, email or call Elizabeth Hartsoch at ehartsoch@co.whatcom.wa.us, 676.6907.
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