THE ROLE OF ARCHAEOLOGY IN CULTURAL RESOURCE MANAGEMENT

by

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Date October 4, 1991
Abstract

A new field in archaeology, cultural resource management, emerged during the environmental and conservation movements of the mid 1960s and early 1970s. The term cultural resource management (CRM) was first introduced into the archaeological literature by American archaeologists. CRM combines the philosophy of conservation (i.e. the preservation and public stewardship of archaeological resource for future use) with management skills to create a process to assess and mitigate archaeological resources affected by adverse impacts.

The main purpose of this thesis is to examine the development of CRM in Canada at the federal and provincial levels and to present alternative conservation strategies that may prove to be as effective as present government heritage legislation and policies. To achieve these aims, first the general literature on CRM is reviewed. From this examination, archaeology, cultural resources and CRM are defined. Second, CRM in the United States and Canada is discussed by examining federal preservation laws and environmental policies which address the issue of archaeological resources located on federal lands. Emphasis is placed on the National Environmental Policy Act of 1969 (NEPA). This Act introduced an environmental impact assessment process that became the model used to identify, evaluate, assess and mitigate archaeological resources affected by a project’s actions. Third, a study is made of a provincial policy guideline and an impact assessment procedure for archaeological resources. Using this literature review, an evaluation of the provincial archaeology agency is presented. Fourth, alternative methods for conserving and managing archaeological resources are analyzed. Finally, after a brief
summary, policy recommendations are presented for developing an integrated planning approach to facilitate the achievement of a more effective CRM plan.

Examination and analysis of the literature concerning CRM in Canada reveals several main problems. The four most important deficiencies are: 1) a failure to integrate CRM planning with the planning policies and programs of other land agencies; 2) the lack of a federal archaeology policy; 3) the lack of a legislated mandate to enforce adherence to the provincial archaeology policy guidelines or to the archaeological impact assessment procedure; and 4) the centralization of final decision-making regarding the designation and preservation of archaeological sites. These related problems suggest that a new approach to conserving and managing the resource base should be considered.

This thesis contends that if archaeological resources are to be preserved for future generations, then alternative resource management strategies should be implemented immediately. In addition, the management of archaeological heritage should be the joint responsibility of all levels of government and community groups. Therefore, a successful and effective CRM plan should integrate government heritage legislation and policies with community needs and values.
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Glossary

ARCHAEOLOGY: The scientific study, interpretation and reconstruction of past human cultures based on the analysis of surviving material remains.

ARCHAEOLOGICAL HERITAGE: The total Native Indian archaeological resource base of a country.

ARCHAEOLOGICAL IMPACT ASSESSMENT: A process used to determine the heritage impacts of a proposed development on archaeological resources. The archaeological impact assessment process consists of three components: overview, assessment and management.

ARCHAEOLOGICAL IMPACT STATEMENT: The document produced from the data collected during the archaeological impact assessment process.

ARCHAEOLOGICAL RESOURCE: Also called cultural resources. All evidence of past human occupations which can be used to reconstruct the lifeways of past cultures. These include sites, structures, artifacts, fauna and floral remains and skeletal remains.

ARCHAEOLOGICAL RESOURCE BASE: see resource base.

ARCHAEOLOGICAL RESOURCE MANAGEMENT: The management, preservation and conservation of Native Indian archaeological sites, objects, and structures. Also known as cultural resource management.

ARCHAEOLOGICAL SITE: A Native Indian habitation, ceremonial, activity, or manufacturing location where physical remains or traces of occupation is found.

ARCHAEOLOGIST: Individuals trained in archaeology to conduct such studies.

ARTIFACT: A portable object produced from human activity, usually applied to items found in or removed from historic or Native Indian archaeological sites.

ASSESSMENT: Inventory and evaluation of archaeological resources.

CONSERVATION ARCHAEOLOGY: An approach to archaeology based on a philosophy stressing the protection, preservation and management of cultural resources for present and future use.
Cultural landscape: A geographic area, including both cultural and natural resources, that has been influenced by or reflects human activity or was the background for an event or person significant in human history.

Cultural resource: Finite and non-renewable man-made features, sites, structures or objects possessing archaeological significance. Used interchangeable with the term archaeological resource.

Cultural resource management: The application of management skills combined with a conservation philosophy to create a process for the preservation, conservation, use, protection, and designation of Native Indian archaeological remains. Same as archaeological resource management.

Environmental impact assessment: The assessment and evaluation of all potential social, cultural and natural impacts of a proposed development and the recommendations of feasible alternatives to the action.

Environmental impact statement: The environmental document produced from the data provided by the environmental impact assessment.

Excavation: The scientific examination of an archaeological site through the layer-by-layer removal and study of the contents within a prescribed unit size.

Heritage resource: A natural or man-made resource that is of cultural interest.

Heritage site: A historic or Native Indian archaeological site.

Impact management: Follows the assessment stage and is concerned with managing unavoidable and unanticipated adverse impacts on cultural resources.

In situ: Archaeological resources found in their original location.

Land managers: Individuals or agencies responsible for the control, maintenance and care of land and all resources located thereon.

Mitigation: Refers to any steps or procedure used to reduce or eliminate adverse impacts of a development on heritage resources through avoidance, protection or data recovery.
Public good: A commodity or service that is not priced in the market place. Market cannot restrict the use or consumption of the good and is therefore unable to allocate costs and benefits.

Resource base: All the archaeological resources in the country or province.

Salvage: Also called rescue archaeology. It is the physical removal of portions of the resource and their preservation through professional investigations and documentation of significant data associated with cultural resources.

Site: see archaeological site

Study area: The zone or region selected for research in a cultural resource management study.

Survey: A comprehensive physical examination of a study area to locate, identify, and inventory the presence of archaeological sites or objects and associated environmental variables. Surveys provide information on all the cultural resources affected by a project’s actions.
Abbreviations and Acronyms

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<td>ACHP</td>
<td>Advisory Council on Historic Preservation</td>
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<td>AIA</td>
<td>Archaeological Impact Assessment</td>
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<td>AIS</td>
<td>Archaeological Impact Statement</td>
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<td>ARC</td>
<td>Archaeological Resource Center</td>
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<td>ARM</td>
<td>Archaeological Resource Management</td>
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<td>ASC</td>
<td>Archaeological Survey of Canada</td>
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<td>B.C.</td>
<td>British Columbia</td>
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<td>BNA</td>
<td>British North American Act</td>
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<td>Branch</td>
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<td>CAA</td>
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<td>CED</td>
<td>Community Economic Development</td>
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<td>CHIN</td>
<td>Canadian Heritage Information Network</td>
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<td>Canadian Inventory of Historic Buildings</td>
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<td>CRM</td>
<td>Cultural Resource Management</td>
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<td>DOTA</td>
<td>Department of Transportation Act of 1966</td>
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<td>EARP</td>
<td>Environmental Assessment and Review Process</td>
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<td>EIA</td>
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<td>EO</td>
<td>Executive Order 11593</td>
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<td>Historic Sites and Monuments Act</td>
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<td>NHPA</td>
<td>National Historic Preservation Act of 1966</td>
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<td>OCP</td>
<td>Official Community Plan</td>
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<td>UNESCO</td>
<td>United Nations Educational, Social, Cultural Organization</td>
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<td>U.S.</td>
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<td>ZAP</td>
<td>Zuni Archaeology Program</td>
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Acknowledgement

I was stimulated to undertake the issue of cultural resource management by my personal involvement in heritage conservation and from the encouragement of several archaeology friends. During my time at the School of Community and Regional Planning, I was greatly inspired to pursue this topic by a number of professors, but I wish to single out Henry Hightower for special thanks.

I wish to acknowledge and thank all of my friends who patiently listened to me rant and rave about the thesis and then offered wise words of advice about how to proceed through the process. Jean Bussey and Malcolm MacPhail deserve special thanks for reading early drafts of the thesis and for providing insightful criticisms and comments. Thanks also to Kathy Steves for helping with the editing.

Finally, on a personal note, I wish to express grateful thanks and appreciation to my family for giving me the time to write the thesis, especially to my sister Julie who understood the personal sacrifices and hardships of the past two years. I would like to dedicate this thesis to my mother, Aileen Yip, for her everlasting moral support and encouragement throughout my "arky" career and my return to school as a graduate student. Her positive attitude towards her own physical disability has been an inspiration to me.
1.1 Purpose

The purpose of this thesis is to examine the role of archaeology in the development of cultural resource management in Canada and to describe some methods by which the management of this resource base is achieved at the federal, provincial, municipal and community levels. For the purpose of this thesis, emphasis is placed on discussing the legal foundation of cultural resource management (CRM) at the federal level. An examination of British Columbia’s approach to CRM focuses on the archaeological impact assessment process. However, a more specific purpose of this thesis is to examine how new and innovative conservation strategies in CRM are proving to be as effective as government legislation and policies in conserving and managing this resource base.

Five objectives are addressed in this thesis:

1) To discuss the role of archaeology in creating a new field known as cultural resource management and to identify the concepts of CRM in general terms;

2) To examine the federal evolution of CRM in the United States and Canada through preservation and environmental laws and policies and to compare the results of the two countries;

3) To present a provincial approach to CRM through examination of the Archaeology Branch, the Heritage Conservation Act, an archaeology policy and the archaeological impact assessment process;

4) To discuss alternative conservation strategies for managing archaeological resources through increased public participation, the development of archaeology sites for community economic development plans and Native management of archaeological resources; and

5) To present policy recommendations for improving the management of the archaeological resource base through an integrated planning approach to CRM.
1.2 **Rationale**

The management of cultural resources, specifically archaeological resources, has been mainly a function of the federal or provincial government through the enactment of historic preservation laws and environmental policies. These laws and policies provided the legislative foundation for conserving and managing archaeological resources. The federal government believes that an appropriate method for managing archaeological resources is implementing land-use controls through the legal system.

In British Columbia, provincial responsibility for the management of archaeological resources led to the creation of an archaeology agency. This agency, now called the Archaeology Branch, is supported by a Heritage Conservation Act designed specifically to protect archaeological resources, a policy outlining the objectives and goals of the agency, and a process for assessing and mitigating adverse impacts on archaeological resources.

CRM in Canada is supported primarily by federal and provincial policies and heritage legislation. Unfortunately, this top-down planning approach has failed to implement effective CRM plans and policies. As a result, private and public development of the land base continues to deplete archaeological resources.

Accordingly, the central premise of this thesis is to suggest that other methods for conserving archaeological resources may prove to be as effective, if not more so, than government legislation and policies. These alternative conservation strategies are community oriented because they emphasize public participation as the key to a successful CRM plan. A community conservation approach focuses on the role of local government for preserving archaeological sites located on private property. In addition, this approach integrates the social, cultural and economic goals of the community into an archaeological
preservation plan. Finally, this approach recognizes the need for greater Native Indian management of archaeological resources as part of their heritage revitalization movement and desire for self-government.

This community planning approach to CRM is in clear opposition to the present top-down planning approach. However, the main objective of both plans is similar - to conserve and preserve the archaeological heritage for future use. The federal and provincial governments perceive this objective as being achieved through legislation, while the other approach envisions public involvement and greater community and Native Indian management of the resource base.

The final premise of this thesis suggests that the management of the archaeological resource base is the collective responsibility of all levels of government, communities, special interest groups, Native Indians, and the general public. This sharing of responsibility can only occur if all the needs and values of each group are integrated into a CRM planning process. Integrated planning recognizes the interconnection of various systems within our society. An integrative process would expand CRM's original concept of conserving and managing archaeological resources into a broader framework integrating social, cultural and economic considerations of all levels of government and community groups.

1.3 Methodology

The first objective of the research is addressed by reviewing the literature on CRM in general and in particular, on the development of CRM from the discipline of archaeology, as it was influenced by the environmental and conservation movements of the 1960s and the 1970s. From this review, the terms archaeology, cultural resources and CRM were defined.
The second objective is met by studying a range of material on the history of the federal preservation and environmental acts which influenced the development of CRM in the United States and in Canada. To supplement the sparse literature available on the federal management of cultural resources in Canada, greater emphasis was placed on reviewing American archaeology laws.

Information on the provincial approach to CRM was obtained from government publications outlining the Archaeology Branch's policy guidelines and archaeological impact assessment procedure, and from sections of the Heritage Conservation Act (1977) that pertain to archaeology. Additional relevant government materials and documents were supplied by the Resource Centre located in Victoria, British Columbia. Personal communication was sought with various professional archaeologists concerning the archaeological impact assessment process.

Current literature on new and innovative strategies for conserving archaeological resources was reviewed to determine alternative methods in CRM planning. Published articles on case studies were supplemented with correspondences from American land agencies, Native Indian groups, and communities presently involved in community planning approaches to CRM.

The last objective is accomplished by analyzing and synthesizing the deficiencies in the present top-down approach to CRM, and presenting recommendations for a more effective and improved CRM plan.

1.4 Organization

Chapter 2 provides an overview of the definition of archaeology, cultural resources and CRM (see Figure 1). In addition, this chapter presents a discussion of cultural resources as non-renewable items, and as public goods that possess social, ethnic and economic significance. Chapter 3 outlines the
development of CRM through the enactment of federal preservation and environmental laws in the United States and Canada. Chapter 4 focuses on the management of archaeological resources at the provincial level, with British Columbia used as the case study. In addition, an in-depth examination of the archaeological impact assessment process is presented. Chapter 5 discusses some examples of alternative conservation strategies in CRM that are currently in use or under consideration. A few case studies are presented to demonstrate the implementation and success of these new strategies. Finally, Chapter 6 presents a summary, provides policy recommendations for improving CRM at the federal and provincial levels, and suggests that an integrated planning approach may be the key to a successful and long-term CRM plan.
FIGURE 1  THESIS OUTLINE

CHAPTER 1:  
THESIS OUTLINE

CHAPTER 2:  
ARCHAEOLOGY & CULTURAL RESOURCE MANAGEMENT

Archaeology

Cultural resources

Conservation philosophy

Cultural resource management

Non-renewable resource

Public good

Significance

CHAPTER 3:  
FEDERAL APPROACH TO CULTURAL RESOURCE MANAGEMENT

United States

NHPA 1966
DOTA 1966
NEPA 1969
Reservoir Salvage Act 1960
Archeological Protection Act 1979

Canada

Communications
Transportation
DIAND
Environment
CHAPTER 4: PROVINCIAL APPROACH TO CULTURAL RESOURCE MANAGEMENT

Ministry of Municipal Affairs, Recreation & Culture

Archaeology Branch

HC Act of 1977
ARM policy
AIA process

CHAPTER 5: ALTERNATIVE APPROACHES TO CULTURAL RESOURCE MANAGEMENT

Public participation & education
Municipal govt.
CED & tourism
Native management

CHAPTER 6: CONCLUSION

Summary
Policy recommendations
Conclusion
2.1 **Archaeology**

Archaeology is defined as the study of the material remains produced from past human activity. Archaeology interprets these remains (e.g. artifacts, structures, features, sites, sediments, faunal and floral remains, skeletal remains and manufacturing debris) in an attempt to understand the actions that led to their formation, and their relationship to the practices and life styles of prehistoric cultures (Wickham-Jones 1988:186). As such, archaeology deciphers past activities in order to understand current and future events.

A main component of archaeology is 'interpretation.' The interpretation of an archaeological site involves the scientific analysis of the site to obtain information concerning the processes which led to its formation. Interpretation provides context and meaning because "it places the resource within a setting and it suggests the actions that might have led to their creation" (Wickham-Jones 1988:186). However, archaeological interpretation is a subjective matter influenced by such variables as the politics, the culture, and the wisdom of the times (Stone et al. 1990).

Context and meaning are also important in archaeology. Context places the resource under investigation within a place and time frame by relating it to past environmental and/or human conditions and to an identifiable time period (Wickham-Jones 1988:186). The 'meaning' of an archaeological item identifies it in terms of a human activity, such as hunting, domestic chores, manufacturing or ceremonial rituals. Without context and meaning, no knowledge is obtained from a resource and consequently, it becomes just another item or piece of property.
2.2 Cultural Resources

The term cultural resources was first introduced into the literature by the United States National Park Service in 1971. Traditionally, cultural resources have referred to archaeological sites and structures. However, under the Park Service, cultural resources included natural or man-made features, such as sites, structures or objects "possessing significance, either individually or in groups, in history, architecture, archaeology or human development" (Fowler 1982:1).

Today there exists a growing worldwide trend to expand the definition of cultural resources to include more than just archaeological material remains (Biornstad 1989:73; Harding 1978:29). Many archaeologists feel that cultural resources should not remain exclusively archaeological in perspective. Rather, they should include additional disciplines, such as history, architecture, ethnology, folklore and anthropology (Adams 1977; Lipe et al. 1974; McGimsey et al. 1977; Schiffer and House 1977). However, for the purpose of this thesis, the term cultural resources will focus principally on Native Indian archaeological properties and objects.

2.3 Conservation Philosophy

The conservation approach in archaeology began with a Swedish Royal Proclamation in 1666. This Proclamation declared all objects of antiquity to be the property of the Crown. For "the first time, the intrinsic importance of the remains of the past was acknowledged by a national legal code. By the end of the 18th century, most of the ancient monuments of Europe were covered by protective legislation" (Cleere 1989:1).

The integration of heritage management with social and economic planning policies began at the end of World War II. The destruction of historic buildings and monuments in Europe gave birth to massive heritage revitalization programs throughout the Continent and in England. In addition, Postwar
reconstruction coupled with increased industrialization led to the economic booms of the 1950s and 1960s. Massive resource exploitation, large scale development projects (e.g. highway construction, dam building and reservoir flooding), population growth, and urbanization began to have profound negative effects on the natural environment.

The mid 1960s and the 1970s gave rise to worldwide concern for the environment. Conservation and protection of the land and its resources became a common international theme. Public sentiment and attitudes towards the land were reflected in new environmental policies. The development pressures of the 1960s and the environmental movement of the 1970s had a profound effect on the discipline of archaeology.

Archaeologists became aware that the entire resource base was being threatened and destroyed at an incredibly fast rate. They began to explore new methods to slow the rate of destruction, and to develop measures to guide, preserve and protect the remaining resources for future use. The result was the emergence of cultural resource management.

2.4 Cultural Resource Management

The concepts of cultural resource management (CRM) were developed by American archaeologists during the 1970s. These archaeologists were the first to realize that the conservation movement coupled with detrimental changes being brought about by increasing land altering activities, demanded a new type of response from the archaeology profession. Almost every European country enacted new legislation on antiquities during the 1970s to replace the outdated and ineffectual statutes created during the pre World War II era (Cleere 1989:4). This ‘new archaeology’, expressed as CRM, was guided by a
conservation ethic applied to archaeological sites and their material remains (Schaafsma 1989:39).

The term 'management' was coined by Lipe (Lipe et al. 1974) in reference to the way that the protection and preservation of cultural resources, specifically Native Indian archaeological sites, could be accomplished through the political process. Consequently, CRM became defined as the application of management skills (e.g. planning, organizing, directing, controlling and evaluating) to create a process whereby "the protection and administration of archaeological resources in its original environment and in its relationship to history and contemporary society is preserved for present and future use. These activities can be viewed as a process which includes survey, inventorization, excavation, research, protection, presentation, conservation and education" (Biornstad 1989:72; Department of Communications 1988:1; Fowler 1982:1; Lipe 1975:1).

A basic principle of CRM is the conservation of the total resource base within sound scientific principles. Conservation archaeology includes the notions of a wise use of the resource, and of maintaining the material remains in their original deposit (Cordell 1984:55). However, when material remains must be removed from their original deposit, all contextual and archaeological items should be documented and analyzed in accordance with the highest professional standards (Knudson 1982:166). Closely related to the conservation concept is the premise that all archaeological sites and materials are non-renewable resources.

Finally, an important aspect of CRM is the recognition of these resources as public goods possessing societal significance. The federal government, acting as and for the people of the nation, introduced the concept of
'stewardship' of the cultural heritage by assuming responsibility through legislation for protecting these resources for public benefit and use.

2.5 Archaeological Resources As Non-Renewable

Archaeological resources were initially viewed as being an inexhaustable supply available for consumption and use by academics and professional archaeologists. Today, archaeological resources are classified as being non-renewable because they are irreplaceable and limited in quantity. These resources cannot be re-created, rejuvenated, restored, or replaced, when the context of the resource is disturbed or the resource itself is destroyed (Ferguson 1978; Lipe et al. 1974; Scovill et al. 1977).

The main mechanisms in which archaeological resources are lost are through modification of the natural landscape for development projects, natural resource exploitation, vandalism to sites and looting of cultural items. In many instances, the contextual relationship between the resource and the environment can be destroyed by relatively minor modifications of the ground surface.

Archaeological resources are finite in quantity. The greater the human demand for development and use of the land, the greater the depletion and loss of the resource base. Donahue (1982) stated that between the years 1979 and 1982, 130,313 hectares (322,000 acres) were disturbed each year in Alberta. In addition

... most disturbances were related to forestry and new agricultural activity. Fifteen percent of the disturbance was related to the energy industry, of which well site activity alone accounted for the impacting of 20,603 acres or 6.4% of all land surface disturbance in 1980. Well site activity alone may account for an estimated loss of 600 to 2,780 archaeological sites. Since 1974 when the Archaeological Survey of Alberta started developing, approximately 41,252 sites may have been lost. This stands in sharp contrast to the less than 13,000 sites presently on file in Alberta (Donahue 1982:256).
The finite and limited quality of the resources assumes even greater relevance and significance since the location of archaeological sites is patterned and predictable to some degree (Ham et al. 1984). Archaeological sites are often concentrated in river valleys, coastal plains, the piedmonts, and the desert springs regions of the landscape. These are the very places where Western society has developed or desires to develop or exploit the land base and its natural resources. It is therefore not coincidence then that “the factors of site selection used by past humans have been similar over exceedingly long spans of time and are frequently congruent with the factors we moderns use today” (Scovill et al. 1977:46-47).

Western society intensifies the destruction of the finite resource base through the alteration and rearrangement of the man-made and natural landscapes. “Our society has the technological capacity, the economic motive and the sociopolitical mandate to do so” (Scovill et al. 1977:47). Rather than adding a new cultural layer to the existing archaeological record, modern man completely obliterates the cultural debris of the past.

2.6 Archaeological Resources As Public Goods

A public good is a commodity or service that is so widely dispersed or consumed by everyone that the market is unable to restrict its consumption, and hence, unable to allocate costs and benefits (Seldon et al. 1973:165). As a result, it is usually not possible to charge a price for a public good since people cannot be excluded from enjoying its benefits. In addition, “it may be undesirable to charge a price for it, because that would discourage some people from using it, even though using it does not deplete its supply” (Baumol et al. 1988:583). Since public goods are not priced in the market place, they
cannot be financed by private enterprise. Therefore, the government must pay for these goods if they are to be provided at all.

Archaeological resources represent the cultural legacy of Native Indians in particular, and in general, the human heritage of all Canadians. Archaeological resources, as items and properties representing heritage, are considered to be the collective property of all a nation's citizens. These resources "contribute to the historical identity of nations, people and local communities. They represent an irreplaceable contribution to what has been termed the collective memory of mankind" (Kristiansen 1989:27). Presented in this manner, these resources are considered to be public goods in that individuals cannot be excluded from enjoying the benefits of the country's archaeological heritage. The lack of excludability means that archaeological resources, as a commodity, are automatically available for all people to enjoy. Therefore, since the commodity is a publicly consumed good, the management, preservation and financial support of the archaeological data base becomes a government responsibility.

The Government of Canada has assumed public responsibility or 'stewardship' of archaeological resources by enacting legislation to protect heritage, and establishing government agencies and national heritage institutions which promote, manage, preserve and conserve this resource base for future generations of Canadians. The Government has also demonstrated its responsibility for these resources through financial support of conservation programs and archaeological research.

There are three main problems with perceiving archaeological resources as public goods under the stewardship of the Government. First, it does not consider Native Indian ownership and guardianship of their own archaeological resources. Second, archaeological sites located on private property are
considered to be 'owned' by the landholder. Finally, many institutions (e.g. private and public museums, universities, and private corporations) and individuals (e.g. scholars, antiquities dealers, collectors and museum curators) sell or export archaeological artifacts. Many opponents state that the trade in cultural properties should be controlled to prevent the illegal looting of sites, the theft of artifacts from museums and black market trading of unique items. However, international and domestic laws prohibiting the selling or export of cultural properties have not discouraged illegal activities from continuing.

Warren (1989) stated that the questions, "Who owns the past and Who has the right or responsibility to preserve cultural remains of the past?" are at the heart of debate over cultural properties. These questions raise important issues about what constitutes the past, the diversity of values associated with archaeological resources and the conflicts of interests of the various parties to the dispute (e.g. government, private citizens, Native Indians, antiquities dealers, and collectors) (Warren 1989:1).

Warren suggested that 'ownership' and 'responsibility' may lie in an integrative perspective towards archaeological resources (1989:21-22). This would integrate cultural differences in defining ownership and encourage both Native and non-native stewardship. An integrative perspective would also understand private ownership while encouraging the 'sharing' of cultural items (e.g. museum loans, photographing private collections, and donations for exhibitions). Finally, an integrative perspective would emphasize the preservation of the resource base as the central issue and support the return of artifacts illegally exported from the country of origin.
2.7 Significance of Archaeological Resources

Archaeological resources are managed because they have social, cultural, and economic significance to special interest groups, local communities, regions, or nations. Significance is assigned to these resources as a way to justify their conservation, and as a method to select and determine which resource to preserve for the present and future use.

The term significance means different things to different people. Flood stated that "significance of Aboriginal sites can be divided into two categories -- those of significance to Aboriginal people and those of significance in a Western value system" (1979:21).

... Any rock art site is likely to be of interest to a non-Aboriginal; to the Aboriginal, rock paintings are generally of limited interest unless the site is one of religious significance. Even where a rock painting is regarded as important by the Aboriginal, it is often the site of the painting which is important, not primarily the detail depicted. In absolutely preserving any Aboriginal rock paintings, non-Aboriginals must be aware that it is analogous to reserving one frame from a strip of movie film. This is to the Aboriginal as unimportant as one frame is to the total sequence (Hope Committee of Inquiry into the National Estate 1974:169 in Flood 1979a:21).

Classifications of significance need to be dynamic. As archaeological resources become rarer, the significance of the remaining resources increase. Conversely, as more sites of one particular type are investigated, so the significance of the remainder may be reduced (Coutts 1979:42).

Regional differences must also be considered when evaluating the significance of cultural items. The Inuit Cultural Institute stated that "it is counterproductive to attempt to impose 'southern' notions of cultural significance on the North. Instead, the Inuit must be given the responsibility to determine the future of their own culture and cultural resources" (Federal Cultural Policy Review Committee 1982:63). The significance of archaeological resources also varies and changes in response to the needs and values of the region or the local community. Consequently, it is difficult for one region to
dictate the heritage needs of another. "This situation is made more complex by the fact that the degree of significance can also change as the discipline of archaeology evolves" (Lipe 1975:31).

In terms of purely archaeological criteria, significance can take into account a number of factors. These include: state of preservation of sites; rarity of sites (e.g. age, cultural affinities or site type); importance of the site to living Native Indians; the environmental context in relation to other sites in the same area; the intrinsic and esoteric value (e.g. rock art sites); and the degree to which they have been previously investigated (Coutts 1979:42). However, no "single universal or absolute frame of reference can be established against which all archaeological resources can be measured to determine significance" (Lipe 1975:31). Therefore, though several types of significance have been used to evaluate archaeological sites, the criteria of social, ethnic and economic significance are the most common.

2.8 Social Significance

The social significance of archaeological resources is often difficult to measure. This is because it refers to "the direct and indirect ways by which society benefits from the study and preservation of archaeological resources" (Scovill et al. 1977:56). In Canada and the United States, the social significance of archaeological resources is expressed through protective heritage legislation (see Chapter 3). British Columbia's provincial heritage agency assigns significance to archaeological resources as part of the archaeological impact assessment process (see Section 4.5.2). Significance is used by the government agency as a criterion to evaluate and rank sites. The ranking of sites or objects enables the agency to determine whether that resource warrants preservation and protection. This government agency helps to give awareness of the past to
communities. Social significance also includes the informational, symbolic and aesthetic values of cultural items.

2.8.1 Informational Significance

Information on archaeology is in great demand from the general public. "Many people are interested in human origin and development. They want to know what happened, how it happened and why it happened" (Mayers-Oakes 1989:55). Archaeology provides the physical evidence of what people were like in the past. Archaeology can also educate non-natives to understand and appreciate Native Indian culture. It can help to change "ingrained concepts throughout the community, government and industry by instilling a respect for Native Indian culture and the present descendants of the early immigrants" (Sutcliffe 1979:56). Therefore, public education is considered to be a powerful conservation method because greater public awareness in archaeology can result in greater public pressure on government agencies to fund archaeology projects and programs, and to enact and enforce heritage laws.

All archaeological resources convey some type of information about the past. The informational significance of these resources is also important to the scientific community since every archaeological site has potential research value. The management of the resource protects the data base for future research purposes. The scientific analysis of the resource base enables the interpretation of the activities which led to the formation of the site, and in the derivation of explanations in cross-cultural comparisons between past cultures.

2.8.2 Symbolic Significance

Archaeological resources, particularly artifacts, represent tangible and durable symbols of the past. Artifacts provide visual means of communicating and learning about past cultures. "Their authenticity is the basis for creating in
the contemporary viewer, the subjective knowledge that he has experienced a contact with the past that is direct and real, however incomplete that experience may be. This quality of archaeological resources makes them powerful as symbols of, or mnemonics for, the past” (Cleere 1984:4).

2.8.3 Aesthetic Significance

Many archaeological resources have aesthetic qualities, such as form, design, texture or colour, that enhance our feelings and improve the quality of our lives. These aesthetic qualities, combined with the location of the resources in the natural and cultural environment, can give a community its unique identity (Province of British Columbia 1987:29).

Cleere stated that the aesthetic value of a cultural resource is influenced by preferences and standards established by an individual and his culture (1984:7). For example, “traditional standards of style and beauty; the conceptions of what aesthetic standards were held by the culture that produced the item; and by standards deriving from the existence of a market for the type of cultural resource in question, all influence its value” (Cleere 1984:7). Therefore, the aesthetic significance of an archaeological resource can create strong emotions. These feelings coupled with the item’s symbolic significance can increase and enhance the power and importance of that particular resource.

2.9 Ethnic Significance

Every nation has a right to its history. Archaeology offer methods of regaining lost history where few other sources are available. ‘Prehistoric times’ can be very recent in those parts of the world where foreign influence has prohibited or delayed the growth of an indigenous historical consciousness and feeling of identity (Trotzig 1989:62).
The use of archaeology is of great value to Native Indians. Many Native groups, whose ties with the tradition have been severed, are now reconstructing the pattern of traditional activity. In this way Native people can renew cultural ties and gain some knowledge of lost traditions (Sutcliffe 1979:56). The process in which cultural ties and knowledge become re-established has been termed revitalization.

... Traditionally Indian groups had no need for the preservation of archaeological remains because the culture was self perpetuating. For untold centuries they lived with their material culture and preserved knowledge of it by oral tradition. There was no need to save everyday items to remind people of the past because essential change was slow enough for people to adjust and live comfortably within it. Within a very brief time period, the Indian ways were disrupted critically. The land, religion, the material culture almost disappeared from the earth. Now we are engaged in a long struggle to regain some of our former glory and traditions. We must revive and preserve our Indianness (Horse Capture 1981:1).

Archaeology supplies accurate data for the revitalization process by providing people with knowledge of their past. It also gives people a sense of self-identity and pride by enabling them to make positive identification with the achievements of their ancestors. Finally, archaeology aids in the land claims process by demonstrating the human continuity of Native people in Canada (Flood 1979a).

2.10 Economic Significance

Archaeological resources compete with human activity on the natural landscape. As a consequence, the economic significance of archaeological resources are defined in monetary value or in the manner in which they can be marketed and 'sold' as a commodity to the general public. Cultural resources may enter the market place through the development of cultural tourism. "In many parts of the world, cultural tourism is a major economic force" (Cleere 1984:8) (see Section 5.5). However, using archaeological resources merely for
strict economic goals may produce negative results. For example, "the most unsophisticated artifact may have little commercial value, but could have great information or scientific significance" (McGimsey et al. 1977:34). In addition, the marketing of antiquities has resulted in vandalism and looting of archaeological sites and structures (Graham 1986). Finally, "the economic development and changes in property values and land use that often accompany cultural tourism projects may have unforeseen effects on the local community" (Cleere 1984:8). Therefore, emphasis on the economic potential or value of an archaeological resource should not be the only criterion for determining which resource to preserve or to manage for the enjoyment of present and future generations.

2.11 Chapter Summary

Archaeological or cultural resources possess unique qualities which make them vulnerable to natural and man-made land-altering activities. These resources are irreplaceable, limited in quantity and fragile in nature. As a consequence, archaeological resources are classified as non-renewable resources, and the need to conserve, manage and preserve them for present and future use has created the field of cultural resource management.

CRM first developed during the 1960s and 1970s in the United States as a result of the environmental and conservation movements and the political response to society's awareness of man's activities on the landscape. CRM became a management process designed by government officials and supported by heritage legislation. This strong philosophy of protecting archaeological resources through a political process and government administration is illustrated in the following chapter.
CHAPTER 3
A FEDERAL APPROACH TO CULTURAL RESOURCE MANAGEMENT

3.1 Cultural Resource Management in the United States

CRM in North America originated in the United States. It was American archaeologists who recognized that with increasing industrial development, the availability of archaeological resources was diminishing (Redman et al. 1978:411). To counteract the rapid depletion of these resources, they lobbied the federal government to amend existing preservation laws and to enact statutes explicitly pertaining to archaeology. The appearance of these federal preservation statutes produced a distinct American archaeology or what is now known as CRM.

The history of CRM in the U.S. is structured by a set of federal laws (Fowler 1982:4; McGimsey et al. 1977:9). These laws rested on four bases: study and designation of nationally significant sites; regulation of archaeological resources; preservation of sites on federal lands; and National Park Service assistance in administering recreational lands (Duerksen 1983:197).

The movement in the U.S. to bring cultural resources into a management framework began in 1966 with the passage of The National Historic Preservation Act and the Department of Transportation Act (see Table I). The appearance of these two federal Acts coincided with "increasing activism on the part of Native Americans for self-determination and concern for the protection of archaeological sites, repatriation of sacred objects and reinterment of burials" (Nichols et al. 1989:28).

3.1.2 The National Historic Preservation Act of 1966

The National Historic Preservation Act of 1966 (NHPA) was acknowledged as being "the key federal law designed to encourage identification and
TABLE I  SUMMARY OF U.S. FEDERAL PRESERVATION ACTS

**Antiquities Act of 1906:**
provides for the protection of historic and prehistoric remains on federal lands; establishes penalties for vandalizing or looting of federally owned antiquities; and issues permits for archaeological excavations.

**The Historic Sites Act of 1935:**
establishes a register for nationally significant archaeological sites; and provides financial assistance to state and local preservation programs.

**Reservoir Salvage Act of 1960:**
provides funds for the recovery of archaeological data lost or destroyed by dam or reservoir construction.

**The National Historic Preservation Act of 1966 (NHPA):**
exands the National Register to include regional, state and local archeological sites of significance; establishes the Advisory Council on Historic Preservation; and introduces a preservation process for archaeological resources.

**The Department of Transportation Act of 1966 (DOTA):**
allocates funds for protecting, avoiding or studying archaeological resources affected by highway construction.

**The National Environmental Policy Act of 1969 (NEPA):**
requires the evaluation of the effects of major federal actions on cultural resources.

**The Archeological and Historic Preservation Act of 1974:**
amends the Reservoir Salvage Act of 1960; all federal projects and federally funded projects are responsible for identifying, assessing and evaluating affected cultural resources.

**The Archeological Resources Protection Act of 1979:**
increases the penalties established by the Antiquities Act of 1906; and defines archaeological resources as being at least 100 years of age.

(source: Duerksen 1983; Fowler 1982; McGimsey and Davis 1977)
preservation of America’s cultural resources” (Duerksen 1983:195). NHPA incorporated four activities which formed the basis of the federal CRM preservation program. The Act identified Native Indian archaeological sites on federal lands; determined the significance of the site through an evaluation process; protected archaeological resources affected by proposed development; and encouraged state and local heritage preservation activities. NHPA also coordinated all federal departments and agencies involved in the preservation of cultural resources.

NHPA decentralized the federal government’s heritage policy by expanding the National Register of Historic Places to include archaeological sites of local, regional, state and national significance. Under the Act, specific properties not listed with the Register received no protection. To encourage regional listing of cultural resources, NHPA authorized grants to state authorities for archaeological surveys, heritage planning and preservation activities. In addition, the Act gave the National Park Service authority to designate privately owned cultural resources as significant resources. The listing of privately owned cultural items with the Register enabled the owner to receive federal income tax benefits.

Title II of NHPA established the Advisory Council on Historic Preservation (ACHP). Under Section 106 of the Act, the ACHP was to consult with federal agencies regarding the effects of federal development projects on the resource base. In 1971 Section 106 was expanded by the issuing of Executive Order (EO) 11593.

EO 11593 required federal agencies to locate, inventory and nominate all archaeological sites on their lands by July 1, 1973. The result was that landholding agencies could no longer ignore affected archaeological sites not on the Register’s list. The ACHP had to review affected archaeological
resources for possible inclusion in the National Register. Consequently, archaeological resources assumed greater significance and required more attention than previously (Storey 1987:29).

3.1.3 The Transportation Act of 1966

The Department of Transportation Act of 1966 (DOTA) stated that funds were to be provided for the "purposes of protecting, avoiding, or studying archaeological sites affected by federally supported road construction" (McGimsey et al. 1977:10). DOTA protected any heritage properties that were declared by the federal government to be of federal, state or local significance. This Act incorporated CRM into the early planning stages of federal highway construction projects. This action ensured that damage to affected archaeological sites was minimized.

3.1.4 The National Environmental Policy Act of 1969

The National Environmental Policy Act of 1969 (NEPA) was considered to be the most important complementary authority for historic preservation and for comprehensive CRM (King et al. 1977:47). NEPA stated that federal agencies must consider during planning the impacts of their activities on the natural and man-made environment, and to also consider alternatives to proposed actions. Cultural resources were recognized as being part of the environment. Hence, NEPA required that federal agencies "fund, identify and plan archaeological assessments of their own as a part of their overall project-planning and land-management programs" (King et al. 1977:48; Wilson 1978:443). As such, NEPA established two major societal goals with regards to archaeological resources. The first was to preserve significant archaeological resources for future generations. The second, to recover and record affected archaeological data prior to their loss (Scovill et al. 1977:44).
Section 102 of NEPA established procedural requirements for federal agencies through the introduction of the environmental impact assessment (EIA). The EIA assessed and evaluated all potential social, economic, natural and cultural impacts of a proposed project and discussed and evaluated feasible alternatives to avoid or minimize the impacts (Fowler 1982:8). The EIA provided the data needed to complete an environmental impact statement (EIS).

The EIS component of NEPA forced archaeologists to determine the direct, indirect and the cumulative impacts of a proposed development on the archaeological resource base. In order to make such an assessment, CRM introduced an archaeological impact assessment (AIA) study. The AIA located and identified all archaeological resources in a development’s area; collected and evaluated the archaeological data within the scope of NEPA’s environmental approach to planning and decision-making (Scovill et al. 1977:51); and proposed alternatives to minimize the damage and destruction of the affected archaeological sites. The archaeological impact statement (AIS), the report produced as a result of the AIA, contained recommendations and conclusions pertaining to the effects of the project’s actions on the archaeological resources. Therefore, working within NEPA’s guidelines, CRM introduced complementary assessment and statement procedures for archaeological resources.

NEPA became a major legal tool in preventing the indiscriminate and inappropriate destruction of archaeological resources by federal projects. However, NEPA only required federal agencies to evaluate their proposed development effects on cultural resources. Also, like NHPA, NEPA had no legal authority over private, state or local actions that affected cultural resources. Nevertheless, when used in conjunction with NHPA, NEPA provided effective protection of cultural resources on federal lands.
... if NHPA does not apply to a cultural resource, NEPA might. While some courts may hold that agencies need not continue to comply with NHPA after a federal project has commenced, courts have generally agreed that NEPA does apply in such situations. If NHPA is weakened through funding cuts and revisions to the federal regulations of the ACHP, NEPA can still be used to compel agencies to consider historic properties (Duerksen 1983:305).

3.1.5 The Reservoir Salvage Act of 1960

The Reservoir Salvage Act of 1960 "made it imperative for federal agencies constructing dams to notify the Secretary of the Interior about possible archaeological data that might be endangered by the building operations" (Hosmer 1987:14). The Archeological and Historic Preservation Act of 1974 (Public Law 93-291) amended the Reservoir Salvage Act and instituted several prominent changes. It made all federal construction projects or federally funded projects that might endanger archaeological data responsible for evaluating, protecting or recovering these resources. The Act placed coordinating responsibilities with the Secretary of the Interior to ensure a relatively uniform data recovery program. It authorized monies to compensate those who suffered losses as a result of the Act's execution. Finally, the Act "permitted agencies either to undertake the requisite recovery, protection and preservation themselves in co-ordination with the Secretary, or to transfer a maximum of one percent of the total amount authorized to be appropriated for each project to the Secretary of the Interior for this purpose" (Wilson 1978:445).

3.1.6 The Archeological Resources Protection Act of 1979

The Archeological Resources Protection Act of 1979 provided further protection for the nation's archaeological heritage. This Act introduced stiffer penalties than those previously established under the 1906 Antiquities Act (see Appendix A) for individuals charged with commercial vandalism of cultural properties (Merlan 1987:170). The 1979 Act also issued permits for the
excavation or removal of archaeological material remains on federally owned lands.

Current federal efforts to protect archaeological resources are now based on this 1979 Act. However, the Act also arbitrarily defined archaeological resources as being at least 100 years of age (Duerksen 1983:238; National Trust for Historic Preservation n.d.:16). This Act reflected the uncertainty of the federal government in dealing effectively and appropriately with archaeological resources.

3.2 Cultural Resource Management in Canada

Canada’s heritage preservation laws and a CRM process are not as well developed or explicit as those of the U.S. In addition, Canada does not have any legislation or policy setting out the federal responsibility for the country’s archaeological heritage. This is due to two main factors: first, the inclusion of archaeology with natural resources or history, and second, the federal and provincial jurisdictional division of responsibility for archaeological resources.

Canada’s cultural resources first received acknowledgement and some degree of protection through the establishment of national parks. Canada, using Yellowstone National Park in the U.S. as a precedent, created Banff National Park by the Rocky Mountain Park Act of 1887. This Act established a national system protecting and preserving natural and cultural resources located within national park boundaries. The Act also "vested ownership of the parkland to the Federal Crown in order that proper control could be exercised" (McCallum 1984:71). As a result, the Park Act emphasized federal responsibility and duty to manage and preserve the resources found in national parks. However, the Act stressed natural resource protection and development, but failed to address the issue of archaeological resources adequately. This attitude
did not change until the 1960s when Parks Canada began to investigate Native Indian and historic archaeological sites located within national parks (Reeves 1984:23).

Federal policies that focused exclusively on heritage sites and properties did not exist until the establishment of The Historic Sites and Monuments Board in 1919. The Board operated in an advisory role to the Minister, designating persons, places or events of national significance. However, similar to the Park Act, the Board also faced difficulties in incorporating archaeological resources into its heritage preservation program. Consequently, the Board emphasized the preservation of historic buildings and structures while neglecting the need to preserve archaeological properties of national significance.

Canada has preservation legislation which deals with natural resources and historic properties and structures (e.g. national parks, national historic parks and heritage buildings). However, the Government considers archaeology to be a component of either the national park system or the historic building system. Unfortunately, this attitude has resulted in:

1) no umbrella policy for the management and preservation of archaeological resources under federal jurisdiction;

2) no protection for those resources that fall outside existing legislated mandates;

3) no co-ordinated approach to administering this resource base; and

4) no consistent application of impact assessment procedures for archaeological resources under federal domain (Department of Communications 1988:28).

This is complicated by the federal and provincial jurisdictional division of responsibility for archaeology.

The type and quality of federal jurisdiction over archaeological resources is influenced by the British North American (BNA) Act of 1867 and 1982 (Weil
1978:52). Section 92 (13) of the BNA Act state that all matters pertaining to property and civil rights are the responsibility of the Province. Since all archaeological sites are located on property, and all objects are property, the provinces have interpreted archaeological properties as provincial resources (Spurling 1984b:35; Weil 1978:52). Therefore, the provinces have claimed exclusive responsibility for the protection and management of archaeological resources within their boundaries (with the exception of archaeological sites on federal lands within the Province). The constitutional division of powers effectively splits responsibility for archaeology between two levels of government. Therefore, the management of archaeological resources in Canada consists of “the sum of federal policy and legislation within its jurisdiction plus provincial and territorial policy and legislation within their jurisdiction” (Department of Communications 1988:34).

The beginnings of CRM in Canada coincided with the appearance of ‘salvage’ archaeology of the 1950s, 1960s and early 1970s (Spurling 1984b:40). Salvage or rescue archaeology occurred when the rapid recovery of archaeological data was required due to unanticipated impacts on the resource. This form of archaeology provided information on the tradition culture of various regions within the country. Private corporations began to sponsor salvage archaeology projects as part of their public relation campaign. The government was also satisfied that salvage archaeology was meeting its objectives: people were being employed; the resource base was being investigated; and government was viewed as being a responsible ‘steward’ by funding and encouraging the preservation of archaeological resources.

Currently, Canada has four federal ministers who are responsible for archaeological sites situated on Crown land, railway lands or in federal waters. These ministers, Communications, Indian Affairs and Northern Development,
Transportation and Environment, are responsible for the research, commemoration, management and protection of archaeological resources (see Appendix B).

3.2.1 Department of Communications

The Minister of Communications administers two important Acts related to archaeological properties. The first is the Cultural Property Export and Import Act (1977) which prohibits the export of archaeological artifacts from Canada without a permit (see Table II). In addition, the Act provides tax incentives for the donation of a nationally significant cultural property to designated institutions, and it provides loans and grants to these institutions to purchase cultural items. The second, the National Museums Act (1968), sets out the responsibilities of the Archaeological Survey of Canada (ASC), and provides for the research, curation, conservation and exhibition of archaeological items in the federal museum. The Act also provides for the collection of archaeological artifacts from museum-sponsored excavations, and all artifacts recovered from excavations in the Yukon and the Northwest Territories.

3.2.2 Department of Indian Affairs and Northern Development

The Minister of Indian and Northern Affairs, under the Indian Act, is responsible for specific ethnographic and archaeological sites located on reserve land. This Act "controls the transfer of title to Indian grave houses, carved grave poles, totem poles, carved house posts, pictographs and petroglyphs situated on reserves and prohibits their destruction or vandalism" (Department of Communications 1988:48).

The Territorial Lands Act (1970) governs the management of unalienated federal Crown land in the Northwest Territories. The Lands Act "prohibits land
TABLE II  SUMMARY OF CANADIAN FEDERAL PRESERVATION ACTS

**The Rocky Mountain Park Act of 1887:**
preserved natural and cultural resources in national parks for the public; and vested ownership of parkland in the Federal Crown.

**The National Park Act of 1930:**
protects archaeological sites or objects located within national park boundaries.

**The Historic Sites and Monuments Act of 1953:**
lists federal, provincial, and municipal archaeological sites of significance; and established the Canadian Inventory of Historic Buildings in 1970.

**National Museums Act of 1968:**
provides for the collection, curation, and display of archaeological artifacts.

**Territorial Lands Act of 1970:**
issues permits for archaeological excavation in the Territories.

**Indian Act of 1974:**
protects archaeological resources on reserve lands.

**The Environmental Assessment and Review Process of 1974:**
assesses, evaluates and mitigates the impacts of federal projects involving Crown lands on cultural resources.

**The Cultural Property Export and Import Act of 1977:**
prohibits the export of archaeological artifacts from Canada without a permit.

**Canadian Shipping Act**
Part X protects underwater archaeological sites.

(sources: Department of Communications 1988; Ward 1986)
use operations within 30 meters of a known or suspected archaeological site without a permit, and provides for the authorities to be notified if archaeological resources are accidentally discovered during land development” (Department of Communications 1988:48).

3.2.3 Department of Transport

Archaeological resources located on air transport lands, railway lands or in federal waters fall under the management of the Department of Transportation. The Minister is also responsible for the Canada Shipping Act. Section X of the Shipping Act provides for the protection of underwater archaeological sites if they are classified as wrecks.

3.2.4 Department of the Environment

The Minister of the Environment is responsible for all matters relating to the environment (i.e. natural landscapes and cultural heritage) of the country. The Department of the Environment contains the Canadian Parks Service which, through the National Parks Act (1930) and the Historic Sites and Monuments Act of 1953 (HSM), has the mandate to protect archaeological resources in national parks or in national historic parks.

The HSM Act established the Canadian Inventory of Historic Buildings (CIHB). The CIHB updated the 1919 Historic Sites and Monuments Board through the initiation of a computer based inventory of all federal, provincial and municipal archaeological sites of significant heritage value.

The Minister of the Environment is also responsible for archaeological sites that may fall under federal jurisdiction through the application of the Federal Policy on Land Use. This policy applies to all federal land, and states that the National Parks Act, in conjunction with the HSM Act, shall be used to
identify and protect through designation or acquisition, lands of particular heritage (Department of Communications 1988:49).

CRM in Canada developed and expanded under this Department with the 1974 Environmental Assessment and Review Process (EARP). EARP, modelled after NEPA, established an administrative procedure for assessing, evaluating, and mitigating the impacts of federal projects, federally funded projects, or those involving federal Crown land on the natural and cultural resources. EARP introduced EIA requirements into the planning process prior to project development.

The formal review of EIS is administered by the Federal Environmental Assessment Review Office (FEARO). FEARO’s role is to ensure that the potential environmental and social effects are taken into account early in the planning process for projects funded or implemented by the Government or projects carried out on federal lands. “Projects were referred to FEARO by initiating departments when the latter’s internal screening processes revealed potentially significant impacts” (Rees 1980:357).

The EIS “presents an evaluation of existing conditions as well as predicting and evaluating the potential impacts from the proposal” (Tanner 1985:5). In most EIS, archaeology is a study component, since archaeological sites represent a non-renewable resource of considerable magnitude. Consequently, EIS propelled archaeology out of the academic realm and into field research by providing funds for the survey and excavation of areas with archaeological potential threatened by large-scale development projects (Epp 1974:33).
3.3 The Federal Role in Cultural Resource Management

The Government of Canada has established...

...a solid foundation of institutions dedicated to safeguarding and developing heritage resources. The National Museum of Canada traces its roots back to 1842, the National Archives of Canada to 1880, the Canadian Parks Service to 1885, and the Historic Sites Monuments Board of Canada to 1919 (Department of the Environment 1990:1).

The Heritage Canada Foundation was also established in 1973 as a non-profit charitable organization to conserve Canada’s natural and cultural heritage (James 1983:22). Heritage Canada serves as a national organization providing financial assistance, publicity, and research for provincial and municipal conservation groups. In addition, it actively lobbies the federal and provincial governments for improved heritage legislation.

Canada is also committed to the international principles of heritage conservation. The Government has put into place mechanisms to implement several international conventions. For example, in 1976 Canada ratified the 1972 United Nations Educational, Scientific, Cultural Organization (UNESCO) Convention on protecting the world’s cultural and natural resources (James 1983:23). To date, Canada has four cultural resource properties of international significance which are listed on the World Heritage List. Two of these properties are archaeological sites (Head-Smashed-In Bison Jump in Alberta and Ninstints Village in the Queen Charlottes). In 1978 Canada formally acceded to the 1970 UNESCO Convention to prohibit and prevent the illicit import, export and transfer of ownership of cultural property (Department of Communications 1988:42).

Canada does adhere to UNESCO’s international requirements for archaeological heritage protection and resource management. The principle of archaeological heritage protection is to "prevent the loss of the tangible and intangible components of the nation’s archaeological heritage so that the
inheritance of future generations is not significantly diminished" (Department of Communications 1988:42). This principle subsumes the existence of a policy and a process. Unfortunately, no archaeology policy or management process exists at the federal level for resources located on Crown land.

Federal jurisdiction in the management of archaeological resources is "restricted solely to those properties under Crown proprietorship" (Burley 1984:4). One method in which cultural resources can be protected is through a designation process. The Historic Sites and Monuments Board of Canada and the Canadian Cultural Property Export Review Board recommends to the Minister archaeological resources of national significance which deserve designation status. However, although the Government can designate sites or objects of national significance, it does not have the legal means to protect these properties unless they are acquired by the Crown. Therefore, designating an archaeological resource does not protect it from destruction.

The public 'stewardship' of the nation's archaeological heritage is the responsibility of four main federal departments. Each department has their own mandate to protect cultural resources located on properties under their authority. These departments generally delegate the responsibility of managing cultural resources to federal agencies. As a result, it is often difficult for professional archaeologists, cultural resource managers, land managers and even government officials to know who has the mandate to protect the resource. This is complicated by the fact that not all archaeological resources are managed under the same legislation and policy, and that some resources receive little or no protection. For example, the Indian Act provides provision only for specific archaeological resources on reserve lands while the Canadian Park Services protects archaeological sites located only within national park boundaries.
The Heritage Strategy Working Group states that the major problem with the federal government is the lack of co-ordination between the departments in the management of archaeological resources (Department of the Environment 1990). There is a need to integrate CRM at the federal level into a single unit similar to the United States Office of Archeological and Historic Preservation within the National Parks Service (Reeves 1984). In this manner, a comprehensive strategy for creating an effective federal policy regarding archaeological resources can be drafted and implemented.

The Canadian government enacted heritage legislation as a method for conserving and preserving specific properties, structures and items of cultural significance. The passage of these acts was thought to play a positive role in aiding CRM. Instead, CRM has failed to integrate its policies and plans with the policies and plans of other resource agencies.

The enactment of EARP introduced archaeological resources as a component of the environment and the EIA process. However, EARP lacks any "formal (legal) basis for requiring that the EIA process be initiated when assessing the potential impacts of a federal project" (Rees 1980:357). This in turn has resulted in no well-established federal archaeological impact assessment procedure. In addition, FEARO provides very limited policy guidelines on identification of archaeological resources, or appropriate responses if these resources are affected by a project's actions.

The Government does not have a comprehensive national register of archaeological sites located on Crown land. For instance, there are only 6,000 archaeological sites registered with the ASC for the Northwest Territories out of an estimated 100,000 sites (Department of Communications 1988:53). The proportion of known to unknown resources may be similar for the rest of
Canada. This lack of knowledge makes it exceptionally difficult to establish a
national archaeological heritage policy.

These problems are compounded by the lack of sufficient funds to do
what the departments and agencies are mandated to do. Since 1976 there has
been no growth in the real value of funds allocated to the National Museums of
Canada and the Canada Council. In addition, the Canadian Parks Service "has
seen no growth in permanent staff allocation, and in 1978-79 it suffered a net
staff reduction" (Federal Cultural Policy Review Committee 1982:66). Lack of
funding makes it difficult to conduct archaeological investigations or research,
to conserve resources that have been found, or to retain collections. The
Canadian Archaeological Association (CAA) has indicated that the federal
presence in the field of archaeology does not begin to address either the scale
of the problem or the significance of the resource to Canadian cultural identity.
"To meet the needs of both basic research and resource management
programs, it will be necessary to provide an increased level of resource
archaeologists are now advocating federal income tax concessions as a means
of encouraging private support for preserving archaeological sites, and in the
development of archaeological sites for the tourism industry (see Section 5.5).

The Government recognizes that federal policies and guidelines for
dealing with archaeological resources are vague, and federal responsibility for
the archaeological heritage is currently undergoing review. However, the CAA
and the Government both believe that the protection and preservation of
Canada's archaeological heritage will ultimately depend upon public support
(Department of Communications 1988). Achieving this will require ongoing
public education programs and public participation in archaeology and CRM.
3.4 Chapter Summary

The enactment of preservation laws in the U.S. and Canada illustrates that these statutes underlie the field of CRM. Government intervention in heritage protection has resulted in an archaeological preservation planning process initiated from the top (i.e. by government departments and officials) rather than one from the bottom (i.e. by academic and field archaeologists, community heritage organizations, Native Indians, and the general public). The top-down planning approach towards the archaeological heritage has centralized the management and administration of the resource base. This led to the establishment of the United States Office of Archeological and Historic Preservation, while in Canada, archaeology became the responsibility of several ministers and numerous federal agencies.

The two most important laws affecting archaeology in the U.S. are NHPA and NEPA. Together these two laws provide protection for archaeological resources affected by federal actions. NHPA applies to a broad range of federal actions that affect archaeological resources, while NEPA establishes procedural protection for all types of cultural resources (Duerksen 1983:305). The EIA process established by NEPA became the model used to create the AIA process.

Canada, on the other hand, has yet to enact a law which deals explicitly with archaeological resources. The current federal acts emphasize the protection of heritage buildings over Native Indian archaeological sites. However, this inequity is presently being addressed at both the federal and provincial levels (Department of the Environment 1990; Province of British Columbia 1991a).

Canada’s counterpart to NEPA is EARP. EARP is an administrative procedure with no legal basis. It does not require all federal agencies whose actions impact archaeological resources located on their lands to implement AIA
studies. Consequently, the absence of a consistent federal AIA procedure has often forced the provinces to assume responsibility for archaeological resources on Crown lands located within provincial boundaries (Spurling 1984b).

The major difference between American and Canadian preservation statutes is that the latter can only protect archaeological resources which are acquired by the Crown, while the former protect those resources located on federal lands, listed on the National Register, or affected by federally funded projects. However, both federal governments have no jurisdiction over private and state or provincial activities that may damage or destroy archaeological resources.

Another difference noted between the two countries is the level of public participation in archaeology. In the United States, the Reservoir Salvage Act of 1960 was amended largely due to the lobby efforts of concerned archaeologists and private citizens (McGimsey et al. 1977). These individuals were successful in making significant alterations to the Act. In addition, they established a precedent whereby archaeologists became included in the political process for preserving archaeological resources. In contrast, while the CAA does recommend to the Canadian government methods of improving heritage legislation, no lobbying tactics have yet been employed to ensure that federal archaeology laws are enacted.

Finally, the Canadian government currently employs professional archaeologists in only a few federal agencies (e.g. Canada Parks Service and the National Museum). Archaeologists or cultural resource managers are not present in other conservation or land agencies (e.g. Forestry, Environment, Energy and Mines, and Fish and Wildlife). This makes it difficult to integrate CRM policies and plans with those of other departments. In comparison, the United States has employed archaeologists in the Departments of Agriculture,
Energy, Defence and Interior (e.g. National Park Service, Forest Service, Bureau of Land Management, Fish and Wildlife Service, Bureau of Reclamation and Bureau of Indian Affairs) since the mid 1960s (Fowler 1982; Johnson et al. 1987).

In summary, the passage of heritage legislation, combined with massive industrial development of the land in the U.S. and Canada, brought about a tremendous change and growth in the discipline of archaeology. State and provincial heritage agencies emerged to conduct regional surveys, excavations, and assessments and evaluations of a proposed developments' actions on the archaeological resources. Though the federal government in Canada lacks an archaeological heritage policy, provincial agencies have compensated by implementing their own management guidelines and policies. In addition, these provincial government agencies support local government preservation programs through assistance and funding. An example of a provincial approach to the management and conservation of archaeological resources is presented in the following chapter.
CHAPTER 4
A PROVINCIAL APPROACH TO CULTURAL RESOURCE MANAGEMENT

4.1 Cultural Resource Management in British Columbia

The constitutional division of responsibility for archaeological resources in Canada is based on the BNA Act (see Section 3.2). This Act conferred upon the provinces responsibility in all matters pertaining to property and civil rights. However, despite no explicit mention of archaeological resources in this Act, all provinces have interpreted these resources to be property and therefore, a provincial responsibility (Spurling 1984b:35). The split between federal and provincial jurisdiction has resulted in a lack of a well defined national policy or explicit federal archaeology legislation. Instead, the development of CRM in Canada has been largely the result of provincial action. This regional approach to planning the management and conservation of archaeological resources has led to the creation of heritage agencies and acts that vary from province to province.

British Columbia is considered to be a leader in heritage conservation legislation and policy (Spurling 1984b; Ward 1986; Weil 1978). CRM in the province is represented by four factors:

1) an agency responsible for the management of archaeological resources.

2) a heritage act specifically designed to protect archaeological resources.

3) an archaeological resource management policy.

4) an archaeological impact assessment process.

4.2 The Archaeology Branch

The management of archaeological resources in British Columbia began with the establishment of the Provincial Archaeologist's Office in 1971. This
Office, now called the Archaeology Branch (the Branch), "provides managerial control and planning affecting the nature and long-term direction of archaeological inquiry in B.C." (Fladmark 1981:12). The role of the Branch is "not to prohibit or impede land use and development, but rather to assist the Provincial Government in making decisions which will ensure optimal land use" (Province of British Columbia 1989:6). The Branch, under the Ministry of Municipal Affairs, Recreation and Culture, has the mandate to: administer sections of the 1977 Heritage Conservation Act which pertain to archaeological resources; implement the archaeological resource management policy; and ensure that archaeological impact assessments are conducted where necessary (Province of British Columbia 1989).

In addition to the functions outlined by the Minister, the Branch maintains a file of all recorded historic and Native Indian sites in the Province. It issues permits for archaeological investigations and issues calls for proposals to heritage consultants concerning projects that have been referred to the Branch from other government departments or from project proponents (i.e. private developers, Crown corporations, or government departments and agencies). Finally, the Branch reviews all reports submitted by consultants to ensure that the conditions of their permits have been fulfilled, and that their AIA studies and reports conform to the provincial archaeology guidelines.

4.2.1 Problems With The Branch

The lack of co-ordination with other government department’s policies and programs is a major problem for the Branch. There are numerous departments and Crown corporations (e.g. Forestry, Energy, Mines & Petroleum Resources, Transportation & Highways, Parks and B.C. Hydro & Power Authority) whose developmental projects and land altering activities affect
archaeological resources. Unlike the situation in the state of California, where archaeologists are employed in several different government departments (e.g. California Department of Transportation and the State Parks Department), the centralization of B.C. archaeologists in one agency makes it extremely difficult for the Branch to know in advance what projects that may affect cultural resources have been planned by other departments (Owens 1987). This often results in AIA studies conducted after a project’s plan has been finalized, when a project’s actions have already impacted archaeological sites, or even when a project has been completed. Consequently, CRM has not been well integrated into the planning process of other ministeries.

The lack of integration of Branch archaeologists into various departments has also resulted in a communication gap between land managers and planners. Government officials generally lack knowledge of the relationship of archaeological sites and resources to the land, the rapid rate of destruction of these resources as the result of public and private actions, and the societal significance of the resources to the general public, special interest groups, and communities (see Sections 2.7 and 2.8). The Branch adds to this problem by offering no training or educational programs in archaeological conservation and protection for government officials, land managers, law enforcement officers or the general public. This lack of awareness in archaeology prevents the Branch from building political and public support for CRM policies and programs.

A major reason for poor communication concerning CRM and archaeology is the limited financial resources available for developing massive public education programs on archaeology. The lack of public programs in turn inhibits wide-spread public participation and support for the conservation of archaeological sites. Therefore, the low level of funding, coupled with minimal
public information, affects the quality of management and protection afforded to archaeological resources.

A communication gap also exists between the Branch and heritage consultants (or professional archaeologists). The development of practical methodologies and strategies to effect preservation of the resource base is becoming more and more the responsibility of consultants (Spurling 1984b:39). Heritage consultants educate the public in the significance and importance of archaeology through public lectures, on-site interpretation programs (Bernick 1986; Riley et al. 1985), and archaeology school programs (Devine 1990; Smardz 1990). Consultants work with Native Indians in designing ecomuseums and cultural centers (Koulas 1980). In addition, consultants and Native groups encourage the Branch to preserve all types of archaeological sites and improve heritage conservation laws (Quick 1981). Finally, consultants encourage private developers through goodwill to include AIA studies in their planning process (Spurling 1984b). However, "the selection of the archaeological resources to be preserved or written off, remains a decision made by the Branch through negotiation with or by fiat from non-archaeologists (e.g. politicians, senior bureaucrats, and proponents)" (Spurling 1984b:39). The Branch provides few opportunities for participation from the general public or Native Indians in CRM planning. The lack of public involvement in policymaking and decisions regarding archaeological resources has made CRM completely a function of the government heritage agency.

Finally, few archaeologists employed in the Branch have training or academic degrees in the field of CRM (Reeves 1984; Spurling 1984b). This is in part the fault of the universities and colleges for not offering courses in CRM, and in part the fault of the discipline of archaeology for not becoming more interdisciplinary. As a result, these individuals who oversee archaeology in the
Province have limited experience in cultural resource planning and policymaking and in understanding how these two fields relate to the political system.

4.3 The Heritage Conservation Act of 1977

Unlike heritage acts in the other provinces, the Archaeological Historic Sites Protection Act (1960) of British Columbia was written primarily for the protection of archaeological property rather than historic buildings or structures (Weil 1978:52). The 1960 Act was created in response to society's concern with human activities on the environment, and to the increasing demand for provincial legislation to conserve archaeological sites. For the first time in the province, these resources were considered to be cultural resources. The Act also set some outstanding precedents, namely "the concept of financial responsibility for the disturbance of archaeological sites (i.e. compensation) and the automatic protection given to some classes of sites, no matter where they are found (i.e. designation)" (Turnbull 1977:122).

The 1960 Act was amended in 1972 with the Archaeological and Historic Sites Protection Act and again in 1977 with the present Heritage Conservation Act (1979 R.S.B.C., Chapter 165). The 1977 Heritage Conservation (HC) Act provides for the protection and conservation of archaeological sites at the provincial and municipal levels through a designation process (see HC Act, Section 4 (1) (a)). Heritage designation is

... a legal means by which the Province and municipalities can control activities affecting the integrity and heritage value of significant archaeological resources. The intent of designation is to protect these resources from uses or activities that would destroy their integrity. Designation involves restrictions on use of private and public property (Project Pride Task Force 1987:33).

The HC Act outlines the issuing of permits by the Minister for the excavation or alteration of provincial archaeological sites (see HC Act 1977,
Section 5 (1)). The Act states the duties required by permit holders and lists prohibitive actions regarding sites, objects, burials, petroglyphs and pictographs (see HC Act 1977, Section 6). Section 7 of the Act provides the Minister with preventive measures (i.e. site survey or site investigation) to protect archaeological sites from land altering activities. Finally, Section 9 provides the Branch with the authority to establish a provincial heritage advisory board. This Board advises the Minister on heritage matters.

4.3.1 Problems With The Act

Section 4 (2 and 3) of the HC Act state that where designation of a site or structure decreases the economic value of the land, the Minister shall provide a full and fair compensation for the loss or damage suffered by the owner. However, it is unclear if designation is a form of expropriation, zoning or land use control. "Expropriation always necessitates the payment of compensation while zoning and land use controls do not" (Project Pride Task Force 1987:22). To date, only 17 Native Indian archaeological sites have received provincial protection through the designation process.

The confusion surrounding the legal interpretation of the word 'compensation' has also proved to be a major barrier in protecting cultural resources at both the provincial and the municipal levels. The fear of legal obligation to compensate and the ambiguity concerning compensation have resulted in very few designated sites.

Many Native organizations feel that the HC Act is too narrow in its definition of heritage and archaeological sites. Native Indians view heritage very broadly, almost synonymously with their culture, encompassing such things as their language, music, traditions, and the land (Province of British Columbia 1991b:17). In addition, the Ministry's perspective on preserving sites and
objects as archaeological resources differs from that of Native Indians. The latter group believes that these resources represent "the cultural legacy of a living people" (Horse Capture 1981). As such, Native people feel that they should be included in the process of managing their cultural resources. Finally, the HC Act does not provide for the protection of all types of archaeological sites. For example, spiritual sites valued because of their relation to religion, tradition or mythology. Therefore, the question of defining significance and who determines it still remains to be addressed.

Section 6 of the Act states that no person shall knowingly destroy, deface, desecrate, move or alter any significant archaeological resource except as authorized by a permit. Meaningful penalties, such as fines and imprisonment, assessed against individuals convicted of purposefully and intentionally damaging and destroying archaeological resources are not established under the current Act.

Finally, the HC Act does not require that the Province and all Crown agencies be bound by the requirements and heritage protection provisions of the Act. In this regard, the Act is similar to federal heritage legislation whereby archaeological preservation is dependent upon the co-operation and goodwill of government departments, land agencies and private developers.

4.4 Archaeological Resource Management Policy

The establishment of the Branch and the 1977 HC Act resulted in the development of an archaeological resource management (ARM) policy. The implementation of the ARM policy is the responsibility of the Branch. The main objectives of the policy are:

1) To minimize the loss of archaeological resources through the preservation of a representative sample of archaeological sites for present and future use.
2) To ensure that development proponents consider archaeological resources in the planning process.

3) To encourage the proponent/developer to avoid damage to archaeological resources or to determine the effects of the project’s action on the resources.

4) To compensate (in-cash or in-kind) the Province for unavoidable loss of significant archaeological value (Province of British Columbia 1989:6).

4.4.1 Problems With The Policy

The main problem with the ARM policy is that it has no legislative basis. Second, it is impossible for the Province to preserve a representative sample of archaeological resources when the total resource base is unknown. Third, the policy, when combined with the HC Act, does not require that project proponents integrate CRM into their planning process. Fourth, the policy does not state in explicit terms how the Branch would encourage the proponent to avoid or minimize damages to archaeological resources. Finally, this policy statement is difficult to implement when cultural differences in interpreting and defining site ‘significance’ and ‘archaeological value’ still exist.

4.5 Archaeological Impact Assessment Process

The archaeological impact assessment (AIA) process introduced in the late 1970s was modelled after the environmental impact assessment (EIA) process. EIA involves "trying to establish in advance the likely environmental consequences of a particular proposal, and making use of this information to help determine whether or not the project should be permitted to proceed, and if so, on what terms and conditions" (Richard 1983:10 in Sneed 1989:52). The AIA process attempts to achieve the same objectives with archaeological resources.

The AIA process represents the Branch’s planning steps for conserving and managing archaeological resources. Each step requires a different level of
archaeological input to provide development options to the proponent and to aid in the decision-making process (Emond 1978:2). The AIA process is composed of three steps: an overview, an assessment of the resource and management recommendations for the affected resource (see Figure 2). These steps should be approached sequentially because each step in the process is dependent upon the results achieved in the preceding one (Province of British Columbia 1989:7).

4.5.1 The Overview

The Branch does not consider the Overview to be a part of the AIA process due to the fact that a permit is not required. However, the general research goals in the Overview and the Assessment are similar. The Overview identifies and assesses the archaeological resource potential in the study area while all of the research activities covered in the Overview are considered in the Assessment (McGimsey et al. 1977:69). Since it is difficult to separate these two steps from one another, the Overview should be incorporated into the AIA process.

The Overview gathers, evaluates and analyzes the information and knowledge "to make general statements concerning the nature, distribution and significance of the archaeological resources in the study area" (McGimsey et al. 1977:69). Completing the Overview consists of: examining published and unpublished materials; consulting with other professionals or with knowledgeable informants; identifying areas which lack data; evaluating the information gathered; stating and initially assessing the archaeological resource potential; and making recommendations concerning the need for further AIA studies (Province of British Columbia 1989; McGimsey et al. 1977:69).
FIGURE 2  ARCHAEOLOGICAL IMPACT ASSESSMENT PROCESS

OVERVIEW

IMPACT ASSESSMENT

Inventory

Survey

Record

Surface

Subsurface

Assessment

Significance

Scientific

Historic

Public

Ethnic

Economic

Impacts

Direct

Indirect

IMPACT MANAGEMENT

Mitigate

Compensate

Avoidance

Redesign

Relocate

Protect

Passive

Active

Data recovery

Surface collect

Excavate

Fill

Asphalt

Rip-rap

Sandbags

Monitor

Surveillance

Public education
4.5.2 Impact Assessment

The Impact Assessment step is implemented when potential impacts to archaeological resources are identified in the Overview. The Impact Assessment is more limited in area than the Overview because the former is project specific. It identifies the resources in the project area through an inventory. This step also determines the full extent of the project’s actions on the archaeological resources through assessment. The Impact Assessment provides information to planners, land managers, government officials, and private developers on the location and type of sites in the area. Ideally, this information then enables those individuals to consider adverse effects on the cultural resources during the early stages of a plan and to implement appropriate management strategies (see Section 4.5.3).

a) Inventory

The inventory determines the types and relative quantities of archaeological sites in the study area. The inventory also provides the hard data for use in preservation and planning decisions concerning the resources. For example, if through comprehensive inventory work, it is established that only one habitation site exists in the area, then the planning can be concentrated on the needs of this site. However, if numerous habitation sites are located, then priorities are established and decisions concerning which one to protect are made (Newcomb 1979:59).

Inventories center on outdoor field surveys involving both surface inspection (e.g. in cultivated or open sections) and subsurface testing (e.g. in forested areas) and the recording of archaeological sites located and identified in the study area. Recording sites consists of documenting specific information on the archaeological site on forms designed by the Branch. This recording is
essential to the AIA process because, if no further work is conducted after the inventory, the information can be filed and indexed for future use.

b) **Assessment**

The assessment has three components: *evaluation, significance, and identification of impacts* on the resource. First, an evaluation is conducted to determine significance of an archaeological site. This evaluation consists of surface collection of the site's material remains or subsurface examination of archaeological deposits. In both situations, evaluation of the site must include the scientific removal, recording, analysis and cataloguing of all material remains.

Second, significance is a term used in the HC Act and the ARM policy as applied to archaeological resources. Site significance is based on the analysis and interpretation of archaeological remains and the context in which these items were found. The Branch lists five types of site significance. They are: historical, scientific, ethnic, public and monetary (Province of British Columbia 1989:13). Significance is assigned to archaeological sites to determine which sites to preserve for present and future use (see Section 2.7), and how to mitigate those sites affected by a project's actions.

Third, impacts on cultural resources are either direct, indirect or potential. Direct impacts are those which have an immediate and demonstrable effect on the resource base (McGimsey *et al.* 1977:30). Examples include inundation, dam and dam site construction, open-pit mining, clear cutting activities, highway and access road construction, and crew facilities. It is the responsibility of the archaeologists to identify direct impacts as early in the planning stage as possible and to provide this information to the developer in order for CRM plans to be implemented.
Indirect impacts are those which are secondary in nature. These impacts are brought about only as the result of the project’s actions and would not have occurred without the project. Specific examples consist of increased erosion of sites because the project has altered drainage patterns, impacts related to project maintenance, highway relocation or topsoil removal; construction of support facilities; and shoreline reclamation (Spurling 1980).

Potential impacts are those which are concerned with "ancillary development which can be predicted to occur as a result of a project, but which depend upon the operation of other variables as well. Examples include increased urban development, intensification of farming, or increased recreational use" (McGimsey et al. 1977:31).

4.5.3 Impact Management

The two main measures for managing unavoidable and unanticipated adverse impacts to archaeological resources are mitigation and compensation. Mitigation requires the consultant to consider the best management technique of the resource and to offer alternatives with respect to preservation or recovery to the project proponent. Compensation is a management tool implemented by the Branch to have proponents provide either monetary or other types of restitution for the unavoidable loss of significant archaeological resources due to impacts.

a) Mitigation

Mitigation is the alleviation of adverse impacts by taking action to avoid, protect or scientifically investigate the resources (McGimsey et al. 1977; Province of British Columbia 1989; Spurling 1980). Mitigation should be implemented prior to project execution and early in the planning stages when "well-founded decisions can be made that field investigation is the best
possible alternative” (McGimsey et al. 1977:71). In its broadest sense, mitigation encompasses a number of options ranging from various forms of preservation to different methods of data recovery and analysis. The three main mitigation options are: avoidance; protection; and data recovery. The choice of an option should be based on relative viability of the alternatives.

First, avoidance generally consists of relocating or redesigning aspects of the project to bypass the adverse effects on the cultural resources. Some examples are the relocation of bridges, transmission lines and associated project facilities. However, avoidance may still not provide protection to the resource without some form of preservation in place.

Second, protection of archaeological resources is implemented to provide long term preservation to those resources affected by adverse project actions (Spurling 1980:153). Protection of sites may be either passive or active. A passive protection method reduces impacts through physical maintenance, such as covering sites with moderate amounts of fill, asphalt, peat, concrete, rip-rap, or sandbags, to prevent the further deterioration or destruction of the resource. For example, asphalt caps the remaining portions of the 'Fraser Arms' site located on Southwest Marine Drive in Vancouver while fill covers the St. Mungo site under the Annacis Island Bridge in Delta. “Once capped, project construction or other activities may be permitted to occur unimpeded over the site” (Province of British Columbia 1989:16).

Active protective measures include systematically monitoring the project area for archaeological sites exposed during development. Monitoring during and after the project ensures that sites which become visible as the result of development activities are identified and treated. Additional protective measures include the establishment of archaeological preserves and public education programs in archaeology. “Of all these protective measures, public
education is doubtless the most important because it is potentially the most effective in the long run" (McGimsey et al. 1977:30).

The last mitigation measure is the scientific retrieval of archaeological data through systematic surface collection or excavation or both. This is considered to be the least desirable mitigation option because the recovery process itself is destructive (Fowler 1982) and expensive, "approximately $1500.00/m3 in some areas of the United States" (King 1979 in Spurling 1980:154). Excavation of an archaeological site involves a procedure consisting of a research design or problem statement, analysis and interpretation of the data, and the publication of the results in the format of a report.

b) **Compensation**

The AIA guidelines state the project proponent should compensate the people of the Province for loss of significant archaeological value as a result of a project’s action. Compensation may be either in-cash or in-kind. A proponent has never been legally required to compensate the Province in monetary terms for the destruction of significant archaeological resources. Compensation in-kind "refers to measures other than direct cash payment, such as the acquisition of property unaffected by project development, for the purpose of establishing an archaeological reserve, the development of on-site interpretation programs, or site reconstruction or restoration" (Province of British Columbia 1989:16). The objective with this type of compensation is to provide public education programs to increase the awareness and knowledge of archaeology and CRM policies and programs.

4.5.4 **Problems with the AIA process**

The provincial responsibility for cultural resources led to the creation of a process for assessing and managing archaeological resources. The AIA
established a planning process whereby information could be obtained and decisions made based on the data supplied. However, similar to the ARM policy, the process has no legislative basis. The proponent is not required to implement an AIA study or to abide by all the steps within the process. As such, mitigation measures may be recommended by the consultant and the Branch, but the proponent is not required by law to implement them.

Evaluating the significance of a site based on government criteria has forced those involved in AIA studies to assign a value to cultural resources. This type of site evaluation relies on personal preferences and biases, and is therefore considered too arbitrary to be reliable and scientific. In addition, defining site significance ignores the fact that all archaeological sites are of equal value to Native people.

There is no standardization in the implementation of the AIA process. For instance, overviews may or may not be required under the conditions of a contract, or they may be incorporated into the assessment step. Also, a consultant may be forced to implement management procedures before completing the assessment. Consequently, there are cases when the steps are not implemented in a sequential manner, or when the AIA process is left unfinished.

Finally, the close relationship between EIA and AIA has prevented the latter from developing independently. For example, cultural resources are perceived by project proponents and government officials as being part of the EIA rather than a separate study component. In addition, cultural resources are often ignored in the early stages of development plans, and considered only as an after thought or when impacts to the resource base occur.

The assessment process is an information-gathering device used by the proponent and the Branch to make decisions concerning archaeological
resources. The four main deficiencies with this process have been recognized. They are:

1) The AIA is a reactive procedure generally applied to an already planned procedure.

2) Impact mitigation is site specific and does not generally take into consideration community needs or values.

3) The AIA is not integrated with other environmental, social and economic policies and programs.

4) A top-down approach to AIA excludes the community and special interest groups from participating in the decision-making process.

4.6 Chapter Summary

The existence of CRM in Canada has been primarily the result of provincial heritage legislation and policies. British Columbia is considered to be a leader in heritage conservation as a result of the creation of the 1977 HC Act, an ARM policy and the AIA process. However, despite the presence of the legislation and associated policy processes, the Province still does not have an effective legal means for conserving and protecting archaeological resources affected by project developments.

The Archaeology Branch, as the provincial heritage agency, designs and implements archaeology management policies and makes the decisions concerning resource conservation. This top-down bureaucratic planning approach to archaeology management and conservation excludes input and participation from municipalities, Native Indians, professional archaeologists, community heritage groups and the general public.

Also, the centralization of provincial archaeologists in one department inhibits a free-flow of information concerning CRM policies and programs to other government agencies. The lack of awareness and knowledge of CRM has in turn resulted in poor integration of this field into the planning and decision-
making processes of other ministeries. In addition, the lack of effective communication techniques by the Branch coupled with lack of financial resources, has prevented the development of a massive 'heritage movement.'

Finally, the Branch archaeologists have minimal academic training in CRM, policymaking and planning. This problem, when compounded by lack of political and public support for CRM and archaeology, has had the following results: no overall provincial policy for the management of archaeological resources; no amendments to the existing archaeological resource management (ARM) policy or to the 1977 Heritage Conservation Act; no effective liaison with professional archaeologists, Native Indians and the general public; and finally, no understanding of how CRM can be integrated into the planning process of other government departments.

The Province, via the Archaeology Branch, should begin to examine alternative conservation methods for managing the archaeological resource base. Examples of new conservation strategies in CRM focus on increased involvement from community and special interest groups. These groups can add a new dimension to the field of CRM by providing alternative methods of protecting the resource base when provincial heritage acts and policies fail. The following chapter examines several new and innovative planning approaches to CRM.
5.1 Current Strategies in Cultural Resource Management

The management of archaeological resources in Canada is based primarily on heritage conservation acts and policies designed and implemented by government officials. Unfortunately, this legislated approach to CRM has proved to be ineffectual in establishing stringent laws to protect archaeological sites from private and public land altering activities, vandalism and relic hunters (Province of British Columbia 1991a). This approach has ignored the role of local governments in providing alternative conservation techniques. In addition, it has excluded Native Indians from participating in the management of their own archaeological resources. Finally, the federal and provincial governments have failed to recognize the economic potential of archaeological sites in developing community tourism plans.

There is a need to improve the current top-down planning approach towards archaeological resources in Canada. Alternative conservation strategies currently in operation emphasize increased participation from community and special interest groups in CRM. This chapter examines some of these conservation alternatives to government heritage conservation acts and policies. These new CRM strategies are:

1) public participation in archaeology.

2) the application of municipal land-use regulations for archaeological preservation.

3) community economic development of archaeological sites for tourism.

4) the management of archaeological resources by Native Indians.

The main goal of CRM is to ensure that the entire non-renewable resource base is identified, protected and managed for maximum longevity.
This can only be accomplished when archaeological resources become highly valued by society. The main method in which societal attitudes towards archaeology can be altered is through public participation. Many archaeologists feel that public participation and public education are the key to successful CRM plans (Fowler 1977; Schiffer and Gumerman 1977).

Second, the municipal level is potentially the most effective in dealing with archaeological conservation. The local government is the political level closest to the people. It also controls the administrative mechanisms (e.g. planning departments, building permits and property taxes) most directly connected to properties (Dalibard 1986:41).

Third, the recent growth in cultural tourism suggests that archaeology can play a major role in community economic development. The development of archaeological sites for tourism can generate employment opportunities and diversify the economy for Native and non-Native communities.

Finally, CRM cannot continue in Canada without support and involvement from Native Indians. Until recently, Native people have been excluded and discouraged from becoming active participants in archaeology. However, with the rise of heritage revitalization, many Native bands are now demanding that they be included in the CRM planning process.

5.2 Public Participation

A major problem with current CRM policies in Canada is the absence of citizen participation in the planning and decision-making processes of archaeological preservation. Through increased public involvement, members of the community would have an opportunity to influence the decisions made by government officials concerning the future direction of heritage legislations and policies (Friedman 1979:31). Greater citizen participation in CRM would
also establish better communication between government officials, land managers, planners and the general public with the objective being "to share in the decisions that are made in the formulation and implementation of projects and policies" (Tabita 1972 in Connor 1985:209). Finally, citizen participation would provide an arena for co-operation between various public sector groups interested in designing and implementing community policies and plans for conservation and managing local archaeological resources.

The movement toward citizen participation in CRM in Canada is almost nonexistent due to a general lack of awareness in archaeology, and a lack of understanding the fragile nature of archaeological resources. Presently, public awareness in archaeology is limited to individuals belonging to amateur archaeology societies or to museums. Consequently, "public participation cannot be separated from public education. Without information on archaeology, there is no basis for the development of interest and hence no participation by the public" (Peterson et al. 1978:195). Therefore, cultural resource managers and professional archaeologists should establish better communication not only with the general public, but also with government officials, private land owners and Native groups if CRM is to prosper and survive (McGimsey et al. 1977:79). Some methods of increasing public participation in archaeology and CRM are through public education and training programs.

Public education is the most effective method for encouraging community based support for CRM (Lipe 1975:21). There are many ways in which archaeology can be presented to the general public. One of the most common is the use of the mass media, primarily newspapers, television, radio and magazines. These communication forms are ideally suited for widespread dissemination of information since they have the broadest contact with the
public. However, media messages have limited effectiveness in providing in-depth information necessary for evaluation and decisions (Peterson et al. 1978:196). The use of the media should be supplemented by other mechanisms, especially interpersonal contact and first hand experience. The more involved people are in archaeology, the more they feel it is their heritage resource that is endangered, and the harder they will fight to preserve it from destruction (Smardz 1990:296).

5.2.1 Archaeology in the Public Education System

A new and innovative conservation approach in CRM is the introduction of archaeology to elementary and secondary students. Most public archaeology programs are geared towards school aged children since one goal of CRM is to educate the new and future generations to think that "archaeology in general and heritage conservation in particular is a normal and important part of their everyday lives" (Smardz 1990:307).

One of the most unique and interesting archaeological participation programs in Canada was created by the Archaeological Resource Centre (ARC) in co-operation with the Board of Education for the City of Toronto (Smardz 1990). In 1983 the Board introduced a full credit summer course in archaeology for students as well as for the general public. The ARC, composed of professional archaeologists, ran a six week program which consisted of classroom instruction, excavation, laboratory work, field trips and archival research.

A grant in 1985 from the Ontario Ministry of Culture and Communications enabled the Center to operate twelve consecutive months of the year. This established ARC as the first year-round archaeological education facility within a North American public school system. Smardz stated that
approximately 12,000 students per year take part in the outdoor and indoor programs (1990:299). The ARC has been successful in accomplishing its goals of emphasizing the social value of archaeology through heritage education and making archaeology a normal and exciting part of the urban environment (Smardz 1991:41).

5.2.2 Hands-On Archaeology Programs

The Crow Canyon Archaeological Center in southwestern Colorado offers unique hands-on programs where individuals participate with professional archaeologists in the scientific excavation of Native Indian ruins. The aim of the Center is to serve as a research facility while simultaneously educating the general public and Native Americans about the prehistoric past. The Center, operating for seven years, offers ten different archaeology programs. The Center recently introduced new programs designed for university students, public school teachers interested in teaching archaeology in the classroom and families. Crow Canyon also offers a year-round course aimed at Native American elementary and high school students. Here, Native students gain knowledge of the archaeological past of their ancestors and of their home region. In addition, the Center provides a place where mutual beneficial dialogue between Native and non-Native cultures can be exchanged (Crow Canyon Archaeological Center 1990:5). The success and the popularity of Crow Canyon are illustrated by the 3,700 adults and students who participated in the programs during the year 1990.

5.2.3 On-Site Interpretation Programs

On-site interpretation programs provide the public with an opportunity to visit an archaeological site, to learn about Native Indian culture of the area, and to handle artifacts. In the spring of 1983, the St. Mungo Program guided
18,000 people through a free tour of a prehistoric archaeological site located in Delta, B.C. (Spurling 1984a). The interpretation program included an on-site museum complex detailing the prehistory of the Northwest Coast culture, a guided lecture of the site, and the opportunity to sift through excavated soils containing archaeological remains.

5.2.4 Training Programs

Educational programs must also be aimed at government officials, particularly those at the local level since municipalities are the ones who control land-use regulations. If a proper educational effort has been carried out, the municipality should be aware of the number and types of sites located within its boundaries. This knowledge enables local governments to initiate adequate conservation measures to protect archaeological resource located on public or privately owned land (McGimsey et al. 1977:88).

Training programs in CRM and archaeological preservation techniques should become a regular part of all government departments who manage land. It is important that those who are responsible for managing cultural resources are well informed, not only about the nature and importance of these resources under their care, but "also about the specialized archaeological studies that are an integral part of any management program. The only way that land managers will begin to acquire a better understanding is if archaeologists make the effort to educate them" (Czaplicki 1989:249).

The U.S. government provides three training programs in archaeology and resource protection to federal and state employed archaeologists, historic preservation officers and law enforcement personnel (McManamon et al. 1989). The federal government offers a twelve hour course on the prevention of looting and additional vandalism of archaeological sites. This course is taught in
conjunction with a forty hour course offered by the Federal Law Enforcement Training Center for field law enforcement personnel and archaeologists. Another forty hour course called "Archaeology for Managers" provides land managers with the legal and managerial background to "oversee the development of effective archaeological resource preservation program within the overall program or land unit they manage" (McManamon 1989:56-57).

5.3 The Role Of Municipal Government

CRM has been primarily the responsibility of federal and provincial governments. However, despite the presence of heritage policies, the conservation of archaeological resources in Canada is not a well established function of either government. In addition, the same problem of co-ordination between departments which exists at the federal level also exists at the provincial level (Dalibard 1986). Therefore, the municipal government may be the most effective political level for protecting archaeological resources within municipal boundaries and on private property.

A municipal heritage plan requires the use of appropriate tools to guide the plan into action. These planning tools or regulations are often used to restrict development or change in privately owned property (Hodge 1986:217). Land-use regulations are implemented principally by laws passed by municipalities (Dawson 1982:3). Municipal land-use regulations that have been successfully applied to protect individual historic buildings or entire heritage districts may be potentially useful in protecting archaeological resources. Examples of these legal tools include tax exemptions, heritage zoning, easements and conservation covenants.
5.3.1 Heritage Zoning

The Ministry of Municipal Affairs, Recreation and Culture (1990) suggested that in addition to designation, heritage zoning should be created for local government use. Heritage zoning "is a very common and effective historic preservation tool since it does not involve the purchase of the property or any interest in it" (Gammage et al. 1975:52). Zoning is an inexpensive method of controlling private property containing archaeological resources. Heritage zoning would also include site protection similar to that established through the designation process. However, unlike designation, compensation would not be applicable. Finally, this type of zoning would enable "local governments to develop a regulatory environment that is appropriate to the individual problems and opportunities each property presents" (Province of British Columbia 1990:13).

5.3.2 The Buffer Concept

The buffer concept provides a buffer of open space, landscaping or a structure between conflicting land uses. "This system can provide that any land use can be adjacent to any other land use if a sufficient buffer is used" (LeVasseur 1981:9). A developer who is required to include a buffer may be persuaded to use it to protect an archaeological site.

5.3.3 Property Tax Exemption

Property tax exemptions could provide financial incentives to property owners to protect and conserve archaeological sites located on their private land. Tax exemptions could also aid in the designation process. Under the present system, designation often prohibits the alteration of property. As a result, property owners often incur a loss in value on property rights. The HC Act provides for some form of compensation, though municipalities rarely have
the resources to compensate the owners. Provincial and municipal governments have been reluctant to establish a precedent for obligatory compensation, but property tax exemptions could be an equally effective incentive.

5.3.4 Heritage Easements

The municipal government could also use easements to encourage preservation of archaeological sites. Easements are most widely used to acquire a right of access to the use of private property. They are binding agreements between property owners and the easement holder. "Easements are registered on title and protect the property against disfigurement and demolition no matter how many times it changes ownership" (Galt 1982:33).

An archaeological easement concept was introduced in the state of California in 1976. This involved donating the property in question as a state archaeological landmark when a significant archaeological site was identified during the environmental review process or during land development. "The State then had the option of working out mitigation or preservation plans, or selling the easement to a government heritage agency or to a nonprofit organization" (Fowler 1982:31).

5.3.5 Conservation Covenants

A covenant, like an easement, is a relatively neglected method which could be used to protect archaeological resources in communities. A covenant is an agreement between a local or provincial government and a private property owner. The terms of the covenant can be anything upon which the two parties agree. Conservation covenants run with the land in perpetuity and are registered on the property title at the Land Title Office. This ensures long term protection of the cultural resource. Also, future purchasers are aware that
the property has special heritage significance (Province of British Columbia 1991c).

A conservation covenant can work well within a community since it would be specific to each parcel of land (Garrett 1987:67). It does not affect an area as large as that affected by zoning. A conservation covenant provides an alternative to heritage acquisition and heritage designation. A covenant is less costly than out-right property purchase, but it cannot be imposed on the property owner as heritage designation can.

5.3.6 Voluntary Stewardship

The key to a successful community heritage conservation plan is to “bring landowners into the preservation process in a positive fashion” (Duerksen 1983:75). Voluntary stewardship is an alternative conservation method which can be used to “build community support to the point where planning controls become acceptable” (Van Patter et al. 1990:21). Voluntary stewardship stresses a positive and proactive method of encouraging private landowners to protect and conserve archaeological resources through a landowner contact process. Under this process, significant archaeological sites located on private property are identified by a community heritage organization. Once the site is identified, personal visits to the property owner are arranged. “Owners would then be encouraged as well as assisted, whenever possible, to protect the significant heritage portions of their property” (Van Patter et al. 1990:21).

A voluntary stewardship program in Ontario has proved to be quite successful because it is more politically acceptable than the regulatory approach to cultural resource protection through land-use planning. “It allows landowners to be introduced to the subject of conservation in a positive manner and to feel proud to own something special and unique. For the
politician, good public relations and little risk are involved" (Van Patter et al. 1990:27).

5.4 **Community Economic Development Through Tourism**

The use of archaeological sites for tourism is one of the few development activities which can be used in a positive way to preserve and conserve the archaeological heritage (Trotzig 1989:62). This development can also be integrated into the "local preservation program as well as part of the overall effort to foster and promote the general welfare and well-being of the community as a whole" (Duerksen 1983:33). Consequently, many communities are turning to archaeological sites through cultural tourism as part of their community economic development plan.

Community economic development (CED) integrates the concepts of local initiative and local self-help, job creation and business investment with community planning principles. A community may target one component of the community system, such as cultural tourism, for development.

Cultural tourism is a growth industry which focuses on "the use of cultural assets in a particular geographic region to draw tourists and extend their visit" (Pompa et al. 1987:41). A 1989 B.C. survey found that visitors ranked heritage tours second among the activities they were most interested in participating in. For example, more than 150,000 tourists visit the Head-Smashed-In Buffalo Jump Complex in Fort Macleod, Alberta each year (Helmohold et al. 1988).

The main reason that communities wish to promote tourism is to create jobs. Some primary employment benefits resulting from developing archaeological sites are:

1) the workforce used to construct the museum/park complex and associated facilities.
2) the workforce required to operate the site.

3) the jobs created by the ripple effect of the project buying supplies and goods from local businesses and from employees spending their wages in the local community (Department of the Environment Inner Cities Directorate 1990:22).

Secondary employment is created from visitor spending. Visitor spending "introduces new financial resources into the community which can be the basis of new businesses. It also increases the viability of existing businesses and increases the scale of businesses beyond that normally found in the area" (Department of the Environment Inner Cities Directorate 1990:22).

Cultural tourism can also aid in diversifying the economy. A 1989 survey indicated that non-resident tourists generated $2.4 billion into B.C.'s economy of which $640 million was allocated to accommodations (The Tourism Research Group et al. 1990:4). It was also reported that a party of two spend an average of $133.50 per day. For example, the economic impacts of the Head-Smashed-In site generated $3.1 million for the Fort Macleod economy in 1988. This figure was expected to double by the year 1995 (UNESCO 1980).

The conservation of archaeological sites through the development of community tourism plans has become a growing trend in CRM. Although the development of archaeological sites for tourism is generally emphasized as an economic issue, these sites also improve the community in non-monetary ways. Archaeological sites provide "the forum by which to educate and instill in the public, an appreciation of our valuable heritage resources" (Cannon 1990:1). Additional social benefit derived from site development for tourism is the creation of a cultural identity for the community which in turn can generate a sense of civic pride, stability and security.
5.4.1 **Besh Ba Gowah Archaeological Park**

One example of a CED plan focusing on an archaeological site to promote tourism is the Besh Ba Gowah Archaeological Park in Globe, Arizona. The Besh Ba Gowah ('place of metal') site represents the ruins of an Indian pueblo abandoned by the Salado people nearly six centuries ago. In 1981 a decline in the economic activity of copper mining in the area had a tremendous impact on the community of 6,000. The city of Globe was forced to examine methods of diversifying the economy, and in 1985 a proposal to reconstruct and develop the site for tourism was developed. What subsequently followed was a five year plan involving reconstructing the site, building a visitor center and a museum complex, designing interpretation programs and marketing the site for tourism.

Funding and labour for this project was derived from federal, state and private grants which integrated community needs with archaeological needs (Hohmann 1988:20). For instance, a job skills training program allowed the site reconstruction phase to take place. A combination of support from several different economic development programs funded the project with a four year budget of $150,000 to $240,000 per year (Hohmann 1988:20).

The success of this project could be attributed to the commitment and co-operation of the entire community. For example, an old metal building donated by the local school district was refurbished for the museum and the visitor centre. This building was moved to the new location with the help of the local branch of the U.S. Navy SeaBees. Volunteer labour was provided by numerous community groups while several local businesses donated materials and the U.S. forest service donated lumber.

In addition, funding obtained from a variety of sources enabled archaeologists to continue their scientific investigation of the site, while
simultaneously providing jobs for the local residents in the construction aspect of the project. "Additional funding for the museum complex came from several different museum grant programs for developing displays, interpretive panels, storage facilities, laboratory areas and environment controls" (Hohmann 1988:21).

Presently, the archaeology park has two full time employees. In the year 1990, approximately 20,000 tourists visited the site. Currently, the City is making plans to expand the park with another archaeological site within walking distance of Besh Ba Gowah (Norma Ajema, pers. comm., February 11, 1991).

5.4.2 Native Tourism

Recent surveys conducted by the B.C. Ministry of Tourism indicated that "both American and overseas visitors desire to see more of Canada’s distinct cultural heritage and ethnic mosaic" (Kafka 1990:16). As a result, one of the areas in which the Province has begun to advertise is Native cultural attractions such as cultural centers and museums and Northwest Coast art work. However, in an effort to maintain control over the marketing of Native culture, Native groups are now becoming increasingly interested in tourism. Moreover, the economic growth of tourism in the Province has made many Native bands aware of the economic potential of developing this industry themselves. The benefits for Native groups are employment and income, improvement of relations between Natives and non-Natives, a strengthening of Native self-identity and "through increased employment opportunities and a heightened cultural awareness, a slowed migration of young Native people off reserves" (Kafka 1990:29).

Kafka stated that in order to exercise meaningful control over tourism, ...

Native groups must control no less than 51% of any tourism-related facilities, including hotels, restaurants, tour buses and campsites.
Cultural erosion due to ethnic tourism can be exacerbated by outside ownership of the local industry. As well, if band members are funded to educate themselves in all facets of tourism, hospitality and recreation industries, native people will have more opportunity to hold the high-renumeration management positions which usually go to outsiders (1990:43-44).

There is great potential for archaeological sites to be developed by Native groups as part of their tourism industry. One such example is the Haida Gwaii Watchmen Program founded by the Skidegate Village of the Queen Charlotte Islands in 1983. This Program was initiated to create employment opportunities for band members through tourism. Under the Watchmen Program, four different tours incorporating the natural scenery of the Queen Charlotte Island and the former village of Ninstints were offered to tourists. In 1987, a total of 10,000 people of all ages and from all parts of the world participated in the Haida Gwaii Watchmen Tours (Vickers 1988:23).

5.5 Native Management of Cultural Resources

A plan for native involvement in CRM has yet to be developed in Canada. Current government departments and heritage agencies do not provide for Native input or consultation in policy formulation or decision-making concerning archaeological resources. Therefore, Native Indian participation in CRM is limited to isolated situations, such as the Skidegate Village managing the former village site of Ninstints in the Queen Charlotte Islands.

In comparison, the Australian and New South Wales governments have a policy stating that "Aboriginal people must be involved in the protection, preservation, management and interpretation of Aboriginal sites" (Ridgeway 1984:87). The implementation of this policy is achieved through the employment of Aborigines by consultants involved in archaeological surveys, consultation with Aboriginal communities and representatives of Aboriginal communities, and employment of Aborigines by the Parks Service in cultural
and natural resource management projects (Ridgeway 1984:86). Aborigines also sit on the New South Wales Interim Aboriginal Sites Committee which advises the Minister on all aspects of Aboriginal site management.

Central to the issue of Native participation in CRM is the desire by Native Indians to regain control over their cultural resources, which has previously been managed by archaeologists, non-Natives and government agencies. Native people feel and believe that

... all Native Indian sites firstly belong to the Native people and secondly, to the heritage of Canada. The people who created the site or the descendants of these people have an obligation to preserve all prehistoric and historic Native sites for our children and their children (West 1984:58).

However, Canada is reluctant to relinquish either its responsibility as steward of these archaeological resources, or its claim of ownership to these items. Presently, ownership of sites and artifacts either resides with the present land owner or is claimed by the Crown (Sullivan 1983:141).

Native people also desire more involvement in managing their heritage resources in order to have their view of their culture presented. Current information on Native sites and Native Indian culture is based mainly on interpretation by a dominant non-Native culture. This has often resulted in an ethnocentric understanding and presentation of the evidence, and "even with the best intentions in the world, often unconsciously harms or insults the study group" (Sullivan 1983:147).

Adams stated that Native American beliefs and values have as much credence in determining the scope of archaeological work in a Native American site as the values of the archaeologists and the Euro-American community (1984:240). A conflict between values is also apparent when one culture holds a different view of resource definition, ownership, significance and use. Most non-Natives consider Native Indian archaeological sites to be a commodity
which can be bought, sold, displayed or otherwise manipulated in our market economy (Winter 1980:124). Cultural resource managers and government officials often perceive archaeological sites as cultural resources which can be managed. However, Native Indians consider their sites to be sacred ground or communal land, and believe that the archaeological resources of the past form an integral part of present Native culture (Horse Capture 1981).

5.5.1 The Zuni Archaeology Program

The best examples of Indian involvement in archaeological research and CRM programs are from the American southwest. One such example is the Zuni Archaeology Program (ZAP) operated by the Pueblo of Zuni in New Mexico. ZAP was established in 1975 in response to: NEPA's legislation regarding cultural resources affected by federally funded projects, and by the issuing of EO 11593 that required the inventoring of all archaeological sites located on reserve land (see Section 3.1.4).

ZAP's main goal is to preserve, protect and study Zuni cultural resources by:

1) providing employment and career opportunities to tribal members.
2) enhancing the archaeology and the history of the Zuni.
3) developing CRM policies that incorporate and reflect Zuni cultural values and beliefs.
4) providing on-reserve professional heritage services.

Zuni values and beliefs play a central role in the development of ZAP's research projects and policies. For instance, a major CRM policy established by ZAP focuses on the excavation and study of skeletal remains. ZAP, in consultation with the Tribal Council, elders and tribal members, initiated a policy whereby the disturbance of graves was to be avoided, and the scientific
excavation of graves for archaeological data was to be prohibited. Excavation would occur only if a direct impact threatened the integrity of the grave.

ZAP’s interaction with the Tribal Council and other tribal leaders illustrates the importance of their archaeological sites to the entire community. ZAP also demonstrates the necessity of involving the community in the design, implementation and interpretation of archaeological research so that the Zuni culture is properly conveyed to other cultures.

The success of ZAP is demonstrated by the 200 projects that have been conducted on the reserve and in adjacent areas in West-Central New Mexico. The permanent staff of ZAP includes three non-Indian archaeologists, five Zuni archaeologists, and two secretarial personnel. In addition, the program has assisted the Tribal Council in developing CRM policies regarding grave sites, sacred sites and religious artifacts. Finally, the presence of ZAP and other tribal archaeology programs in the U.S. demonstrates that management by Native people of their own cultural heritage and resources can be accomplished with minimal disruption to government agencies.

5.5.2 Native Heritage Parks

Canadian Indian participation in CRM can be found in Native heritage parks. The establishment of Native parks for the purpose of conserving archeological sites is a relatively recent phenomenon in Canada (Walker 1987:123). These parks have become a “growing component of the environment and cultural scene in the Northwest Territories since the mid 1980s” (Hamre 1987:27). Heritage parks dealing with Native Indian culture:

1) serve as an economic resource for tourism.
2) conserve and protect a site from future development projects.
3) commemorate Native contribution to the culture and history of the area.
4) educate the public on Native culture.

5) preserve traditional lands for continual and future use for Native Indian groups.

6) involve Native people in the management of their own heritage.

The Wanuskewin Heritage Park in Saskatoon is unique because the project involved the Native community in the overall park development plan. The Park contains several types of archaeological sites (e.g. medicine wheel, tipi ring, bison procurement and habitation sites) that reflect the traditional culture of the Northern Plain Indians. These sites were designated as a provincial heritage property in 1984 and two years later added to the National Historic Sites list. Their close proximity to the City of Saskatoon and their variation and intactness provided an excellent opportunity to develop these resources into a Native heritage park.

The main objective of the park plan was to express the cultural heritage of the Northern Plains Indians by "preserving the archaeological resources and natural environment as well as by providing opportunities for ongoing ceremonies and other events that promoted and strengthened Plains Indian culture" (Walker 1987:127). Secondary objectives of the Park consisted of: scientific archaeological investigation of the sites; public education programs on the Northern Indian Plains culture; and tourism development.

Native involvement in the park project began in 1983 with one member on the master plan development team and another on the steering committee. However, two years later, Native participation increased to include one representative from each cultural group (Walker 1987:129). Together these members constituted the Indian Planning and Development Committee.

The function of this Committee was to oversee the planning process and to ensure that the needs and the aspirations of the Native communities were
being met. The Committee also provided consultation and input into the public interpretation programs in order to maintain accuracy and acceptability. Finally, the Committee aided in the fund raising campaign and in the promotion of the Park.

The Park provides employment to several Native members as archaeology assistants, park interpreters and conservators. It also stands as a symbol of the uniqueness of Native cultures in Canada. The Park provides a focal point for Native people in the revitalization and preservation of their culture. Finally, the heritage park represents involvement and control by the native community over their own history, traditions, customs and art.

5.6 Chapter Summary

The conservation and management of cultural resources should not be a function of only the federal or provincial government. New strategies in CRM stress the importance of the role of the community in assuming responsibility for developing, preserving and utilizing cultural resources. Alternative conservation approaches emphasize public participation from local government, communities and Native Indians.

Professional archaeologists have recognized that the key to a successful CRM plan lies with the community (Fowler 1982; Lipe 1977). Greater public participation and support in CRM is needed to encourage governments to enact stronger conservation acts and fund archaeology programs. The more involved people are in protecting and preserving cultural resources, the more government officials feel they have political support in lobbying for improved heritage legislation. However, involvement in CRM can only occur if the public is made aware of the value of archaeology and its resources. Consequently, public education cannot be separated from public participation.
Educational programs in archaeology are acknowledged as being an effective method in encouraging public support for CRM. The most common and successful programs are those which incorporate lectures or guided tours with practical experiences in archaeology. In addition to programs aimed at the general public, training programs for land managers and government officials introduce these individuals to the concepts and principles of CRM.

The role of local government in CRM planning has been underemphasized by senior levels of government. Municipal governments control the administrative mechanisms which regulate property. As such, municipal governments may prove to be the most effective political level for protecting archaeological resources on private property. Specific land-use regulations that have been successfully applied to preserve historic buildings may also be appropriate for protecting community archaeological resources. Therefore, local government should incorporate heritage conservation plans into their Official Community Plan (OCP) and plan for cultural resources in the same manner they plan for other community resources.

Some communities seeking ways of diversifying their economy have turned to developing archaeological sites for the tourism industry. The benefits arising from tourism include primary and secondary employment and increased local business activity.

Native involvement in the tourism industry provides employment to band members as well as opportunities for ownership of tourist facilities, such as camping grounds, lodges or hotels, restaurants and on-site museums. Native tourism can expand job openings for people living in an environment which is scarce in natural resources. Participation in native tourism can also revitalize cultural pride and identity in "a people who have suffered emotionally as a
result of pressures arising out of values forced upon them by the non-Native community” (Flood 1979b:53).

Tourism can alleviate some of the unemployment pressures in many communities. However, it should be perceived, not as a panacea for solving the community’s economic problems, but as one component of a larger CED strategy. "This is an important recognition, for while visitor rates to a destination area may be high one year, due to a variety of confounding factors, these rates may slump the next year” (Kafka 1990:42). In addition to the economic benefits, there may be negative impacts resulting from tourism such as damage to the environment and pressure on a community’s services and physical resources.

Finally, CRM in Canada cannot continue to develop without participation and consultation from Native Indians. The growing desire by Natives for control over their land and natural resources provided the impetus for a heritage revitalization movement. This heritage movement includes increased Native custodianship, responsibility and management of their own archaeological resources.

A successful and effective CRM plan requires involvement from all levels of government as well as participation from the general public, communities and Native groups. One method in which a collective responsibility for conserving and managing cultural resources is achieved is through integrated planning. The following chapter presents policy recommendations and discusses an integrated planning approach to CRM.
6.1 Summary

American archaeologists were the first to recognize that increasing development and alteration of the land base were producing negative impacts on archaeological resources. The environmental movement of the mid 1960s, society's growing concern for conserving the land and its resources and the destruction and the rapid depletion of archaeological resources, motivated archaeologists to create a new field in archaeology. This new field, known as cultural resource management, promoted a different method for conserving archaeological sites. Cultural resource management (CRM) combined the concepts of conservation (e.g. the preservation and public stewardship of resources) with management skills to create a process. This process consisted of identifying, selecting and preserving archaeological resources of particular value to society for present and future use.

CRM in Canada evolved during the mid 1960s and the early 1970s in response to a growing public concern for the environment. This conservation philosophy and attitude towards the land and its resources led to the emergence of government environmental policies, such as EARP. EARP introduced a process for assessing and evaluating the impacts of federal projects on natural and cultural resources. Under EARP, archaeology became a study component since archaeological resources were recognized as being irreplaceable once destroyed, limited in quantity and hence non-renewable in nature. For the first time, government officials began to consider the effects of a federal project on archaeological resources.

Federal involvement in the management of the resource base is limited by the BNA Act. The Act confers upon the provinces all responsibility in
matters that pertain to property. The provinces have interpreted archaeological resources to be property under their jurisdiction. In B.C. an archaeology agency was established to assume complete responsibility for the conservation and management of archaeological resources within the province. The present agency, known as the Archaeology Branch, has the mandate to: administer sections of the Heritage Conservation Act (1977) that pertain to archaeology; implement the archaeological resource management policy; and ensure that archaeological impact assessment studies are conducted when necessary.

Archaeological resources are managed primarily through a structured set of federal and provincial acts. These laws impose on the government a responsibility and a public obligation to preserve and manage significant cultural resources for future generations. Legislation has provided the foundation for CRM, resulting in a top-down decision-making process for managing archaeological resources.

Government heritage policies and laws give strong support for CRM. The federal and provincial government provide leadership in heritage conservation. This leadership role is expressed through legislation to protect heritage as well as funding and technical assistance for community conservation programs and activities. The federal and provincial government also support archaeological research through scholarships and grants. However, many communities are currently developing their own heritage programs and evolving their own cultural support infrastructure.

New conservation strategies for managing archaeological resources emphasize the need for greater public participation in CRM. However, public involvement can only occur with increased educational programs in archaeology. Greater understanding of the resource base can lead to increased public and political support for archaeological preservation laws and funding for
educational programs and research. Additional strategies recently introduced to CRM planning consist of the conservation of sites through community tourism plans and the management of archaeological resources by Native Indian groups.

6.2 Policy Recommendations
6.2.1 The Federal Government

There are three areas of particular concern with the federal management of archaeological resources. They are:

1) the lack of co-ordination between the agencies who are responsible for archaeology;

2) the lack of an archaeology policy; and

3) deficiencies in the Export Act for protecting significant Native Indian artifacts.

First, archaeology is the responsibility of numerous departments and agencies which govern land. This often makes it difficult for cultural resource managers to determine who has the mandate to protect resources affected by the actions of federal or federally funded projects. This problem is complicated by a lack of co-ordination between government groups.

The Government should establish an interdepartmental agency to carry out federal responsibilities towards the archaeological heritage. This agency should co-ordinate existing mandates, policies and programs that pertain to archaeology, and promote a more comprehensive and dynamic view of archaeological resources by working in partnership with other levels of government, private sector and the public. More co-ordination among government departments would provide the organizational structure (e.g. human and financial resources) necessary to implement all the components of a resource management program, provide for a consistent implementation of the AIA process, and enable the development of a federal archaeology policy.
Second, the Government has yet to formulate a policy which even recognizes the contribution and importance of archaeological resources to the cultural heritage of the nation. The federal government should provide leadership for the conservation of this resource base, as it clearly has the basic responsibility and the mandate for heritage on a national basis. Therefore, the Government should acknowledge the significance and value of archaeological resources by adopting as policy the principle that the archaeological heritage under its jurisdiction is an important national resource worthy of protection and management. This policy should provide guidelines and objectives to all federal departments and agencies involved in the archaeological heritage.

Finally, the Cultural Property Export and Import Act (1977) prohibits the export of archaeological artifacts from Canada without a permit. However, this Act does not prohibit the transportation of significant archaeological items between provinces. In addition, provincial governments lack the legal powers to protect archaeological resources when an artifact has crossed provincial boundaries (Department of Communications 1988:66). Therefore, the Government should amend the existing Export Act by also prohibiting inter-provincial transportation of significant archaeological items without permit approval. The federal government should also co-ordinate the protection of archaeological items with provincial heritage conservation acts by providing similar penalties and fines for those individuals charged with illegal transportation.

6.2.2 British Columbia

CRM in British Columbia is the responsibility of the Archaeology Branch. Specific problem areas identified within this provincial agency involve the Heritage Conservation Act’s designation process and protection of
archaeological resources, the academic qualification and training of the Branch's archaeologists, and an archaeology policy and an AIA procedure that have no legislative basis.

First, the HC Act provides legal protection for archaeological resources through a designation process. Designation of sites located on private property often results in a decrease to the property value, since designation often prohibits the alteration of the land containing the archaeological resource. In the event of an economic decrease to the property value, the Act states that the Province shall compensate the owner. As a result, the government is reluctant to designate sites. The Branch, in lieu of designation, should consider alternative methods for protecting sites. These new methods should focus on the implementation of municipal land-use regulations, heritage stewardship programs, the development of archaeological sites for tourism and Native Indian management of archaeological resources.

The HC Act does not provide meaningful penalties for individuals charged with the willful damage to archaeological resources. The Province is currently proposing stiff penalties for those convicted of intentionally damaging archaeological sites. However, in the absence of a law, alternative conservation methods should be considered. For example, local citizens have proved to be effective in monitoring community sites. Increased public archaeology programs which emphasize conservation and protection can help to reduce vandalism and looting of sites. Finally, programs should be designed for law enforcement officers to make them aware that individuals can be charged with intentionally and willfully damaging historic or Native Indian sites.

Second, few government archaeologists possess academic degrees or training in the field of CRM, planning, or policymaking. It is necessary to
improve the level of experience of Branch archaeologists in the above areas.

These individuals should learn the:

1) language of planners and other land managers.
2) planning stages of various government departments.
3) bases on which land managers make their decisions.
4) lines of authority of government departments who are responsible for managing the land.

In addition, officials in the Branch should establish personal contacts with other government officials. The Branch should also include professionals with degrees in various disciplines or individuals who possess wide experience and specialized training in CRM.

Finally, although the archaeology policy outlines the objectives of the Branch, while the AIA establishes a procedure for assessing and mitigating resources affected by a project’s action, neither the policy nor the process are supported by the HC Act. Consequently, project proponents are not required by law to adhere to any of the policy guidelines or to implement AIA studies.

The Branch should initiate support for the policy and the AIA by providing training programs in CRM for land managers and planners in other departments and agencies, and by placing cultural resource managers into different government departments. The Branch should provide land managers and government officials with information and knowledge concerning the value and significance of archaeological resources. Only through increased education in CRM can greater political support for implementing AIA studies, adherance to the archaeology policy, and effective resource management be achieved.

The presence of cultural resource managers in other land agencies can bridge the communication gap which exists between the Branch and other
government departments. This can aid in the development of an integrated planning approach to CRM.

6.2.3 Comprehensive Surveys and Inventories

The archaeological resource base must be appropriately managed at both federal and provincial levels to achieve effective stewardship. However, this stewardship is difficult to implement when the full extent and nature of the resource base under both jurisdictions is unknown. There is no comprehensive registry of archaeological sites located on Crown or provincial lands. Not knowing the proportion of known to unknown resources makes it exceptionally difficult to establish effective national or provincial archaeology policies, or to plan development projects to avoid cultural sites.

It is recommended that both governments should document the quantity and types of archaeological sites on Crown lands by initiating comprehensive surveys and inventories. This would provide government agencies with data on the presence or absence of cultural resources in areas under their responsibility, and provide the basis for the development of a comprehensive approach to CRM planning. A comprehensive CRM plan would:

1) identify all of the resources under federal or provincial jurisdiction.

2) integrate federal and provincial policy guidelines and preservation laws.

3) help to establish co-ordination between other levels of government, the private sector and the general public.

4) provide information for assessment and mitigation decisions to a proponent during the early planning stages of a project.

5) facilitate the protection of cultural resources with other resources.
6.2.4 Regional Planning

A comprehensive survey and inventory provides knowledge of the entire resource base. With this information, B.C. should introduce a regional planning approach for CRM. Regional plans involve priorities to be considered, goals to be achieved, and methods to achieve these goals for each selected region within the province. Regional planning can determine the types of sites in a project’s specific area, and facilitate the choice of which site to conserve early in the project’s planning stages. Finally, a regional approach decentralizes the management of cultural resources and places more responsibilities for the resource base into the hands of regional centers, local governments and communities.

6.2.5 Integrated Planning

A number of problems and deficiencies have been noted with the federal and provincial management of cultural resources. Some of the main difficulties are:

1) failure to recognize the interconnection between cultural resources and the environment.

2) lack of integration in the planning and decision-making processes of other government groups.

3) a top-down approach to CRM.

4) minimal integration of a community’s social, economic and cultural needs and values.

All of the identified flaws in CRM have one over-riding characteristic in common: CRM has developed, and continues to develop in relative isolation from other policies and objectives. As a result, CRM has been unable to expand its original goal of conserving and managing archaeological resources into a much broader framework incorporating environmental, social, economic and cultural considerations. Therefore, it is recommended that an integrated
planning process should be considered as an appropriate method for improving the quality of CRM in Canada.

Integrated planning is defined as a process which recognizes the inter-relationship of cultural resources to the land base and is compatible with the social, economic and cultural goals of the nation, region or community. Integrated planning co-ordinates and links a consistent CRM approach between the federal and provincial governments as well as between the provinces and their municipalities. An integrative process increases communication and co-operation between government groups, ensures complementary CRM programs and provides support for each government. Integrated planning stresses the interconnection of CRM with the planning policies of other government groups. Finally, the integrated approach incorporates the role of the government with the goals of the people and the community in a CRM plan.

a) The Environment

Archaeological sites constitute a cultural dimension of the environment (Cleere 1989:13). These resources are intimately bound up with the wildlife and the aesthetic qualities of the natural environment. For example, ancient forests may preserve archaeological remains, such as culturally modified trees or an ancient landscape that everywhere else has been obliterated by agricultural activities. Conversely, some archaeological sites may provide havens for endangered species of animals and plants (Cleere 1989). Alteration of the land through such activities as forestry, agriculture, road-building, mineral extraction and industrial development, disturbs this relationship.

There is a strong community of interest between different conservation agencies. However, this interdependence has not been recognized or appreciated, and as a result, these agencies operate in isolation from one
another. *CRM should establish closer links and common policies with the different areas of environmental protection.* A *broader plan should be designed to integrate every aspect of environmental heritage protection, including wildlife, landscape and coastal protection with the objectives and goals of CRM plans.*

b) **Land Agencies**

Cultural resource managers are generally not involved in the planning and decision-making processes of other government groups or Crown corporations whose projects may have adverse impacts on cultural resources. Inappropriate development or unnecessary delays may result when cultural resource compliance is not planned. These delays can be costly in terms of money and idle personnel and equipment (Tainter 1987:55). Therefore, cultural resources should be seriously considered early in a proponent’s planning process. *This can be accomplished by integrating CRM into the early stages of planning to identify the archaeological values and the impacts and to minimize damage* (Friedman 1982:6).

Early planning enables the proponent to make concessions and changes to the project, and to minimize the impacts on archaeological sites through selection of an appropriate mitigation technique without stopping a project (Cleere 1989; McGimsey et al. 1977). In addition, the involvement of cultural resource managers should not cease at the feasibility stage, but should be maintained until the project is completed.

c) **The Municipal Government**

The decision-making process concerning archaeological resources is centralized (i.e. the responsibility of federal and provincial governments) and continues to stress the role of the bureaucracy in administering land use controls for managing this resource base. However, this process has generally
ignored the potential role of local governments in protecting archaeological sites in situations where federal and provincial heritage acts and policies are inapplicable.

Municipal governments may prove to be the most effective political level for protecting archaeological resources on private property. Therefore, the province should provide local governments with greater power to protect community cultural resources, such as enabling legislation to raise taxes for heritage or a property tax exemption to protect community cultural resources.

The Province should also integrate provincial heritage needs with those of local governments. This could be accomplished through co-operative ventures, such as the development of Native heritage parks or heritage organizations composed of provincial and municipal representatives. Integrated conservation and preservation plans should incorporate provincial and municipal needs to the mutual benefit and satisfaction of both.

Finally, local governments should establish their own heritage conservation policies and plans by integrating the management and conservation of cultural resources into their Official Community Plan (OCP). The inclusion of heritage conservation goals, objectives and policies in the OCP "would become binding on local government and constitute part of the system of procedural protection for heritage property owners" (Province of British Columbia 1991c:11).

Increased municipal involvement in CRM planning should provide greater opportunities for community and special interest groups to participate in the decision-making process concerning the protection of local cultural resources. Accordingly, an integrative process should allow municipalities to design CRM strategies and plans that are compatible with the objectives and goals of the Province, municipal council and community members.
d) **Public Participation**

 Public participation should be integrated into future CRM plans. The general public can be involved in archaeology, and introduced to the concepts of CRM through educational and training programs, hands-on experience in archaeology and guided tours of local archaeology sites.

 CRM, as it presently exists, is non-consultative and generally indifferent to significant public participation (Sneed 1989:58). However, public participation in archaeology and CRM is considered by many to be an effective method of managing and conserving archaeological resources (Fowler 1982; Lipe 1984; MacKenzie 1990; Stone 1989). The more involved individuals are in preserving the resources, the greater a public understanding, appreciation and use of them (Lipe 1984:4). As such, public awareness of the fragile nature of archaeological resources can influence social attitudes concerning the nation's archaeological heritage. These public attitudes directly influence the institutions (e.g. government agencies, private corporations and heritage organizations) that financially support the preservation of this resource base. The cumulative effect of public involvement in archaeology can lead to improved government heritage legislation, and provide citizens with a sense of participating in direct action and decisions regarding the preservation of the resource base.

 e) **Native Participation**

 Native Indian participation in the management and decision-making process of their own archaeological resources should be integrated into future CRM policies and plans. The desire by Native Indians for self-government and control over their land and natural resources makes it crucial that Native involvement in the management of archaeological resources also occur.
Greater Native Indian participation in CRM can be achieved through:

1) the provision of more training and technical programs in archaeology and heritage conservation for native communities.

2) greater involvement in archaeological impact assessment studies.

3) access to the government planning and decision-making processes.

4) employment of Native people in provincial archaeology agencies.

5) the establishment of Native Heritage Committees to make recommendations to the Minister for the designation and commemoration of Native sites, objects, places, and people.

f) Community Needs and Values

A community’s economic and social needs and cultural values should be integrated into future CRM plans. In many situations, communities may not have the available financial resources to conserve archaeological resources. A relatively new conservation strategy in CRM is the development of archaeology sites for the local tourism industry as part of a community’s economic development plan. These sites, developed into Native heritage parks, provide employment opportunities and aid in diversifying the local economy.

Social benefits can also be derived from the preservation of cultural resources. These resources can serve as a focal point for the community by functioning as educational and research centers. Cultural resources can contribute to a sense of community and feeling of belonging by helping to keep the past alive. Through economic development of the resource, there is less outward migration of the local population. This in turn provides social stability for the community.

Canada’s human heritage stresses the English and French heritage while neglecting many other ethnic groups who have also contributed to the rich cultural fabric of the country (Nelson 1991:10). The preservation of archaeological resources reaffirms to Native people the value and importance of
their culture. These resources provide Native groups with the physical evidence of knowledge of their past. Archaeological resources can instill in an individual a feeling of pride and self-identity by providing them with a positive identification of the achievements of their ancestors. Therefore, the cultural value of an archaeological resource should be integrated into CRM plans.

6.3 Conclusion

The legal foundation of CRM in Canada was based on using the legal system for controlling land uses. This influence in CRM continues today, and has created a top-down bureaucratic planning approach to managing archaeological resources. This planning approach has resulted in CRM developing in relative isolation from other policies and plans. It is imperative that the field of CRM become more holistic and dynamic. Cultural resources should be closely linked to and integrated with other systems, such as natural resources, the land base, government heritage legislation, community goals and needs, and urban and regional planning functions.

Cultural resources represent the cultural and historic dimension of the environment. These resources compete with man for the land base because the survival of archaeological sites depends on the maintenance of an unmodified landscape. However, society's increasing demands on the land result in problems of conflict when "all of society's or individual's demands on the land resource base cannot be simultaneously satisfied" (Sneed 1989:50). Therefore, protecting the archaeological resource base requires careful management and conservation of the land.

It is necessary to change society's attitude towards cultural resources through increased public involvement in the conservation, management, planning and decision-making processes. It is also necessary to expand the
concepts of CRM into heritage institutions, universities, colleges and public school systems, government departments and private corporations. Many archaeologists and cultural resource managers believe that public participation and public education are the key to a successful CRM plan. Increased public education can generate greater public support for archaeology and CRM. A change in societal attitudes towards this resource base influences politicians, resulting in additional government support for improved heritage legislation and policies.

Finally, it is important to realize all the social, economic and cultural benefits provided by cultural resources. These range from providing information for educational and research purposes, to increasing local employment and economic diversification through community tourism plans, to creating or reviving a feeling of community or cultural pride and identity.

The conservation and preservation of the resource base depends on support not just from the government, but also from the citizens. New conservation strategies currently in operation or under consideration integrate community needs and values into CRM plans. These alternative management methods stress the role of the public and local communities in establishing effective CRM plans.

Finally, this thesis contends that the conservation and management of archaeological resources is the collective responsibility of all levels of governments, community groups, Native Indians, professional archaeologists, and the general public. Therefore, a successful CRM plan is achieved when the interests of all these groups are recognized and integrated into the policy and decision-making processes.

Integrated planning fosters co-operation among the governments by having them share in the responsibility for the archaeological heritage. An
effective integrated plan among government departments, private corporations and citizens can be accomplished by linking community heritage projects through federal and provincial financial and technical assistance (e.g. Heritage Canada’s main street revitalization programs). Integrated planning would also create mutual dependence and integration among all types of resource management policies and planning. Finally, an integrative process co-ordinates community and government heritage goals by: promoting heritage stewardship programs on private and public lands; developing a process whereby appropriate government and non-government persons for make decisions concerning the preservation and designation of archaeological sites; and integrating Native and non-Native community needs into future CRM policies and plans.
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APPENDIX A  EARLY U.S. FEDERAL PRESERVATION ACTS

Antiquities Act of 1906:
passage of this Act was motivated by Congressional interest in preserving the prehistoric ruins at Mesa Verde in Colorado. This Act established federal concern for things of antiquity and of scientific importance. The Act authorized the President to designate prehistoric structures as cultural properties of national significance; delegated rule-making authority to the Departments of the Interior, Agriculture and War; issued permits for surveys and excavations on federal lands; and provided for the prosecution of individuals charged with destroying any object of antiquity situated on federal lands.

The Historic Sites Act of 1935:
established a national policy for the preservation of historic sites, buildings and objects of national significance; listed prehistoric sites of national significance on the National Register of Historic Landmarks; introduced surveys, inventories, research, and preservation programs for archaeological resources; and authorized the Secretary of the Interior to enter into co-operative agreements with intergovernment agencies, state and local governments and individuals to protect and preserve properties.
APPENDIX B  CANADIAN MINISTERS RESPONSIBLE FOR ARCHAEOLOGY

MINISTER OF COMMUNICATIONS: through the Department of State Act, has the mandate to promote and develop cultural activities and programs for libraries, archives, historical resources, museums and galleries.

a) **The Department of Communications Canada**: administers the Cultural Property Export and Import Act. Under this Act archaeological items cannot be exported from Canada without a permit. Permit appeals can be made to the Canadian Cultural Property Export Review Board.

b) **The Canadian Museum of Civilization**: the National Museums Act provides the mandate for the Museum to research, collect and exhibit Canadian artifacts from all periods. The Museum also provides a computerized listing (CHIN) of the designated provincial and federal prehistoric archaeological sites.

MINISTER OF TRANSPORTATION: responsible for canals, railways, marine and air transport.

* **Canada Shipping Act**: Archaeological resources in federal waters may fall under federal jurisdiction if they are considered wrecks as defined in this Act.

MINISTER OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT: responsible for archaeological sites and archaeological items located on reserve lands.

* **Yukon Act & the Northwest Territories Act**: both empower the Governor in Council to make regulations for the protection, care and preservation of archaeological resources.

* **Territorial Lands Act**: provides the mandate for the management of federal Crown lands in the territories; establishes a permit system for excavation of archaeological sites; provides for the notification to authorities if archaeological resources are discovered during land development.

a) **Department of Indian Affairs and Northern Development**: is responsible for all Indian and Inuit affairs, all federal Crown lands in the Yukon and the Northwest Territories, the coordination of federal activities in the territories, and the promotion of knowledge of the North through scientific investigation.

MINISTER OF THE ENVIRONMENT: under the Department of the Environment Act, the Minister is responsible for all policies related to the environment (natural landscapes and cultural heritage) of the country. The Minister is also
responsible for the administration of the Environmental Assessment and Review Process Guidelines through the Federal Environmental Assessment Review Office.

* National Parks Act of 1930: provides the Minister with the mandate for the protection, management and interpretation of the natural and cultural resources (e.g. archaeological sites) located within national parks and national historic parks.

* The Historic Sites and Monuments Act of 1953: established the Historic Sites and Monuments Board of Canada which provides a computer inventory of all heritage structures and buildings of national, provincial and local significance. It also enjoins the Minister to commemorate archaeological sites or structures reflecting aboriginal people and their culture.

a) Canadian Parks Service: protects significant examples of Canada's natural and cultural heritage; establishes, develops and manages national parks, national battlefields, national historic sites, heritage canals and co-operative heritage areas.