GUIDELINES FOR BASELINE DOCUMENTATION, MONITORING AND ENSURING COMPLIANCE OF CONSERVATION AGREEMENTS IN MANITOBA

By

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A Thesis Submitted to the Faculty of Graduate Studies
in Partial Fulfillment of the Requirements
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Guidelines for Baseline Documentation, Monitoring and Ensuring Compliance of Conservation Agreements in Manitoba

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ABSTRACT

The loss or alteration of wildlife habitat is currently the leading cause of wildlife depletion in the Canadian prairies. The majority of the human population in the Prairie Provinces is concentrated near the United States border where much of the wildlife habitat has been lost or dramatically altered. Conservation agreements are one tool that can more permanently conserve land in its natural state, through either partial or complete restrictions on land use and development. Conservation agreements involve landowners voluntarily entering into binding agreements with conservation agencies that place certain restrictions on the way land is used. Conservation agreements are an important private land conservation option that can be used in combination with other conservation tools to provide long-term protection of land on the agricultural landscape. Today, conservation agreements are the most widely used tool for private sector land conservation in the United States. In Manitoba, The Conservation Agreements Act was proclaimed in 1998 by the Legislature and came into force in 1999. The Act now enables conservation organizations like the Delta Waterfowl Foundation, Ducks Unlimited Canada, the Nature Conservancy of Canada and the Manitoba Habitat Heritage Corporation to enter into conservation agreements that can provide protection of land in its natural state in perpetuity. The objective of the study was to establish guidelines for conservation agencies in Manitoba on baseline documentation, monitoring, and ensuring compliance with the terms of conservation agreements. A series of interviews with individuals from various conservation agencies in Ontario, Saskatchewan, Alberta, Minnesota and North Dakota were conducted to reveal current techniques and practices for baseline data

reports, monitoring and enforcement of conservation agreements. Using the interview results and relevant literature a set of guidelines and sample forms for baseline documentation, monitoring and ensuring compliance with conservation agreements was developed to provide conservation agencies in Manitoba entering into conservation agreements with guidance.

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CHAPTER 1

INTRODUCTION

1.1 Background

Over the last 150 years, Canada's prairie ecosystems have undergone many dramatic changes. The fur-bearing prairie species were the first to experience significant losses as the fur trade reached its peak between 1840 and 1870. Uncontrolled trapping in the mid 1800s nearly drove the once abundant beaver (*Castor canadensis*) to extinction and drastically reduced populations of fisher (*Martes pennanti*), otter (*Lontrac canadensis*) and weasel (*Mustela nivalis*) (Oetting, 1973). Increased use of fire and firearms in the prairies drove the bison (*Bison bison*) completely from southern Manitoba by 1819 and by 1870 the great bison herds that once roamed the prairies were gone. The plains grizzly (*Ursus arctos horribilis*) had become extinct by 1850 and the plains wolf (*Canis lupus*) soon followed. Lynx (*Lynx canadensis*), wolverine (*Gulo gulo*), black bear (*Ursus americanus*) and timber wolves (*Canus lupus*) were pushed north completely out of southern Manitoba as the fur trading economy that had dominated Western Canada for nearly 150 years began to collapse (Oetting, 1973).

All time low wildlife populations were experienced in the late 1800s and in 1876 the Province of Manitoba passed its first game laws. Although these laws were extremely liberal, once trapping pressures were reduced, fur-bearing species that were not extirpated

or extinct began to recover their numbers (Oetting 1973). The fur trade was only the beginning of many dramatic changes that would significantly alter the prairie landscape.

The first group of immigrants settled in the Red River Valley near Winnipeg and began farming in 1812. The settlers' numbers had increased by 1900 and so had the number of acres that were annually cultivated (Oetting 1973). Soon much of the open grasslands that once extended from the Red River Valley as far south as Texas were converted to agricultural land for their rich fertile soils (Manitoba Natural Resources 1998). Cities and towns were constructed, along with the railway and an extensive network of roads, which today, fragments much of the prairie landscape. Species that once inhabited the prairies like the passenger pigeon (*Ectopistes migratorius*) also soon became extinct. Other species like the swift fox (*Vulpes velox*) and the black-footed ferret (*Mustela nigripes*) were extirpated from Manitoba as the human population continued to grow and wildlife habitat continued to shrink (Potyondi 1995).

Agricultural programs like the Special Canadian Grains Program, the Western Grain Stabilization Program, and the Western Grain Transportation Act raised commodity prices and increased the demand for agricultural land, thus increasing the number of acres of land in production (van Kooten and Schmitz 1992). In the 1980s and early 1990s, cropping acreages responded positively to agricultural policies, like the Canadian Wheat Board Quota System, that were based on the area of land under production. Subsidies, financial assistance and crop insurance made it profitable to continue production on marginal land, and initiated the conversion of additional acres of marginal land to agricultural land. These policies also encouraged the drainage of many wetlands throughout the Canadian Prairies (Batt 1996). In the early 1980s, population

data showed a series of record low populations for most migratory bird species in the central flyway (Environment Canada 1998).

Agricultural policy has changed significantly in the last decade with the elimination of grain transportation subsidies and the decoupling of farm income safety nets from the grain and oilseed sectors allowing producers to respond to prevailing market signals (McRae et al. 2000). There have also been many national and international polices like the United Nations Economic Commission for Europe (UNECE) Protocol on Persistent Organic Pollutants, The Canadian Environmental Protection Act (CEPA), the Canadian Environmental Assessment Act and the North American Agreement on Environmental Cooperation (NAAEC) as well as provincial acts and regulations, municipal bylaws and provisions that encourage sustainable agricultural practices throughout Canada (McRae et al. 2000).

Although there have been many initiatives that encourage sustainable agricultural practices throughout the prairies, there are currently 11 plant and animal species listed as endangered, 9 listed as threatened and 8 that are listed as extirpated under the Manitoba Endangered Species Act alone (Table 1). Of the three distinct grassland communities in the Canadian Prairies, less than one percent of the original tall grass prairie, less than 13 percent of the short grass prairie and less than 19 percent of the mixed grass prairie still remain today (Manitoba Natural Resources 1998). Of the once extensive fescue prairie less than five percent can still be found in the Canadian Prairies (Troffier 1992).

Table 1: Species Listed Under The Manitoba Endangered Species Act.

Animals	Plants
Endangered: • Baird's Sparrow (*Ammodramus bairdii*) • Burrowing Owl (*Athene cunicularia*) • Eskimo Curlew (*Numenius borealis*) • Loggerhead Shrike (*Lanius ludovicianus*) • Peregrine Falcon (*Falco peregrinus*) • Piping Plover (*Charadrius melodus*) • Uncas Skipper (*Hesperia uncas*) • Whooping Crane (*Grus americana*) **Threatened:** • Dakota Skipper (*Hesperia dacotae*) • Ottoe Skipper (*Hesperia ottoe*) • Ferruginous Hawk (*Buteo regalis*) • Great Plains Toad (*Bufo cognatus*) • Mule Deer (*Odocoileus hemionus*) **Extirpated:** • Greater Prairie-Chicken (*Tympanuchus cupido*) • Grizzly Or Brown Bear (*Ursus arctos horribilis*) • Kit Or Swift Fox (*Vulpes velox*) • Long-Billed Curlew (*Numenius americanus*) • Muskox (*Ovibos moschatus*) • Pronghorn (*Antilocapra americana*) • Riding's Satyr (*Neominois ridingsii*) • Trumpeter Swan (*Cygnus buccinator*)	**Endangered:** • Great Plains Ladies'-Tresses (*Spiranthes magnicamporum*) • Small White Lady's-Slipper (*Cypripedium candidum*) • Western Prairie Fringed Orchid (*Platanthera praeclara*) **Threatened:** • Western Silvery Aster (*Aster sericeus*) • Western Spiderwort (*Tradescantia occidentalis*) • Riddell's Goldenrod (*Solidago riddellii)* • Culver's-root (*Veronicastrum virginicum)*

Source: Manitoba Conservation - Wildlife Branch December 2001.

Prairie wetlands also referred to as potholes, are very productive and biologically diverse ecosystems that provide important habitat for many migratory bird species (Wildlife Habitat Canada 1998). It is on the agricultural landscape that wetlands have traditionally experienced significant losses and the prairies are one of the areas where wetlands are at greatest risk (Figure 1) (Wildlife Habitat Canada 1998). Approximately 14 percent of the wetlands in Canada have been lost over the past 200 years. In the southern prairies, southern Ontario and the Fraser lowlands, over 70 percent of the wetlands have been altered or converted to other land uses (North American Wetlands Conservation Council 1994). In southwestern Manitoba alone, it is estimated that as much as 57 percent of the wetlands have already been lost (Glooschenko et al. 1993 in Batt 1996).

The prairie ecosystem has undergone such dramatic alteration that it has become one of the most altered ecosystems in North America (Samson and Knopf 1996; Manitoba Natural Resources 1998). The loss and/or alteration of wildlife habitat are the leading causes of wildlife depletion in the Canadian Prairies today (McRae et al. 2000). As the Human population continues to expand in the prairies, conservation of wildlife habitat on private land has begun to take on a new role in the conservation of the prairie landscape.

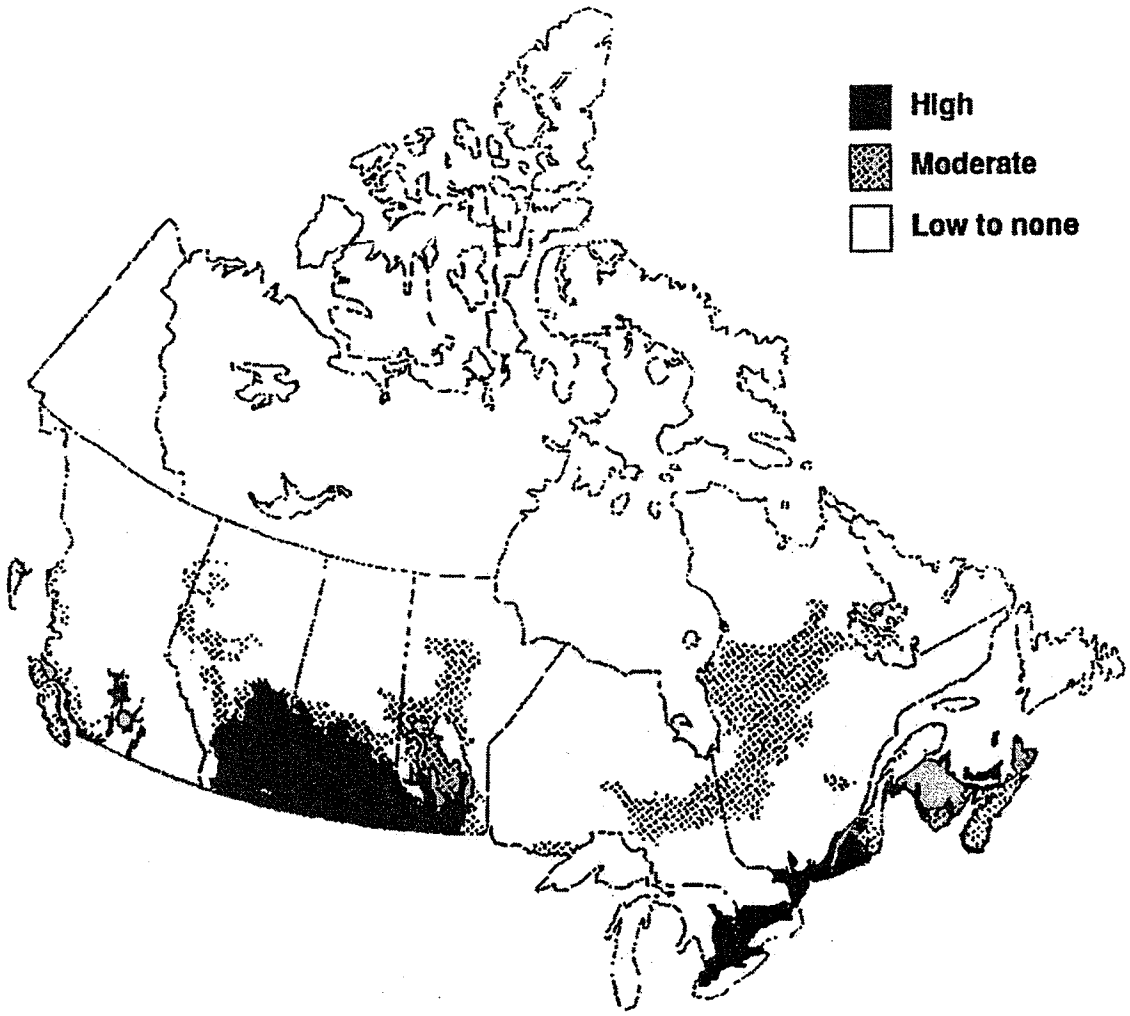

Figure 1: Wetland Areas at Risk in Canada

Source: North American Wetlands Conservation Council 1994

1.2 Conservation in Southern Manitoba

Southern Manitoba presents a challenge for natural resource managers, as the majority of land is privately owned and under annual cultivation, making it difficult for provincial and federal programs to secure land for protection. The agricultural landscape also surrounds the most densely populated part of the province adding to land use conflicts, making conservation even more difficult (Wildlife Habitat Canada 1998). Over the last 20 years numerous conservation programs have been initiated in Manitoba to address habitat loss in the prairie ecosystem.

The North American Waterfowl Management Plan (NAWMP) was initiated with the signing of an agreement between Canada and the United States in 1986 with Mexico joining the program in 1988 (Environment Canada 1998). The goal of NAWMP is to restore waterfowl populations to mid-1970s levels by securing, enhancing, and managing wetland and upland habitat across the continent (Environment Canada 2001a). NAWMP is implemented and financed through an innovative partnership program of joint ventures consisting of federal, state, and provincial/territorial government agencies, non-government organizations, the private sector, and landowners (Environment Canada 2001a). The partner's efforts to conserve waterfowl and waterfowl habitat in the prairie region of Canada are coordinated through the Prairie Habitat Joint Venture. NAWMP encourages agricultural producers to maintain wetlands and upland for waterfowl habitat as just one of its many objectives. To date, the Prairie Habitat Joint Venture has conserved over 700, 000 acres of upland and associated wetlands in the prairie region alone (NAWMP 2001).

The Permanent Cover Program (PCP) delivered by the Prairie Farm Rehabilitation Administration (PFRA) as one component of the National Soil Conservation Program (NSCP) was initiated in 1989 in Manitoba, Saskatchewan and Alberta. Initially the PCP was a three-year program with the objective to reduce soil degradation on marginal land classes 4, 5 and 6 under the Canada Land Inventory system. Marginal lands that exhibited a high risk of erosion under annual cultivation were targeted for the Program (Vaisey et al. 1996). The program offered landowners a seed payment to convert eligible lands to perennial forage or tree cover with economic incentives encouraging landowners to sign long term contracts.

The PCP was extended in 1991 to include the Peace River Region of British Columbia and Alberta. The initial PCP converted 168, 000 hectares from crop to forage and an additional 354, 000 hectares were converted through the PCP II. In total, 15, 000 contracts were signed by 1992 and 522, 000 hectares of marginal lands were converted to alternative productive uses with 64 percent of the contracts for a 21-year term (Vaisey et al. 1996). The PCP was a relatively short-term initiative, acceptance to the program between 1989 and 1992, with relatively long-term implications (Vaisey et al. 1996). The first of the 10-year contracts began to expire in 1998 and by 2013 the last of the 21-year contracts will expire leaving no permanent protection on the enrolled lands.

The Critical Wildlife Habitat Program originated in 1989 as a cooperative program involving five conservation organizations; Manitoba Natural Resources, the Manitoba Habitat Heritage Corporation, Wildlife Habitat Canada, the World Wildlife Fund, and the Manitoba Naturalists Society (Environment Canada 2001). The Nature Conservancy of Canada joined the Program in 1992 and the Canadian Wildlife Service in

1993 (Environment Canada 2001). The goal of the Program is to identify, preserve and manage the remaining critical wildlife habitats in Manitoba, including native grasslands, forested landscapes, and rare and endangered species habitat (Environment Canada 2001). In 1989, the Critical Wildlife Habitat Program began to secure land in the Tolstoi and Gardenton areas, and today the Tall Grass Prairie Preserve protects over 2000 hectares of tall grass prairie in southern Manitoba (Environment Canada 2001).

The Manitoba Government has committed to creating a network of protected areas across Manitoba that will adequately represent each of Manitoba's 18 ecoregions. The Parks and Protected Areas Initiative has made many achievements in Manitoba with the designation of provincial parks, wildlife refuges and ecological preserves. These achievements along with the many other conservation programs in the Province have increased the percentage of natural area representation in Manitoba significantly in the last ten years (Figure 2). Despite the many successful conservation efforts to date, much of southern Manitoba remains, according to the Parks and Protected Areas Initiative, less than adequately represented (Figure 2).

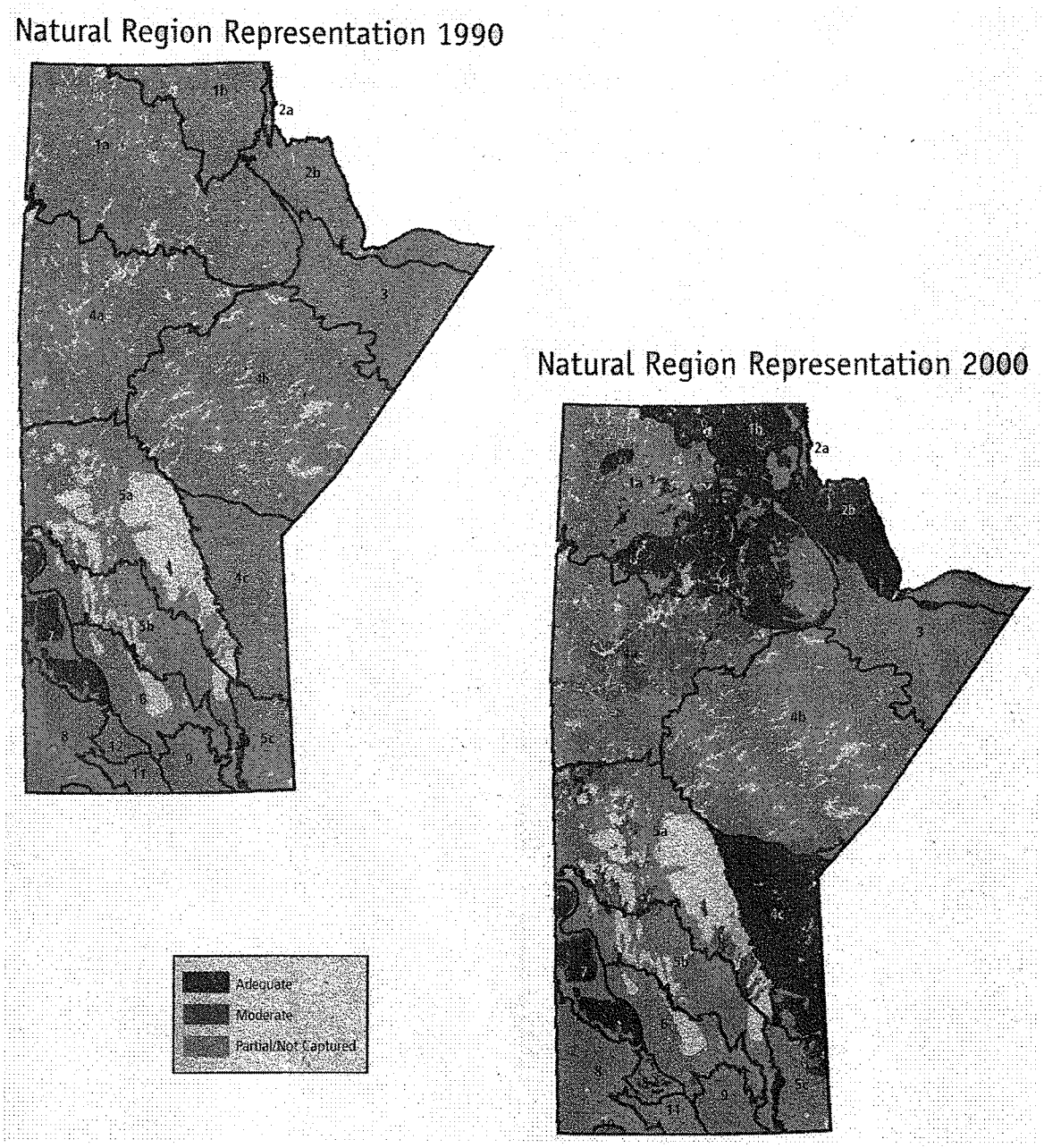

Figure 2: The Degree of Natural Region Representation in Manitoba through the Parks and Protected Areas Initiative for 1990 and 2000

Source: Manitoba Conservation 2000.

1.3 The Direction of Conservation in Southern Manitoba

In the past, most of the environmental challenges in the agricultural sector were primarily related to soil and water quality. Today, the primary environmental pressures in the agricultural sector are increased area seeded to annual crop and the expansion of intensive livestock operations (Agriculture and Agri-Food Canada 2000). As the environmental challenges faced by the agricultural sector continue to broaden, reaching a balance between meeting our agricultural needs and maintaining a healthy environment becomes more difficult.

An agroecosystem approach to achieving sustainable agricultural practices and habitat conservation places agriculture and agri-food activities in the broader context of the environment (Agriculture and Agri-Food Canada 1997). The agroecosystem approach is the key to finding a balance for a healthy agroecosystem as changes in the way land and water are managed must come from the agricultural sector and the people that derive their living from the land (Manitoba Natural Resources 1998). In areas where conservation practices have been implemented, soil quality has remained the same or has been increasing. Soil quality in intensively cropped areas and on marginal lands will continue to decline if appropriate conservation practices are not implemented (Agriculture and Agri-Food Canada 2000).

Habitat restoration programs like the North American Waterfowl Management Plan, soil and water conservation programs like the PFRA's Permanent Cover Program, and landowner stewardship projects have improved environmental conditions in many areas in southern Manitoba. Government, conservation agencies and landowners must

continue to work together and strengthen their relationships to further the conservation efforts that have already been achieved in southern Manitoba.

There are many options available to conservation agencies and landowners for securing wildlife habitat for protection. These options range from long-term landscape approaches such as extension and policy reform to immediate options such as land purchase and lease. Purchasing land is a very expensive option that leaves the agency that purchases the land responsible for the management and maintenance of the property as well as for paying the property taxes. The advantage to purchasing land is the agency has control over management of the property and the activities conducted on the property. Land purchase is a large initial financial commitment as well as a long-term financial and time commitment for the agency. Unfortunately, most agricultural communities and many Rural Municipalities do not support numerous agricultural land purchases by conservation agencies (Bruce pers comm.).

Leasing land is a less expensive option than outright purchase where the landowner, in most cases, retains the title to the land and is thus responsible for management and maintenance of the property and the property taxes. The drawback of leasing land is that it is only a short-term solution. There is no guarantee that at the end of the lease period the landowner will decide to re-sign the contract or that there will be funding for the program to continue, leaving no permanent protection of the land.

To compliment land purchase and lease options, conservation agreements have been used extensively throughout the United States and more recently in Canada. Rather than buying or leasing an entire parcel of land, a conservation agreement acquires only the interest in the land that is needed for conservation purposes. Conservation agreements

do allow the seller and purchaser to negotiate the specific interests to be acquired and the conditions that will apply to the subject property. The initial cost of signing a conservation agreement may be much less than purchasing or leasing the same property while the landowner retains ownership of the property, responsibility for property taxes and in some cases the management and maintenance of the property. Conservation agreements also involve a long-term financial commitment by the holding agency for future monitoring and potential enforcement costs.

1.4 The Conservation Agreement

Conservation agreements are one tool that can enhance partnerships between conservation organizations and landowners to more permanently conserve land in its natural state, through either partial or complete restrictions on land use and development. Conservation agreements also referred to as conservation easements throughout the United States and in many Provinces in Canada, can be defined as a binding agreement between a landowner and a conservation agency to protect land where the landowner accepts certain restrictions on the way land is used. Landowners and conservation agencies enter into conservation agreements[1] voluntarily but both parties are legally bound to follow the terms of the agreement. Conservation agreements are an extremely flexible conservation tool that can be placed on the entire parcel of land or on only a portion of the property (Howe et al. 1997). For example many wetland agreements include only the wetlands under the agreement and not the entire property.

[1] The term conservation agreement is used exclusively in the Province of Manitoba and will be also be used exclusively throughout the document unless referring to specific legislation.

In Manitoba, The Conservation Agreements Act was proclaimed in 1998 allowing eligible agencies under the Act (Appendix 1) to begin signing conservation agreements in 1999. Once signed a conservation agreement is filed with the Provincial Land Titles Office. This binds current and future landowners to follow the conditions of the agreement for the term of the agreement. Conservation agreements can either be donated by a landowner or purchased by an eligible agency (Appendix 2). Donors of a conservation agreement can receive a tax receipt for the value of the gift. The agreement may be for a specified term or in perpetuity, depending on the needs of the landowner and the holding agency. The specific restrictions on land use and development for each conservation agreement can vary depending on the nature and ecological features of the land (wetland, forest or native upland) (Trombetti and Cox 1990).

Typically each conservation agreement is tailored to fit each parcel of land and its unique features but some aspects remain common to all agreements. The Manitoba Conservation Agreements Act sets out the purpose or intent of all conservation agreements signed in Manitoba. The Act allows conservation agencies to accept conservation agreements for the purposes of:

- The protection and enhancement of natural ecosystems or their components,
- The protection and enhancement of wildlife or fisheries habitat, or
- The protection and enhancement of plant and animal species.

In addition to the purposes provided by the Act, is important that the specific intent of the agreement, in relation to the land, is included in the agreement to ensure that the needs of both the landowner and the holding organization are met and that the ecological value of the land will be protected.

Accurately measuring and documenting the area to be protected under the agreement is important to ensure future compliance with the restrictions of the agreement (Lind 1991; Diehl and Barrett 1988). Monitoring all conservation agreements held by an agency is extremely important for several reasons. First, to ensure that land is in fact being protected, second, to prevent future violations, third, to defend the agreement in court (if necessary) and fourth, to maintain public support for conservation agreements as a private land conservation option (Lind 1991; Diehl and Barrett 1988). Although conservation agreements have had a short history of use in Manitoba, they have been successfully used in other provinces in Canada and throughout the United States. Many years of experience with conservation agreements in other jurisdictions can provide the basic foundation to guide agencies entering into conservation agreements here in Manitoba.

1.5 Issues

Conservation agreement legislation is relatively new to Manitoba but several issues concerning agreements have been identified by the agencies using conservation agreements for land protection in the United States. The lack of baseline data with conservation agreements may cause difficulties in future monitoring of the agreements and future enforcement of these agreements. Complete baseline data was identified as one of the most immediate issues that need to be resolved among land trusts surveyed in the United States (Lind 2000).

Accurately measuring and recording the size of the area protected under the agreement also presents a challenge for agencies signing conservation agreements. In

North Dakota, the USFWS has experienced several violations of their conservation agreements, especially with wetland agreements (McEnroe pers comm.). Wetland size may vary from year to year depending on the amount of rainfall. Problems with monitoring and enforcement may arise when wetlands under an agreement become much larger than originally recorded.

Although less than 1% of conservation agreements in the United States have experienced major violations (Danskin 2000) difficulties have arisen with monitoring and enforcement protocols. Documenting monitoring procedures is another of the major issues with conservation agreements that was identified by United States Land Trusts (Lind 2000). Documenting monitoring activities is important for conservation agencies to ensure that all staff are aware of and familiar with the agreements they will be inspecting as well as to prove (in court if necessary) that the agency has been regularly monitoring their agreements.

The Manitoba Conservation Agreements Act does not include standards for baseline documentation or any protocols or recommendations for monitoring or enforcement of conservation agreements. In summary, standard guidelines for conservation agreements are needed and are important to provide conservation agencies with guidance for documenting baseline data, monitoring and ensuring compliance with the terms of conservation agreements in Manitoba.

1.6 Issue Statement

The Goal of the research project was to establish guidelines for conservation agreements in Manitoba to be used by conservation agencies with respect to baseline documentation, monitoring and ensuring compliance with the conditions of the agreement.

1.7 Objectives

To develop the guidelines for baseline documentation, monitoring and ensuring compliance with the terms of conservation agreements the following objectives were defined:

- A review of the basic framework for baseline documentation, monitoring and compliance issues surrounding conservation agreements provided in the literature;
- To collect information on the methods used to collect baseline data, used to monitor agreements and to deal with compliance issues from different agencies holding conservation agreements in Ontario, Saskatchewan, Alberta, North Dakota and Minnesota;
- To develop and recommend practical guidelines for baseline documentation, monitoring and ensuring compliance with the terms of conservation agreements for Manitoba using both the framework provided in the literature and the practical information gathered from the agencies in the five different jurisdictions.

1.8 Scope and Limitations

Due to time and financial constraints the scope of this research project was limited to extensively exploring conservation agreement programs through a comprehensive literature review and information gathered through interviews with various conservation agencies experienced with conservation agreements in Ontario, Minnesota, and North Dakota. Information on conservation agreement programs through literature and a limited number of interviews was also gathered in Saskatchewan and Alberta to complete the study. Only one agency in Alberta and one agency in Saskatchewan were investigated due to time limitations. Although the project deals with conservation agreements, which is a very large subject area, the focus of this thesis was limited to developing guidelines for baseline documentation, monitoring and ensuring compliance with the conditions of conservation agreements.

CHAPTER 2

METHODS

2.1 Introduction

The first phase of the research study began with a comprehensive literature review and analysis of conservation agreements in Canada and the United States. Literature concerning land conservation, tax implications and current legislation was analyzed to gain a thorough understanding of the history and nature of conservation agreements in Canada. Literature specifically addressing baseline documentation, monitoring and compliance of conservation agreements was then analyzed to determine common themes or patterns that form the theoretical foundation for implementing conservation agreements.

The second phase of the research study involved interviews with individuals from organizations that hold conservation agreements in Ontario, Saskatchewan, Alberta, Minnesota and North Dakota. In-person interviews were chosen for use in the study as the amount of information required for the study was voluminous. Mail and phone surveys were not used in the study as the population of individuals experienced with conservation agreements is relatively small and a good representation of the population was interviewed with a limited number of respondents. The interviews specifically focused on baseline documentation, monitoring and compliance of conservation

agreements in order to gain a practical understanding of conservation agreement implementation applicable in Manitoba.

The third phase of the research study was to develop practical guidelines for baseline documentation, monitoring and ensuring compliance with the terms of conservation agreements. The data collected through the interview process was analyzed then compared and contrasted to the literature. Criteria were developed from the literature and the interviews, which formed the basis for the methods and techniques that are recommended in the guidelines presented in Chapter 6.

2.2 Literature and Document Analysis

A comprehensive literature review of research relating to conservation agreements was conducted. Scientific literature, peer reviewed journals, government reports, legal journals and articles from various conservation agencies were the primary sources for the literature review. The document search focused on University libraries, the Provincial and Federal government, relevant Provincial and State legislation and information available from conservation agencies like: Ducks Unlimited Canada (DUC), the Nature Conservancy of Canada (NCC), The Nature Conservancy (TNC), the Delta Waterfowl Foundation, Land Trusts and Wildlife Habitat Canada. Sample conservation agreements from both the United States and Canada were also reviewed.

The type of document analysis that was conducted, according to Hult (1996), is a synthesis of key ideas from the various sources. The first step in the synthesis was to compare techniques and common themes from the different literature sources on baseline documentation, monitoring and compliance of conservation agreements. The common

themes and techniques were then categorized and displayed in a series of matrix tables (Chapter 3, Tables 2-4) to expose the basic theoretical foundation for implementation of conservation agreements. Matrix tables were used because they are one way of displaying data in a systematic fashion that shows relationships among the data (Creswell 1994). A synthesis of the data rather than an evaluation or critique was chosen as the method for analysis, as the goal of the research is to compile effective and practical methods for conservation agreement implementation.

University libraries in Manitoba, Ontario and Minnesota, the internet, Wildlife Habitat Canada's library in Ottawa, the United States Fish and Wildlife Service offices in Minnesota and North Dakota, and various conservation organizations (TNC, NCC, DU, the Delta Waterfowl Foundation and various Land Trusts) were the main sources for the information synthesized. Some relevant legal cases and documents related to conservation agreements in the United States were also reviewed. The source for the legal cases and documents was the University of Manitoba Law Library.

2.3 Identification of the Jurisdictions Investigated

To determine the jurisdictions that were investigated in the study, the length of experience with conservation agreements in the jurisdiction and the similarity of the landscape to Manitoba were taken into consideration. The length of experience a jurisdiction has with conservation agreements was deemed important to the study as many of the successful techniques used in the other jurisdictions can be adapted and applied to Manitoba. The similarity of the landscape in the jurisdiction investigated to

that of Manitoba was also an important factor in the decision process as it is essential to keep the information and data as relevant to Manitoba as possible throughout the study.

North Dakota, Minnesota, Saskatchewan and Alberta were chosen for investigation as each of these Provinces/States is partially within what is commonly referred to as the Prairie Pothole Region of North America (Figure 3). The Prairie Pothole Region of North America extends across approximately 80 percent of the Great Plains region of Canada and approximately 20 percent of the north-central United States (Figure 3) (Batt 1996). The Pothole Region consists of a gently rolling surface relief, scattered with various densities of depressions commonly referred to as potholes, ranging from a few to in excess of forty per square kilometer (Batt 1996). The density and quality of potholes depends largely on annual precipitation, which is highly variable (Batt 1996). These prairie potholes or wetlands are very productive and biologically diverse ecosystems that provide important habitat for many migratory bird species (Wildlife Habitat Canada 1998).

The southwestern portion of Manitoba is also located in the Prairie Pothole Region of North America (Figure 3) and similar issues concerning conservation agreements (for example recording the area of wetlands) may be experienced in areas with similar broad landscape and habitat types. It was the assumption of the author that much of the experiences from the different agencies throughout the prairie pothole region with regard to conservation agreement implementation are adaptable to the Manitoba situation.

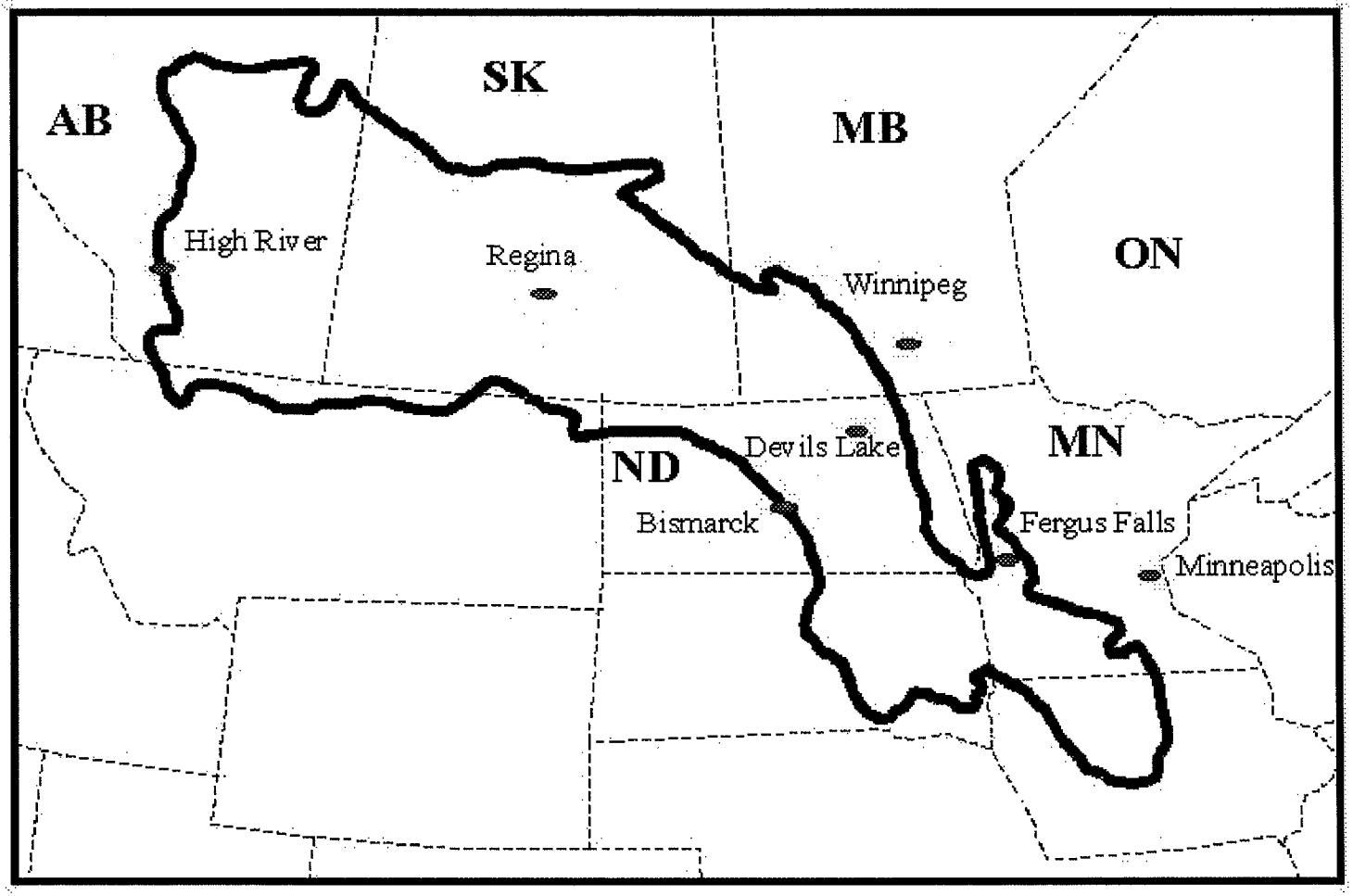

Figure 3: Study Sites Located in the Prairie Pothole Region of North America

Source: Adapted from Van Der Valk 1989.

North Dakota and Minnesota were also chosen for inclusion in the study due to the long history of conservation agreement use, especially in North Dakota. The USFWS has been using conservation agreements as far back as the 1950s. Ontario was also chosen for inclusion in the study due to the length of experience with conservation agreements. Ontario has had conservation agreement legislation in place since 1994 and there are currently numerous agencies (government, national conservation agencies and land trusts) holding conservations agreements in Ontario. Ontario's Conservation Lands Act, along with the legislation of several other Provinces, was also examined during the drafting process of the Manitoba Conservation Agreements Act (McTavish pers comm.). Additional information on the Federal Government's Ecological Gifts Program was also deemed valuable to the study.

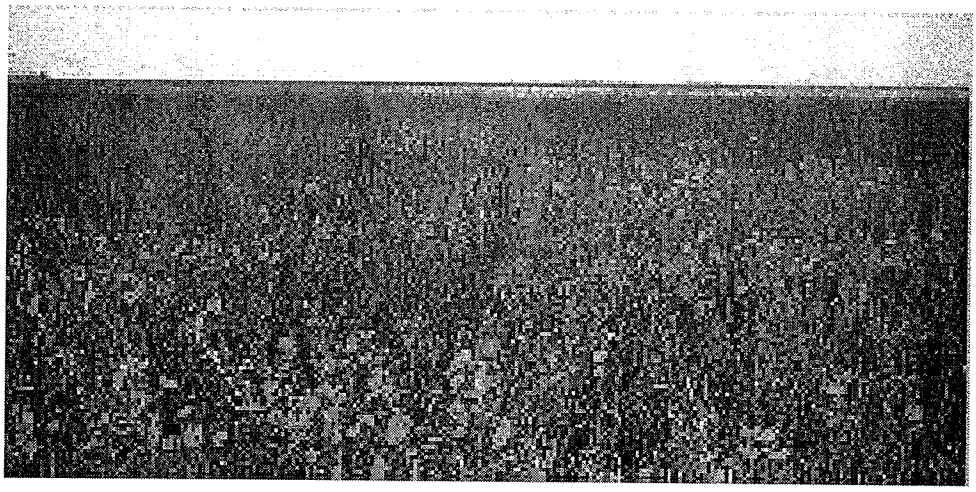

Figure 4: The Manitoba Prairie Landscape

Source: Environment Canada

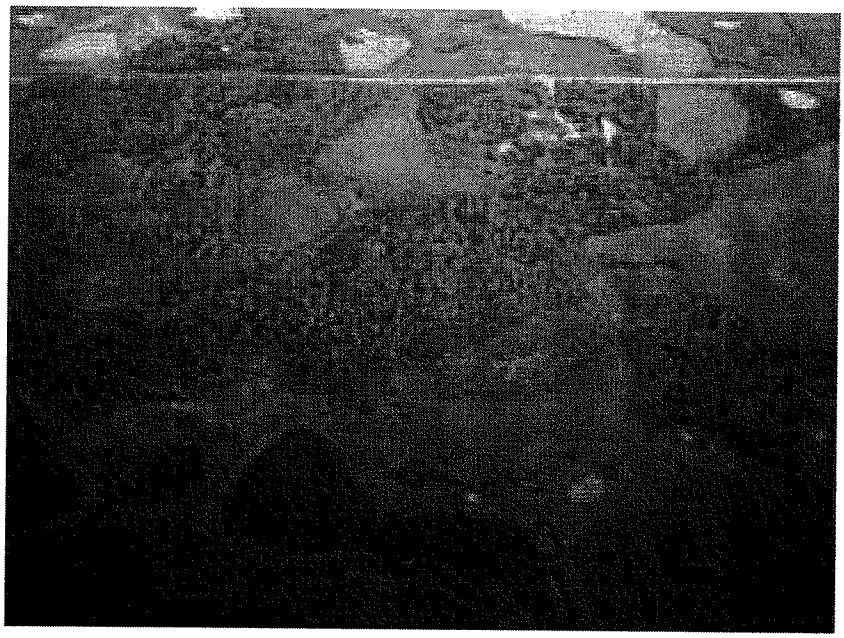

Figure 5: Aerial Photo of the Prairie Pothole Region of Manitoba

Source: the Delta Waterfowl Foundation

2.4 Identification of the Participants

To identify the participants for the study a list of stakeholder groups was developed and then, through discussions with key informants associated with each of the stakeholder groups, specific individuals to be included in the study were identified. With the assistance of the advisory committee the groups involved with conservation agreements in each of the study jurisdictions were first identified. For each jurisdiction the groups identified were:

- Federal Land Management agencies
- State/Provincial Land Management agencies
- National conservation organizations
- Local and/or National Land Trusts
- Land Titles Personnel (Manitoba and Ontario only)

Individuals from different land management agencies, conservation agencies and land trusts were included in the study to provide valuable information on baseline data, monitoring and enforcement issues associated with conservation agreements. In addition to the agencies directly involved with conservation agreements, land titles personnel were also included in the study as all conservation agreements are registered with the Land Titles Office and the guidelines developed in the study must be in accordance with any Manitoba Land Titles Office requirements. Ontario Land Titles personnel were interviewed to reveal any issues that may have arisen with agreement registration in the six years that conservation agreements have been used in Ontario.

Several key informants were first identified with the assistance of the advisory committee, and these individuals recommended other individuals from the same

jurisdiction to participate in the study. The technique of identifying individuals through recommendation or suggestion by other individuals in the study is a nonprobability sampling method called snowball sampling (Babbie 1998). The snowball sampling technique begins with the few individuals from the target population that can be located, and then those individuals are asked to recommend other members of the population. The result is the accumulation of subjects from the target population that provide additional information that could not have been acquired through the initial contacts alone (Babbie 1998). Snowball sampling was chosen for this study, as individuals specifically experienced with conservation agreement implementation in other jurisdictions can be difficult to locate.

The snowball sampling technique for Ontario was halted when individuals from 9 different agencies had been identified. Due to financial constraints and the distances between the different agencies only 9 different agencies in Ontario were investigated. Three of the agencies investigated (The Canadian Wildlife Service, Wildlife Habitat Canada and the NAWCC) do not currently hold conservation agreements. Members of the advisory committee provided informants from these agencies and the informants were interviewed to gain a better understanding of conservation agreement legislation, the ecological gifts program and taxation issues surrounding donated conservation agreements. In Minnesota the snowball sampling technique was ended when individuals from 5 agencies (two different offices for one agency) were identified. The type of interviews conducted (in person) limited the number of interviews that were conducted for financial reasons. In North Dakota the snowball sampling technique ended when the same individual was recommended by several different sources.

The informants from each of the agencies were contacted using a standard greeting explaining that the research is part of a Master's thesis at the University of Manitoba, the objectives and goals of the research study. The informants were then asked to recommend individuals with knowledge or expertise with baseline documentation, monitoring and compliance of conservation agreements, to participate in the interview process. During the interview process respondents were encouraged to recommend additional individuals to participate in the study. The additional individuals were contacted and also participated in the study. Some of the additional individuals that could not be interviewed in person due to time limitations were contacted and interviewed over the phone.

2.5 The Interview Process

To complete the second phase of the research the author conducted in-person or face-to-face interviews with the identified individuals experienced with conservation agreements in each of the jurisdictions. The type of interview that was conducted is the qualitative (Babbie 1998) or a non-structured (Jackson 1988) interview. This type of interview involves an interaction between the interviewer and the respondent that is guided by a general plan of inquiry (Babbie 1998). In the qualitative interview there are no specific questions with specific wordings that must be asked in a specific order. The interview is in essence a conversation between the interviewer and the respondent that is directed by the interviewer (Babbie 1998).

In-person interviews were chosen for use in this study because a rapport can be developed between the respondent and interviewer during the interview. If additional

interviews or information is required the response rate is higher where a rapport has been developed (Hult 1996 and Jackson 1988). In-person interviews are the best technique to use when in depth information requiring maps, charts and figures is required. There is greater flexibility in the actual interview with direct interaction between the interviewer and the respondent allowing the interviewer the most freedom to explore questions in detail (Hult 1996 and Jackson 1988). In-person interviews were also chosen for this study because the population of individuals experienced with conservation agreements is relatively small and difficult to locate without the assistance of informants.

The major disadvantage of in-person interviews is that they are more costly and time consuming than both phone and mail surveys therefore fewer interviews can be conducted (Chadwick et al. 1984). Mail surveys have a lower response rate than phone or in-person interviews, as some of the questionnaires may not actually reach the potential respondents (Jackson 1988). Phone interviews produce relatively high response rates but the questions and response categories must be kept simple since they are presented verbally (Jackson 1988). In depth inquiries are difficult during phone interviews and there is also difficulty in making casual inferences (Jackson 1988).

In-person interviews were encouraged where possible and phone interviews were conducted where in-person interviews were not possible. Due to time and financial constraints it was not possible to conduct all interviews in person. Some of the interviews were conducted over the phone despite the disadvantages of phone interviews. Limitations on the length of time, topic constraints that may result from time limitations, the ease with which the interview can be terminated and the lack of a rapport established with the respondents are the main disadvantages of phone interviews (Chadwick et al.

1984). In this study, the major disadvantages did not seriously limit the amount of information that was acquired but the type of information was limited. Any maps, GIS or remote sensing data could not be examined or questioned in detail. Additional information was requested and received from the subjects interviewed in-person and over the phone.

The type of survey design used in this study is a cross-sectional survey. In a cross sectional survey the data is collected at approximately one point in time from the sample population and is used to describe some larger population at that same time (Babbie 1990). Cross sectional survey designs are used more frequently in explanatory studies than longitudinal survey designs where data is collected over an extended period of time (Babbie 1998). A cross sectional survey design was chosen for this study, as the purpose of the study is to provide guidelines for baseline documentation, monitoring and compliance of conservation agreements in Manitoba.

Every attempt was made to keep the number of individuals from each stakeholder group and jurisdiction interviewed consistent (except for Alberta and Saskatchewan due to time and financial constraints), although this was not possible in all cases. The number of individuals from each stakeholder group recommended through the snowball technique was not consistent. The interview process was initially designed to interview three individuals from each agency in each jurisdiction: a field specialist, an administrative person and an individual with legal expertise. This was not possible, as some agencies have one individual that is responsible for all functions of conservation agreements and in other agencies there were several individuals with different functions with respect to conservation agreements. Interviews were held with as many different individuals with

different experiences in respect to conservation agreements as time and financial constraints allowed. In some jurisdictions different field offices of the same agency were interviewed to ensure a variety of experiences from different areas were included in the study.

All respondents were contacted by phone to discuss their participation in the interview process using a standard greeting explaining the purpose and structure of the interview. The respondents were encouraged to participate in-person where possible using phone interviews where in-person interviews were not practical. During the interview the questions were open-ended and additional inquires were made to obtain clearer explanations. The respondents were informed that they could ask any questions or terminate the process at any time during the interview.

Due to time and financial constraints only one agency in Alberta and one agency in Saskatchewan were interviewed. The Agencies were identified by recommendation from participants in the other jurisdictions. The Rocky Mountain Elk Foundation in Alberta and Montana were contacted first but both declined to participate in the study. The Southern Alberta Land Trust Society was contacted next and was interviewed over the phone. In Saskatchewan, the Saskatchewan Wetlands Conservation Corporation (SWCC) was contacted first and declined to participate in the study due to a lack of experience with conservation agreements. The individual contacted at SWCC recommended an individual from the Nature Conservancy of Canada in Saskatchewan who was contacted and participated in the study through a phone interview.

An adaptive and interactive approach to the interview process was used in the study. An adaptive and interactive approach to research involves adapting to things that are not

planned for (Nelson 1991). During the course of research many things can change, like political contexts or some of the research methods may fail. With an adaptive approach the researcher can change directions to adapt to these unpredictable events. The evolution of the research should be systematically recorded and reported by the researcher (Nelson 1991). During the course of the study some of the questions asked during the interviews evolved. Different questions used in the interviews that were less successful at eliciting relevant and detailed answers were dropped or adapted to obtain the information. Some of the respondents also cancelled the scheduled interviews at the last minute so phone interviews were conducted at a later date.

2.5 Development of the Interview Guide

To complete the interview phase of the research an interview schedule (Jackson, 1988) or interview guide (Chadwick et al. 1984) was designed for use in the study (Appendix 2). An interview guide outlines the major questions or subject areas that will be addressed in the interview but the exact questions and sequence are determined in the interview itself (Jackson, 1988; Chadwick et al. 1984). Open-ended questions were used throughout the interviews to obtain comprehensive information from the respondents in respect to conservation agreement implementation. This type of non-structured interview guide was chosen because it allows the most freedom to explore questions in detail and is the best technique when thorough and in depth information is required.

The interview guide for the research study was developed from the analysis of the literature that was reviewed. To determine which areas of inquiry were important

common theses from the literature were used. The following areas of inquiry were included in the interview guide:

- If the ecological value of the land and specific purpose of conservation is captured in the agreement;
- The techniques used for collecting and recording baseline data within the agreement;
- The procedure for measuring and recording the area (especially of wetlands) under the agreement;
- The protocol for monitoring and ensuring compliance with the restrictions of the agreement; and
- The violation resolution options provided in the agreement or used by the agency.

During the interviews the responses were hand recorded then transcribed to form a permanent computer based matrix. The interview guide and the protocol for this study was reviewed and received human ethics approval by the Joint-Faculty Research Ethics Board at the University of Manitoba.

2.7 Analysis of the Results

The amount of data that was collected during the in-person interview phase of the research was voluminous. When copious amounts of quantitative data are analyzed the researcher must be comfortable in developing categories and comparing and contrasting the data as well as being open to contrary possibilities or alternative explanations (Creswell 1994). Qualitative data analysis is a process that involves the occurrence of

several simultaneous activities: collecting information from the field, sorting the information into categories, formatting the information into a story or picture and writing the qualitative text (Creswell 1994). Data analysis approaches based on segmenting, coding and categorization are valuable to assist with finding and conceptualizing regularities in the data (Punch 1998).

The type of qualitative analysis process conducted for the study is referred to as "de-contextualization" and "re-contextualization" (Tesch 1990 in Creswell 1994). This process involves reducing or segmenting the field data collected into categories or patterns. According to Miles and Huberman (1984) data reduction occurs continually throughout the process of analysis. Data reduction occurs through editing, segmenting and summarizing the data, through coding and finding patterns in the data and through conceptualizing and explaining the data. In reducing the data it is important, especially for qualitative research, that the context of the data is not lost (Miles and Huberman 1994). After the interviews detailed notes of each of the interview sessions was reduced or summarized to form a permanent computer record.

Once the data is reduced the next step is to display the data. Displaying data involves organizing, compressing and assembling information (Miles and Huberman 1994). The data is interpreted using some schema and re-constructed to form a larger consolidated picture (Tesch 1990 in Creswell 1994). There are many different ways that can be used to display data; graphs, charts and various diagrams. According to Miles and Huberman (1994), any way of displaying data that advances the analysis is appropriate. Displays are used throughout the process of data analysis and help to organize, summarize and conceptualize the data. A matrix is one method that can be used to display the interpreted

data systematically to the reader using a spatial format (Miles and Huberman 1984). Matrices consist of tables of tabular information that show relationships among the categories of information, display role ordering, display categories by informants and many other possibilities (Creswell 1994). Analysis of the interview data included developing common themes or categories from the reduced data and the data was then reorganized according to the different categories. To display the data a series of matrix tables was used with the categories appearing at the top of each column and the agency interviewed at the beginning of each row (Tables 5-7 and Appendix 6).

The data collected during the interview phase of the research was categorized using the questions in the interview guide. The data was then interpreted and displayed in the matrix tables. Categorizing and interpreting the data collected from the interviews using the interview guide resulted in three matrix tables for each of the main jurisdictions investigated (Ontario, Minnesota and North Dakota). Due to the vast amount of data presented in the matrix tables (a total of 9 tables), three summary matrix tables were developed and include the information collected from all jurisdictions investigated (Ontario, Alberta, Saskatchewan, Minnesota and North Dakota). The matrix tables emphasize the responses collected from the areas of inquiry used in the interview guide, and show a comparison or contrast of the information collected during the interviews by agency (Appendix 6) and by jurisdiction (in summary Tables 5-7).

The areas of inquiry used in the interview guide (developed from the literature) and used to develop the matrices that display the interview data are:

1) If the ecological value of the land and specific purpose of conservation is captured in the agreement. (Table 5 in Chapter 4)

2) The techniques used for collecting and recording baseline data within the agreement. (Table 5 in Chapter 4)
3) The protocol for monitoring and ensuring compliance with the restrictions of the agreement. (Table 6 in Chapter 4)
4) The violation resolution options provided in the agreement or used by the agency. (Table 7 in Chapter 4)

These areas of the interview guide were analyzed because they provided in-depth information on baseline documentation, monitoring and compliance procedures used by the agencies interviewed and are easily comparable to the information presented in the literature that was reviewed and analyzed (Tables 2-4 in Chapter 3). The main sources of literature on baseline data reports, monitoring and compliance issues are summarized in Chapter 3 using the same matrix system for easy comparison/contrast with the interview data collected. The matrix used to display the interview data also emphasizes the similarities and differences between each of the agencies interviewed and between the different jurisdictions interviewed.

Coding is an essential part of qualitative analysis and in fact is what gets the analysis process started (Punch 1998). Coding is the process of attaching tags or codes to pieces of data. The pieces may be individual words, groups of words, sentences or paragraphs (Punch 1998). The reason for coding is to attach meaning to the pieces of data so the data can be indexed (stored and retrieved), given more advanced codes and summarized through the identification of patterns. The data in the study (literature and interview data) were coded using category labels.

A written summary accompanies the matrix tables in Chapter 4 and provides more detailed explanations of the interview responses. Some information that was too specific to be summarized in the tables is discussed in section 4.3, Issues Identified Through the Interview Process. No complex statistical procedures were conducted on the data collected, only simple percentages of responses were used to identify commonly used techniques between different organizations and jurisdictions and to identify trends in the data.

The reason data produced from a study is reduced and displayed is to assist with drawing conclusions from the study. Conclusions are drawn continuously throughout the analysis process of the study. In the early stages the conclusions are vague and need to be shaped. The conclusions are not finalized until all the data from the study has been analyzed. Conclusions drawn are in the form of propositions that need to be verified by checking back against the raw data (Miles and Huberman 1994). The tactics used to draw conclusions from the literature analyzed and the interviewed data analyzed were noting patterns or themes and making comparisons and contrasts (Miles and Huberman 1994). As the data were summarized and displayed recurring patterns or themes among the data were noted and then refined after all the data was summarized and displayed. Using the data displays, the data from the literature and the data from the interviews were compared and contrasted to reveal similarities and differences. All the conclusions drawn were verified using the raw data. All three stages of analysis, data reduction, display and drawing conclusions occurred concurrently throughout the analysis.

2.8 Development the Guidelines for Conservation Agreements

The conclusions that were drawn from the data were used as a guide to develop the guidelines for baseline documentation, monitoring and ensuring compliance of conservation agreements for Manitoba. First, the interview data and the literature data were compared and contrasted. Whether there were similarities or differences among the data the specific reasons for recommending the different techniques in the literature or the reasons the agency uses/does not use the technique were considered. The applicability of the technique to Manitoba was also considered.

The similarities among the literature and interview data were noted, then the reason for the use or recommendation of the technique was considered. Techniques that are not relevant to Manitoba were not included in the guidelines. The criteria used to determine applicability to Manitoba were restricted to direct relevance to the Manitoba Conservation Agreements Act and the system of government in Manitoba (Canada). For example, the IRS requires that baseline data must be collected prior to accepting or signing the conservation agreement for donated agreements. This is not applicable in Manitoba (Canada), as the Canada Customs and Revenue Agency (CCRA) does not have that specific requirement. Techniques that are applicable to Manitoba or that are easily adaptable to Manitoba were included in the guidelines. For example, aerial photos can easily be used in Manitoba for collecting baseline data.

The differences observed between the techniques recommended in the literature and those from the interview data were also noted. The reasons for the techniques recommendation in the literature and the reason the agency chooses not to use the technique were considered along with the applicability. The agency's experience with

conservation agreements was also considered where there were differences between the techniques used by the agency and those recommended in the literature. The agency's experience with different techniques and insight on which techniques work better than others was considered.

Figure 6 depicts the decision making process that defines the guidelines on baseline documentation, monitoring and ensuring compliance with the terms of conservation agreements for Manitoba. The flow diagram is a simplified depiction of the decision process that is used here to help clarify the process. The guidelines are presented in Chapter 6.

The criteria that were used to determine what is included in the guidelines were developed from the literature and the interview results. After analysis of the literature different themes or patterns in the literature were revealed. In most of the literature sources analyzed, the main reasons for recommending specific techniques with respect to conservation agreements were: to prevent future violations, to improve the agency's ability to defend the agreement in the event of a violation and to improve the agency's relationship with the landowner. Through analysis of the interview results two common patterns were detected to explain why agencies did not use specific techniques with regard to conservation agreements. The two main reasons agencies chose not to use a specific technique were: that it was too costly and/or that it was time consuming. Some agencies that have extensive experience with conservation agreements also provided some insight into methods that had been found to be unsuccessful. Each of the criteria were used to evaluate the different techniques recommended in the literature and those used by the agencies interviewed.

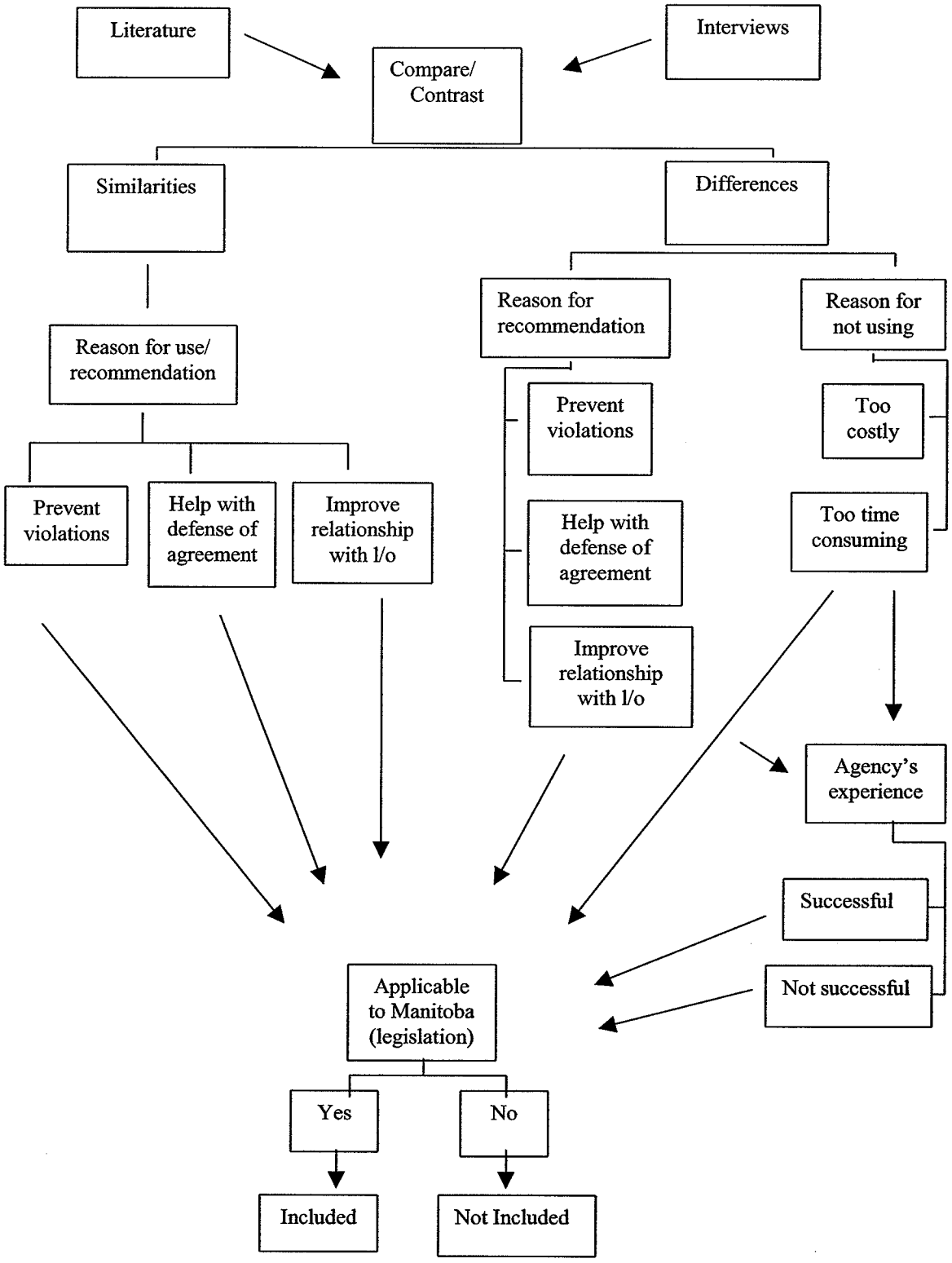

Figure 6: Criteria for Development of the Guidelines

Finally, techniques that are not applicable to Manitoba (Canada) were not included in the guidelines presented in Chapter 6.

The strengths and experiences from practices in other jurisdictions and the literature provided the basic framework for the guidelines. Some examples from the literature and documents collected from the different agencies during the interview process were also adapted and included in the guidelines.

The basis for the framework for baseline data reports developed from the literature focuses on the following features:

- Practical methods or techniques for collecting baseline data;
- A standard approach for measuring and recording the area under the conservation agreement; and
- Authentication of baseline data and reports.

The basic framework for the monitoring and enforcement protocols developed from the literature include the following features:

- How often monitoring should occur;
- What to look for when monitoring;
- The time of year monitoring should occur;
- Use of monitoring reports and monitoring logs; and

The basic framework for the enforcement/violation policy developed from the literature includes:

- Initial important decisions about the agency's responses
- The steps to be followed in the event of a violation

The guidelines were designed to recommend techniques that are practical and applicable for use by different agencies with different staff and financial situations. The guidelines were also designed to be comprehensive, easily understood and readily applicable to any situation and are recommended for use by conservation agencies entering into conservation agreements in Manitoba.

CHAPTER 3

CONSERVATION AGREEMENTS

3.1 Introduction

The objective of the study was to provide conservation agencies in Manitoba with guidelines on baseline documentation, monitoring and ensuring compliance with the terms of conservation agreements. The first phase of the research involved a comprehensive literature review and analysis of information on conservation agreements in Canada and the United States. This chapter provides a summary of all the information reviewed and analyzed during the first stage of the research.

The history and use of conservation agreements in the United States and Canada was reviewed to discern how conservation agreements have historically been used to conserve wildlife habitat on private land. The Manitoba Conservation Agreements Act and other relevant conservation agreement legislation were then reviewed to obtain a better understanding of how conservation agreements work in Manitoba and the different jurisdictions investigated in the second phase of the research. To acquire thorough working knowledge of conservation agreement use in Canada, implications of the Income Tax Act and the Ecological Gifts Program were also investigated during the study.

To reveal the theoretical framework for conservation agreement implementation, this chapter concludes with a summary of the information analyzed on the specific techniques and methods used to record baseline data, to monitor and enforce conservation

agreements in Canada and the United States. A synthesis of key ideas from the various sources on baseline documentation, monitoring and enforcement of conservation agreements was conducted and the information is presented in section 3.7 Baseline Documentation, Monitoring and Enforcement of Conservation Agreements. For ease of comparison with the interview results presented in Chapter 4 (Tables 5 through 7), the information analyzed was also displayed in a series of matrix tables (Tables 2 through 4).

3.2 Conservation Agreement Use in the United States

Conservation agreements have been used to conserve land in the United States as far back as the 1930s (Wright, 1994). In the 1940s and the 1950s, an increase in the number of acres of wetlands put into production and an increased awareness of the value of wetlands in North Dakota lead to an amendment (Public Law 85-585 1958) to the Migratory Bird Hunting Stamp Act of 1934. The amendment authorized the Fish and Wildlife Service (FWS) to purchase conservation agreements on private land for waterfowl breeding habitat protection (Sidle 1981). The Fish and Wildlife Service started to acquire wetland habitat through purchased conservation agreements to protect waterfowl breeding habitat in the 1950s (Wright 1994). The wetland easement program, funded by Public Law 87-383 (1961) as amended, allowed an agreement to be entered into by willing landowners and the FWS where the landowners agreed not to drain, burn, level or fill wetlands on all or a portion of the property for a one time payment. The term of the conservation agreements signed was 20, 30 or 50 years and in perpetuity, with perpetual agreements being the most numerous (Sidle 1981).

Throughout the long history of conservation agreement use in the United States many issues or concerns have been raised by the agencies holding the agreements. One of the major problems that was encountered by the FWS in North Dakota was size variations in wetlands due to seasonal conditions. In extremely wet years many of the wetlands covered under conservation agreements increased dramatically in size. The property owners became concerned that the agreement only covered a specific number of acres and the wetlands had increased to such a degree that they were losing a significant proportion of the surrounding agricultural land (McEnroe pers comm.). In United States v Kerry and Michael Johansen, the United States Court of Appeals, Eighth Circuit, decided that the agreement covered only the number of acres that were recorded in the acquisition or summary report. In 1976, the FWS in North Dakota, adopted a new contract format that delineated all wetlands, using the high water mark, to be covered under the agreement on a map that was attached to each contract rather than the previous summary acre reports used (Sidle 1981).

Some of the long-term issues with conservation agreements that were identified by United States Land Trusts were improving the drafting of the agreements and to conduct advanced site reviews (Lind 2000). There was no mention of baseline data but several enforcement issues such as conflicts with mandatory arbitration, notice clauses, judicial review clauses, and the need to take prompt action if a violation should occur were listed (Lind, 2000). Although several enforcement issues were identified as long-term issues with conservation agreements, according to another study of United States Land Trusts, it was found that less than 7 percent of the agreements held by land trusts have experienced violations (Danskin 2000). The same study also reported that most of

the agreement violations experienced were considered minor violations. Of the violations that were considered major, lawsuits were filed in only 21 cases and of these, a court adjudicated only 6. In each case subsequent landowners or a third party committed the violations, not the original grantors of the agreement (Danskin 2000).

According to Gustanski and Squires (2000), most agreement violations in the United States are the result of successive landowners, not the original landowner that signed the agreement. The longer a conservation agreement has been in place, the greater the possibility of the land changing hands and the greater the possibility of violations (Sidle 1981). Increased possibility of violations may be experienced because successive landowners do not receive payment for the agreement, they do not share the original landowner's concern for honouring the agreement or perhaps because they are unaware of the agreement or the conditions (Sidle 1981). In North Dakota the rate of conservation agreement violation from 1965 to 1971was 0.7 percent but in the following eight years it had doubled to 1.5 percent (Sidle 1981). The longer an agency has been accepting conservation agreements, the greater is the possibility of land changing hands and the more important it becomes for the agency to consistently monitor every agreement to prevent future violations.

As a result of experiencing a major agreement violation, forty-five percent of the participants in a land trust survey reported that they changed their agreement drafting, monitoring, or violation policies. The most common change was to clarify the agreement documents (Danskin 2000). Some of the other land trusts reported changes including implementing stronger monitoring policies, refining agreement acquisition programs and policies, creating violation policies and resolution procedures, and creating an

amendment policy (Danskin 2000). Even when most of the agencies in the study reported monitoring agreements annually, reconciliation of violations (damages, restoration etc.) was reported as an issue where it was not explicitly outlined within the agreement (Danskin 2000). According to Danskin (2000) no conservation agreement in the United States had been overturned in a final court ruling although in one case, a ruling seriously eroded certain terms of the agreement.

Wright (1994) suggests that the principal users of donated conservation agreements in the United States have been and continue to be land trusts and national conservation organizations. These groups together have protected over one million acres of private land from development throughout the United States. Today, conservation agreements are the most widely used tool for private sector land conservation in the United States (Gustanski and Squires 2000). Although conservation agreements are commonly used in most states, the state legislation that authorizes the use of conservation agreements varies greatly from state to state.

3.3 Conservation Agreement Use in Canada

Conservation agreements have had a significantly shorter history of use in Canada. Prior to 1974, there was a significant lack of literature on conservation agreements in Canada and little research or interest in agreement use for conservation purposes (Silverstone 1974). The Ontario Heritage Foundation began using heritage conservation agreements to preserve heritage features of Ontario properties in 1967. It was not until the Conservation Lands Act was amended in 1994 that several agencies

including The Nature Conservancy of Canada, Ducks Unlimited Canada and several land trusts began using conservation agreements in Ontario.

In Manitoba prior to the 1998 proclamation of the Conservation Agreements Act by the provincial government, an "easement" could only be acquired on a servient tenement if it accommodated the dominant tenement. The common law definition of the term easement is "a right attached to a particular parcel of land which allows the owner of that parcel either to use the neighbouring land in a particular manner, or to restrict the use of the neighbouring land by its owner to a certain extent" (Trombetti and Cox 1990). The difficulty of finding a suitable dominant tenement to satisfy the common law requirement was the major impediment to conservation agreement use in Manitoba prior to 1998 (Silverstone 1974). The Conservation Agreements Act now enables conservation organizations like the Delta Waterfowl Foundation, Ducks Unlimited Canada, the Crown and the Nature Conservancy of Canada to enter into agreements that will provide protection of land in its natural state for a specified term or in perpetuity. Through the Potholes Plus Program, the Delta Waterfowl foundation and the Manitoba Habitat Heritage Corporation (MHHC) began signing both purchased and donated conservation agreements in 1999.

3.4 Conservation Agreement Legislation

The Manitoba Conservation Agreements Act allows landowners and specific conservation agencies (Appendix 1 and 2) to enter into conservation agreements for the protection and enhancement of natural ecosystems, wildlife or fisheries habitat, and plant or animal species. In the Act, a conservation agreement is defined as "a written

agreement between a landowner and a holder that creates a conservation interest in land". A conservation interest is defined as "an interest that imposes one or more restrictions on the use of land for the protection and enhancement of natural ecosystems, wildlife or fisheries habitat, or plant or animal species". The Act outlines the mandatory and optional terms of conservation agreements, termination procedures as well as providing a list of conservation agencies eligible to hold conservation agreements. The Act also sets out the procedures for the description of land in the agreement and for registration of the agreement with the Land Titles Office. Any agency intending to file a caveat with the Land Titles Office, is required to serve notice at least 45 days, prior to filing the caveat, to all individuals on the certificate of title or that have an interest in the land.

A Conservation Agreements Board was established under the Act and is responsible for:

- Providing a forum for discussion for interested parties regarding conservation agreements;
- Assisting interested parties who apply to the Board to consider the implications of a conservation agreement;
- Assisting in the resolution of disputes between interested parties regarding conservation agreements; and
- Fulfilling functions prescribed by regulation.

The Board also handles applications objecting to the registration of a caveat with the Land Titles Office. Once a caveat has been filed and the conservation agreement has come into affect, any objections are handled by the Courts. The Act does provide a basic format that can to be used for drafting conservation agreements. The format does not list

any restrictions that are to be included in the agreement; the landowner and receiving agency must negotiate the restrictions. There are no recommendations or regulations for collecting baseline data, monitoring or enforcement of conservation agreements provided in the Act; each agency must develop a system for collecting baseline data, for monitoring the agreement property and enforcement of the restrictions.

The Ontario Conservation Lands Act amended in 1994, now allows landowners to grant a conservation agreement or enter into a covenant with a conservation body (as defined in the Act) for the conservation, maintenance, restoration or enhancement of all or a portion of the property or the wildlife on the property. The Act also allows agreements to be entered into to gain access to land for any of the above purposes. The Ontario Act differs from Manitoba's Conservation Agreements Act in that there is no actual definition of a conservation agreement (easement) or covenant provided in the Act. The Act also includes a clause to cover conservation bodies that cease to be conservation bodies (as defined in the Act). All agreements (easements) and covenants held by a conservation body that ceases to be a conservation body will revert to the Minister (as defined in the Act). The Ontario Act, like the Manitoba Act, does provide a list of the conservation bodies that may enter into an agreement in the province. The Ontario Act does not list any restrictions to be included in the agreement; they must be negotiated between the agency and the landowner. The Ontario Act also allows for an agreement (easement) to be registered with the appropriate land registry agency, binding all future landowners to the conditions of the agreement for the term of the agreement.

The conservation legislation in Minnesota differs from the Manitoba Conservation Agreements Act in various ways. First, the definition of a conservation

agreement (easement) in the Minnesota Act is "a nonpossessory interest of a holder in real property imposing limitations or affirmative obligations the purposes of which include retaining or protecting natural, scenic, or open-space values of real property, assuring its availability for agricultural, forest, recreational, or open-space use, protecting natural resources, maintaining or enhancing air or water quality, or preserving the historical, architectural, archaeological, or cultural aspects of real property". The Minnesota legislation also states that if the holding agency is unable to do business in the state due to the lack of a licence, and provisions have not been made for agreements to revert to another non-profit corporation, all conservation agreements will revert and vest with the State of Minnesota and will be administered by the commissionaire of Natural Resources. The Act also provides a list of restrictions of which any or all may be included in the agreement.

The State of North Dakota's legislation only permits certain agencies to hold conservation agreements and only for a 30 year term. The USFWS, due to the supremacy clause, is not bound by North Dakota legislation and can hold agreements that are in perpetuity. The Federal law in all states governs only the tax issues associated with donated conservation agreements. Once an agreement is donated to a non-governmental agency it is the responsibility of that agency to monitor and enforce the terms of the agreement unless a violation is in breach of the law. If a holding agency fails to monitor or enforce the terms of the conservation agreements it holds, the government may withdraw the agency's charitable status and the agreements held will revert to another agency as outlined in the agreement or to the state if that option is provided in that state's legislation.

3.5 Tax Implications of Conservation Agreements

Under the federal Income Tax Act up till 1995, landowners that donate land to a non-governmental registered charity or a municipality could receive a tax receipt for the gift to a maximum of 20 percent of the donor's net income for the year of the donation, and for up to a maximum of 5 years subsequent. Gifts of private land to municipal government or non-governmental registered charities were treated differently than donations to Crown agencies in which tax receipts could be used against 100 percent of the donors income (Rubec 1998). In February 1995, the Federal Government announced proposed changes to the Income Tax Act to promote the donation of ecologically sensitive lands, conservation easements, covenants and servitudes for the purpose of conservation (Rubec 1998). These changes came largely from presentations to the Federal Government by the National Round Table on the Environment and the Economy, non-governmental organizations, corporations, municipalities, citizens and the provinces. The Income Tax Act was amended to allow donations of ecologically sensitive land to be applied against up to 100 percent of a donor's annual income (Rubec 1998).

Further amendments to the Income Tax Act that extend recipient status of land or easement donations to Crown agencies were announced in July 1997. In October 2000, yet another proposed change to the Income Tax Act was announced in the Federal budget. The change reduced capital gains included as income to 50 percent and capital gains for donations of ecologically sensitive lands included as income to 25 percent (Deloitte and Touche 2000). Under the Income Tax Act, the federal Minister of the Environment was given the responsibility of establishing a certification process across Canada to certify the quality of donations of ecological gifts and the qualification of

recipient agencies (Rubec 1998). In order to qualify as ecologically sensitive land, the federal Minister of Environment must certify the donated land as ecologically sensitive, "the conservation and protection of which is, in the opinion of that minister, important to the preservation of Canada's environmental heritage" (Andrews and Loukidelis 1996). An appraisal must be completed in all cases where the property owner will claim a tax receipt for a donated conservation agreement. The appraisal is required by the Canada Customs and Revenue Agency (CCRA) for the tax benefit and is the justification for the value shown on the tax receipt (Attridge 1997).

The Income Tax implications for purchased conservation agreements are different than for donated agreements, as the amount paid for the agreement will count as income for the landowner. The tax specifics will depend on the individual status of each landowner. Capital gains taxes will apply to landowners that do not have an exemption under the Federal Income Tax Act. Farmers are entitled to a 500,000 dollar exemption under the Act but non-farmers will not be entitled to the same exemption. Capital gains will still be reduced to 25 percent if the property is certified under the Ecological Gifts Program.

3.6 The Ecological Gifts Program

In 1995 the Federal government initiated the Ecological gifts program. The program establishes a national process for ecologically sensitive land to be certified, and for registered charities to be qualified recipients of ecologically sensitive land donations (Canadian Wildlife Service 2001). A donation can be full title to a property, or through a conservation agreement, easement, covenant or servitude that restricts the long-term use

of the land. The donors of ecological gifts can receive a federal tax credit for the value of the donated land or the value for the conservation agreement. The tax credit is 17 percent of the first 200 dollars of the value and 29 percent of the remaining value, which can be used against 100 percent of the donor's income and carried forward for 5 years subsequent (Canadian Wildlife Service 2001). For land to be considered ecologically sensitive, the Minister of the Environment or someone on his behalf must certify the property as ecologically sensitive by issuing a "Certificate for Donation of Ecologically Sensitive Land". The Minister of Environment must also certify the fair market value of the gift (Canadian Wildlife Service 2001).

The Federal Income Tax Act includes penalties for any non-approved use of the land, changes to the land or dispositions of the gift or title of the ecologically sensitive property. The penalty will be applied to the landowner and can be as much as 50 percent of the value of the gift at the time of disposition or land use change (rather than at the time of acquisition). In the case of conservation agreements, easements, covenants or servitudes, land use or changes and disposition are regulated under provincial or territorial law (Canadian Wildlife Service 2001). If an agency holding a donated conservation agreement (or certified as ecological sensitive) on a property that is in violation of that agreement and if the agency is found not upholding their responsibility to monitor and enforce the restrictions of the agreement, the charitable status of the agency could be revoked. Thus it is extremely important for all agencies holding conservation agreements to monitor all agreements consistently.

3.7 Baseline Documentation, Monitoring and Enforcement of Conservation Agreements

The first step in developing the guidelines for baseline documentation, monitoring and ensuring compliance of conservation agreements was to reveal the basic framework for baseline documentation, monitoring and compliance issues through an analysis of all the information gathered through the literature review. The main sources of information on baseline documentation, monitoring and compliance issues analyzed in the study were: the Conservation Stewardship Guide by Brenda Lind (1991), the Land Trust Alliance's Conservation Easement Handbook for Managing Land Conservation and Historic Preservation Easement Programs by Diehl and Barrett (1988), Baseline Reporting by Thorne (1997) and Baseline Documentation and Monitoring – Keys to a Successful Future Defense by Thornton and Anderson (1998). This section provides a written summary of the information on baseline documentation, monitoring and enforcement of conservation agreements analyzed during the study. For further clarity, the information analyzed was also summarized in Tables 2 through 4.

3.7.1 Baseline Documentation

Lind (1991), and Diehl and Barrett (1988) recommend that agencies entering into conservation agreements have written goals or criteria for accepting conservation agreements to ensure that all agreements accepted by an agency are in accordance with the overall objectives or goals of the agency. Lind (1991) also suggests including the specific intent (other than that allowed by the appropriate legislation) of the agreement in relation to the parcel of land to ensure the ecological value of the land is protected.

According to Lind (1991) and Thornton and Anderson (1998), drafting agreements with terms that are easy to monitor and enforce are the key factors to ensuring future compliance with the terms conservation agreements.

Three of the four literature sources summarized in Table 2 recommend that baseline data be collected prior to accepting the agreement or as close as possible to the time the agreement is signed. This is to ensure that the original condition of the property is accurately documented. Each of the sources reviewed list various types of data to be collected and included in the baseline data report. The conservation value of the property, the condition of all ecological, historic, geologic, land use, and other property features that are protected or affected by the agreements' terms should be included in the report. The methods suggested for collecting the data by the different literature sources are very similar. Ground and aerial photos, maps, surveys, inventories and written descriptions are recommended by each of the sources analyzed. Thornton and Anderson (1998) suggest using what they refer to as an easement map that identifies the important landscape features, reserved building sites, and areas of conservation interest. They also suggest using only one map to depict all roads, fences, existing structures, trails, wetlands, water bodies and any other special features rather than using a series of maps. This will allow the agency to view the agreement in the context of the entire property. Boundaries that are enforceable are also recommended to be included in the baseline report and surveys are one way to achieve that. Lind (1991) and Diehl and Barrett (1988) warn that collecting unnecessary details wastes time and money, so the information collected should relate to the agreement and the restrictions of the agreement. More specific or constraining restrictions in the agreement require more detail on the features of the

property that are documented. For example, species inventories should be conducted for conservation agreements that are intended to protect endangered species and their habitat.

Three out of the four sources reviewed suggest creating a baseline document file that include at the very least, property and landowner information as well as an acknowledgement statement. Acknowledgement of the condition of the property is very important as it helps to establish the accuracy of the report. Lind (1991) and Thorne (1997) include far more detail that should be included in the baseline document file. They recommend including: a cover sheet, directions to the property, a summary, any legal information (encumbrances or mortgages), the property owner's information, and the property information (photos, maps etc). Thorne (1997) also includes a reference statement in the baseline report to ensure that the actual agreement will take precedence should there be any discrepancies between the original conservation agreement and the baseline data report.

Table 2: Summary of Literature on Baseline Documentation

	Lind 1991	Diehl and Barrett 1988	Thorne 1997	Thornton and Anderson 1998
Before Accepting the Agreement	Select agreements according to overall goals of organization	Written criteria for accepting agreements		
	Consider restrictions, potential violations, ability to monitor			Draft with monitorable, and enforceable terms
In the Agreement	The intent of the agreement			
	Defined boundaries, avoid restrictions that cannot be monitored or enforced	Enough info to define each restriction in the agreement		Clearly understood baseline data
When to Collect the Data	Prior to the time the donation is made	Before the agreement is accepted	The time the agreement is signed	
Type of Data Collected	Photographs-ground (keyed to map) and aerial, maps, surveys, and narratives	Quantitative data, photos ground and aerial, maps	Air photos and maps, vegetation/habitat types, boundaries, cultural features, ground photos, a list of monitoring recommendations	Easement map-ID imp features, photos-ground, aerial supporting text-descriptions and explanations
Included in the Baseline Data Report	Directions to property, summary, legal information, l/o information, conservation values, acknowledgement		Reference statement, summary, location, l/o info, agreement summary, property info, acknowledge statement	Acknowledge, baseline data sheet- name, address, location, list of features and improvements

3.7.2 Monitoring Conservation Agreements

Once the baseline data report is complete, Lind (1991) and Thorne (1997) suggest that several copies of the report are made; one for the landowner, one for the agency's files, and one copy that will be stored in a secure, fire safe location. Thorne (1997) also recommends that the person collecting the baseline data make a list of recommendations for future monitors. How often to monitor and what to look for, or potential violations are a few of the things that Thorne (1997) suggests are included in the monitoring list. Thorne (1997) does not included the frequency that monitoring should take place but the other sources analyzed recommend monitoring take place at least once per year.

Lind (1991) and Diehl and Barrett (1988) recommend agencies use a monitoring form or checklist when inspecting agreement properties. Lind (1991) also includes a list of the elements that should be included in the form: property owner name and address, location of property, method of monitoring, if the property is in compliance, the name of the inspector, their signature and the date. Some additional elements that were listed and can also be included in the inspection form are: a summary of the agreement restrictions, other property owner information like phone number and signature, a list of all people accompanying the inspector, a brief description of the property, a description of any man-made or natural alterations, any other observations, and a list of all photos and maps attached to the report.

All of the sources reviewed recommend the agency use the method of monitoring most appropriate to each agency's specific situation. Ground inspection should be considered for small or relatively few agreements, and for agreements that have very specific restrictions or permanent public access. Aerial monitoring is recommended for

numerous or very large agreements. The need for follow up ground monitoring should be assessed on a case-by-case basis. Lind (1991) also recommends that the same individual should conduct ground inspections from year to year to build and maintain a good rapport with the landowner.

According to Lind (1991) the steps involved in monitoring are: notify the landowner of the visit and invite them to participate (ground monitoring only), schedule the flight path (aerial monitoring only), review the baseline report, bring all materials that may be needed during the inspection and note and document any changes that have occurred. The monitoring visit should be properly documented either by having the property owners signature in the case of ground monitoring, or sending a letter to the property owner to notify them that aerial monitoring has taken place.

Table 3: Summary of Literature on Monitoring

	Lind 1991	Diehl and Barrett 1988	Thorne 1997	Thornton and Anderson 1998
Once the Report is Complete	Multiple copies, one stored in a secure location		Multiple copies, have one stored in a secure location	
Monitoring	At least 1/yr, more specific restrictions more often	Contact at least 1/yr through monitoring or other actions	Prepare a monitoring list- when to monitor, what to look for	Regular monitoring program- annual basis
Forms	Have a monitoring form or checklist	Have a form or checklist		Inspection form-signed and dated
Conducting the Inspection	Ground- small agreements with specific restrictions, permanent public access. Aerial- large numerous agreements	Tailor monitoring procedures to agencies needs		Type of monitoring that best suits the agency (ground or aerial)
Inspector	The same person conduct the inspection each year			
Steps to conducting the inspection	Schedule time, review all info, bring materials, walk boundaries record condition- for aerial assess the need for ground inspection	Notify owner, review info, review baseline, gather materials, note any changes, discuss changes with owner		Check for changes in ownership, notify the owner, bring materials, note any changes (photos)
After the Report is Complete	Property owner's signature-for ground monitoring Send a letter to the owner- for aerial monitoring	Send 2 copies to owner and ask to sign and return one copy		Send owner summary of findings

3.7.3 Enforcement of Conservation Agreements

All three of the sources of literature on enforcement of conservation agreements (summarized in Table 4) reviewed during the study recommend maintaining regular contact with landowners (other than monitoring visits) to prevent future violations. Contact with landowners can be in many different forms; periodic newsletters, annual letters reminding the landowners of the conservation agreement and the restrictions or regular visits. This will also help new landowners to become aware of conservation agreements, the agency holding the agreement and where to find more information. Lind (1991) also points out that maintaining good relations with the surrounding communities and other interested parties is important as neighbors of agreement properties can assist the agency in discovering potential violations.

Lind (1991), and Thornton and Anderson (1998) recommend that all agencies accepting conservation agreements should have a written enforcement or violation policy. A written policy will allow the agency to act quickly and appropriately in the event of a violation. Information such as what constitutes a violation, who will document the violation and who will negotiate a solution with the landowner should be included in the policy. The policy should also include the method of contacting the landowner to discuss the violation and any required restoration. Each situation will be different but each agency should determine at which point legal action will be initiated if a mutually acceptable solution cannot be reached.

Lind (1991) recommends documenting the violation using photos that are signed, dated and keyed to a map, taking measurements of the affected resource and extensive field notes. The documentation should then be compared and contrasted to the baseline

report and any relevant monitoring reports. Once the violation has been documented the agency should immediately meet with the property owner to review the information. When dealing with third party violations the third party should be held responsible whenever possible and when the third party is unknown the agency should work together with the landowner to complete any necessary restoration. For serious violations that are in breach of the law, Lind (1991) recommends the appropriate law enforcement agency is involved immediately.

When dealing with the landowner in a violation case, Lind (1991) advises agencies to work with the landowner whenever possible. Voluntary restoration should always be encouraged and other options considered if a mutually acceptable solution cannot be reached. Thoroughly documenting all contact with the landowner will be useful if legal action is required. Official letters should also be sent to the landowner reaffirming the property condition, restoration and the deadline for restoration. The property should be inspected at the deadline and if restoration is satisfactory a letter should be sent to the landowner notifying them that the restoration is acceptable. If the required restoration has not been completed by the deadline, arbitration and mediation are possible options that can be used to resolve the dispute. All three sources of literature strongly recommend that legal action is pursued as a last resort option only after all other resolution options have been attempted.

Table 4: Summary of Literature on Enforcement

	Lind, 1991	Diehl and Barrett, 1988	Thornton and Anderson, 1998
Maintaining Contact	Landowner contact program-contact at least once per year	Regular contact with the landowner	Good relationship with l/o
	Maintain contacts with government and other organizations		Establish a landowner outreach program
Enforcement	Have a written enforcement policy		Policy to address violations
Enforcement Policy	How property owner will be contacted, how to document the violation and by whom, when to use legal action, and who will negotiate with landowner		Contact property manager or l/o, follow up with letter, if violation consult legal council, establish a plan for restoration and deadline
Documenting the Violation	Photos signed, dated and keyed to map, measurements of affected resource, and extensive field notes		
Dealing with the Landowner	Meet with the landowner to review information and work with the landowner in third party violations		
Restitution Options	Encourage voluntary reparation, document all contact, agree on deadline, follow up with letters, arbitration, mediation, and court as last resort	Restoration, arbitration, mediation, litigation as last resort	Court action last resort

Another important topic discussed in the literature analyzed is the idea of endowment funds. Stewardship takes both time and money and as the number of agreements held by an agency increase, the costs of stewardship will also increase (Lind 1991). Agencies entering into conservation agreements should plan for costs associated with collecting baseline data, monitoring and possibly defending the agreement in the event of a violation. Baseline documentation and monitoring will require staff time, travel expenses, the expenses associated with creating or acquiring maps and photos, and various administration costs. Enforcement of the agreement will require staff time and may require the expense of hiring professionals and potentially court fees (Lind 1991). Planning for these future costs becomes even more important as the number of agreements an agency holds increases. Lack of financial planning can result in inadequate stewardship, failure to monitor and enforce agreements, loss of the property's conservation values, and the loss of public confidence in conservation agreements as a private land conservation option (Lind 1991).

CHAPTER 4

JURISDICTIONAL ANALYSIS

4.1 Introduction

To collect the practical information on baseline documentation, monitoring and ensuring compliance with the terms of conservation agreements, a series of interviews with individuals from different conservation agencies from Ontario, Minnesota, North Dakota, Saskatchewan, and Alberta were conducted. A written summary of the results, discussed by jurisdiction, is presented in this chapter. A summary of the interview data is also presented in Appendix 6, in a series of matrix tables. Due to the large amount of data collected, the information from each of the jurisdictions has been summarized and displayed in this chapter, Tables 5 through 7. Due to the large number of categories developed from the analysis of the interview data, each matrix is presented in three tables. The first table deals with the intent of the agreement and baseline information, the second table has information gathered on authentication of the baseline report and monitoring of the agreement, and finally, the third table deals with enforcement and the transfer of land. All information that was too detailed to enter into the matrix is discussed in section 4.3, Issues Identified Through the Interview Process.

4.2 Ontario Interview Results

Most of the agencies that were interviewed in Ontario incorporate the specific objective of the conservation agreement into the agreement in relation to the land or habitat type. In the majority of the non-governmental organizations interviewed, the agreements were drafted to be more flexible and to allow for the specific objective of the agreement to relate in particular to the property or the habitat type. The ecological features were included or described in the agreements by approximately 57 percent of the agencies interviewed (Appendix 6). The Nature Conservancy of Canada (NCC) uses the ecological features of a potential agreement property in the design of the agreement itself. NCC also has an overall plan for accepting conservation agreements that coincides with the objectives of the organization. The features of the property are investigated before the agreement is accepted to ensure all agreements accepted follow with the overall goals of organization. Other agencies that have an overall plan or organization goal reported using evaluation sheets or conducting groundwork prior to accepting an agreement to ensure that the agreement follows with the agencies goals. Agencies that are just starting to accept conservation agreements or have relatively few reported that little groundwork is conducted prior to accepting agreements.

All the agencies interviewed in Ontario stressed that good baseline data is an essential component of accepting conservation agreements. Conservation agreements can only be successful if the terms of the agreement are adhered to and to ensure this, the agreement properties must be consistently monitored. Monitoring can only be done if there is a baseline or original condition for comparison. The agencies also agreed that baseline data is extremely important for defending the agreement in the event of a

violation. If a violation should occur and there is no baseline information on the property the agency may have a difficult time proving that a violation has occurred.

In respect to baseline data reports it was suggested by all agencies interviewed to keep the report as short and simple as possible without missing any important detail. NCC and Ducks Unlimited Canada (DUC) were the only agencies interviewed in Ontario that do a detailed search on the historical perspective of the property. All agencies interviewed did conduct a search on the title of the property prior to signing the agreement. NCC and DUC, who actually conduct and environmental audit, look into the historic background of the property to ensure that there are no buried hazardous materials or other potential problems. Hazardous materials on the property may become a liability issues in the future for the agency holding the agreement. Some agencies do a preliminary site inspection of the property or meet with the landowner and if there are any problems, a more thorough investigation into the history of the property is conducted. NCC also records any improvements that have been made to the property or buildings in the baseline data report to ensure that the data recorded is complete for comparison with future monitoring reports.

All of the Ontario agencies interviewed that collect baseline data use both ground and aerial photos to document the original condition of the property (Appendix 6). Aerial photos are commonly overlaid on topographic maps or used to create sketch maps of the property. Ground photos are used to document the property's original condition and are keyed to a map showing the location of the photo stations. In all cases written reports with a description of the property are used to supplement the photos and maps in the baseline data report. Some of the agencies even use a ranking form (evaluation form) to

document the condition of the property as well as to determine the agencies interest in the agreement. The ranking forms varied between the different agencies but most are designed to give the agency an idea of what the major habitat types are and their proportion on the property, the current uses, existing structures and other information. Inventories that range from very general to biological and species inventories are used in 5 of the 6 agencies interviewed in Ontario.

Surveys are generally very expensive and were not included as part of the baseline data on a regular basis by any of the agencies interviewed in Ontario. If the agreement is quite complicated or the boundaries are not clear, all of the agencies reported that a survey would be conducted on the property. Once the baseline documentation is complete the only agency interviewed that did not require the baseline report to be authenticated by the landowner is the Land Use and Policy Branch of the Ontario Government. For storage of the baseline report, NCC was the only agency that stored a hard copy of the report in a fire safe location. The other agencies had multiple hard copies of the report stored in different locations, and some expressed interest in using a fire safe location in the future.

The recommended frequency for monitoring conservation agreements by all the agencies interviewed is at least once per year. Not all the agencies interviewed in Ontario actually monitored agreement properties once per year but they did agree that once per year is ideal. One of the agencies based monitoring frequency on the objectives of the agreement. If the agreement is high risk, the agreement will be monitored more frequently than low risk agreements. Actual monitoring varied between once every year

to once every two to three years. NCC is the only agency that monitors their conservation agreements once per year (or more for high-risk agreements) on a regular basis.

The time of year monitoring is carried out varies depending on whether agencies have paid employees that conduct the monitoring visit or volunteers. Agencies with paid employees conducting the visit reported monitoring usually takes place in late fall, early spring or summer (after July 15th). Agencies with volunteers reported that monitoring was carried out whenever it is most convenient for the volunteers. Site inspection is the most common method of monitoring used by the agencies interviewed in Ontario. Aerial monitoring is used by some of the agencies interviewed for large or numerous agreements. Some of the agencies interviewed that use site inspection invite the landowner to accompany the inspector, while all agencies give the landowner at least 24 hours notice prior to the monitoring visit. A monitoring form, checklist or some from of record was used by 4 of the 6 agencies interviewed.

NCC was the only agency interviewed that had signs posted on any of the agreement properties. All the agencies interviewed reported that most of the landowners do not want signs posted on agreement properties. Many landowners are concerned that posted signs may give the public the impression that the land is public property. Three of the agencies interviewed have a landowner contact program in place and maintain regular contact with their landowners. All of the agencies interviewed stressed the importance of maintaining regular contact with landowners to ensure the success of conservation agreement programs.

Most of the agencies interviewed do not include arbitration or mediation options in the agreement but they will use these methods if a dispute were to arise. DUC is the

only agency that includes dispute resolution options in all their agreements. Four of the agencies interviewed include an option in the agreement to enter the property and restore the damage if the landowner has failed to conduct the required restoration. Of these, only 3 of the agencies also include cost recovery options in their agreements. NCC was the only agency interviewed in Ontario that includes a clause in the agreement requiring the landowner to notify the agency of the intent to sell the property. It is important for the agency to contact new landowners as soon as possible to ensure they have information on the agreement and the agency.

4.3 Minnesota Interview Results

The Fish and Wildlife Service (FWS) use two different types of agreements that relate directly to habitat type; grassland and wetland conservation agreements. Wetland Reserve Program Operation agreements and Farmer Management Home Administration Easements that are objective specific are also used by the FWS. Reinvest In Minnesota (RIM) also uses different types of conservation agreements that relate to different habitat types. The Minnesota Land Trust (MLT) and The Nature Conservancy (TNC) both use conservation agreements that are specific to the property or the purpose of conservation for each agreement accepted. TNC and RIM take the ecological features of the property into account when drafting the conservation agreement, while the FWS only accepts agreements in one of the four different agreement types used. TNC also conducts an environmental hazard assessment on all properties they are interested in. RIM inspects all properties of interest and depending on the findings, a more intensive investigation may

be launched. None of the agencies in Minnesota document improvements that have previously been made to the property.

As with the agencies interviewed in Ontario, all agencies interviewed in Minnesota stressed that good baseline data is an essential part of accepting conservation agreements. All the agencies interviewed use different types and scales of maps to document the original condition of the property. MLT and the FWS in Fergus Falls have incorporated some use of GIS to create maps for the baseline data report. All of the agencies interviewed except the Department of Natural Resources (DNR) and RIM use a combination of ground photos and aerial photos to further document the original condition of the property (Appendix 6). RIM only uses air photos that are provided by the Farm Service Agency to delineate the area of the agreement. DNR does not collect any baseline data, as their agreements are very restrictive.

Aerial photos are commonly overlaid on topographic maps or used to create sketch maps of the property. The location of all ground photos taken are keyed to one of the property maps and the photographer's signature and the date are recorded on the back of each photo. All of the agencies use written reports or forms to summarize and supplement the data collected for the baseline report. The FWS was the only agency interviewed that use inventories, although very general, in the baseline data report.

Surveys are very expensive and are only used in situations where the boundaries are unclear or to meet with IRS or the County Clerks Office's requirements. The MLT is the only agency interviewed that actually requires the landowner to authenticate the baseline data report. Most agencies have several copies of the agreement stored in different locations; one to the landowner, one to the lawyers (if the agency does not have

a lawyer on staff), one to the Land Registry Office, and one stored at the agency's office. The MLT was the only agency interviewed that actually stored one copy of the conservation agreement in a secure fire safe location.

The recommended frequency for monitoring agreements was the same as with the Ontario agencies interviewed, once per year. Again, not all the agencies interviewed actually monitored once per year but they did agree that once per year is ideal and had plans to increase their efforts in the near future (Appendix 6). The responses for the time of year monitoring is conducted was also the same as for Ontario, usually late fall or early spring.

The methods of monitoring used by the Minnesota agencies interviewed were also very similar to Ontario. Site inspection is the most common for few or small agreements where aerial is best for large or numerous agreements. Some of the agencies interviewed that use site inspection, invite the landowner to accompany the inspector and most agencies give the landowner at least 24 hours prior notice. None of the agencies interviewed are currently using remote sensing techniques to monitor agreements but a few of the agencies have expressed an interest in using satellite imagery in the future. TNC, MLT and RIM all use a monitoring form for site inspections but only the MLT requires the landowner to sign the form.

The only agency interviewed in Minnesota that does not have a landowner contact program is DNR. The type of landowner contact program varies among the different agencies that have a program in place. The MLT sends out a landowner annual newsletter and a post-monitoring letter. The FWS and RIM only send landowners annual reminder letters. All the agencies interviewed stressed the importance of maintaining a good

relationship with the landowners to ensure the success of conservation agreement programs. The FWS, RIM and the MLT post some signs on a few of their conservation agreement properties but most landowners do not want signs posted on their property. Many of the landowners are concerned that if conservation agreement properties are posted, the public may view the properties as public land. RIM stakes all the boundaries of their agreement properties but the signs are completely optional.

In Minnesota the agencies interviewed have experienced some violations, both major and minor. The violations have in some cases been resolved directly with the landowner and in others through the courts. The most typical violations were access problems (driving over land under agreement), encroaching on the agreement boundaries, and parking machinery or storing bales on areas covered under the agreement. When a violation is discovered, the agency documents the violation and then contacts the landowner to discuss the violation and required restoration. The landowner is usually given 30 to 60 days to restore the property. All agencies interviewed stressed that they try to work with the landowner whenever possible, meeting with them several times and allowing extra time for restoration, within reason, if it is required. The agencies stated that it is in the individual agency's best interest to try to maintain the relationship with the landowner but in some cases more strenuous enforcement efforts are required.

TNC and RIM include the right to enter the property and complete the restoration if the landowner has not completed restoration by the set deadline. The agency then requires the landowners to reimburse them for all incurred costs. The agencies must provide the landowner with prior notice before they enter the property to restore any damage. All of the agencies interviewed except the FWS also include a clause in the

agreement requiring the landowner to notify the agency if they intend to sell the property. The sooner the agency is aware of a new landowner, the sooner they can begin to establish the new relationship. All of the agencies interviewed agreed that communication with the landowners is essential to preventing future violations.

4.4 North Dakota Interview Results

The FWS in North Dakota, as in Minnesota, use different types of conservation agreements to relate to the habitat type and to incorporate the ecological features of the property into the agreement (Appendix 6). The North Dakota Natural Resource Trust (NDNRT) and the Natural Resource Conservation Service (NRCS) are the only agencies interviewed in all jurisdictions that exclusively accept term agreements. Both agencies have specific criteria that determine which properties will be considered for a conservation agreement. All of the agencies interviewed in North Dakota check only the title of the property, the history of the property or any improvements to the property are not included in the baseline data report.

The FWS does not collect any physical inventories or data on agreement properties; aerial photos of the property are taken and maps are used to delineate the boundaries. The NDNRT and the NRCS both use maps, ground photos, aerial photos and written reports to document the original condition of the property. None of the agencies interviewed include any inventories in the baseline report. The NRCS is the only agency interviewed in North Dakota that routinely requires a survey of agreement properties. The other agencies do not require surveys of agreement properties because they are too expensive.

Neither the NRCS nor the NDNRT require the landowner to sign the completed baseline data report. The FWS, on the other hand, does require the landowner to authenticate the baseline data report and the maps produced as part of the baseline data for wetland agreements. FWS wetland agreements are slightly different from other types of agreements held, as only the wetlands are covered under the agreement and the landowner's input is important in determining the total number of wetland acres on the property. It is also important for future monitoring and potential disputes to have both the landowner and holding agency in agreement to the acreage delineated on the maps of the property. The FWS also incorporates some use of GIS and other remote sensing data in their baseline data reports.

All of the agencies interviewed in North Dakota, except DNR, store one copy of the agreement in a secure location as well as having several other copies in different locations. Again, for monitoring all the agencies agreed that monitoring once per year is ideal. Unlike Ontario or Minnesota all of the agencies reported that monitoring actually occurs once per year. There was no specific time of year that monitoring occurs, the agencies reported that it varies depending on the situation and the type of agreement. The FWS monitors all agreements aerially and the need for ground inspection is assessed on a case-by-case basis. The NDNRT and NRCS both inspect agreement properties on the ground. To date none of the agencies are using remote sensing techniques for monitoring agreement properties. The NDNRT is the only agency interviewed that uses a monitoring form when conducting the inspection.

The NRCS is the only agency interviewed using posted signs on the agreement properties, as most landowners do not want signs posted on their property. Currently only

the NDNRT has a landowner contact program in place where landowners are contacted once per year and sent a regular newsletters. The NRCS also contacts landowners once per year to check for changes in ownership during their annual review. The FWS has set up a system where they are notified by the County Clerk's Office if there is a change in ownership on an agreement property. The FWS is currently paying 25 cents per notification. The NDNRT has included a clause in their agreements requiring the landowner to give the agency at least 30 days notice of the intent to sell the property.

None of the agencies in North Dakota include mediation or arbitration options in their agreements, although the NRCS and the NDNRT include some cost recovery options. In the event of a violation all four agencies will contact the landowner by letter (NRCS uses registered mail) to notify them of the violation and any required restoration. When a violation has occurred, the landowners are usually given 30 to 60 days to complete the necessary restoration. All the agencies interviewed are flexible and willing to work with the landowners whenever possible to find a mutually acceptable solution.

In North Dakota there have been many violations, but the majority of the problems revolve around the methods used to record the acres for wetland agreements prior to 1976. Prior to 1976, the field personnel for the FWS would prepare a summary number of acres for which the landowner was paid but no maps were created. When water levels increased and wetlands also increased, many of the landowners had complaints that they were only paid for a certain number of acres and now the wetlands far exceeded that. In one case, The Court of Appeals ruled that only the wetlands existing at the time of the agreement conveyance were covered by the agreement's restrictions (United States v. Kerry Johansen, Michael Johansen). Starting in 1976, the FWS began

includes maps, made from aerial photos, of the wetlands that are covered under conservation agreements.

All of the agencies interviewed include a clause in the agreement that allows the agency the right to enter the property, if the landowner has not completed the required restoration, and complete the restoration charging the landowner for any incurred costs. All of the agencies give the landowner 24 hours notice of the intent to enter the property and complete the restoration although the NRCS is not required to give prior notice. All of the agencies in North Dakota also agreed that legal action is a last resort option only after all other attempts to reach an amicable solution have been attempted.

4.5 Saskatchewan and Alberta Interview Results

Both the Nature Conservancy of Canada (NCC) and the Southern Alberta Land Trust Society (SALTS) include the specific habitat type or native rangeland in the design of their agreements (Table 5-7). The SALTS seeks to accept conservation agreements with native prairie habitat and designs their agreements specifically on that land type. The NCC inspects all properties of interest to obtain information on the history of the property. The SALTS conducts an interview with the landowner to acquire information on the history of any properties of interest. The NCC does not document any improvements to the property while SALTS does include previous improvements in the baseline data report.

Both NCC and SALTS use a combination of maps, ground photos, aerial photos and written reports to document the original condition of the property. The NCC collects lists of species found on the property but SALTS only conducts very general inventories

on the property. Surveys are expensive and are used infrequently by both agencies. The NCC and SALTS both require the landowner to authenticate the baseline data report in addition to signing the conservation agreement. The NCC also stores one copy of the agreement in a secure location in addition to having several other copies in different locations.

Both agencies conduct monitoring once per year and most often during the summer. Neither of the agencies currently use aerial monitoring; all monitoring is done by site inspection. The SALTS are currently using remote sensing methods only for baseline documentation not for monitoring. Both agencies use a monitoring form but only the NCC requires the landowner to sign the report.

The NCC does not post signs on any of their agreement properties, as most landowners do not want the properties posted with signs. The SALTS leaves posting of signs up to the landowners and some landowners have even requested signs be placed on their property. The NCC has regular contact with their landowners through a newsletter and organized community events. The SALTS does not have any other contact with landowners other than during annual monitoring visits.

Both agencies have the option of using arbitration or mediation if a dispute should arise. The NCC includes dispute resolution options in their agreements although in Alberta, dispute resolution options are provided in the legislation. Both agencies also have various cost recovery options included in their agreements. The NCC and SALTS also include a clause in the agreement that states that if a violation goes to court and the landowner is not successful, the landowner will have to pay the agency's legal fees. If NCC is not successful in court, they will only be responsible for their own legal fees. The

SALTS on the other hand, will pay the landowner's legal fees if they are not successful in court. This is an interesting method of discouraging resolution of violations through the court system.

In the event of a violation, both agencies will contact the landowner in accordance with the agencies enforcement policy. The landowner is usually given 30 to 60 days to complete any necessary restoration. Both agencies also include a clause in their agreements requiring the landowner to notify the agency of the intent to sell the property. As with all of the other jurisdictions investigated NCC and SALTS both stressed that legal action is a last resort option after all efforts to find a mutually acceptable solution with the landowner have been attempted.

Table 5: Summary Table I of all Agencies Interviewed in Ontario, Minnesota, North Dakota, Saskatchewan and Alberta

	Specific objective	Ecological features	History of property	Improvements to property	Maps	Ground photos	Aerial photos	Written reports	Inventories
Ontario 6 separate agencies interviewed	3, 4, 5, 6 - relate to situation	2, 3, 4, 5, 6 - include in baseline	4 and 6 - include	2, 4, 6 - include in baseline	All agencies use	All agencies use	All agencies use	All agencies use	1, 3, 4, 5, 6 - vary form specific to general
Minnesota 6 agencies /offices interviewed	7, 8, 10, 11, 12 - relate to land/ habitat type	7 and 12 - include in baseline	7 and 12 - include	None included	All agencies use	7, 8, 10, 11 - use	7, 8, 10, 11, 12 - use	All agencies include	10 and 11- very general
North Dakota 4 agencies /offices interviewed	All specific to land or agency criteria	15 and 16- specific to agency criteria	15 - title inspection only	None	All agencies use	15 and 16- use	All use- 13 and 14 - use different years	All use- evaluation sheets/ forms	None
Southern Alberta Land Trust Society (SALTS)	Native range lands	Not included	Site inspection	Not included	Series- main based on air photo	GPS points recorded	Included	Notes based on terms of CE	Species lists
Nature Conservancy of Canada Saskatchewan (NCC)	Specific to habitat type	Native prairie	Interview with landowner	Yes	Yes	Not from a specific location	Included	Natural features, description of property	General, not all-inclusive

Table 6: Summary Table II of all Agencies Interviewed in Ontario, Minnesota, North Dakota, Saskatchewan and Alberta

	Survey	Authentication of Baseline	Copy in secure location	Frequency	Time of year	Site inspection	Fly by	Remote sensing	Monitoring form
Ontario 6 separate agencies interviewed	1- regular basis, 2, 3, 4, 5 and 6- depending on the situation	2, 3, 4, 6	4 and 6- safe location 3 -four different locations	All- 1/yr ideal, 1, 5 actually monitored less than 1/yr	Varies depending on situation	2, 3, 4, 5, 6 - use for most or all monitoring, 3, 4, 6 - give notice	3 and 4 currently use, 6 plans for future	None	1, 3, 4, 6 - form or keep a record
Minnesota 6 agencies /offices interviewed	7, 8, 10, 11- some use	8	8	7, 8, 11- 1/yr, 10 - 1/2yrs, 12 - 1/yr for 5 yrs, then 1/3yrs	Varies depending on situation	All use for most or all of monitoring	8, 11, 12 - currently use 7, 10- possible for future	8, 12- some use, 7 - possibly in future	7, 8, 12 – use- not necessarily require l/o signature
North Dakota 4 agencies /offices interviewed	15 - for most, 13 and 14 - some use	13 and 14 - require	13, 14 and 15	All 1/yr	Varies depending on situation	15 and 16 - use, 13 and 14 - use as needed	13 and 14 - use for most or all monitoring	None, 14, 15- plans for use in future	15 - uses a form
SALTS	Only for part of prop or subdivision	Yes of baseline and monitoring form	Yes for CE, 3 copies of baseline	1/yr-unless problems then more	Summer- June	Yes-person that negotiated CE	No	Yes- for baseline not monitoring	Landowner signs- based on restrictions
NCC		Part of CE- all signed by landowner	No	1/yr	Summer	Yes, currently staff	No	No	Follows baseline report

Table 7: Summary Table III of all Agencies Interviewed in Ontario, Minnesota, North Dakota, Saskatchewan and Alberta

	Conservation agreements posted	Landowner contact program	Arbitration/ mediation	Cost Recovery Options	Notice of violation	Right to enter and restore	Notice of Sale of Land
Ontario 6 separate agencies interviewed	6 - one agreement posted	4 - regular contact, 6 - l/o becomes a member	4 - include in agreement	2, 3 and 4 - include in agreement	1 and 4 – in person, 2 and 6 - letter	2, 3, 4 and 6 - include with notice	6 - requires landowner to give 10 days notice to agency
Minnesota 6 agencies /offices interviewed	8 and 11- some use 12 -stake bound-signs optional	All except 9 - have a program or some contact	None in document but will use	7 and 8 - have options in the agreement	8, 10, 12 – letter, 11 - in person	7 and 12 - with notice	7, 8, 9, 12 - require landowner to notify agency
North Dakota 4 agencies/ offices interviewed	15	16	None	15 and 16	All notify by letter first	All include, 13, 14 and 15 - have to give prior notice	13, 14 and 16
Southern Alberta Land Trust	No-landowners don't want	Newsletter, social activities etc	Yes- included in CE	Agency can claim legal fees etc, so can landowner	Formal procedure- enforcement policy	Yes	Landowner to notify, also for utility interests
Nature Conservancy of Canada Saskatchewan	Up to landowners- a few requested	Not other than monitoring	Yes, legislated	Damages, legal fees etc	Yes, in agreement- after notice 60 days	Yes	Landowner to notify at time of transfer

Footnote explaining the coding used for Tables 5 through 7:

1. Georgian Bay Land Trust
2. Ontario Nature Trust Alliance
3. Koochaching Conservancy
4. Ducks Unlimited Canada (Ontario)
5. Land Use and Policy Branch (Ontario Government)
6. Nature Conservancy of Canada (Ontario)
7. The Nature Conservancy (Minnesota)
8. The Minnesota Land Trust
9. Department of Natural Resources (Minneapolis)
10. Fish and Wildlife Service (Bloomington)
11. Fish and Wildlife Service (Fergus Falls)
12. ReInvest in Minnesota
13. Fish and Wildlife Service (Devils Lake)
14. Fish and Wildlife Service (Bismarck)
15. Natural Resources Conservation Service
16. North Dakota Natural Resources Trust

4.6 Issues Identified Through The Interview Process

Issues related to baseline documentation:

One of the suggestions made by several of the agencies that were interviewed in Ontario was the development of a standardized form for collecting baseline data. The form would have to cover certain areas but would also be flexible enough to fit many different situations. A standardized form for monitoring would also be useful for agencies monitoring agreements and for defending an agreement in court if a violation should occur. The form would document the condition of the property as well as when monitoring occurred, by whom, and any changes in the condition of the property. If one agency fails to perform their responsibilities under a conservation agreement and is found negligent in court, public confidence in all other conservation agreements could be weakened.

The methods used to document the area protected under wetland conservation agreements have been the cause of some agreement violations in North Dakota. Only the wetlands and associated upland habitat are covered under wetland agreements, leaving the landowner free to use the surrounding land in accordance with the other terms of the agreement. Due to changes in the amount of rainfall, wetlands may change size from year to year, and in wet years the wetlands may increase dramatically reducing the area of the surrounding land. Special care should be taken when the number of acres covered in wetland agreements is determined. To measure wetland size the FWS, in Bloomington Minnesota, delineates a square boundary around each wetland then records the total acres from all the squared off wetlands on the property in the agreement. To determine where the boundary should be drawn, air photos from typically wet years along with the

hydrology of the area, saturation and soil types are used. The FWS attempts to find a fair boundary line that will accommodate future changes in wetland size.

The FWS in Fergus Falls Minnesota uses a similar method to the FWS in Bloomington to record wetland size but they do not require the wetland to be squared off. Mean sea level is used to give a restoration or starting point then aerial photos from several wet years are used to determine the high water mark or spill point of the wetland. In North Dakota, a series of aerial photos from as far back as 1952 are used to determine the average high water mark. A line around the wetland is delineated on a mylar sketch map of the property (using the aerial photos and other information). The acreage of all the wetlands covered under the agreement is then estimated using a dot grid system. The total number of acres derived from the dot grid is then used to determine the amount the landowner is paid for the agreement.

The dot grid is only an estimate not an exact measure of the total number of acres so it is essential that both the agency and the landowner agree on the total number of wetland acres that will be included in the agreement. The FWS in North Dakota continues to use the dot grid system to maintain consistency with all previous agreements signed and they also require the landowner to acknowledge all photos and the total number of acres determined. Many landowners are extremely knowledgeable about the land and it's features, which can be very helpful in drafting the agreement, completing the baseline data report as well as noting natural changes on the property over time. Conservation agreements are a partnership between the conservation agency and the landowner, to conserve or protect the land in its natural state and the landowner should be included in the process whenever possible.

Reducing potential violations:

During the interview phase of the research, the participants pointed out a few ways that agencies can minimize the number of potential conservation agreement violations. One of the ways mentioned is not to include any restrictions in the agreement, if they cannot be easily monitored or if they cannot or will not be enforced. If restrictions that cannot be enforced are included in the agreement violations may occur that are not detected, which may eventually lead to more serious violations. Drafting conservation agreements while considering the potential risks of the property and what the potential violations might be is another way agencies can reduce the number of potential violations. If the potential violations are relatively easy to monitor and enforce, the restrictions are acceptable. If the potential violations are not easy monitor or enforce the restrictions of the agreement may not be acceptable to the agency or their overall objectives.

The idea of a landowner contact program was also mentioned during the interviews as another way to help reduce potential violations by many of the agencies in the different jurisdictions. A contact program establishes a good relationship between the agency and the landowner that may compel the landowner to value the agreement and to seek assistance from the agency in any ambiguous situations. Regular contact with the landowner will also allow the agency to become aware of new landowners in a timely manner. The agency can then provide the new landowners with information on the agreement, all the restrictions of the agreement and how to contact the agency if there are any questions or concerns about the agreement.

Legal language of conservation agreements:

Misconceptions with the legal language of wetland conservation agreements were reported as a problem by some of the agencies interviewed during the study. Wetland agreements only cover the acres of wetland on the property and the associated upland, not the entire property (this could also be a potential problem for any type of agreement that does not cover the entire parcel of land). Many landowners and other people do not understand the difference between the types of agreements. More specifically, when an agreement is purchased in a legal subdivision it is described on the document as: all such wetlands included that amounts to 10-15 percent of the area. However, some landowners or potential landowners may understand the agreement to include the entire property. Several United States conservation agencies reported that neighbors or other people in the community have called the agency concerned of potential violations on agreement lands. Many of these violations turn out to be a misunderstanding of the individual's interpretation of the agreement and not a violation at all. This could also be a problem if professionals that are indirectly involved with conservation agreements (like accountants or real estates agents) are similarly uninformed about how conservation agreements work.

Other agencies that deal indirectly with conservation agreements:

Some of the agencies interviewed expressed a general lack of understanding of conservation agreements among real estate agents and other professionals that are indirectly involved with conservation agreement lands (for example lawyers and accountants). The real estate agents handle the sale of the property and if they do not understand the conservation agreement, they cannot explain the specifics to the new

landowners. Violations may occur if the landowner does not understand the agreement or is completely unaware of the agreement on the property. The USFWS has an arrangement with the County Clerks Office where they are notified of the sale of any agreement lands. Unfortunately, once the USFWS has been notified, the land has already changed hands. While the USFWS can explain the agreement to the new landowner, the landowner may be stuck with land under an agreement that they did not fully understand. Land that changes hands directly from one landowner to another can also result in misunderstandings and potential violations if the new landowner does not take the necessary actions to determine if there is an agreement filed on the title of the property.

In Ontario some of the agencies interviewed have experienced some problems with the Land Registry Office accepting the different types of data contained in the baseline data reports. It was also reported that different Land Registry Offices have different requirements for recording conservation agreements. All of the Land Titles personnel interviewed (Ontario and Manitoba) stated that any information that cannot be stored on microfiche will not be accepted by the Land Titles Office. Most agencies in Ontario do not include the baseline data report in the actual agreement but rather append the report to the agreement and therefore it is not recorded at the Land Titles Office. The Winnipeg Land Titles Office reported that only a reasonable amount of data appended to the agreement is accepted (for example air photos). No additional information will be accepted at the Land Titles Office once the agreement has been registered. As a policy, the SALTS does not make any of their baseline data reports available to the public because of potential problems with information that may be sensitive such as habitat for endangered species.

Financial implications of conservation agreements:

Several agencies interviewed recommended that agencies holding conservation agreements set up a trust fund for future monitoring and the legal costs for defending agreements in the event of a violation. Not all of the agencies interviewed are currently setting up such endowment funds but they did recommend agencies consider endowment funds as the number of conservation agreements held by an agency increases. Some of the agencies that have just begun to accept conservation agreements reported not yet having the resources to set up such endowment funds. Other agencies that have had longer experience with conservation agreements include or are starting to include future monitoring and enforcement costs in their annual budgets.

In North Dakota the FWS stated that in all counties, except one, a conservation agreement on the property does not lower the value of the property (McEnroe pers. comm). The different situations in each specific area (province/state or county/municipality) will determine the economics surrounding the sale of conservation agreement lands and it cannot be assumed that the value of all conservation agreement lands will remain the same. As the use of conservation agreements increases throughout Manitoba, it is hoped that the value of conservation agreement properties will not decrease, as conservation agreements become more widely understood and valued in communities, by landowners, real estate agencies and other agencies.

Penalties for conservation agreement violations:

Several of the agencies interviewed in the different jurisdictions mentioned possible repercussions of the Federal Government penalties for any unauthorized use of

donated conservation agreements. The penalties for any unauthorized use of conservation agreement properties are applied against the landowners but in the United States, The Nature Conservancy (Minnesota) pointed out that the charitable status of an agency could also be revoked. The IRS could revoke the charitable status of an agency, if the agency is found negligent in monitoring an agreement that has experienced a violation. In Canada, the penalties for any unauthorized use of donated agreement properties (or lands that have been certified as ecologically sensitive) are also applied to the landowner. If an agency has been found negligent in monitoring or enforcing agreement properties that have experienced a violation, the CCRA could also revoke the charitable status of the agency. It is thus very important for agencies holding conservation agreements to monitor all donated agreements (or lands that have been certified as ecologically sensitive) consistently and enforce any violations vigorously. Purchased agreements should also be monitored and enforced with equal vigilance to prevent public opinion (including that of the Federal Government) of conservation agreements as a private land conservation option from diminishing.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The goal of the research was to provide practical guidelines on baseline documentation, monitoring and ensuring compliance with the terms of conservation agreements for Manitoba. To develop the guidelines, the basic framework for baseline documentation, monitoring and ensuring compliance with the terms of conservation agreements provided in the literature was reviewed. Interviews with individuals from different conservation agencies in Ontario, Saskatchewan, Alberta, North Dakota and Minnesota were also conducted. Once the literature review and interview phase of the research was complete the information gathered was analysed. After analysis of all the information gathered during the study the following conclusions were drawn:

- Conservation agreements (especially those in perpetuity) should be carefully selected to compliment other protected areas or to conserve important landscapes and habitats.
- Baseline data should be collected for all conservation agreements accepted by a conservation agency.
- The elements of a baseline data report should include the following (at the least): a cover sheet, a reference statement, a summary, directions to the

property, landowner information, property condition and authentication of the report.

- GIS information is currently being used only for baseline data, not for monitoring conservation agreements.
- Multiple copies of the baseline report should be produced and one additional copy should be stored in a secure location.
- To ensure that the ecological value of the property is protected conservation agreements must be monitored at least once per year.
- All agencies holding conservation agreements should have a violation or enforcement policy that is followed consistently.
- To reduce potential violations, agencies holding conservation agreements should maintain contact with landowners at least once per year.
- Violation of the restrictions of conservation agreements will be more probable with successive landowners. In all reported conservation agreement violations, subsequent landowners or a third party committed the violation, not the original grantor of the agreement.
- Conservation agencies in Canada do not place enough emphasis on future management requirements (monitoring, enforcement, endowment funds etc) for conservation agreements held.

5.2 Recommendations

After extensive review and analysis of relevant literature and the interview data on baseline documentation, monitoring and ensuring compliance with the terms of conservation agreements, the following are recommended for agencies entering into conservations agreements in Manitoba:

- Do not include any restrictions in the agreement that cannot be defended. Restrictions that are difficult to monitor and/or enforce should **not** be included in the agreement. For example, an agreement that restricts the use of all motorized vehicles is very difficult to monitor and even more difficult to enforce.
- Agencies entering into conservation agreements should include a clause in the agreement requiring the landowner to notify the agency of the intent to sell the property. The agency should be in contact with new landowners as soon as possible, to provide them with necessary information about the agreement and the agency.
- Baseline data should be collected as close as possible to the time the agreement is finalized to ensure the original condition of the property is documented.
- Information specific to each of the restrictions in the agreement should be collected as part of the baseline data report. For example, if one of the restrictions of an agreement prohibits cutting on a woodlot, the size of the area the woodlot covers should be recorded in the baseline data report as well as an

aerial photo of the woodlot taken in late fall or winter for comparison with future monitoring reports.

- The baseline data report should be referred to in the agreement that is registered with the Manitoba Land Titles Office and a map of the property should be attached to the agreement (outline for baseline data reports provided in Chapter 6 section 6.2).
- All conservation agreements (purchased and donated) should be monitored at least once per year. Monitoring agreements once per year will ensure that any violations are detected in a timely manner.
- A monitoring log that records all contact with the landowner and the results should be kept. The agency should have accurate records of all monitoring visits and contact with the landowner for defending the agreement (in court if necessary) in the event of a violation.
- Where possible, try to have the same individual conduct ground monitoring visits and all other contact with the landowner. The agency should develop a relationship with the landowner and having the same individual dealing with the landowner will help to build trust between the landowner and the agency.
- Where possible, the individuals conducting aerial monitoring should be alternated. Having different individuals conduct aerial monitoring will help to minimize individual biases and to ensure that violations are not missed.
- A landowner contact program should be initiated by all agencies accepting conservation agreements. Conservation agreements are a partnership between the conservation agency and the landowner. The agency should build a

relationship with the landowner and maintain regular contact with all agreement landowners. Violations are less likely if the landowner and the agency work together and have built a level of trust.

- All agencies holding conservation agreements should have a written violation or enforcement policy that is followed consistently. In the event of a violation, the agency will need to react quickly and predetermined violation response procedures will ensure the appropriate steps are taken (outline for violation policy provided in Chapter 6, section 6.5)
- Agencies accepting conservation agreements should cooperate with other agencies involved with conservation agreements and coordinate workshops or seminars on conservation agreements to provide landowners, real estate professionals, government employees and any other interested agencies with relevant information.

CHAPTER 6

GUIDELINES FOR BASELINE DOCUMENTATION, MONITORING AND ENSURING COMPLIANCE OF CONSERVATION AGREEMENTS IN MANITOBA

The third objective of the study was to develop and recommend practical guidelines for baseline documentation, monitoring and ensuring compliance with the terms of conservation agreements for Manitoba. To develop the guidelines all information collected through the literature review and through the interview process was reviewed and analyzed. Criteria developed from the literature were used to determine the information from the literature and the interviews that was included in the guidelines. The guidelines are broken down into five sections: Drafting the Agreement, Baseline Data Reports, Monitoring, Enforcement and Violation Response Procedures. Each section includes recommendations for the components that should be included in the agreement, the baseline data report, and the monitoring and enforcement protocols respectively. Where possible, examples have been adapted from the literature and documents collected during the interview process for further clarification. Appendices 7 through 12 provide sample forms, checklists and an enforcement policy all adapted from the literature as well as an example endowment fund calculation (Ducks Unlimited) to supplement the guidelines presented in this chapter.

6.1 Drafting the Agreement

One of the most important things to consider when drafting a conservation agreement is the potential violations or areas of risk on the property. The restrictions of the agreement should be designed to protect the ecological value of the property and should be drafted with the potential risks in mind. When designing the restrictions of the agreement the agency should consider their ability to monitor and enforce the restrictions. If the agency does not have the ability or will to monitor or enforce a restriction, it should not be included in the agreement. For example, an agreement that prohibits the use of any motorized vehicle is very hard to monitor and even more difficult to enforce. Violations that go uncorrected can lead to more serious violations and they can diminish public perception of conservation agreements as a private land conservation option.

As agreement properties change hands the possibility of violations also increases. New landowners may not fully understand the agreement or they may not even be aware of the agreement. Agencies holding conservation agreements should be in contact with new landowners as soon as possible to provide them with information on the agency and the agreement. One way to help ensure that the agency is notified of a landowner's intent to sell the land is, to include a clause in the agreement requiring the landowner to do so. The agency should work with the landowner and try to develop a long-term relationship with the landowner. Meeting with the new landowners or sending them a letter, letting them know about the agency and where they can address any questions or concerns can prevent many misunderstandings that may otherwise result in violations.

6.2 Baseline Data Reports

A baseline data report should be reflective of the restrictions in the agreement and should include enough information to define each right and restriction written in the agreement (Diehl and Barrett 1988). Baseline data reports should also be kept as simple and short as possible without missing any vital information or details (Thorne 1997). The report should also be objective and easy to duplicate (Diehl and Barrett 1988). Baseline data should be collected as close as possible to the time the agreement is signed to ensure that the original condition of the property is documented. Each baseline data report should be specific to the land it is designed to protect but should include the following components (example provided in Appendix 7):

i. Cover sheet listing the contents of the file;
ii. A reference statement;
iii. A summary of the agreement;
iv. Directions to the property;
v. Property owner information;
vi. Legal information;
vii. Property information (including maps, photos, and written reports); and
viii. Authentication of the report.

i. The baseline data report should have a cover sheet listing all components of the file for quick and easy reference. Many people over the years may need to use the baseline data report and should easily be able to determine what information is contained within the report.

ii. The report should also include a reference statement that directly refers back to the original agreement. The reference statement should also reinforce the fact that the agreement is the overriding document in case of any inconsistencies between the baseline report and the original agreement (Thorne 1997). An example reference statement adapted from Thorne (1997):

> *This Baseline Report is ancillary to the conservation agreement between (the landowner)_____ and (the agency) _____ dated _____ and registered as _____ at the_____ Land Titles Office. In cases where there is a difference between this baseline report and that conservation document, the agreement will take precedence.*

iii. A summary of the agreement should also be provided in the report. The summary is important to give a short overview of the agreement and the site including a brief overview of the features (natural and structural) of the property (Thorne 1997). Please refer to Appendix 7 for an example summary statement, adapted from Thorne (1997).

iv. Directions to the property and the location of the agreement property are important for future monitoring visits to the property. Over time, many different people may be required to visit the property for monitoring or to meet with new landowners and should have clear directions to the property. The exact location including the legal description of the property should also be provided. A map can also be attached for further clarity (Thorne 1997).

v. A description of the agreement's history and any contact with the property owner should be included in the report. The name and contact information of the current landowner and the location of the yard site will be helpful for future visits. Any

other details like the best time of the day to reach the landowner can also be listed. Complete and accurate information about the landowner should be included in the report to help the individual(s) visiting the landowner(s) over the years to develop a rapport.

vi. Any legal information, such as other encumbrances on the property, should be included in the report. It is important for the person visiting the property to have all the information about the property available in case any problems should arise or the landowner has any questions.

vii. The property information should describe the features of the property to be protected and their current condition. The data should include descriptions, measurements, maps, and sketches of all ecological, historic, geologic, agricultural, scenic, and human-made structures that are protected by the agreement (Thorne 1997 and Lind 1991). Any existing information (maps, surveys, inventories etc) should be analyzed, interpreted, and summarized for use in the baseline data report (Thorne 1997). If there is no existing data or it is insufficient, primary data should be collected.

The boundaries of the property under the agreement should be clearly delineated on a map and attached to the conservation agreement that is filed with the Land Titles Office. An aerial photo of the property with the areas covered under the agreement can also be attached to the agreement. The Manitoba Conservation Agreements Act does not require that a survey of the property be included in the agreement. Section 6(1) of the Act states "land that is the subject of a conservation agreement is sufficiently described if its boundaries are shown,

or its area is indicated, on a map attached to the conservation agreement". For the purposes of the caveat filed at the land Titles Office, the Act requires that the conservation agreement contain the legal description set out in the certificate of title of the land or in which the land is included.

Ground photos can be used to indicate points of interest to future monitors and as evidence of a violation (Thorne 1997). The restrictions of the agreement will dictate what features should be documented using photos. Permanent photo stations can be established during collection of the baseline data and used annually for all monitoring visits. When ground photos are used it is important that the location of the picture (GPS coordinates would be desirable for annual photo stations) and the vantage point are recorded on a photo location map with the property boundaries clearly delineated. Each photo should be numbered and should include a compass reading of the direction of each shot. The photo number, the compass reading, the approximate time of day, date, location, the photographer and their signature should all be recorded on the back of the photo (Thorne 1997). Any other comments should be included in the written report referring to the photo number.

Air photos are useful for documenting the condition of some properties, as they will show the extent of vegetation on the property, watercourses and the locations of buildings (Thorne 1997). The scale used will depend on the natural features of the property. Existing air photos can be used in the baseline report, if there are only a few changes to the property that can be easily noted. Existing air photos from several years can also be used in comparison with recent air photos to

determine the high water mark for wetland agreements. Information provided by air photos can be transferred to a sketch map of the property, so the boundaries and any other features can be shown on the same map. Information on the air photos like the angle and altitude the photo was taken should be recorded so the process can be easily replicated.

Aerial photos are critical for documenting the area of wetland and other types of agreements and for calculating the total number of wetland acres. Soil type and saturation along with a series of air photos from wet years should be considered when determining the high water mark to arrive at a safe buffer around the wetlands to account for changes in wetland size. An electric planimeter or a dot grid can then be used to estimate the total number of acres to be protected by the agreement or the data can be entered into a GIS to arrive at a total number of acres under the agreement. The agreement holder and the landowner should agree on and sign the photos or GIS maps with the total number of acres delineated to ensure that all parties are in agreement as to the number and location of the acres protected under the conservation agreement.

Different types of maps can be used to display different features of the property; the appropriate scales should always be related to the agreement restrictions and the features of the property. Aerial photos can be used to create overlay maps with the boundaries of the agreement clearly delineated. All structures or improvements to the property should be included in the maps, photos or the written report, whichever form is most appropriate. Surveys are expensive and are only recommended for legal subdivisions, partial protection of property or

where the boundaries of the property are not clear. Any maps that already exist, such as geological soil maps, can be used in cases where more detailed information is required. Written reports should be specific and should include the number of acres of the agreement, the number of acres that are planted with each type of crop/forage and should explain all other types of data collected. For scenic views, what can be seen and by whom should also be included in the report.

viii. Acknowledgement of the baseline data report by both the holding agency and the landowner is important to ensure that all parties are in agreement at the time the agreement in signed to help resolve any future complications. For wetland agreements the landowner should not only sign an acknowledgement of condition statement but should also sign the air photos or GIS maps used to calculate the total wetland acres and any other maps or photos. Please refer to Appendix 7 for an example acknowledgement of condition statement adapted from Thorne (1997).

Baseline data is essential for monitoring conservation agreements and for enforcing the restrictions of the agreement in the event of a violation. Accurate and descriptive data should be collected as soon as possible after the conservation agreement is negotiated and should always be acknowledged by the landowner. It is important to remember that the area protected under the agreement and the restrictions listed in the agreement should define the data that is collected in the report. All information should also be as simplistic, replicable and brief as possible without missing important detail.

6.3 Monitoring

All conservation agreements (donated and purchased) should be monitored at least once per year to ensure the ecological value of the property is being protected and that violations are discovered in a timely manner. When monitoring by site inspection the landowner should be given the opportunity to accompany the inspector on the visit. Monitoring in late fall or early spring is usually the best time of year, for many types of agreements, to detect any changes in the property as there are few leaves on the trees and crops are either harvested or not yet planted. Late fall or early spring is usually a convenient time for the landowners as well. Other types of agreements may require very specific times of the year for monitoring. The time of year that monitoring is conducted should be reflective of the restrictions in the agreement. On properties where delay hay techniques are practiced monitoring in mid July may be a more suitable time. Other agreement properties that have protected wooded areas should be monitored in late fall when there are no leaves on the trees and violations can be easily detected. When an agreement property is monitored either on the ground or aerially, a monitoring form should be filled out, signed and dated. The monitoring form and any additional data collected (photos etc) will supplement the baseline data report and provide evidence of the agencies monitoring efforts. The landowner should receive a copy of the completed monitoring form for their records (an example monitoring form provided in Appendix 9). A monitoring checklist may also be helpful for the actual inspection of the property. A checklist should provide the inspector with the steps that should be taken and what to look for during the monitoring visit (an example provided in Appendix 10).

The basic steps for ground monitoring that can be adapted to any situation are:

i. Notify the landowner in writing well in advance of scheduling the visit;
ii. Review the agreement, baseline data report and any previous monitoring reports;
iii. Bring any equipment that will be needed;
iv. Note any changes to the property;
v. Discuss minor observable changes with the landowner; and
vi. Complete the inspection form and have the landowner sign the form or send a letter notifying the landowner of the visit.

i. Conservation agreements create a partnership between the holding agency and the landowner. The agency should try to involve the landowner(s) at all possible stages. It is a good idea to notify the landowner(s) well in advance of the visit and offer the landowner(s) the opportunity to accompany the inspector when the property is monitored. If the landowner(s) declines, the agency should record the decision and the reasons for declining. If the landowner(s) accepts, try to find a time that is convenient for the individual conducting the visit and the landowner.
ii. Before the inspector monitors the property they must be familiar with the agreement and all of the restrictions as well as the baseline data report and any previous monitoring reports. Being prepared is essential to detecting any changes on the property and which changes have occurred since the property was last monitored.

iii. It is important to bring along any equipment that will be required to complete the inspection. Maps of the property and existing structures, ecological features or other areas of interest should be used when inspecting the property for changes. A camera (possibly a video camera) should also be included in every monitoring visit. Photos should be taken from permanent photo stations on each monitoring visit. A camera or video camera may also be required to document changes to other areas of the property.

iv. If there are changes to the property the changes should be noted and well documented. Natural changes may occur over time but should be documented to supplement the baseline data report for future monitoring visits.

v. Any minor changes to the property, natural or otherwise should be discussed with the landowner. The landowner may not fully understand the restrictions of the agreement or may simply not be aware of the changes. All discussions with the landowner should be followed up with a letter and documented in a monitoring log. More serious changes that are potential violations of the agreements terms should be carefully documented and discussed with other personnel at the agency, for example the person that negotiated the agreement. The agency should have a violation or enforcement policy, which should be followed in cases where a violation has been detected (section 6.5 provides the framework for an enforcement policy).

vi. If there are no significant changes to the property, a monitoring form should be completed and signed by the landowner if they accompanied the inspector. The landowner should be given a copy of the monitoring form for his/her records and

one copy should be placed in the agency's files. If the landowner did not accompany the inspector, a letter notifying the landowner that the property was inspected listing any minor observations and a copy of the monitoring report should be sent. It is important for defending the agreement, in the event of a violation, to have the landowner's signature on each of the monitoring reports. If the landowner was not present for the inspection the agency should have a monitoring log that records all letters sent to the landowner (including notification of the monitoring visit and the invitation to accompany the inspector), the landowner's responses and all monitoring events.

The basic steps for aerial monitoring that can be adapted to any situation are:

i. Schedule the flight path;
ii. Review the agreement, baseline data report and previous monitoring reports;
iii. Fly the area under the agreement and note any changes in the properties condition; and
iv. Assess the need for follow up ground inspection and notify landowner of inspection and any minor changes.

i. The flight path should be scheduled so that the agreements can be monitored as efficiently as possible. A time where there is maximum visibility (for example, late fall when all there are few leaves on the trees) should be chosen. A pilot that is familiar with the area and the landscape should also be chosen.

ii. Before the agreements are monitored the baseline report and any previous monitoring reports should be reviewed. All aerial photos should be reviewed and the inspector should be familiar with the features of the property, buildings, location of roads etc.

iii. When monitoring the agreement the inspector should look for any changes in the property's condition or any encroachments from surrounding properties. Photos to update the baseline report or document the property's condition should be taken.

iv. The photos should be compared to the previous photos and any possible violations should be followed up with a ground inspection. If there is no need for a follow up inspection the monitoring form should be signed and dated. A letter should be sent to the landowner informing them of the inspection, noting any observable changes and including a copy of the monitoring report.

Agencies should use the most appropriate method of monitoring for the number and size of conservation agreements they hold. Ground monitoring is most appropriate for agreements that are small enough to be monitored on foot or can be easily viewed from roads. Ground monitoring is also appropriate for use with agreements that have restrictions requiring close observation. For example, agreements with endangered species habitat on the property should be monitored by site inspection. The disadvantage to ground monitoring is that it takes a large amount of staff time. When monitoring an agreement property by site inspection the agency should try, wherever possible, to have the same individual conduct the inspection. The agency should try to develop a relationship with the landowner and having some consistency with the individual

monitoring the property will help to build the relationship and a level of trust between the agency and the landowner.

Aerial monitoring is cost-effective when monitoring a large number of agreements and/or for very large agreements. Aerial monitoring is also useful for monitoring agreements that are isolated or difficult to access. Monitoring by air can also easily detect some restrictions such as clear cutting or draining wetlands. For restrictions that require closer inspection, a site visit is recommended. Aerial monitoring can be expensive but as the number and size of the agreements held by an agency increase, it may become a more feasible option. When inspecting agreement properties aerially it is a good idea to alternate the individuals conducting the inspection. This will help to avoid individual biases and help to ensure that violations are not missed.

6.4 Enforcement

Each agency holding conservation agreements should have a written enforcement or violation policy that can be easily accessed (an example provided in Appendix 11). In the event of a violation, the agency will need to act quickly and appropriately. An enforcement or violation policy should include some important decisions about the agencies responses if a violation should occur. These decisions should include (adapted from Lind 1991):

i. What will be considered a major and minor violation including a list of the most common of both types of violations;
ii. How the property owner will be contacted and who will have the authority to discuss the violation with the landowner;

iii. Who will document the violation and how the violation will be documented;

iv. The person that will have the authority to negotiate a resolution to the violation;

v. What resolution options will be considered (negotiation, arbitration or mediation) and at what point legal counsel will be consulted; and

vi. What procedures will be followed for third party interests in the land.

i. The agency should have a general idea of what will be considered a violation and a list of as many of the minor and major violation categories as possible. Not all violations can be anticipated but if the violation categories are listed it may be helpful in clearing up ambiguous situations.

ii. The method of contacting the property owner should be decided in advance and followed in every situation. Consistency is very important in the enforcement of conservation agreements if the violation goes to litigation. The agency should also decide who will have the authority to discuss or explain the violation to the property owner.

iii. Methods for documenting the violation should be specific to the agreement, the property and the type of violation. The methods should be outlined in the enforcement policy and should be flexible enough to adapt to any situation. Violation should be documented using photographs that are signed and dated by the photographer and keyed to their location on a map of the property. In some cases using a video camera with a running commentary may be useful (Lind 1991). The next step is to take all possible measurements of the affected area

using the most appropriate means. For example, if an area designated as cultivation restricted has been cultivated the total number of acres that have been cultivated should be recorded. The inspector should also take extensive field notes then sign and date them. All the information collected on the violation should be compared and contrasted with the baseline data report and all relevant monitoring reports to determine the extent of the damage and the restoration required (Lind 1991). If the violation is serious, legal counsel should be consulted immediately to ensure the agencies interests are not compromised (Land Trust Alliance 1995). Voluntary restoration by the owner should always be encouraged and the agency should try to work with the landowner whenever possible.

iv. The agency should clearly indicate all individuals that will have the authority to negotiate a resolution with the property owner. The individual(s) should be familiar with the agencies policies and procedures and have the authority to make important decisions. This may be the same individual that discuses the violation with the landowner or one of the agency's senior staff. Any meeting with the landowner should be followed up with a letter outlining the restrictions of the agreement, the violation, the results of the meeting (any solution that has been reached), the restoration necessary and the deadline for restoration (Land Trust Alliance 1995).

v. The agency should determine which resolution options will be considered if a mutually acceptable solution cannot initially be reached. Negotiation, arbitration and mediation are some of the resolution options that should be considered. The agency should also determine at what point legal action will be considered if other

resolution options have not been successful. Each case will be unique and the agency will have to use the enforcement policy (section 6.5) as a guideline but also be flexible to each situation. The agency should also determine what steps will be taken if the violation is the result of a third party. If the third party is unknown the agency should determine who will be responsible for any necessary restoration; the landowner, the agency or a fifty-fifty split (if not already in the agreement).

vi. The agency should also have procedures for dealing with third party interests in the property like hydro easements. If another agency has an interest in the land that will result in a violation of the agreement, the agency should determine who will have the authority to negotiate with the interested party and the landowner. Compensation for third party violations and proportion payments should also be considered and included in the violation policy if not already included in the conservation agreement.

6.5 Violation Response Procedures

The agency should have a written procedure listing each of the steps to be followed in the event of a violation. The steps should be specific to each organization but should include the following (adapted from the Land Trust Alliance 1995):

- Report and describe the violation to the specified staff member of the organization.
- Inspect and document the violation.

- Review the conservation agreement, baseline report and previous monitoring reports.
- Evaluate the extent of damage and the required restoration and if the violation is serious seek legal counsel immediately.
- Contact the property owner by specified method (telephone, letter or in person).
- First attempt to negotiate a mutually desirable solution to the violation with the landowner setting a deadline for any restoration work required.
- Follow up the meeting with the landowner with a letter describing the property condition, agreement restrictions and the results of the meeting including the solution and the deadline for restoration. Offer to meet with the landowner again if there are any questions on how to carry out the restoration or any other matters.
- Inspect the site for compliance at the deadline.
- If prompt compliance send thank you letter.
- If non-compliance, send a second letter restating the property condition and ask for compliance setting a new deadline.
- Inspect the property at the second deadline.
- If compliance send thank you letter.
- If there is still non-compliance, according to section 8(4) of the Manitoba Conservation Agreements Act, the Conservation Agreements Board can be involved to assist with dispute resolution. If the Board is not involved, any

other methods of dispute resolution provided in the agreement or otherwise should be initiated.

- Send a third letter giving notice of the agency's intention to initiate dispute resolution (the Boards involvement, arbitration or mediation) if immediate compliance is not achieved.
- If a solution can still not be reached, inform the property owner of impending legal action and consult an attorney, having them send a letter requesting immediate compliance.
- If the violation is the result of a third party that can be identified, the agency should negotiate with the third party resorting to legal action if voluntary restoration cannot be achieved. If the third party is not identified the agency should discuss the violation with the landowner. The restoration should be completed according to whatever method was previously determined or provided in the agreement (the landowner's responsibility, the agency's or a fifty-fifty split).

The above steps should be adapted according to each agency's own internal procedures and may vary depending on the initial decisions made. Each agency should also be prepared to follow the selected policy with as much consistency as possible, also being flexible enough to deal with different situations in a manner that will (if possible) result in a mutually acceptable solution while preserving the relationship with the landowner. Legal action should only be pursued as a last resort once all other resolution

methods have been exhausted. Legal action is slow, expensive and can tie up key agency personnel in court appearances.

Agencies holding conservation agreements should also consider planning for future monitoring and enforcement costs of the agreements. There will be expected annual costs associated with monitoring that should be accounted for in the agency's budget. As the number of conservation agreements held by an agency increases, so will the monitoring costs and the importance of planning for these costs. At some point it is likely that agencies will experience violations and the legal defense of the agreement can be expensive. Agencies can plan for these future costs by setting up endowment funds. Appendix 12 provides a sample calculation of an endowment for annual monitoring costs. Note that there are no costs in the budget for enforcement of agreements as the costs are highly variable but they can be added to the schedule.

Agencies entering into conservation agreements should also consider coordinating with other agencies holding conservation agreements to provide workshops or seminars on conservation agreements. Landowners, real estate personal, accountants and any other agency or professionals that are directly or indirectly involved with conservation agreements should be invited to attend. Providing information to different agencies that may be involved with conservation agreements can help to strengthen relationships in the community and to prevent potential violations.

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APPENDIX 1

ELIGIBLE CONSERVATION AGENCIES UNDER THE MANITOBA CONSERVATION AGREEMENTS ACT

Eligible Conservation Agencies

5 The following conservation agencies may hold a conservation agreement:

a) A corporation without share capital that is incorporated under Part XXII of *The Corporations Act* and designated by regulation as being authorized to enter into conservation agreements;

b) A not-for-profit corporation that is incorporated under an Act of Parliament and designated by regulation under this Act as being authorized to enter into conservation agreements;

c) The Crown in right of Canada;

d) The Crown in right of Manitoba;

e) A federal or provincial Crown corporation or agency;

f) A municipality;

g) A local government district;

h) A conservation district established under *The Conservation Districts Act.*

APPENDIX 2

THE ELIGIBLE AGENCIES REGULATION

Eligible Conservation Agencies Regulation

Regulation 152/98

Registered August 25, 1998

Eligible conservation agencies

1 The following are designated as eligible conservation agencies authorized to enter into conservation agreements:

(a) Ducks Unlimited Canada;

(b) Delta Waterfowl Foundation;

(c) Wildlife Habitat Canada;

(d) Manitoba Naturalists Society Inc.;

(e) Manitoba Wildlife Federation;

(f) Rocky Mountain Elk Foundation;

(g) Nature Conservancy of Canada

APPENDIX 3

INTERVIEW GUIDE

Interview Guide

1) Original intent of the agreement
    - Does (the agency/organization) capture within the written agreement the specific objective of conservation agreements entered into?
    - Have you experienced any legal problems (court challenges) with the language used to record the specific objectives of conservation agreements held?
    - Are all ecological features of the property under a conservation agreement identified within the agreement?

2) Baseline Data Reports
    - Does (the agency/organization) use any of the following methods to collect baseline data information: photos (ground, aerial), written reports, maps, or GPS?
    - Are maps specifically created or are existing geological or taxation etc maps used?
    - Are soil, vegetation and wildlife inventories conducted on the property as part of the data collection process?
    - Is a survey of the property conducted?
    - Do you require both the landowner and the agency representative to authenticate all baseline data documentation?
    - Are multiple copies of the baseline data information produced and is one copy stored in a secure location?
    - Is the baseline data filed with the local clerks and recorders office?

3) Measuring and recording area under the agreement

- What methods/techniques does (the organization/agency) use to accurately measure the area under a conservation agreement including wetlands?
- Has (the agency/organization) experienced difficulties with wetlands under a conservation agreement changing in size from year to year?
- How does (the agency/organization) account for these changes in wetland size?

4) Monitoring of conservation agreements

- Does (the agency/organization) monitor the conservation agreements that it holds?
- How often are conservation agreements monitored?
- What time of the year does monitoring occur?
- How are conservation agreements monitored: site inspection, aerial photos, remote sensing?

5) Enforcement Issues

- Has (the agency/organization) experienced any violations of the conservation agreements it holds?
- What was the outcome of any violations experienced?
- What enforcement provisions are usually provided within the agreements entered into by (the agency/organization)?
- What restitution options are usually provided within the agreements entered into by (the agency/organization)?

APPENDIX 4

INTERVIEW COVER LETTER

AND CONSENT FORM

INFORMATION LETTER

Cari-Lyn Epp
Natural Resources Institute
70 Dysart Road
Winnipeg, Manitoba
R3T 2N2

September 1st, 2000

Dear _____:

My name is Cari-Lyn Epp and I am a graduate student at the Natural Resources Institute at the University of Manitoba. I am currently undertaking research for the thesis component of my Master's degree of Natural Resource Management.

The purpose of my research is to recommend guidelines for baseline documentation, monitoring and ensuring compliance of conservation agreements in Manitoba. To develop the guidelines, information pertaining to baseline data, monitoring and enforcement techniques will be gathered through interviews with individuals from conservation agencies dealing with conservation agreements in Ontario, Minnesota, North Dakota, Saskatchewan and Alberta. The research is designed to provide conservation agencies in Manitoba with guidance when entering into conservation agreements.

The interview should take approximately one hour, and will cover a range of topics pertaining to how (the agency/organization) functions with respect to conservation agreements/easements. In the course of the interview, please feel free to ask questions or terminate the interview at any time. Due to the factual nature of the information gathered, the subjects will be quoted within the thesis and their names may also appear in the thesis.

The Delta Waterfowl Foundation, the Manitoba Habitat Heritage Corporation, the Nature Conservancy of Canada and Ducks Unlimited Canada are supporting the research study. The research is being conducted under the supervision of Dr Richard K Baydack, Natural Resources Institute, University of Manitoba. The University of Manitoba Joint-Faculty Research Ethics Board has approved the interview process for the research proposal titled Developing Guidelines for Conservation Easements in Manitoba. If there are any questions about ethics approval you can contact the University of Manitoba Office of Research Services (204-474-7122).

Sincerely,

Cari-Lyn Epp

Natural Resources Institute
University of Manitoba
Winnipeg, Manitoba, Canada
R3T 2N2

DEVELOPING GUIDELINES FOR
CONSERVATION EASEMENTS IN MANITOBA

Consent Form

I_____, agree to participate in the study titled Developing Guidelines For Conservation Easements in Manitoba.

I have read the attached information sheet on this study. I understand that if I agree to participate in the study, the interviewer will take notes on the information I provide in the interview. I understand that any information I provide as well as my name may appear in the Master's thesis titled Developing Guidelines For Conservation Easements in Manitoba. I understand that any information gathered in the course of this research may be published in academic journals, books or presented at scholarly and other public conferences. I understand that my participation in this study is entirely voluntary. I also understand that I may withdraw my participation at any time, without prejudice.

If the researcher should require any additional information within the next year would you be willing to participate in a follow-up telephone interview?

[ ] I would be willing to provide an additional phone interview.
[ ] I would not be willing to provide an additional phone interview.

At the conclusion of the study, a copy of the findings will be provided to me.

This research is being carried out with the support of Delta Waterfowl Foundation, Manitoba Habitat Heritage Corporation, the Nature Conservancy of Canada and Ducks Unlimited Canada.

This research has been approved by Joint-Faculty Research Ethics Board of the University of Manitoba. Any questions regarding the research study may be directed to either the principle investigator (Cari-Lyn Epp: (204), the research advisor (Dr Richard k Baydack: (204) 474-6776) or to the University of Manitoba Office of Research Services (Margaret Bowman: (204) 474-7122).

_____ _____
(Date) (Signature in ink)

_____ _____
(Date) (Researcher as witness)
[ ] Cari-Lyn S. Epp

APPENDIX 5

LIST OF AGENCIES AND INTERVIEW DATES

List of Agencies Interviewed

Ontario Nature Trust Alliance	Don Mills, ON	September 28, 2000
Koochaching Conservancy	Barrie, ON	September 29, 2000
Ducks Unlimited Canada	Barrie, ON	September 29, 2000
Ministry of the Environment Land use and policy Branch	Toronto, ON	October 2, 2000
Georgian Bay land Trust	Toronto, ON	October 2, 2000
Nature Conservancy of Canada	Guelph, ON	October 4, 2000
Land Registry Office	Guelph, ON	October 5, 2000
Nature Conservancy of Canada	Guelph, ON	October 12, 2000
The Nature Conservancy	Duluth, MN	November 1, 2000
The Nature Conservancy	Minneapolis, MN	November 1,2000
Minnesota Land Trust	St Paul, MN	November 2, 2000
Department of Natural Resources	St Paul, MN	November 2, 2000
USFWS (Wildlife Biologist)	Bloomington, MN	November 3, 2000
USFWS (Refuge Operations Specialist/Refuge Officer)	Fergus Falls, MN	November 3, 2000
USFWS (Deputy Project Leader)	Devils Lake, ND	November 21, 2000
USFWS (Realty Field Supervisor)	Bismarck, ND	November 22, 2000
USFWS (Supervisory Wildlife Biologist)	Bismarck, ND	November 22, 2000
Natural Resources Conservation Service (NRCS)	Bismarck, ND	November 22, 2000
North Dakota Natural Resource Trust	Bismarck, ND	November 22, 2000

Land Titles Office	Winnipeg, MB	December 21, 2000
Southern Alberta Land Trust Society	High River, AB	January 22, 2001
Nature Conservancy of Canada	Regina, SK	January 23, 2001
Land Titles Office	Winnipeg, MB	December 21, 2000
Land Titles Office (District Registrar)	Winnipeg, MB	August, 2001

APPENDIX 6

INTERVIEW RESULTS FOR

ONTARIO, MINNESOTA AND NORTH DAKOTA

Results for Interviews Conducted in Ontario on Baseline Documentation, Monitoring and Compliance of Conservation Agreements

	Specific objective	Ecological features	History of property	Improve-ment to property	Maps	Ground photos	Aerial photos	Written reports/forms	Inventories
Georgian Bay Land Trust	N/I	N/I	N/I	N/I	Yes	Yes	Yes	A site evaluation form prior to accepting	Biological
Ontario nature Trust Alliance (ONTA)	N/I	Types of features	N/I	Existing uses	Sketch-complexity depends on situation	A series	Yes	Report	N/I
Koochaching Conservancy	Specific to habitat type	In baseline report	N/I	N/I	Yes	Yes	Yes	Report	Vegetation, wildlife-informal
Ducks Unlimited	Specific to situation-usually habitat type	Evaluated and identified in the baseline report	Land use changes, title, envtl asses. (hazard mat)	Note all existing infrastructure/ uses	Sketch maps	Yes	Yes	Report	Vegetation communities and wildlife use
Land Use and Policy Branch	Specific to property and habitat type	Identification of natural and scientific areas- less taxes	No	No	No	No	No	No	Use to document the condition
Nature Conservancy of Canada	Significance of property and intent of in the baseline	Description of the natural features	Yes	Yes	Sketch and topo-graphic	Yes	Yes	Report	Species, soil type etc

Results for Interviews Conducted in Ontario on Baseline Documentation, Monitoring and Compliance of Conservation Agreements

	Survey	Authenti-cation of Baseline	Copy in Secure Location	Frequency	Time of year	Site inspection	Fly by	Remote sensing	Monitoring form
Georgian Bay Land Trust	yes	No Information (N/I)	No	1 every 1-2 years	N/I	Yes	N/I	No	Audited Statement
ONTA	Some-depends on the situation	Yes	No	Annual basis-sometimes more	Not specified	With or without landowner present	N/I	No	N/I
Koochaching Conservancy	Some- if only a portion of property under CE	Yes	4 different locations	1/yr-sometimes more	Varies-depends on volunteers	Most, notify landowner first	Yes-some	No	Keep record of all inspections
Ducks Unlimited	As required by Land Titles Office	Yes	Yes	1/yr, 1/3yrs biological review, 1/2yrs Engineering review	Usually summer	Most-notify landowner	Some	No-consider in future	Yes-including photos
Land Use and Policy	N/I	N/I	No	1/yr-ideal actual 1/ 2-3yrs	N/A	Site visit	No	No	N/I
Nature Conservancy of Canada	Not unless complicated	Yes	Some stored in fire safe drawers	1/yr or more as needed (high risk)	Spring and fall coordinate with natural features	All now-give landowner 24 hrs notice	Possibly future	No	Checklist, landowner not required to sign

Results for Interviews Conducted in Ontario on Baseline Documentation, Monitoring and Compliance of Conservation Agreements

	Conservation agreements posted	Landowner contact program	Arbitration/ mediation	Cost Recovery Options	Notice of violation	Right to enter and restore	Notice of Sale of Land
Georgian Bay Land Trust	No	N/I	N/I	N/I	Personal contact by Board	N/I	N/I
ONTA	No	N/I	If dispute arises	Can claim damages	Notify landowner ask to rectify	With a letter giving prior notice	N/I
Koochaching Conservancy	No	Record all contact with landowner	If dispute arises	Third party violation-landowner and agency split cost 50/50	N/I	With prior notice	N/I
Ducks Unlimited	No	Regular contact	Always included in agreement	Varies depending on site, situation and violation	In person and/or written	With prior notice, through terms of agreement	Not required
Land Use and Policy	No	No	N/I	N/I	Letter	N/I	N/I
Nature Conservancy of Canada	Only one-most landowners do not want	Landowner becomes a member, want to start a program	If dispute arises	Not included in agreement	1st notice-60 days to restore	10 days notice of intent, 24 hrs notice to enter prop	10 days notice to agency prior to sale of land

Results for Interviews Conducted in Minnesota on Baseline Documentation, Monitoring and Compliance of Conservation Agreements

	Specific objective	Ecological features	History of property	Improve-ments to property	Maps	Ground photos	Aerial photos	Written reports/ forms	Inventories
The Nature Conservancy	Specific to land-public cons purpose	Yes- used in designing the CE	Envtl. hazardous material asses.	No	Yes	Yes	Yes	Physical not ecological function	N/I
MN Land Trust	Very specific to land and intent	N/I	No	No	GIS non profit firm, topographic	Yes	After agreement signed	Report	Not unless they already exist
Department of Natural Resources Minneapolis	Type of agreement	No	No	No	No baseline-because CE very restrictive	No	No	Assessment and write up	No
USFWS Bloomington	Covered in the different types of CEs	No	No	No	Key habitat types	Yes-digital camera	Yes	Walk through-take notes	General
USFWS Fergus Falls	Covered in the different types of CEs	No	No	No	Yes	Yes	And some use of GIS	Report	General
RIM	Covered in the type of CE's accepted	Water quality and soil erosion	Inspectio n- may lead to investigat ion	No	Yes, legal description-digital orthophotos	No	Yes- farm service agency, delineate area of agreement	Questionnaire filled out	No

Results for Interviews Conducted in Minnesota on Baseline Documentation, Monitoring and Compliance of Conservation Agreements

	Survey	Authentication of Baseline Report	Copy in Secure Location	Frequency	Time of year	Site inspection	Fly by	Remote sensing	Monitoring form
The Nature Conservancy	When boundaries are not clear	N/I	No	Typically 1/yr, some 1/2yrs	Generally early spring/late fall- consult landowner	Preferred method	Possibly if CE # increases consider	Possibly in future	Don't require landowner to sign
MN Land Trust	Too costly, use if exists	The full property report reviewed and signed by landowner	3 sets- future 4th set in secure location	1/yr by volunteers and staff	Staff-spring and winter, volunteers- late summer fall	Primary method	Some	GIS map- incorporate into the property report	Monitoring form and data report- not require l/o sign
Department of Natural Resources Minneapolis	N/I	No	No	No scheduled monitoring system	Whenever convenient for field person	Yes	N/I	No	No
USFWS Bloomington	Some	No	No	1/2yrs avg	Spring	Yes- document in writing or use camera	In future	No	No
USFWS Fergus Falls	Some	No	No	1/yr- for all- do not notify landowner	Spring or late fall	Yes	Most	No	No
Re Invest Minnesota	No	No	No	1/yr for 5 yrs – then 1/3yrs	N/I	Yes, form filled out	Farm service flies	Some	Yes

Results for Interviews Conducted in Minnesota on Baseline Documentation, Monitoring and Compliance of Conservation Agreements

	Conservation agreements posted	Landowner contact program	Arbitration/ mediation	Cost Recovery Options	Notice of violation	Right to enter and restore	Notice of Sale of Land
The Nature Conservancy	No	Some but need a better system	Possibly if dispute	Landowner looses suit- pay agency legal fees	Letter	With prior notice	Landowner must notify agency of intent to sell land
MN Land Trust	Some	Landowner newsletter and post monitoring letter	Not in agreement but may use	L/o covers court costs, surveys, amendments, restoration	Letter outlining restrictions, then phone, then visit	Yes	90 days notice written into agreement
Department of Natural Resources	No	No	Not in agreement	N/I	N/I	N/I	30 days notice
USFWS Bloomington	No	Try to keep a good relationship during monitoring	Not in agreement	No	Letter by certified mail	No	Only yearly reminder letters
USFWS Fergus Falls	Only grassland easements	Reminder letter send out 1/yr	Not in agreement	No	In person interview followed by letter (cert. mail)	No	Only yearly reminder letters
RIM	Boundaries are staked, signs optional	Occasional mail outs	Not in agreement	Damages, legal fees etc., not in agreement	Letter- violation procedure	L/o must notify	30 days notice

Results for Interviews Conducted in North Dakota on Baseline Documentation, Monitoring and Compliance of Conservation Agreements

	Specific objective	Ecological features	History of property	Improvements to property	Maps	Ground photos	Aerial photos	Written reports/ forms	Inventories
USFWS Devil's Lake	Covered in different types of CEs	No	No	No	Sketch, and other maps	No	From several different years	Evaluation sheet	No
USFWS Bismarck	Covered in different types of CEs	No	No	No	Sketch, overlay, GIS in future	No	For different years	Evaluation sheet-case by case basis	No
NRCS (Term only)	Agency has specific criteria	Only accept floodplain	Title inspection only	No	Yes	Yes	Yes	Eligibility forms-ranking, benefit/cost ratio	No
ND Natural Resources Trust (Term only)	Agency has specific criteria	Specific to agency	No	No	Sketch, overlay and other maps	Yes	Yes	Field report and checklist	No

Results for Interviews Conducted in North Dakota on Baseline Documentation, Monitoring and Compliance of Conservation Agreements

	Survey	Authentication of Baseline Report	Copy in Secure Location	Frequency	Time of year	Site inspection	Fly by	Remote sensing	Monitoring form
USFWS Devil's Lake	Some	Both maps in baseline report and in the agreement	Yes	1/yr	Fall or early spring	On an as needed basis	Yes	Not at this time	No monitoring form used
USFWS Bismarck	Some	Both maps in baseline report and agreement	Yes	1/yr	Wetland-late Oct, grassland July 10-14	On an as needed basis	Majority	Plans to use GIS in future	No monitoring form used
NRCS (Term only)	Yes	No authentication of the baseline data report	Yes, copy is keep in a secure location	Annual status review	Depends on the situation, usually in September	With photos	No	No, possibly in the future	Yes, Status review form is used
ND Natural Resources Trust (Term only)	No	No	No	Annually	Whenever convenient for landowner	Site visit	No	No	No

Results for Interviews Conducted in North Dakota on Baseline Documentation, Monitoring and Compliance of Conservation Agreements

	Conservation agreeements posted	Landowner contact program	Arbitration/ mediation	Cost Recovery Options	Notice of violation	Right to enter and restore	Notice of Sale of Land
USFWS Devil's Lake	No	Not unless a violation, or landowner contacts with question- contact new owner	No	No	Contact landowner after document violation	Yes, has only been used on a limited basis	Pay county clerks office to notify of sale of land
USFWS Bismarck	No	Not unless a violation, or landowner contacts with question- contact new owner	No	No	Send letter asking for compliance, followed by visit	Yes, has only been used on a limited basis	Pay county clerks office to notify of sale of land
NRCS (Term only)	Yes-corners of property	Develop long-term contract with the landowner	None at this time	Landowner covers all legal costs, NRCS covers all cost of establishing cover	Landowner is notified by registered mail	Yes, will notify but not required to, NRCS has ingress/egress	Check with landowner when completing annual status review
ND Natural Resources Trust (Term only)	No	Newsletter, annual visit	No	Landowner covers all costs	Notify l/o by letter, follow up phone call, site visit - buy back and partial buy back options	With notice	30 days notice

APPENDIX 7

SAMPLE BASELINE DOCUMENTATION FORM

Baseline Data Documentation Cover Sheet

The baseline data documentation file for the conservation agreement signed between _____ and _____ on the _____ day of _____ 200__ for the property at _____ registry number_____, contains the following documents:

- Summary of the agreement (including location of original agreement)
- Property owner information
- Reference statement
- Property location
- Directions to the property
- History of the property
- Written description of all structures
- Written description of the condition of the property
- Acknowledgement statement signed by the owners of the property

And the following attachments:

- Map of property
- Aerial photo
- Sketch map

SUMMARY OF CONSERVATION AGREEMENT

This document is intended for summary purposes only. Should there be any discrepancies between this summary and the original agreement, the original agreement will take precedence.

Registry number: _____
Date: _____

Purpose:

_____
_____
_____
_____

Restrictions:

_____
_____
_____
_____

Reserved rights:

_____
_____
_____
_____

Other comments:

_____
_____
_____
_____

1

Baseline Data Documentation Form

Donor(s) Name _____ _____

Do property owners live on the property? _____
Contact Person (if different from above) _____
Address of
Property _____

Donee Name _____ Address _____

_____

Name of Field Person _____ Date of Visit _____
Registry Number _____

Reference Statement:

_____
_____
_____

Property Location:

_____
_____
_____

Direction to the property:

_____
_____
_____

Legal Information: (any mortgages, liens, encumbrances etc)

_____
_____
_____

History of property:

_____
_____
_____

2

Property Information

Land Types:

Acres _____ % Forest Land_____ % Farmland _____

% Wetland _____ % Buildings and grounds_____ % Other_____

Ecological features of the Property: (any rare or endangered species, description of vegetation cover and soil types, and any inventories)

_____

_____

_____

_____

_____

Buildings and Structures on the Property: (describe size, type and condition of all man-made structures and map location of each on attached map)

_____

_____

_____

_____

_____

Condition of Property: (describe condition and management status, land uses, health of wetlands/waterways, unusual features, rare species, erosion, pollution etc)

_____

_____

_____

_____

_____

Attachments:

(List of all maps, sketches, inventories, and photographs etc that document the condition of the property as described in the written statements above).

ACKNOWLEDGEMENT OF CONDITION
STATEMENT

We _____ and _____ the owners of the property described below do accept and acknowledge the preceding baseline documentation including all attachments listed below, as being, to the best of our respective knowledge, an accurate description of the natural features and current land uses on the subject property.

Address and location of the property:

List of all documents contained in the documentation package:

- Aerial photo of property
- Biological inventory
- Ground photos numbered 1-34
- Sketch map of the property

_____ Landowner

_____ Landowner

_____ Date

_____ Date

_____ Organization

_____ Field Person

_____ Date

4

Adapted from examples in Lind (1991), Diehl and Barrett (1988), Thorne (1997) and the Land Trust Alliance (1995)

APPENDIX 8

SAMPLE BASELINE DATA CHECKLIST

Baseline Data Checklist

_____Cover page (legal description of property and contents of the file)

_____Property owner information (name and address of property owner, location of the agreement property and contact information)

_____Legal information (any mortgages, easements, or liens against the property)

_____Background information (historical information on the donation/acquisition, history of the property and land uses on the property)

_____Ecological features (any rare or endangered species, description of vegetation cover and soils, inventories and land types- include only the features that the agreement seeks to protect)

_____Man-made features (buildings, structures and improvements to the property)

_____Condition of the property (soil quality, health of wetlands/waterways, management status, pollution)

_____Photographs
- _____Aerial (altitude, angle and date on each photo)
- _____Ground (compass reading for the direction of each picture, signature, date, time of day, location and number on each one)

_____Maps
- _____Property location map (boundaries clearly identified)
- _____Photo location map (showing location and vantage point of all photos)
- _____Geological maps
- _____Other maps (include a list)

_____Survey (only if required or already existing)

_____Owner acknowledgement of condition statement

Adapted from examples in Lind (1991), Diehl and Barrett (1988) and the Land Trust Alliance (1995)

APPENDIX 9

SAMPLE MONITORING FORM

Conservation Agreement Monitoring Form

Property owner's name _____ Inspected by _____
Original Donor _____ Date _____
Property location _____ Did owner accompany inspector?
_____ _____

Date notice was sent to property owner and method _____
Was there a change of ownership? _____ If so when? _____
The new owner's name, telephone and address (if different from above):
_____
_____

Describe in detail any changes to the property or land uses (note any natural events or acts that have taken place since last monitoring report):

List any recommendations or requirements for the property:

List all attachments used to document property condition:

_____ _____
Signature of Inspector Signature of Property Owner

Phone _____
Address _____
_____

Adapted from examples in Lind (1991), Diehl and Barrett (1988) and the Land Trust Alliance (1995)

APPENDIX 10

SAMPLE MONITORING CHECKLIST

Conservation Agreement Monitoring Checklist

Preparations for Monitoring:

_____ Owner notified of monitoring visit and the date of notification recorded in the monitoring log?

_____ Baseline data and relevant monitoring forms reviewed?

_____ Agreement restrictions and reserved rights reviewed?

_____ Most recent photos and maps of property reviewed?

On the property inspection:

_____ Are the present land uses inconsistent with the conservation agreement?

_____ Have there been any additions, deletions or man-made alterations to the property?

_____ Is there any evidence of violations on the property?

_____ Is there any evidence of any potential threats/problems?

_____ Are there any encroachments from adjacent property?

_____ Have there been any natural alterations of the property?

If the answer to any of the above questions is yes please provide a detailed description of each point including photographs etc.

Property owner

_____ Does the property owner have a copy of the conservation agreement? (If not provide property owner with a copy and record in monitoring log)

_____ Were all recommendations or requirements discussed with the property owner? If not send a letter with all recommendations and requirements to property owner and record in monitoring log.

Adapted from examples in Lind (1991), Diehl and Barrett (1988) and the Land Trust Alliance (1995)

APPENDIX 11

SAMPLE ENFORCEMENT/VIOLATION POLICY

Enforcement/Violation Policy

Position of individuals that have the authority to discuss violations and negotiate solutions with the property owner:

-
-
-

Method that the property owner will be contacted:

1) In person
2) By telephone
3) By letter (as last resort)

List most common types of violations:

Major violations: Minor violations:

Violation Response Procedures:

- Review the conservation agreement
- Inspect and document the violation
- Evaluate the extent of the damage and necessary restoration
- Contact the property owner and try to negotiate a solution and set a deadline
- Follow up with a written letter outlining agreement restrictions, condition of property and restoration required and the deadline
- Inspect the property at the deadline
- If there is compliance send a thank you letter
- If no compliance send a second letter with a second deadline
- Inspect property at deadline
- If compliance send a thank you letter
- If no compliance send third letter notifying property owner of agencies course of action (involvement of Conservation Agreements Board or other method of dispute resolution)
- If a solution cannot be found, seek legal advice and have lawyer send property owner a letter
- If result of third party, negotiate with third party- resorting to legal action if unsuccessful or restore damage using previously determined approach

Adapted from examples in Lind (1991), Diehl and Barrett (1988) and the Land Trust Alliance (1995)

APPENDIX 12

EXAMPLE ENDOWMENT FUND CALCULATION

Ducks Unlimited

Worksheet to calculate the value of an endowment needed to provide for costs of monitoring and defending a conservation easement (jkr 8/7/00)

Conservation Easement Obligations

A. Annual Costs

Annual staff costs	
Annual staff costs for monitoring, stewardship, and reporting	$476
Annual direct costs	
Annual cost for vehicle	$270
Reimbursable travel expenses (airfare, hotel and meals)	$600
Film, letters, and other materials needed for stewardship and easement documentation	$35
Sub-total annual direct costs for monitoring and stewardship	$905
Total annual costs	**$1,381**

B. Costs of Defending an Easement

Staff days needed to defend an easement	0
Hourly Rate Charge for staff involved in easement defense	$56
Total staff cost for easement defense	$0
Cost of retaining legal counsel	$0
Additional costs (expert witnesses, documentation)	$0
Total legal defense cost	**$0**

C. Calculation of Endowment and Defense Funds

Assumed interest earning (percent) on endowment	8.83%
Assumed annual inflation rate (percent)	3.83%
Difference between interest rate and inflation rate	5.00%
Endowment needed for annual costs (= cost/difference between earnings and inflation rates)	**$27,615**
If we assume that the chance of legal action is 1 in 20, then the cost of a legal defense fund could be split among 20 easements. Therefore, this easement's share of the defense fund =	$0
Total of endowment and defense fund costs	**$27,615**

Provided by Ducks Unlimited- Bismarck, North Dakota.