

Treaties, Spirituality, and Ecosystems

American Indian Interests in the
Northern Intermontane Region of Western North America

Social Assessment Report
for the
Interior Columbia Basin Ecosystem Management Project
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FINAL REPORT

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L First Nations of the Region

Introduction

As a contribution to the Interior Columbia Basin Ecosystem Management Project, this report provides an introduction to current American Indian interests in the northern intermontane region of western North America and assesses the prospects of tribes pursuing those interests into the 21st century. A primary goal of the Federal interagency project is to develop scientifically sound and ecosystem-based management strategies for forest and range lands under stewardship of the Forest Service and Bureau of Land Management in the greater Pacific Northwest (Fig. 1). As an integral part of the project, a scientific assessment is designed to characterize and assess socio-economic and biophysical conditions throughout the interior Columbia River basin and certain adjoining regions, and to identify emerging issues that relate to ecosystem management. This report, more particularly, contributes to the assessment phase of the project. Given the remarkably broad nature of tribal interests in the region, this report addresses a comisserately wide range of topics. For this reason, the term "cultural resources" as commonly used by agencies over the past two decades has been broadened in meaning. "Cultural resources" in the context of the Interior Columbia Basin Ecosystem Management Project refers to native species (plants and animals), inanimate materials, landforms, archaeological sites, ancestral grounds and other components of the physical environment associated with American Indian traditional use of the region.

Other project-related assessment reports may also address the same topics of interest to tribes, but frequently in more biophysically technical detail. For example, in regard to native vegetation, a key topic in this report from a socio-cultural perspective, other assessments entail: assessing the occurrence of native species and species groups in relation to general landforms; analyzing relevant biogeographic factors and historic habitat ranges; constructing geographic gradient models relating species occurrence to habitat and environmental conditions; and, identifying habitat and environmental variables useful for predicting the occurrence, distribution, abundance, or trend of species and species groups. Most Project assessments are based on habitat and environmental factors rather than empirical data from actual population demography.

Three basic aspects of this report should be clarified. First, this report attempts to convey non-linear thinking into linear concepts. This translation is driven by the legally compelling need to incorporate traditional American Indian interests into mainstream Federal agency land management activities. Secondly, Indian interests are clearly pervasive, complex and sensitive in the region. Therefore, a more detailed systematic accounting of tribal interests for each tribal government entity within more limited geographic areas, particularly in regard to public land management issues, would be more appropriately performed as individual administrative units of Federal agencies pursue subsequent land use planning exercises. These more localized efforts should also provide tribes a more prominent role in describing tribal interests and assessing potential effects posed by proposed actions. This direct involvement is more difficult and awkward on such expansive and "distant" projects as ICBEMP that include interests of a large number of groups. Thirdly, and perhaps most important, this report necessarily assumes an "us

versus them" perspective, contrasting in general terms the traditional tribal world view with the Federal agency "culture." Obvious variation within both domains is largely overlooked in this relatively brief assessment. Both "entities" are composed of individuals living on the same geographic landscapes, operating within familiar socio-economic constraints, and facing many of the same choices affecting the social, economic and environmental health of the region. It may be said this report addresses "institutional" behavior more than individual beliefs and behavior. In addition, tribal concerns and expectations of public land management goals over the next few decades do not differ significantly from many agency viewpoints. As has been pointed out, there is little conflict between tribes' interests in protecting watersheds and the agencies' interests in the management of public lands.

For purposes of this assessment, the northern intermontane region includes all of the interior Columbia River basin south of the United States-Canadian boundary (which includes present-day Oregon and Washington east of the Cascade Mountains, most of Idaho, and portions of western Montana and Wyoming, northeastern Nevada, and a small northwestern corner of Utah) and those portions of the Northern Great Basin and upper Klamath River watershed that lie north of the southern Oregon boundary. The region consists of a physiographically and geologically diverse region. Exemplifying the diversity are the adjoining subregions of the mountainous, forested Okanogan Highlands and the sagebrush-covered Channeled Scabland within the Columbia River basin itself. Equally diverse is the character of Indian tribal governments with interests in the region. Those considered in this report are listed in Table 1.

Table 1. Number of enrolled members and reservation acreage* for each tribal government as of 1995.

Tribe	membership rolls (number of persons)	reservation (acres)
Burns Paiute	274	11,945
Couer d'Alene Tribe	1,290	66,550
Colville Confederated Tribes	7,992	1,068,428
Fort Bidwell Paiute	163	3,334
Fort McDermitt Paiute	816	151,663
Kalispel Tribe	327	4,465
Klamath Tribes	2,914	312
Kootenai Tribe	110	1,924
Nez Perce Tribe	3,170	103,886
Northwest Band of Shoshoni	411	0
Salish & Kootenai Tribes of Flathead	6,792	617,611
Shoshoni-Bannock of Ft. Hall	3,761	493,066
Shoshoni-Paiute of Duck Valley	1,691	289,819
Spokane Tribe	2,121	133,113
Summit Lake Paiute Tribe	117	10,861

Umatilla Conederated Tribes	1,529	84,664
Warm Springs Confederated Tribes	3,468	646,731
Yakama Nation	8,435	1,010,758

* "reservation acreage" refers to lands owned or controlled for tribal purposes that includes various types of land status such as allotted acreage, lands held in trust by the United States, tribally owned lands, and privately owned fee lands.

Recognition of the breadth of American Indian interests and the trust responsibilities of the United States government to protect those interests has shaped the following discussion. The subject of Indian interests in public land management over such a vast area is incredibly complicated due to the complex cultural and legal histories of numerous independent population groups. To address this broad topic in such a brief forum, as this assessment report, information came primarily from the following sources:

- (1) Direct contacts with tribal members and staff has been the most important and informative. Technical resource and land use information, including information on current trends in use and needs, has been offered over the course of the past year by various individuals through meetings and written documents. Reliance on non-Indian interpretations of tribal activities with minimum, if any, direct contact with the affected tribes has been a common and valid criticism from tribes on past federal projects. It is hoped this report attempts to take a step in the proper direction to remedy that problem. This tribal source of information, though knowledgeable opportunistic rather than scientifically systematic in nature, is also complementary to the existing scientific literature, thus providing some degree of verification of the scientific literature from the subject source itself. Indian persons have been sought who could provide as comprehensive a knowledge of the subject and project area as feasible within the short time frame.
- (2) Secondly, a scientific literature search was conducted, focusing on anthropological, ethnohistorical, and ethnobotanical publications and unpublished reports. This body of data is large for the region and produced almost exclusively by non-Indians, primarily within academic institutions. Researchers and other knowledgeable persons have also offered additional, unpublished information through informal contacts, particularly regarding ethnohistory. A few tribal histories do exist written by American Indians and/or sanctioned by the tribes.
- (3) A third substantial source of information which addresses various aspects of traditional culture and current governmental and subsistence issues is the numerous treaties, executive orders, Congressional statutes, and case law.
- (4) Tribal government documents, consisting primarily of tribally approved land use plans, adopted tribal resolutions relevant to resource and land use activities, and unpublished

technical papers addressing resource research activities by tribal staff have been collected. This information provides another source of data on desired land use goals and needs. Unfortunately, this form of information is far from comparable among the large number of tribal entities having interests within the region.

Before discussing specific tribal interests in the region, certain aspects of Indian communities and worldview should be clarified. These factors are discussed through the remainder of this section of the report. Section II briefly summarizes the lengthy and complex legal history for the region which establishes why Indian peoples have interests that government agencies must take into account. Section III discusses those interests, followed by Section IV which identifies issues of today surrounding those interests, and examples of current tribal management strategies employed to address the issues. Finally, Section V explores means to assess implications posed by Project scenarios and future EIS alternatives to tribal interests.

Nature, Ecosystems, and Science

The worldview of persons living within tribal communities with long-term traditional interests in the northern intermontane region varies considerably; however, collectively they often pose a marked contrast to that of the present-day economically dominant "white" culture of the Pacific Northwest as frequently expressed through activities of the public agencies. Relevant to the Interior Columbia Basin Ecosystem Management Project are these fundamental variations in the perception of "nature" and "science" (see Evernden 1992).

In brief, nature is intrinsically spiritual as sacredness is embedded in all phenomena, not something forced on the landscape. As commonly described in anthropological literature, traditional American Indian perceptions are that nature possesses a symbolic content more significant than the visible material content (Murdock 1980: 144). Special insight is required to interpret nature's hidden symbols. In addition to the material content, the environment is populated by spirit beings, some of which are identified with inanimate objects, others with wind, clouds, thunder and fire. Humans gain access to these powers through spirit quests (Spier 1930: 249; Walker 1991: 105). Acquired power is very personal and should not be revealed to others (Murdock 1980: 145; Relander 1986: 41).

This worldview has fundamental implications when addressing issues concerning lands and natural resources. First, attachment to a traditional cosmological perspective is maintained that in turn produces sacred emotional attachment to native plants and animals and to natural landform features. The belief that people are one of thousands of species in a single, common universal cosmological system is basic and contrasts to the more detached science perspective of Federal agencies. For example, in this sense, the agencies manner of implementing the Endangered Species Act is seen as invalid. Though the act addresses management of habitats, it is often applied by agencies on an individual species basis rather than applied to the well-being of all on an ecosystem basis.

The interconnected nature of species relationships leads to another fundamental traditional

belief in that relationships are based on reciprocity. Fear is held by traditionalists that continued human interference with nature at levels of the past several decades will generate forms of supernatural retribution. Therefore, a threat to the lands is perceived as a threat to the entire culture. Despite past tribal economic development activities and future economic growth goals, a common fear and belief in Indian country, particularly among traditionalists, is that non-Indians have wantonly and indiscriminately taken more from the land than they have replaced; in a sense, acting as a dysfunctional component of the system.

A third belief important through the history of U.S.-tribal relations is that if a person leaves their ancestral lands their spirit will be lost forever. Therefore, ties to specific localities are maintained despite socio-economic hardships and barriers introduced. Similarly, for many aspects of the environment, if "locations of sacred sites are divulged, not only will the sites lose their power, but the individual responsible for divulging the information...will suffer serious physical harm" (Treitler 1994: 23). Such consequences apply as well to other forms of information besides locational.

In contrast to the above three points, "science" is based on "observations of nature's *surfaces*" (Ingerson 1994: 377). A fundamental condition of science is that the "facts" of nature be visible to anyone, not confined to an "intellectual elite" (Evernden 1992). Science has thus been perceived as "a fundamentally social activity that allows individual human beings to verify each others' perceptions"; a democratic way of interpreting the natural world (Ingerson 1994: 377). A "resource" to the western technological science worldview has value for its physical properties while to the Indian traditionalist it is also a representation of cultural continuity, often irreplaceable in time and space. This contrast in perception affects agencies' interpretations of cultural sites, perhaps missing or at least under valuing important factors of significance.

As science becomes "institutionalized in laboratories, it loses touch with the local knowledge of everyday experiences" (Kloppenborg 1991: 53). For American Indians, knowledge of the environment is also gained through experience, not observation alone. Consequently, nature is perceived by land managing agencies as an "external, biotic realm," whereas, the tribes' image of nature is a "shared life-world" (Winthrop 1994: 28). In sum, science is considered to be but one way to look at the landscape (DeWalt 1994: 124). In an even narrower perspective, "science" constitutes one model used by a subset of modern U.S. society, with economics, politics, and ethics posing alternatively driven perspectives.

In light of the above considerations, an inherent difficulty (not to mention appropriateness) exists in describing the nature and degree of importance of the various aspects of the intermontane landscape to American Indians. Whereas the natural world is viewed as a "sacred" cyclical relationship of patterns by Indian traditionalists, European cultures consider the natural world in a linear, scientific manner with decision-making involving hierarchical objective thinking. Therefore, English words such as "subsistence," "food," "medicine," and "use" have fundamentally different meanings. All traditional foods may also be "referred to as medicine given their healing qualities for both the body and spirit" (Keith and Corliss 1993). The following statement highlights problems in assessing traditional cultural interests as "resources":

By treating an Indian medicine area as analogous to an owl nesting site or a patch of wetlands, its *cultural character is ignored*. *The significance* of medicines...does not accrue simply from the existence of particular physical substances at particular sites alone; rather, it is inherent in the culturally patterned relationship between the substances, the pristine settings in which they occur, the traditional knowledge of their properties and modes of use held by particular individuals, and the appropriate actions and prayers with which they are collected (Winthrop 1994: 26).

Therefore, what appears on the surface to be "simple food gathering is something much more profound for traditionalists" allowing persons to "define their role in society and provides a link with their ancestral heritage...(constituting) a powerful communion with the forces that create and sustain life on our planet" (Corliss and Keith n.d.). Consequently, culture as a whole is the primary concern for sustainability, not just the individual species or certain habitat types. It is frequently stated that in sustaining and preserving traditional lifeways, the people look back seven generations and look ahead seven generations for measuring the potential implications of potential land uses.

As described by Indian traditionalists, American Indian cultural traditions and the biological systems of which "the peoples" are a part were highly integrated prior to non-Indian settlements with a strongly imbedded belief in communal ownership of the land which persists today. Land, community and religion are integrated as one whole in which all natural entities participate in a "unity of balance" (Deloria 1994: 201). The sacred is embedded in all natural phenomena. It is commonly believed that "each form of life has its own purposes, and there is no form of life that does not have a unique quality" (Deloria 1994: 88). Consequently, with spirituality related directly to the land, impacts to the natural landscape are also impacts to the community's self-identity. Tribal communities contend that "standard Western methodology for cultural assessment cannot be a true reflection of (Indian) experience... (since) all resources are identified clearly within our beliefs, traditions, customs, and legends... (and) cannot be set down on paper in bits and pieces" (Yakima Agency 1993: I-2). The Federal agency process of reductionism in the environmental assessment process largely ignores complex interactions. In addition, much of the spirituality, and therefore significance, associated with the resources is traditionally passed through generations as hidden sacred knowledge. As stated by Deloria (1994: 68), "the nature of revelation at sacred places is often of such personal nature" that it inhibits revealing related locations.

Thus, Land is sacred as it has sustained Indian society through the ages and water is all important, being the "giver of life." Some see water and food as "energies you use in following the path to the other world" (Dick 1991: 10). Spirituality is expressly interwoven in the individual's "whole life". A unity of life is perceived in which "all living things share a creator and a creation" (Deloria 1994: 90).

This attachment to land and water means that sacred sites are not confined or precisely located, and are numerous, diverse in form and not geometrically patterned in contrast to Judeo-Christian religion which creates its own sacred spaces (Walker 1991: 103). For example, Spier

(1930: 100) stated, "There is hardly a mile of Klamath Territory but has its mythical reference." The number of spirits are described as indefinitely large. Accessing this sacredness is a major rite goal in Indian cultures.

A key element of American Indian spirituality is that all animals and plants in the ecosystem share with humankind intelligence and have moral rights and obligations, a perception labelled "animism" in European thought. Humans can change into animals and birds and vice versa. In this way species can communicate and learn from each other. This power extends to the inanimate as well, such as plants, rocks, and natural features (Spier 1930: 93). As Hunn (1990: 232) states, "Animism extends the moral benefits of human society to the entire local ecosystem... One's life literally depends upon maintaining whole this socio-ecological web...Animism suggests a rather different view of the world of nature and of the human place." In a collective sense, Indian peoples consider themselves as guardians or custodians of the Land, rather than owners. American Indians are considered privileged to be able to eat the traditional native foodstuffs and owe thanks to the spirits of the natural world for the variety and wealth of plants and animals.

In sum, American Indians are linked to their environment by careful observation, economic calculation, ritual monitoring, and mythical explanation (Hunn 1980: 14). Natural resources are an important economic necessity with their use primarily orchestrated through myth and ritual associations. Taking of plants is often accompanied by prayers and occasional offerings to the plant spirits to show respect. Ceremonies and religious stories honor the spirits of the fish, animals and plants and teach against overuse. Plants and animals played important roles in the world views of the peoples as reflected in myths and tales. Many species of mammals, reptiles, birds and occasionally insects and fish account for creation of earth and people, establishment of seasons, and setting of food preferences and taboos. For example, salmon has the supernatural power to change form, transform other physical things, and perform superhuman acts (Meyer 1983: 43). They illustrate proper and improper social behavior (Fowler 1986b: 96). Such beliefs relating to the immortality of certain species is common. As Ames and Marshall (1980: 31) have stated, "In the Nez Perce view, people were economically successful because they lived exemplary lives based on 'religious' principles...So by living correctly people found themselves in regions where resources were available."

Such culturally-based perceptions of nature and science must be taken into account when applying scientific assessments to traditional cultural activities and governmental regulatory processes to cultural landscapes. One implication of differing worldviews between agencies and tribal governments is that agencies' data collection is commonly performed in the language of a natural or social scientist, not sufficiently accommodating the general complexity of human behavior or particular cultural sensitivities. The remedy for this shortcoming is the maintenance of more continuous contact and more substantial employment of American Indians. In this context, use of the concept of "ecosystems" essentially serves as a social "tool for holistic and empathetic thinking about nature" that can help bridge the cultural gap (Ingerson 1994: 376).

Given the above considerations, use of the term "subsistence", in reference to broad

geographic traditional Subsistence Ranges, implies more than simply harvesting food. It also implies the gathering of medicines, crafts and industry-related materials, commercial uses, and attachment to ancestral places on the landscape, often in the appearance of landforms. The following sections describe other traditional aspects of Indian communities in the region.

Tribes, Bands, Settlements, and Families

Though having a specific anthropological meaning, the term "tribe" has been historically used in the region to describe every range and degree of organization of American Indian population groups, including linguistic stocks, dialect groups, single settlements or people inhabiting particular geographic areas. Commonly, the term "tribe" has been loosely used for groups of people simply because they spoke the same dialect and did not fight among themselves (Ray 1939: 9; Walker 1985: 10). Despite such perceptions of larger political entities, local autonomy was the rule within the region with individual settlements serving as the basic political unit, if not individual families (Ray 1939: 4). In actuality, the population is fluid where identification of peoples non-Indians has been crude and inexact, having reference to specific subsistence areas or geographic features rather than set groups of people (Ray 1939: 7). A strong sense of social unity is present, however, with individuals related to a number of local groups through immediate ancestral affiliation. The Indian people themselves have traditionally considered such local ethnically mixed groups as social units, a "people" (Ray 1939: 7).

In fact, traditionally each settlement (village) was composed of several families usually wintering together and changing year to year (Ray 1939: 14). This pattern of community autonomy continues today with relatively free movement of individuals and families from one community to another across the region. Traditionally, intermarriage among members of friendly villages geographically not far separated was exceedingly common; still today this results in relatives being distributed over a number of communities (Ray 1935: 116). The more geographically distant groups are the less similar is the sequencing of their traditional resource use schedule, and the less those groups socially interact with one another (Ames and Marshall 1980: 29). This pattern has often developed in direct response to localized resource availability. Consequently, marriages are based not only on geographic proximity, but close economic relations. Kinship ties have often served as the primary basis for social and religious activities involving larger groupings of people (Ray 1939: 9). The politically autonomous groups (settlements, villages and bands) have tended to have ethnic unity in language, subsistence, material culture, social organization, religious beliefs and values (Chalfant 1974a: 150; Suphan 1974a: 110). Settlements would be linked by peaceful trade, intermarriage and participation in each other's ceremonies, and festivals.

A hierarchical ordering of group associations is evident with each grouping bound by blood, geographic proximity, general association, mutual interests, economics, common country and/or dialect. These relationships become more diffuse on the continuum from immediate local groupings to the entire northern intermontane region. Points on the continuum have been given the common labels of "extended family," "village," "band," "tribe," and "native peoples" throughout the region. Each level is composed of a loose association of the more narrow

groupings, such as "band" associations of autonomous villages and individual families (Walker 1985: 14).

As a result of the above factors, the process of naming larger social groupings beyond settlements or communities is somewhat arbitrary - based on linguistic rather than political factors as much as anything - using the name of a particular settlement projected to the larger group (Walker 1985: 13). These larger perceived population units were all nameless from the peoples' point of view. As Ray (1939: 8-9) observed, "The people themselves had no such common names and no common organization". Historically used names were usually derived from single village names (Nespelem, Kittitas) or French-Canadian and English derivation (Colville, Columbia) or derived from local stream names. A number of tribal or band names are Anglicized forms of the native names, such as the Colville tribes of the Methow, Chelan, Entiat, and Wenatchi (Ray 1975: 11). Traditional names, such as Nimipu for Nez Perce, are used less today (Ray 1936: 116). To further confuse the record, Lewis and Clark largely acquired their Salish names from Shoshonean and possibly Sahaptin informants (Chalfant 1974b: 33). Also, the same geographic grouping of people in early history were often referred to by different names or the name assigned to one group applied to other groups in the same general subregion of the Columbia Basin (Fuller 1974: 33).

"Tribal" names have become fixed through the Federal recognition process, through treaties, creation of Indian Reorganization Act (IRA) governments, and other more recent governmental interactions. Therefore, "tribe" in the modern-day sense is used for administrative and political purposes. Though "tribes" are commonly plural in titles (e.g., Confederated Tribes of the Warm Springs Reservation), the groups are treated politically as a single tribe (Cohen 1971: 268).

Reference to "ethnic groupings" has often been used to avoid the formal political connotations of the terms "village," "band," and "tribe." Indeed, the distinguishing of geographically associated groups occurred prior to federal government and non-Indian settlement influences. As an example, the Spokanes considered themselves distinctive from Kalispel, Coeur d'Alene, Sanpoil and Colville groups at the time of first contact (Anastasio 1974: 145). Another example is the identification of two major linguistically-based Salish groups: northeastern (Flathead, Pend d'Oreille, Upper Spokane, and Kalispel) and central (Lower Spokane, Colville, Sanpoil, Nespelem, South Okanogan and Columbia) (Ray 1936). Adoption of the reservation system, however, led to extensive population concentration and redistribution (Walker 1985: 14).

In terms of land use then, population groups who used many common subsistence areas were heterogeneous, comprising families from many ethnic groups with local autonomy the rule (Ray 1939: 7). These small nuclear groups were held together by family ties and common residence, having long term standing and greater stability than the named task groups. But the mobility during the food gathering season caused even these units to break temporarily into independent camps and at other times to associate in large informal congregations for common harvest of resources (Liljeblad 1960: 17). This is consistent with the highly mobile nature of subsistence quest. Of basic importance here is recognition of the ethnic groups represented by

each present-day governmental entity and their accustomed range of annual activities.

Alliances have traditionally formed at times - leading to extensive "continual interaction" throughout the region commonly with a socio-economic emphasis on commerce and trade, but often at times of conflict with others as well (Suphan 1974a: 89). Currently, these alliances take the form of the Columbia River Inter-tribal Fisheries Commission, Affiliated Tribes of the Northwest, and other tribally-sponsored organizations. Traditionally, resident groups would band together only for certain specific purposes in certain seasons; such organization would become non-existent when no need for cooperative efforts persisted (Chalfant 1974c: 18 1). These multiple village alliances would normally compose ethnic, social or linguistic units, and, at times, political. As stated above, these alliance were based on common habitat, culture, language, and blood ties (Suphan 1974b: 31).

As described above, people often travelled in "inter-ethnic aggregations." Such groupings were traditionally led by heads of families and noted warriors, with a "spokesman" selected to serve as council chairman and moderator, but with no real political clout (Suphan 1974a: 101). Decisions were normally reached by majority vote, but with unanimous support always sought. Confusion was introduced when non-Indians considered these spokesmen as "chiefs" having decision-making authority. Other specialists were also chosen at times to be in charge of some temporary activity (ceremonies, campsite selection, hunting, fishing, etc.). Qualifications of a "chief" or leader include: sound judgement, skill in arbitration, truthfulness, generosity and kindness to fellow villagers - basically one having respect and influence (Suphan 1974b: 26). Subsistence forays were led by persons highly skilled in types of hunting or gathering, familiar with the area and with strong spirit helpers (Chalfant 1974a: 113). Prestige gained from hunting and fishing skills is an important social ranking factor. In sum, traditional leaders relied more on the power of persuasion and persistence than direct political power (Anastasio 1974: 156). With the establishment of governments under the Indian Reorganization Act and the adoption of corporate charters or constitutions, a new leadership system was added, at times conflicting with the traditional system.

In sum, there are a number of ways of viewing relationships among Indian peoples of the northern intermontane which question the validity of named groups at all. The function of the names have also altered through time. For instance, "Spokane" originally derived from a settlement location and became attached to a linguistic unit but also has been used for ethnic reference and has become now a governing body formed by several groups called the Spokane Business Council. In referring to groups, one must choose between (1) treaty designations, (2) ethnographically defined bands, (3) historical identifications, and (4) 20th century established governmental entities, if not other alternatives. Tribal names continue to change today consistent with tribes' efforts to further establish their identities, both internally and with the non-Indian world (Churchill 1992).

The diverse Indian population of the region persists today in that each "tribe" or grouping of "tribes" has its own particular history, value system, government, language and social ties that give each community its own identity. The numerous reservations in the region (see Fig. 2)

provide the "core of Plateau Indian cultural continuity...a physical, social, and economic refuge" (Hunn 1990: 274). In addition, many off-reservation resident Indians maintain a strong commitment to traditional culture through reservation-based activities and associations.

Ownership and Boundaries

The fluidity of population and reliance on extended families has substantial implications regarding "ownership" of land and resources. Aboriginal title has never been considered fee title by United States courts, but rather resting on prior use and occupancy (Cohen 1971). Generally, most people were free to hunt and gather across the landscape (Hunn 1986). In the interior Columbia Basin, fishing sites and particularly productive root grounds close to villages "belonged" to families of that village, even being given family names. Other subsistence areas, normally more distant from permanent settlements, were not owned, but jointly shared (Ray 1939: 16). "Uninhabited lands," where substantial settlements were rare, were doubtlessly extensive in some mountainous and desert regions and were usually used by peoples from the various neighboring areas (Blyth 1938: 403). Many areas of southeast Oregon appeared "unoccupied," with no immediately "resident" communities. High mobility negated "strict territorial delimitations," and the groups' names could change with the seasons of the year and the corresponding food they ate (Harris 1938: 408).

Though no land was traditionally "owned," there are areas (settlement locations and fishing stations) under "control" of tribal entities. Therefore, perhaps "boundaries" best represent a general range in course of the annual subsistence quest centered around a core settlement area or homeland with increasing political control toward the central core area. In many cases, areas of more permanent settlement were well enough defined or localized so that geographic gaps were recognized by local populations (Ray 1939: 16). As an example, while Sahaptin-speaking peoples were free to move among those people who shared their language, strict protocol was likely observed--as it is today--in deference to the territorial needs of other hunter/fishermen. Recognition by the Federal government of this "exclusive" control for many groups was gained through the Claims Commission process in the 1950s and 1960s (Beckham 1991).

In other words, boundaries between settlement clusters or "tribal" areas were not fixed lines, but rather marginal areas commonly used by many groups. Boundaries may often be conceptualized in geographic formations or areas of change (transitions) - which can be ethnic, linguistic, or social (Chalfant 1974c: 193). Similarly, cultural boundaries are not evident and of little relevance in the region. The Dalles/Celilo Falls area where socio-economic interaction was intense represented a linguistic boundary between Chinookan and Sahaptin speaking peoples, but not a cultural boundary (Suphan 1974b: 21). Similarly, the major linguistic boundary between Salish and Sahaptin peoples in eastern Washington does not reflect cultural transitions either (Chalfant 1974d: 359).

Simply put, "there were no territorial lines of demarkation between territories" as normally conceptualized in Euro-American terms (Suphan 1974a: 122). Boundaries are more appropriately viewed as lines of balance. The economic activities of most peoples in the region had

tremendous geographic range with areas outside of a normal range being used sporadically by limited numbers and being secondary to the annual subsistence pattern (Chalfant 1974a: 157). In addition, there were varying degrees of land utilization within primary traditional subsistence areas with parts being used seasonally by peoples from other areas (Chalfant 1974a: 163). In sum, throughout much of the intermontane, individual ethnic groups had primary use of core areas surrounded by less intensively used and overlapping hinterlands. This pattern was less distinct in the northern Great Basin and upper Snake River Plain region where mobility was considerably greater. In general though, peoples from various directions jointly used areas and it is still customary to meet at various places during the summer season for the purpose of trading and social intercourse.

It should be noted that non-Indians, including those in public land management positions, have commonly considered treaty-defined ceded boundaries as lines demarcating tribal areas of interest. However, ceded treaty boundaries were commonly defined by U.S. treaty negotiators prior to treaty council meetings (Richards 1993). Case law since has ruled that these imposed ceded boundaries are not inclusive of all the subsistence areas traditionally used by the respective peoples and consequently serve only a limited function in defining tribal interests in the region.

Population Disruptions

Indian peoples have withstood a constant barrage of actions leading to erosion of the land base, water rights, resource loss, and desecration of sacred sites and places. The impacts occur within the realms of culture, society, and economy. It has been surmised by some that the population of the Columbia region was possibly its greatest around 1780 (Chalfant 1974e: 206). Regular trade with non-Indian nations began by sea in 1788 thus leading to the introduction of exotic diseases to the Northwest Indian population through more direct contact and perhaps for the first time. Such events include an 1823 great fever apparently limited to Lower Chinook peoples to the west, an 1846 smallpox epidemic east to Nez Perce country, an 1847 measles epidemic among the Cayuse and others, and an 1852-3 smallpox epidemic throughout Washington and northern Idaho which wiped out whole villages (see Boyd 1985, Campbell 1988). Others have suggested that catastrophic population losses began earlier due to indirect transmission of exotic diseases, followed by the episodes mentioned above (Campbell 1988). In addition to impacts due to disease were several decades of sporadic hostilities and friction with the military, settlers and miners, and the final relocation to reservations.

Regardless of the timing and sequence of events, the result is the same, a great loss in population and culture through the 18th and 19th centuries. One possible consequence attributed to the widespread decimation was the reaffiliation of groups (Chalfant 1974c: 176). Recently Walker (1993a: 141) has described a process by which local food-named groups became "quickly absorbed into larger composite bands with regional names such as Lemhi Shoshone-Bannock or Fort Hall Shoshoni-Bannock." The group names survived as "hunting districts" named in the Fort Bridger Shoshoni-Bannock Treaty of 1868.

Though now disconnected geographically, communities are still connected through a

common history, a web of kin relations, similar traditional subsistence activity, and religion, and have maintained a distinct identity system. However, "the people" are best defined by "identification with a territory", and groups today still suffer from enmity of other groups they have been forced to share reservations with and from losing title to homelands at first and then, in many cases, reservation lands. Some people were given their choice of which reservation to relocate to, others were assigned involuntarily. The U.S. has frequently failed to protect Indians from illegal encroachments on even the lands reserved by Congress or executive order for exclusive Indian use (Ray 1974a: 260). Communities nonetheless persisted, engaged in conflict with external agents over issues of political, demographic, ecclesiastical, and economic incorporation. For example, despite continued efforts at assimilation into the U.S. population, with certain periods of intense pressure, tribal communities have rarely adopted "an urban middle class economic ethic of individual acquisition and saving for personal gain" rather it is "a society organized on principles of reciprocity and sharing" (Meyer 1983: 32, from Schuster 1975: 59). The people became quickly sophisticated in interaction with federal agencies and private corporations making use of legal institutions. Skills have been developed as survival strategies, making strong use of extended family networks, patterns of mutual aid, sharing of resources (including development of communal commercial enterprises such as agricultural and livestock cooperatives and industrial parks), and formation of governments based on European-derived political principles.

Federally-Recognized Governments

A number of sources discuss late pre-contact tribal distributions in the northern intermontane and offer a number of theories concerning population movements (Berreman 1937; Anastacio 1972; Fowler 1986a; Garth 1964; Ray 1939, 1960; Ray et. al 1938; Aikens and Witherspoon 1986). Though intrusion of non-Indians introduced dramatic disruptions in traditional lifeways, rapid depopulation, and dislocations, the distribution of modern-day tribal communities throughout the northern intermontane generally mirrors pre-contact times with the attachment to ancestral lands still largely intact (Fig. 3 and 4).

Effects on the Indian settlement patterns by non-Indian exploration and settlement through the 19th century was variable in the northern intermontane region. Though demographic and environmental effects of non-Indian intrusion into the interior Northwest was first felt along the Oregon Trail emigrant route early in the 1840s and 1850s, population displacements in some more "out of the way" sub-basins did not occur until after 1900 (Ray 1936: 99).

On a broad geographic scale the project region may be culturally considered in three general regions, somewhat congruent with the physiographic regions.

1. Columbia Plateau Region: The southern portion of the basin was primarily used by Sahaptin-speaking groups, including the Nez Perce, Cayuse, Tenino, Wyam, John Day, Tygh, Umatillas, Wanapum, Wallulapum, Klickitat, and Palus. Though the various groups were politically independent, related dialects were spoken and many customs shared. Also on the Columbia River were the Chinookan-speaking Wishram and Wascos. To the

north were numerous Salish-speaking groups, including Wenatchee, Entiat, Methow, Chalan, Colville, Nespelem, Sanpoil, Kalispel, Spokane, Coeur d'Alene, Pend Oreille, and Flathead, and the Kitunahan-speaking Kutenai of northern Idaho and northwest Montana. These large linguistic groups may be characterized by numerous dialects. For instance, Sahaptin is a complex of some 15 dialects spoken by peoples now mostly on the Yakama, Warm Springs and Umatilla reservations. As noted above, basically all groups in the region are related to one another by blood and marriage, linguistics, traditions, history, or religion. The traditional economic systems of these Plateau groups are varied, with major factors being latitude, elevation, and such landform features as the historic obstacle to salmon at Kettle Falls blocking anadromous fish from much of the upper Columbia region. The current land base is largely in the form of a number of reservations and widely scattered allotments.

2. **Upper Klamath Region:** The region was traditionally utilized by the Klamath, Modoc and Northern Paiute (Spier 1930; Ray 1942). The Modocs lived along Lost River and the Klamaths around Klamath Lake, Agency Lake, and the Williamson River. These groups are culturally similar to the Columbia Plateau groups with added California and Great Basin influences, and, in fact, have overlapping subsistence areas with the Plateau Sahaptin groups in the upper Deschutes River drainage. These people have little land base at present due to past Congressional actions.
3. **Great Basin/Upper Snake Plain Region:** The relatively more mobile Shoshonean-speaking (Paiute, Shoshoni, and Bannock) groups were the principal communities of the interior draining northern Great Basin and much of the upper Snake River country. This region represented the lowest populated density in the intermontane as each family roamed about on its own and winter villages were often less permanently based than to the north and west. The high mobility and broad dispersion is still reflected in the distribution of settlements today, including Warm Springs, Burns, Yakama, Klamath, Duck Valley, Fort Hall, Ft. Bidwell and Ft. McDermitt.

Characteristics of each of the modern-day federally-recognized tribal communities are described in Appendix A.

Non-Federally Recognized Indian Communities

In addition to the above Federally-recognized tribes, there are also non-recognized traditional Indian communities in the region, including some who never negotiated treaties, moved to reservations, or sought Federal recognition or assistance. Consequently, these groups do not have a government to government relationship with the United States. Traditional use ties to their ancestral lands are asserted through claims of prior occupancy and demonstrating perpetual use of ancestral lands.

One non-recognized group in the region is the Wanapum, located in the Priest Rapids area

of the Columbia River near their traditional village site. They remain today one of the more conservative, traditional groups still maintaining an off-reservation residential status (Relander 1986: 30; Ray 1936: 111; Ray et. al 1938: 393). The traditional Wanapum homeland included both banks of the Columbia River from above Crab Creek downstream to the mouth of the Snake River, with primary settlement at Priest Rapids on the west bank as mentioned above (Ray 1936: 151; Suphan 1974a: 141). Mat-covered lodges persisted at Priest Rapids as late as 1955 (Ray 1974b: 381). The Wanapum settlement served as a great rendezvous for salmon fishing and trade. The Wanapum subsistence area includes Saddle Mountain eastward to Ephrata and an important subsistence area on the east bank near Waterville (Chalfant 1974f: 297). Their areas were shared with Wallawallas, Umatilla, Cayuse, Nez Perce and Yakama. Though their homeland was ceded to the United States in the 1855 Yakama Treaty, they were not signatories to the treaty. The fourteen bands that were signatory to the Yakama treaty in essence not only ceded their own territories but a vast tract east of the Columbia River occupied by non-signatory Columbia Salish groups (Chalfant 1974f: 271). Being a strongly traditionalist group and the home of the prophet Smohalla in the mid-1800s, the Wanapum have maintained their independence from the U.S. Government and other tribes and, in fact, attracted other traditionalists avoiding reservations (Ruby and Brown 1992: 260). An agreement with Washington State in 1939 provided for the group to take fish for personal and ceremonial use. In 1957 an agreement was signed with Washington's Grant County Public Utility District which waived future claims against the Priest Rapids Dam and assured the group rights to continue to hunt and fish on lands and waters of the project. Other groups, such as the Palus and other Snake River peoples, also spurned treaties (Hunn 1990: 270).

Several Indian organizations that are not traditional groups also serve tribes in the region. They do not themselves have governmental status or traditional claims in the region directly. But they do formally represent tribal views or positions on many issues. Some are inter-tribal organizations, including the Columbia River Inter-tribal Fish Commission, Affiliated Tribes of Northwest Indians, Upper Columbia United Tribes, and Native American Business Alliance. These organizations play an integral role in representing regional Indian policy and influencing U.S. public land and economic policy.

Tribal Economies

Traditional economic relations are extensive and complex. Even prior to non-Indian settlement, the mid-Columbia tribes served as wholesalers and retailers on an extended trade network stretching from the Plains to the Pacific Coast. The traditional annual economic cycle was composed primarily of two phases: winter life along the main rivers or lower elevations, and semi-nomadic summers on plateaus and higher ground in quest of various products with seasonal uses of major fisheries (Hunn 1990). All groups scattered across the countryside for most of the year gathering roots and berries, hunting, fishing, visiting and trading. Though such residential mobility has essentially ceased today, the same annual geographic shifts in resource emphasis continue today. Tribes still view trade and commerce as central to economic and political self-sufficiency. Accordingly, new trading partners are seen along the Pacific Rim. The importance

of different products in local economies vary from group to group according to ecological differences in local environments. In addition to the inter-tribe flow of goods, an active intra-tribal system of exchange is also in place. Individual accumulation of goods is established for purposes of "giveways" which allows increased social stature. In addition, there is exchange through gambling, both within and between tribes.

The traditional economies of several of the northern intermontane groups changed significantly by the mid-1700s with acquisition of horses from the south (Haines 1938). The horse replaced canoe and water travel, and introduced new kinds of goods. Settlement locations changed in some cases, moving to more open, grassy areas for livestock grazing purposes away from traditional lakeside sites (Chalfant 1974c: 185). Mobility increased dramatically for those with horses and, consequently, economic power. The geographic range of contacts for these groups greatly expanded, such as the Cayuse of northern Oregon who established economic relations with the Flathead tribes of western Montana and Crows on the Plains.

Upon arrival of non-Indians in the region, traditional economies continued to experience substantial changes (see Reichwein 1988). Initial contacts with non-Indian peoples in the late 18th century and early 19th century were strictly economic in nature. Arrival of fur traders in the early 19th century further expanded the trade network outside western North America. Initially tribes controlled some traders' forts, providing security and taxing exported goods. For example, the Spokane House management paid tribute to the Spokane people (Anastasio 1974: 149). As discussed above, at least by the 1830s disease had decimated the populations of many American Indian tribes in the Northwest, thus substantially undercutting the economic foundation of the communities and creating losses in culture, including disruption of oral history traditions. Disease, in addition to increased non-Indian incursions and impacts on regional resources, led to many conflicts through the mid-1800s. On the plains and hills of the mid-Columbia region, bunchgrass originally grew to luxurious heights of 3 feet; it was replaced by sagebrush in the 1900s (Ray 1974b: 381). At the same time, establishment of the Oregon Trail and the flood of emigrants across the route provided another trade opportunity. Natural foods and garden products were being traded for a variety of goods. The introduction of stockraising and limited agricultural practices brought additional significant changes in native economy by mid-1800s (Chalfant 1974f: 287). Traditional economies for the interior Columbia Basin tribes continued to function to some degree with the addition of modified lifeways into the 1880s. In the far northern Columbia basin, native life was described as little disturbed until the 20th century (Ray 1974b: 380).

Passage of the Dawes Act in 1887 introducing the allotment period (see Section II) further abruptly disrupted many of the remaining economic traditions by dramatically reducing tribal control of an economic land base. The Confederated Tribes of the Umatilla Indian Reservation was one of the first and more severely affected by the allotment process in the Northwest. Landless with natural foods destroyed or access hindered, the people eked out a living through manual and domestic labor; still with inadequate land base to support economic self-sufficiency, they continue to depend on outside labor and wage for subsistence associated with acculturation trends. Some economies still functioned, even during the economic depression era of the 1930s,

due to the abundant fisheries available. However, further substantial disruption in the 1950s occurred through the tribal government termination actions of the U.S. government, with The Klamath Tribes being the most affected in the United States. Also, by this time additional fragmentation of allotments occurred as remaining allotments were further subdivided and passed on to heirs. Perhaps the most dramatic survival period for tribal economies occurred during the 1950s and 1960s.

In sum, a dramatic shift in the regional economic balance between Indian communities and non-Indian society occurred during the 19th century. Due to the decreasing access and availability of resources, the cost of acquisition for different resources increased and the net return declined with effort. Production of foods, medicines, and industrial raw materials became much more restricted through time. Boosting the economies in the 1960s was the award of a number of sizable monetary settlements for land claims successfully argued. Also, twenty-five western North American tribes, including several from the Northwest region, filed a claim concerning mismanagement of Indian Claims Commission judgement funds and of other funds held in trust by the United States (Ruby and Brown 1992: 195). Resulting awards for several of the northern intermontane tribes were in the millions of dollars.

As traditional economic activities became less feasible, dependence on non-traditional economies grew, and eventually tribes were largely drawn into the national market economy. This significant transition in economies may often have been associated with a corresponding "cultural disjunction as corporate interests and enterprises replace family and community-based production systems" (DeWalt 1994: 124). By the 1970s economic recovery boosted by increased tribal authority began to take effect. Use of off-reservation treaty resources supported by the *U.S. v. Oregon* (1969) decision began to increasingly contribute to the economies for many groups striving for self-governance through authority provided by the Indian Self-Determination and Education Assistance Act of 1975. Correspondingly, tribes began to become involved in public land management decision processes, aided by passage of several regulatory Congressional acts. The economic recovery continued to escalate into the current decade though off-reservation treaty resources continued to diminish through increased competition and environmental degradation.

This economic recovery is based in part on changing uses of natural resources. In conformance with the National Indian Forest Resources Management Act, an assessment of the status of Indian forest resources was recently performed. As noted in the resultant report, "Indian forests are vital to tribal communities...(which) provides the backbone of economic activity in many locations" (Indian Forest Management Act Team 1993: 1). Eight tribes in the northern intermontane region were recognized as having over 100,000 acres of commercial timberland or over one million board feet allowable cut (Coeur d'Alene, Colville, Flathead, Nez Perce, Spokane, Umatilla, Warm Springs, and Yakama). Three other reservations contained lesser, but still economically viable, timberlands (Fort Hall, Kalispel, and Fort Bidwell). Through self-determination policies of the past two decades, tribes are assuming more of the forestry functions from the BIA. As with the Federal agencies, ecosystem management-based strategies emphasizing maintenance of ecological processes over commodity production is gaining increased attention with tribes taking a stronger leadership position in their development. Within this shift

in focus, means still available for increasing income and other benefits from timber harvests have been identified. Integrated resource management plans (IRMP) have become the preferred means of guiding land use as demonstrated by the Colville and Yakama tribes among others in the region. However, a shortage of funding and resource management expertise are problems hindering timely development of such plans.

At present, a major emphasis is focused on reestablishing a land base, seen as critical for continued economic growth. An example of current efforts to re-acquire land is the Yakamas' efforts to gain surplus land on the Hanford Nuclear Reservation. It is an area where teachings and rituals are still practiced today. Related to the acquisition of lands, the governors of Oregon and Washington and U.S. secretary of energy agreed to share decision-making authority over the Hanford Nuclear Reservation cleanup with Yakama, Nez Perce, and Umatilla.

Various factors must be considered when assessing modern-day economic impacts to Indian populations in the region. Such factors identified by economists include generational compounding of low employment (Meyer 1983). Additional social costs of economic declines also result from low mobility potentials of Indians, because of the limited size of homelands when compared to the entire United States available for non-Indian American citizens.

Since the disastrous consequences of allotment and termination on tribal economies and passage of the Indian Reorganization Act, many subsequent developments have been Indian-initiated and directed. Meyer (1983), in a discussion of the economic and non-economic importance of Columbia River fisheries to tribal communities, has described some factors influencing tribal efforts toward economic growth. One major factor is their rural nature. Another is the fact that "where primary production is generally exported and finished products generally imported, self-sufficiency is not likely, and poverty is the predictable result" (Meyer 1983: 6). The development of economic activities based on "own" resources with broad involvement of community members does present a general remedial measure. Similarly, an objective expressed by BIA in 1972 was development of truly Indian economic systems so that dollars can be kept moving throughout an Indian economy. Historically, the "resources of Indian reservations have been regularly exploited...leading to the drastic diminution of the Indian land and resource base...(and) this necessitates stringent resource protection" efforts on behalf of the tribes (Meyer 1983: 7).

Benefits of resource uses to a community can take several forms: physical production, dollar revenue from sales, employment, social and psychological well-being. Values can include "existence" values (just knowing the resource exists in natural state is sufficient) and "vicarious" values (knowing the resource remains available for some other group is sufficient). Another factor is "social time preference" which represents the relative importance that a community assigns to the current generation and to successive generations when balancing the consumption rate of resources (Meyer 1983: 8). This factor marks a major distinction between tribal and United States societies with tribal emphasis on several generations forward and back. Tribal communities are now seeking to "merge traditional cultural concern and experience with effective product development for the modern markets" (Meyer 1983: 32).

Resource management capabilities vary significantly between tribes, "as does degree of tribal control over resources" (Meyer 1983: 16). As Meyer (1983: 34) has observed, "On all reservations, the economic base is narrow, and dependent on one, or at most two, natural resource related activities for economic sustenance." The allotment of substantial portions of trust lands, including timbered and agricultural lands, to individuals has greatly complicated land management and economic development initiatives (IFMAT 1993: 13). Warm Springs and Yakama were relatively better off during most of the 20th century in economic terms since they were better able to fend off non-Indian efforts at acquiring Indian lands and resources. The Umatilla and Nez Perce, on the other hand, have suffered severe depletion of this resource base (Meyer 1983: 35). On all reservations per capita income is substantially lower than non-Indians in the Northwest.

Efforts at promoting economic growth are as diverse as the tribal communities themselves. Presently, casino development and gaming is seen as a relatively quick way to boost employment and build capital for land acquisition and investment in other economic endeavors. A large amount of political turmoil on reservations today is between traditionalists and "the more assimilated people" over the use of land resources. The latter group views land as an economic resource, the former as a homeland to be lived in a sacred manner (Deloria 1994: 212). In either case, these lands are the "permanent homelands where Indians live intimately with the environmental and economic consequences" of their decisions (IFMAT 1993: 14). In addition, economic development programs have caused population shifts, breaking down traditional bonds, and causing social stress. Characteristics of each of the tribal economies are individually described in Appendix A.

II. Legal History

The appropriateness of Indian peoples having interests in public lands is often questioned and not understood by not only the general public but even Federal agency personnel. Consequently, recognition of the legal status of tribes is normally an initial issue to be resolved in establishing collaborative relationships between agencies and tribes. Relevant issues revolve around sovereignty, trust status, self-determination, self-governance, access to sacred places, and harvest of traditional foods and medicines. In addition, the relationship between the Federal government and tribes today is strongly influenced by the many legal events occurring in the past. Those agency and tribal personnel who "sit at the table of dialogue" today carry this "baggage" of legal history with them, despite their lack of personal involvement in the past. For both reasons given above, it is important to summarize the trends and general character of past events.

For over two centuries, federal policy towards Indian peoples has been caught in vacillation between two conflicting themes: self-sufficiency/self-governance and assimilation (Getches et. al 1993: 2). From the geographic vantage point of the Pacific Northwest, the legal history may be conceptualized in four distinctive time periods. The first, prior to 1850, is the pre-treaty period for the Pacific Northwest, a time of escalating interaction between cultures in the region and a great loss of population due to introduced exotic diseases. The 1850-1871 time period was one of intense interaction with treaties being negotiated as the land base was rapidly lost and open hostilities were occurring on a recurrent basis. The third period, 1871-1971, is marked by the oscillation of federal policy, from assimilation to self-sufficiency and back to assimilation. The final period, 1971-1995, is one of increasing self-sufficiency, self-governance, and economic growth.

Pre-1850: Formulation of Federal Policy

From initial non-Indian settlement of the east coast of North America dating back to 1532, Indian tribes were considered as sovereign and independent political entities by European nations and functioned as such. Spain established principles of Indian title and consent requirement as early as the 16th century and these continued to influence international law through the 18th century (Cohen 1971: 47; Getches et. al 1993: 50). Thus, tribal sovereignty was recognized prior to creation of the United States and Indian tribes were, from the beginnings of the Federal/Indian relationship, recognized as powers capable of making treaties (Cohen 1971: 274). The United States inherited from England the conflicting policies of recognition of Indian sovereignty within the context of "right of discovery." The latter policy gave title to the discoverer subject only to the Indians right of occupancy (Cohen 1971: 46). In 1775, the Continental Congress as one of its first acts "declared its jurisdiction over Indian tribes (and)...to treat with the Indians" (Cohen 1971: 9). The Northwest Ordinance of 1787 reaffirmed this recognition of sovereignty to tribal groups (Cohen 1971: 69). Correspondingly, the Constitution, drafted also in 1787 and adopted in 1789, acknowledged the sovereign status of Indian Tribes and recognized Indian treaties as part of the "supreme law of the land" (Cohen 1971: 34). The Indian Trade and Intercourse Act of 1790 was the first of several temporary acts passed in the 1790s, defining Federal rights and

duties toward Indian nations (Cohen 1971: 69). These policies ultimately became the cornerstone of U.S. Indian policy and became permanently expressed in the Indian Trade and Intercourse Act of 1834 (Getches et. al 1993: 99). Marking the outlines of Federal Indian law, the act established treaty making policy and the reservation system, and asserted that land and other property could not be taken from Indians without their consent. The 1834 Act further expressed the power the Constitution gave Congress over Indian tribes and provided a new definition of Indian Country by recognizing American Indian "title" throughout most of the United States west of the Mississippi River. This act was described by Cohen (1971: 73) in 1941 as "perhaps the most significant date in the history of Indian legislation."

A series of three Supreme Court decisions, referred to as the Marshall Trilogy, were issued on between 1823 and 1831. Established were the Discovery Doctrine in which only the federal government has preemptive right to procure Indian land; identification of the trust responsibility of the Federal government, with Indian tribes having status of sovereign, domestic dependent nations who do not have power to make treaties with foreign countries; and, the Supremacy Clause which holds that treaties take precedence over State laws (Cohen 1971: 274; Getches et. al 1993: 122). Thus, by the mid-1830s U.S. Indian policy was well established and the fundamentals remain basic to today's Federal agency activities.

In 1848, the Oregon Territory was created by the Organic Act which extended the Northwest Ordinance's confirmation of Indian title to land in the new U.S. territory. It also recognized the treaty process by asserting that lands not expressly ceded by ratified treaty constitute Indian Country. The act also established the Superintendent of Indian Affairs position.

1850-1871: **The Treaty Period**

An aggressive policy in the Pacific Northwest of securing land for non-Indian settlers through treaties began in 1850 (Coan 1922). Passage of the Act of June 5, 1850 established a program for implementing Indian policy in Oregon Territory. It created a Treaty Commission and extended the 1834 Indian Trade and Intercourse Act to Oregon. However, in direct contradiction was the Oregon Donation Act of 1850 (9 Stat. 496, amended by 10 Stat. 158) which ultimately provided patent (7,437 claims in Oregon and 1,018 in Washington) to land totalling 2.8 million acres. Title to these lands went to new settlers of the Territory beginning prior to the ratification of any treaties of land cession in the Pacific Northwest. This action was contrary to established U.S. Indian policy and, not unexpectedly, created considerable tension in the region evident through the present day. Further tension was added with passage of a Congressional act on March 2, 1853 creating the Washington Territory from part of the previous Oregon Territory, thereby extending the Donation Land Act to that territory and encouraging settlers to dispossess long established Indian communities.

The period of 1854-55 was particularly one of increasing stress between Indians and non-Indians in the region, given the following factors: (1) the significant Indian population decline due to recurring epidemics; (2) encroachment and seizure of Indian lands authorized by Congressional acts in contradiction to long established United States Indian policy; (3) rapid

destruction of Indian food resources; (4) non-ratification of Indian treaties negotiated with western Oregon tribes in 1851; and, (5) the persistent overt hatred and mutual fear and distrust between both communities (Beckham 1984: 33). The very short time frame allowed for negotiation of the treaties by the United States enhanced bitter feelings, despair, and latent hostility.

In Oregon 34 treaties were negotiated with tribes, but many were never ratified, causing frustration and confusion between tribes and the United States. In 1855 various native groups in the interior Columbia Basin entered into five treaties with Washington Territorial Governor Isaac Stevens representing the United States (see Appendix B). Each of these treaties reserved rights for the tribes to continue off-reservation subsistence activities. The treaties contain virtually identical language, reserving "the right of taking fish at all usual and accustomed places in common with citizens of the Territory ... together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle on open and unclaimed land" (Kappler 1904: 714). A primary goal of the tribes in treaty negotiations was the preservation of their traditional economies and cultures. The reservation of pre-existing rights included the right to take any species without species limitation unless the right was expressly ceded.

Another key treaty in the region, the Treaty of Fort Bridger (15 Stat. 673), was negotiated in 1868 with the Shoshone-Bannock tribes. The treaty reserved "the right to hunt on the unoccupied lands of the United States." Subsequent case law, the 1972 case of *State v. Tinno*, interpreted the "right to hunt" to extend to fishing and gathering seemingly comparable to the 1855 Stevens treaties. The Court agreed that the Indian peoples expected rights to harvest food on the unsettled lands as a means of subsistence and an integral part of their way of life.

The treaties were controversial from both the United States and Indian peoples' perspectives. Some people in the federal government felt the treaty process was a farce and that it would be more equitable for the government to dictate benevolent terms. The treaties are commonly perceived by Indian peoples as "coerced agreements" in which ceded boundaries were pre-determined by U.S. agents prior to the actual treaty councils with tribal "representatives" (Yakima Agency 1993: 1-2). But many in the U.S. government, including President James Madison, did not want to risk charges of aggression or non-democratic activities (Richards 1993: 192). The inequities pointed out include: (1) treaties were written in English; (2) European concepts of land ownership were unilaterally imposed; (3) like today, all Indians were considered the same by negotiators despite diverse cultures; (4) ceded boundaries were derived ahead of the treaty councils; (5) incompatible native groups were relocated together; (6) negotiations were performed with selected individuals who often did not actually represent the tribal populations; (7) promised services often were not provided due to reluctance of Congress to appropriate funds; (8) treaty results were pre-determined; and, (9) non-Indian settlement often immediately followed negotiations resulting in defacto ratification. In addition, the treaties divided Indian peoples over decisions to participate and sign treaties, and increased factionalism among groups. The treaties have set the foundation for considerable conflict (Baenen 1968; Cohen 1986). American Indian societies traditionally make community decisions through consensus. Consequently, many traditional bands and individuals who were not present at the treaty councils refused to move to the resulting reservations. For that reason, many wished to remain in Grande Ronde and Walla

Walla valleys (Confederated Tribes of the Umatilla Indian Reservation n.d.: 11). Development of unity is still a major issue within most of the tribal communities today.

Positive aspects of the treaties were that they established beneficial ownership of Indian lands, rights to use lands and resources off reservation were reserved in some cases, and the treaties in recent years have provided a foundation for rejuvenation of tribal economies and heritage preservation. The treaties served to establish "reciprocal obligations assumed by the Federal government and by the Indian tribes" (Cohen 1971: 33). Cohen continues, "treaties with Indian tribes are of the same dignity as treaties with foreign nations." However, as a consequence of the treaties and subsequent violent conflicts, many Indians in the region were removed from their original homelands, with some being sent as far as Oklahoma.

While the scope and extent of fishing at usual and accustomed stations have been defined through numerous court decisions, the geographical limits on other treaty-reserved rights have yet to be conclusively determined. The terms "open", "unclaimed", "public lands", and "unoccupied" lands carry with them the implied condition that rights reserved on those lands could be exercised until the lands were closed, claimed, or occupied by settlers under the public land disposal statutes. The courts have consistently held that they include the National Forests and BLM-administered lands, but have not been consistent with state or private lands.

A major influence on public land management today is that the treaties provide for apportionment of natural resources on the western frontier. The primary function of reserved rights retained by tribes constitutes the assurance of the U.S. government the right of tribes to sustain traditional lifeways. In other words, what is reserved is the way of life of the tribal communities (not just resource uses). The treaties, federal statutes, and executive agreements over the past 200 years have established a special trust relationship between tribes and the Federal government. Through the treaties and U.S. policies, the tribes received promises of federal protection for their lands, resources, assets and people. The benefits gained by the United States were considerable, establishing the basis for the country's economic development through the present. Congress has the power to modify or revoke a treaty, but such action must be compensated.

Beckham (1984: 23-32) has elaborated on the development of Indian policy in the Northwest in the early 1850s which led to the reservation of rights to the Columbia Basin tribes to public lands. These reserved rights do not commonly occur in other treaties of the Pacific Northwest. In brief, the territories were not considered good game country; therefore it was reasoned, reservations could be relatively small for purposes of exclusive use of lands if established in conjunction with a means to allow "the liberty of motion for the purpose of seeking, in their proper season, roots, berries, and fish, where those articles can be found, and grazing their horses and cattle at large" as stated in the 1854 *Annual Report of the Commissioner of Indian Affairs* submitted by Isaac Stevens. The treaties reserving these rights were seen as a legal remedy to the lack of recognition of tribal occupancy rights in the donation land act as noted above. Consequently, "public domain lands, not reserved to Indians and not claimed by white settlers, should be open to both Indians and non-Indians" (Beckham 1984: 27). The key

United States negotiators thus intended the treaties to provide Indians access to their basic subsistence resources. The reserved rights reserve "a greater spectrum of rights and privileges than are available to ordinary citizens" (Beckham 1984: 117) including continued supplies of wild game animals. It has been claimed that "Indians have a compensable interest in treaty-secured hunting and fishing rights guaranteed by the United States government" (Beckham 1984: 119) thus constituting an actual property right (Cohen 1971: 285).

The tribes retain authority to manage fish and wildlife on reservations by requiring licensing, setting seasonal limits and gear restrictions. On a broader scale, tribes retain the right of self-government over their territory, free of state control. The tribal governments also retained authority to regulate hunting and fishing by their members within ceded lands and at usual and accustomed sites, with state regulations having only limited application. States can manage the exercise of rights in certain instances.

According to a series of Supreme Court decisions, Indian treaties must be interpreted according to the understanding of the Indians where ambiguities are discovered. For example, *United States v. Winans* established that rights are not subordinate to the States, treaties must be construed as Indians would have understood them, and right of access to usual and accustomed fishing sites continues even when public lands pass into private ownership (Getches et. al 1993: 155). As stated in the Idaho Tinno case, "the mere passage of time has not eroded the rights guaranteed by a solemn treaty that both sides pledged on their honor to uphold..." Also, in the absence of clear judicial direction, all reserved treaty rights should be exercisable both on ceded lands and in other areas traditionally used for those activities at the time of the treaty (Cohen 1971: 37). Investigation into the tribal understanding of treaties is a part of an agency's official trust responsibilities in their determination and enforcement of treaties and tribal off-reservation treaty-reserved rights. Most importantly for public land management considerations, tribal traditional areas as related to off-reservation treaty rights extend well beyond the United States-imposed ceded and reservation boundaries. The tribes' right to take fish that pass their usual and accustomed places is reaffirmed by numerous court decisions (*see Sohuppy v. Smith, 1969; United States v. Oregon, 1976; Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n, 1979*). Absent specific authorization by Congress, Indian treaty rights cannot be abrogated (*Menominee Tribes v. United States, 1968*).

In sum, Hunn (1990: 269) states that "treaties...provide a legal basis for the continued existence of a Plateau Indian way of life." They promote the political, cultural and economic survival of Indian communities despite non-Indian settlement of their lands.

In 1871 Congress terminated Indian treaty powers of the Executive Branch, bringing the House of Representatives into the negotiation process (Cohen 1971: 77). Negotiations for land cessions continued through the following decades in the form of "agreements" rather than treaties ratified in the form of executive orders and Congressional acts (Cohen 1971: 67). Some see this action by the United States as constituting a marked decline in Federal recognition of tribal sovereignty. However, regardless as to whether a "reservation" has been created through treaty, statute or executive order, they have the same validity and stature (Cohen 1971: 299). Such

reservations perpetuate the Federal-Indian relationship in which the rights of the Indians were always those of occupancy and use, and the fee was placed in the United States (Cohen 1971: 299). It has long been established that fee title in lands in the U.S. was vested in the Federal government from the time of formation of the Federal government. Indian title consisted of a right to perpetual occupancy with the privilege of using it until the right is given to the U.S. (Cohen 1971: 300). It is similarly immaterial whether the trust lands are labelled reservation or colony. The use of executive order authority to create reservations was terminated by statute in 1910.

1871-1971: A Century of Vacillation

The reservations, though sizable in the beginning, were systematically and dramatically reduced in size as non-Indian settlements and land use expanded. Passage of the Dawes Act in 1887 led to dramatic reductions, if not elimination, of reservations as allotment plans were developed through the next few decades and tribes were dispossessed of much of their lands (Cohen 1971: 78; Getches et. al 1993: 190). The act gave BIA authority to allot parcels carved out of reservation lands to tribal members and to dispose of the "excess" lands to third parties. Tribes lost 90 million acres nationally, from 138 down to 48 million, and the Indian Country left was severely fragmented. A key intent of allotments was to enforce adoption of a farming economy. The aridity and poverty of soil "made small holdings infeasible, and the program was largely a failure" (Murphy and Murphy 1986: 303). Integrity of most of the reservations was severely compromised. The Klamaths and Warm Springs Indians were able to keep intact large tribal reserves; however, the Klamaths eventually lost their reservation through the Termination Act of 1954. Without a land base, the Indian lifeway and economic bases were catastrophically affected.

An example of the dramatic implications of the allotment process is demonstrated by the Nez Perce (Walker 1985: 77). The previously established reservation was allotted between 1890 and 1895, reducing Indian held lands from 757,000 acres to 175,000 acres. The land loss also resulted in population redistribution and increased intermarriage with other groups, thus losing the previously held spatial and social isolation. By 1923 approximately half of the allotments had been sold and by 1963 Nez Perce holdings amounted to only 57,000 acres.

While traditional economies and land bases were being decimated, major court victories were won reaffirming validity of treaty and individual rights. In *U.S. v. Winans* (1905), the reserved rights doctrine was elaborated in that tribes granted rights to the U.S. and rights not specifically ceded were reserved. The Winters Doctrine followed in 1908, not only setting the foundation for all Indian water law, but also establishing the canons of construction in which any ambiguity in interpretation of treaties must be resolved in the tribes' favor (Getches et. al 1993: 776). In regard to water law, it was established that Indian water rights are defined by Federal rather than state law (contrary to the common "prior appropriation" doctrine) and that reservation of water rights is established by reservation of land and must be sufficient to meet the purposes of the reservation. Also, the Indian Citizen Act of 1924 extended U.S. citizenship to all Indian peoples, granting them voting privileges in federal elections (Cohen 1971: 82; Getches et. al 1993: 499).

Allotment in severalty was terminated in 1934 with a basic shift in policy back away from forced assimilation to a policy of cultural and ethnic pluralism. The Miriam Report of 1928, prepared by the Brookings Institute, was a comprehensive assessment of the impacts of the previous Congressional actions on tribal communities. Resulting from that report was a recommended change in Indian policy to right past wrongs. The Indian Reorganization Act (IRA) was passed in 1934 (Cohen 1971: 84; Getches et. al 1993: 216). The Act made major revisions to Indian policy by: ending the allotting of Indian lands; extending the trust status for lands allotted; restoring unsold "surplus" lands from the allotment period to tribal ownership; ceasing the sales of Indian lands to non-Indians; beginning acquiring lands for Indian use; establishing the right of tribes to incorporate; providing revolving loans; and, enhancing management practices for Indian forests and range.

The IRA encouraged tribes to organize as governments and receive formal recognition from the federal government. Tribes could form corporations for their own economic development. The Federal policy sought to promote reservation autonomy and self-determination and to preserve Indian cultures and values. Cohen (1971: 67) provided the following analysis: "the underlying assumption of the treaty period that the Federal Government's relation with the Indian tribes should rest upon a basis of mutual consent was given new life in the mechanism of federally approved tribal constitutions and tribally approved federal charters." The IRA has been characterized as having "formed the basis for communal survival in the postwar world" (Deloria 1994: 29). From other perspectives, the act is also viewed as a way of limiting the number of Indian political entities with whom the U. S. must deal.

As a result of the act, the establishment of constitutions and by-laws under the IRA ended the leadership era of headmen and recognized chiefs in many cases. New leadership was provided by boards of trustees or business councils and chairmen. The boards often have been responsible for establishing concepts of economic development and establishing resource management policies in timber, range and farming.

The Indian communities in the region responded to the IRA variously. Northwest tribes have taken different paths in establishing Federally-recognized governments. After passage of the IRA, many of the tribes incorporated during the following decades of the 1930s and 1940s. In contrast, some Northwest tribes chose not to incorporate (Confederated Tribes of the Umatilla Indian Reservation n.d.: 13). For instance, those living on the Umatilla Reservation did not want to lose their allotments. However, by 1949 the traditional chiefs and headmen had lost power. As a result, the tribes decided to adopt a constitutional government, establishing a board of trustees to make tribal decisions and granting 18 year olds and women voting privileges. This action constituted a political revolution for the Umatilla tribes and altered the control of tribal resource assets.

The Indian Claims Commission Act of 1946 established a process for extinguishing Indian claims against the U.S. Only monetary settlements were offered, not land, and without interest. Prior to 1946, tribes could seek money damages in Court of Claims only with the express consent of Congress. A total of 617 dockets were filed with the claims commission prior to the 1951

deadline. After the Commission was disbanded in 1978, incomplete cases were transferred back to the Court of Claims where many still reside.

The 1950s provided another era of major setbacks. The Termination Act of 1953 again introduced a forced assimilation policy (Getches et. al 1993: 729). Reservations of those tribes selected were terminated and lands sold to third parties. Federal services were ceased and tribal sovereignty terminated. A relocation program was established to guide tribal members departure from former reservation lands to urban settings. The Klamath Tribes was one of the hardest hit tribes in the nation, losing its land base which subsequently became the current Winema National Forest. Also in 1953, Public Law 280 was also passed greatly diminishing tribal sovereignty in selected reservations and states, including the State of Washington (Getches et. al 1993: 479).

Thus closed an era marked by great swings in U.S. Indian policy. Whereas tribal land bases in the Northwest were dramatically diminished from the initial reservation era of the 1850s-70s with dire consequences to traditional economies, opportunities for increased activity in the non-Indian economic markets were established.

1971-present: Self-Governance and Economic Growth

Tribal communities in the northern intermontane greatly benefited from actions of the Nixon administration. The Council on Environmental Quality (CEQ) regulations implementing the National Environmental Policy Act of 1969 recognized the need of Federal agencies for involving tribes in the project review process and established the national policy for protecting important cultural aspects of the "human environment." In 1976, the Forest Service and BLM planning processes in conformance with NEPA were recognized in the National Forest Management Act (NFMA) and the Federal Land Policy and Management Act (FLPMA), respectively.

Perhaps of most importance, the Indian Self-Determination and Education Assistance Act of 1975 provides substantial funding avenues for the tribes and allows tribes to assume responsibility for programs operated on their behalf by the Federal government (Getches et. al 1993: 256). Authority for tribes to acquire lands adjacent to reservations was also granted. This act has further enabled tribes to pursue economic growth and effectively assert their role in the region.

Importantly in the Northwest at this time, the Boldt Decision was issued in 1974. More formally known as *U.S. v. Washington*, a U.S. District Court decision reaffirmed off-reservation fishing rights and their priority over other uses. Upheld by the Supreme Court in 1979, tribes are allowed up to a 50% share of harvestable returning fish at accustomed traditional fishing sites. The right of tribes rather than states to regulate their off-reservation treaty rights was also recognized. An important aspect of this decision in regard to federal ecosystem management strategies is the surmised right of tribes to take part in the protection of fish habitats, helping ensure that a treaty-related resource exists. The case has been allowed to stand open, as has the *U.S. v. Oregon* case which began in the late 1960s, in order to resolve further disputes

concerning the exercise of treaty rights. States still have authority to regulate for conservation purposes. Similarly, Klamath treaty rights were reaffirmed in a settlement agreement through the *Kimball v. Callahan* case. A process is established in which the tribe determines resource needs, the State of Oregon enforces relevant game regulations, and the Federal government manages related habitat. In addition, *United States v. Adair* provided water adjudication in which water for resources used and needed by the tribe is given top priority in allocation strategies.

In 1978, Federal Recognition Regulations were adopted establishing procedures for tribes to gain federal recognition status and reservation lands. The Klamath Tribes were restored in 1988. Also in 1978, the American Indian Religious Freedom Act required agencies to evaluate their actions regarding their impeding access to sacred areas. Though the act was not regulatory and lacked enforcement provisions, it led to substantial revisions of other regulatory acts mentioned below. In addition, a Circuit Court decision essentially established regulatory provisions by requiring agencies to consult with tribes when assessing potential project effects (Getches et. al 1993: 750).

A number of federal regulatory acts have passed in the last 15 years, increasing the role of tribes in the federal decision-making process and enhancing economic growth potentials. These include:

- the Archaeological Resources Protection Act (ARPA) of 1979 requiring tribal notification and consultation where requested in regard to proposed removal of artifacts by permit from public lands;
- the Indian Mineral Development Act of 1978 providing authority to tribes to regulate and develop tribal mineral resources and enter into joint agreement and leases;
- the Indian Gaming Regulatory Act of 1988 requiring tribes to develop formal agreements with states before opening casinos;
- the Native American Graves Protection and Repatriation Act of 1990 recognizing Indian control of human remains and certain cultural objects found on public lands and requiring consultation prior to authorized removal of such items;
- the National Historic Preservation Act of 1966, as amended in 1992, more explicitly incorporating tribal involvement into the Section 106 consultation process and making traditional use sites without physical remains eligible for listing in the National Register of Historic Places;
- the Religious Freedom Restoration Act of 1993 establishing a higher standard for justifying government actions that may impact religious liberties;
- and, the 1994 amendments to the Self-Determination and Education Assistance Act of 1975, expanding tribes authority to assume Federal responsibilities including services formerly provided by agencies and activities in areas of cultural, historical or geographic interest to tribes.

Guidance for conformance with the National Historic Preservation Act is provided in the National Park Service's National Register Bulletin No. 38. The publication addresses procedures for

identifying and evaluating traditional properties.

In addition to the above Congressional acts, the 1994 Executive Order on Environmental Justice was signed encouraging increased effective participation of minorities and low economic groups in proposed project environmental assessments. Complementing the above federal archaeological protection acts is the recently passed Oregon State Law SB61 which places tribes in a stronger role for protecting sites on state and private lands.

Recent administrative policy and guidance has been provided in two documents. Interior Secretarial Order No. 3175, issued in November 1993, established the responsibility of all bureaus and agencies to carry out trust responsibilities of the federal government and assess the impacts of their actions on Indian trust resources and requires consultation with tribes when impacts are identified. A White House memorandum was issued in April 1994 emphasizing the importance of government to government relations with tribal governments and compelling agencies to consult with tribes prior to taking actions that may affect tribal interests.

In sum, we are now in an extended period of increasing tribal political and economic involvement. The above series of Congressional acts, executive orders and court decisions have provided a basis for accelerating tribal renewal. In keeping with each tribe's unique legal and cultural histories is the unique path each is forging in their socio-economic recoveries. The long-standing treaties and agreements established a "trust relationship" between Indians and the Federal government in which the latter became a manager or trustee over unceded remaining Indian lands and resources on public lands for which rights were retained. The Federal government is responsible for assisting tribes while still recognizing their sovereign rights. In addition, the Federal government must mesh its trustee role toward the tribes with its responsibilities to manage public lands in the public's best interest. The Federal agencies have an obligation to not abrogate Indian treaty rights without specific Congressional action, and must use their authority to safeguard that which is the subject matter of the federal treaties. The trust relationship between the United States and Indian tribes is part of the very fabric of federal Indian law that imposes stringent fiduciary standards of conduct on federal agencies in their dealings with Indian tribes with respect to Indian-owned assets.

A number of tribal governments in the project do not have ratified treaties with the U. S. government. For example, many of the northern Columbia Basin tribes were missed by the Governor Steven's treaty expedition. However, formal consideration of traditional uses of native species and access to locations for religious purposes, as well as protection of cultural resources in general, are addressed directly and indirectly by the series of Federal mandates described above. These mandates address concerns of both federally-recognized tribal governments and Indian individuals regardless of tribal affiliation.

III. Current Resource and Land Use

Given differing perceptions of the role native species and natural landforms in the lifeways of Indian and non-Indian peoples living in the region, the title of this section poses problems in representing how Indian traditionalists live on the landscape. As noted in Section I, the terms "resource" and "use" are culturally-loaded. To some, these terms misrepresent the interrelationship of native species, peoples, and the land. With these cultural distinctions in mind, various aspects of the landscape important to Indian peoples are described below.

Importance of Place

As described in Section I, the totality of the regional landscape has importance. These are sacred lands of the Indian peoples and all landscape components participate in a system of complex inter-relationships. As such, places of importance are created by an intersection of nature, social relations, and meaning. Sacredness is associated with supernatural power derived from the spirit world and sacred space is wherever spiritual energy resides. Landforms contain spirits of creation figures and descendents. Some spirits range freely across the landscape, whereas others reside at specific localities. In regard to the Klamath, Spier (1930: 100) stated, "Spirits are legion and in many cases are localized, so that one looking over the countryside finds it rich in religious connotation." Knowledge of landscape sacredness is passed through generations by oral traditions, performance of rituals and personal experiences. A clandestine persistence of such traditions has evolved when exclusiveness of such traditional knowledge became a cornerstone of relations with non-Indians, fueled by religious intolerance, mockery and mimicry of beliefs, and loss of control over sacred places.

The uniqueness of Indian population of the northern intermontane region is best characterized by this strong, long term spiritual attachment to the land. Although the various Indian societies in the region differ in many ways, perhaps most common is their relationship with the land and water (Spier 1930: 95). Creation stories common to Indian spirituality stresses the placement of peoples in this landscape by the Creator. Thus, their ancestry extends from "time immemorial." The peoples of the northern intermontane are part of a large, loose social web strengthened by their shared experience of the Columbia River Basin and surrounding ecosystems (Hunn 1990: 3). The traditional subsistence economy is broad-based, including fishing, fowling, hunting, and gathering terrestrial and aquatic resources over very large geographic areas encompassing a diverse range of important places (Walker 1993a: 146). The full range of resources needed to sustain lives and Indian culture was found each in its own place. Consequently, Indian peoples have accrued a "detailed, encyclopedic knowledge of their environment" through the millenia (Hunn 1990: 93).

Localism (the strong identification of person and place) is a key factor in traditional northern intermontane lifeways. Geographic stability and attachment to ancestral lands is represented in recurrent use of favored specific economic areas and campsites in annual subsistence rounds (Whiting 1950: 19; Ray 1932: 28; Hunn 1991: 9; Spier 1930: 9). This

association is reinforced by the brief time periods that traditionally-used resources are available in limited geographic locales. Such place identification has long been imbedded in Indian society. For instance, Hunn (1990: 97) noted an extensive geographical terminology among the mid-Columbia River Sahaptins that "suggests a long period of stable residence on this stretch of river." Sahaptin-named geographic areas extended as far south as the Metolius River, north to the Wenatchee River in interior Salish territory, west to Ft. Vancouver, and east to the Palouse country of southeast Washington.

The importance of place is embedded in Indian culture as reflected in the languages which serve a "symbolic link" to the land and maintenance of cultural identity (Hunn n.d.). Place names relay traditional knowledge of land and resources by referring to plants and animals which characterize a location, the actions of people at a location, the spiritual role of the location, or some other important attribute of the site.

The historical depth of these relationships and strong cultural identifications, while not well understood by most non-Indians, must be acknowledged as they reflect more than a place name veneer on the landscape. As for example, in the case of the Sahaptin speakers of the southern Plateau region, places where people interacted with the land in specific ways usually were named (Hunn n.d.). Such naming may be referencing notable plant and animal resources, whether found commonly or rarely, or for particular features of the place, either biological or topographic; in the Sahaptin world, places with topographic feature names are more often references to hydrological attributes rather than terrestrial. The very names of people or places have certain sacred qualities since they originate in the past, handed down generation to generation. This naming scheme is in contrast to English named places, which are often binomial, named for persons or distant home places, and usually identify each river or mountain as a single entity. This nomenclature difference reflects the differences in philosophy toward owning and claiming the land.

In native ideology, people did not presume to invent names for the land, rather they intended to allow the land's own characteristics to remain dominant through the naming process. For example, (1) some place names use word stems that describe the flow of the river current, the sweep of the landscape, a resource or some activity of people, or animals at the site; (2) a Sahaptin speaker recognizes a number of named river segments for the John Day River rather than a single named river system; and, (3) a number of names focus on a land feature as a referent to an object or place figured in a legendary cultural hero story (Hunn n.d.: 28-31).

Normally, native places have national heritage significance for local American Indians. Through these landscape places, people are provided a culturally enlivened world and continued confirmation of their distinctive living heritage. Yet, place names are fragile and often remembered best by elders. Even then, Hunn (1993: 9) estimates that over 60 percent of the original inventory of Sahaptin place names have been lost; with a limited potential for future recovery of unattested traditional names.

The importance of place to tribes in the region can be viewed as a hierarchical ordering,

from the broadest geographic scale to the smallest. Expectations of what "meaning" each order of place conveys to the community and individual are shared within each group and creates an "image" of how these places should be and what they should provide (Tuan 1977: 5). Each category of place is briefly discussed below:

Interest Areas

Interest area is the broadest notion of place for tribal governments, communities and individuals and is the most important for this project. The category is known by various names: aboriginal area, subsistence range, traditional area, region of interest, zone of influence, and so on. The frequently used phrase in the region, usual and accustomed area, normally refers to interest in fisheries in a region. When subsistence range is used, subsistence means more than foods for physical nutrition, but lands and resources important for socio-cultural sustenance and maintenance of tribal community well being. Given the fluidity of movement of peoples and the long time depth of the communities, the boundaries of interest areas are necessarily vague and can only be approximated to encompass expansive areas of the Pacific Northwest (Fig. 5).

A tribal interest area represents a coarse-grained approximation of the geographic region within which individual tribal governments express interest and concerns in activities which can potentially affect the landscape and resources. An interest area can be quite expansive and overlap with interest areas of other tribal governments. Normally, these areas represent the geographic extent of traditional uses by members of a tribe. The core area, or homeland, may be commonly located near the center of the interest area where exclusive use of resources and land by the respective tribe occurs. Shared resource use areas are near the internal peripheries of the areas. Unlike ceded boundaries and reservation boundaries that are precisely defined in United States legal documents, an interest area is not something to be expressly defined, but left open to ongoing interpretation and discussion on a project-by-project basis.

Addressing the southern portion of the ICBEMP area, Steward (1938: 248) states,

The temporary and shifting intervillage alliances of this region, therefore, instead of consistently allying people of well-defined territories, entailed a linkage of village with village which extended, net-like, throughout the entire area. Political bonds, like subsistence areas, interlocked in all directions.

All communities considered in this assessment have interest areas, which include permanent townsites and locations returned to year after year normally in a homeland core area, and areas normally traversed seasonally. A large number of people have refused to leave their natal territories over the past two centuries, eventually becoming landless through settler and government appropriation, at least for a time until trust lands or allotments were established to some degree. The interest area provides the fundamental definition of geographic range of interest of any particular group. A region encompassed within an interest area is expected by the people to fully provide for the needs of the community.

Ceded Territory/Exclusive Use Area

Two types of negotiated areas, often confused even by persons knowledgeable of tribal issues, are considered here. The first is ceded area. Only those tribes who ceded lands by treaty or agreement. Secondly are exclusive use areas. Boundaries for these were established through the 20th century land claims process. Resultant boundaries for exclusive use areas are based on arguments provided to the Federal Claims Commission which tended to exclude the hinterlands of subsistence ranges, and focused primarily on "exclusive use" core areas.

These two types of areas are normally geographically large, but commonly considerably smaller than interest areas. Both are constructs of actions governed by U.S. Indian policy (treaties and the Indian Claims Commission Act) and not necessarily of traditional importance to Indian peoples. Ceded territories represent boundaries as established by U.S. treaty negotiators, often prior to the actual treaty council meetings. Hence, they are frequently considered arbitrary in nature by tribal communities and do not accurately reflect the extent of lands actually used on a consistent basis. Consequently, the ceded and land claim categories importance to perception of place are largely subsumed within the importance of interest areas, except where modern day legal questions may be relevant. As Indian case law has proven, usual and accustomed fishing sites and other traditional use locations are defined within interest areas, not ceded territories or land claims boundaries. The ceded areas are only a partial reflection of the cultural landscape (Yakima Agency 1993: 1-4).

The importance of exclusive use areas to tribes has been primarily tied to receipt of monetary settlements for land loss to the U. S. government. Ceded boundaries, where they exist, tend to establish a modern-day version of exclusive use areas, serving to identify tribal supremacy over other tribes in certain areas. They also form convenient administrative boundaries for tribal land use planning efforts and, in some cases, are viewed by tribal staff as defining the tribe's interest area.

Trust Lands

Reservations established by treaty or executive order, as well as other lands placed in trust by the U.S. government, define very important places to tribes due to the sovereignty of the tribes over activities within these lands. These lands define Indian Country today. Substantial legal responsibility resides with the tribes in the regulation of its members. Though normally geographically contained within interest areas, the importance of these special areas is outside the focus of the present project and will not be considered further here.

Cultural Landscapes

Recent discussions in the literature emphasize the relative importance and meaning of landscapes to peoples depending upon their own life experiences (Greider and Garkovich 1994). Any one landscape may represent multiple meanings depending upon who is experiencing it. Indian traditionalists perception of the biogeographical terrain, is highlighted by extensive

knowledge of utilitarian values in addition to the ceremonial (Hunn 1990: 115). In essence, every plant and animal found on various landform features is believed to have a significant role to play in the overall economy. Given the strong attachment to the land and the inherent importance of different landforms and vegetative communities, the landscape can be viewed as a continuum of meaningful features. Such features as mountain ridges, valley basins, canyon bottoms and mountain peaks often have differing forms of importance, each with its own distinctive mix of foods, medicines, sacred power places and ancestral grounds (Fig. 6). These areas, commonly several thousand acres in size, cover the entire landscape within the larger types of place categories described above. Certain prominent landmarks are "vivid landscapes, still alive for the elders" (Hunn 1990: 97).

Prominent landforms also provide useful indicators of the location of important plant and animal resources and, in some cases, of "boundaries." For example, in the Flathead and Pend d'Oreille country, river valleys provided the bulk of subsistence resources and served as primary travel routes (Malouf 1974: 163). In addition, before lands were surveyed, localities were fixed by reference to natural objects, such as mountains, streams, lakes, and valleys (Fuller 1974: 30).

The vulnerability of these landforms to disruptive intrusions is naturally variable, but sensitivity remains great. Some areas may be violated by intrusions introduced within its viewshed though not within the landscape unit itself. A major effect on the use of these landscapes is posed by proposed land tenure adjustments through which lands pass into private ownership, thus hindering access.

Cultural Site

The most geographically-limited category of place is the cultural site. This type of area may occur in the form of an archaeological site or a traditional use locality, or a combination of both. Some traditional use sites were distinctly pan-regional in importance (i.e., Celilo Falls, Kettle Falls, Stinkingwater Pass, Moscow area, etc.). More commonly, traditional use localities occur where resources are normally harvested or where rituals or ceremonies are recurrently performed. Obviously, a wide range and variety of resources discussed below and landforms are associated with these uses. The diversity of such resources will be discussed below in this section.

To Indian traditionalists, archaeological sites mark where ancestral use of the land occurred, representing the eternal bond with the land. This attachment constitutes a strong sense of place. The importance of archaeological sites from this vantage is measured in socio-cultural terms, where the value is related to the maintenance of individual and community self-identity. From the western technological society perspective, the archaeological record has been the focus of much scientific research in the Northwest, particularly since the 1930s (Cressman 1936, 1940). Though some areas are still little documented, such as the upper Columbia basin area in northern Idaho and Montana, the association of sites with specific landforms has been defined for other areas. Changes in the mobility patterns and land uses of the American Indian broad-based traditional economy has been a persistent theme in anthropological studies (Ames and Marshall

1980: 29; Ames 1990; Fowler and Fowler 1990; Aikens 1993).

The three physiographic regions of the Columbia Basin, Northern Great Basin, and Klamath region have seen varying amounts of archaeological research. Much of the archaeological work conducted in the Plateau has been associated with the many hydroelectric projects. Key sources marking the cumulation of archaeological information include: Krieger (1927); Daugherty (1956, 1962); Osborne (1957); Cressman et. al (1960); Swanson (1962); Fryxell and Daugherty (1963); Warren et. al (1963); Warren (1968); Grabert (1968, 1970); Browman and Munsell (1969); Nelson (1969, 1973); Leonhardy and Rice (1970); Rice (1972); Brauner (1976); Dancey (1976); Hammatt (1976); Irwin and Moody (1978); Butler (1978); Galm et. al (1981); Dumond and Minor (1983); Schalk (1983a, b); Thoms (1984); Campbell (1985); Chance and Chance (1985); Chatters (1986); Thoms and Burchardt (1987); Reid (1991). Southeast Oregon has been a frequent region of archaeological study since the 1930s when Luther Cressman launched a series of projects designed to establish the antiquity and other characteristics of high desert prehistoric land use (Cressman 1936, 1942; Cressman et. al 1940). Research projects in specific subregions over the past two decades provide extensive descriptions of the material culture and interpretations of past lifeways. Other key sources of archaeological and paleo-environmental information include: Cressman (1937); Weide (1968, 1974); Butler (1970); Bedwell (1973); Fagan (1974, 1988); Pullen (1976); Pettigrew (1979, 1984, 1985); Toepel et. al (1980); Loring and Loring (1982, 1984); Beck (1984); Jones (1984); Willig (1984, 1988); Wilde (1985, 1989); Mehringer (1985, 1986, 1987); Mehringer and Wigand (1986); Andrews et. al (1986); Cannon and Ricks (1986); Wigand (1987); Aikens and Greenspan (1988); Hanes (1988a, b); Pettigrew and Lebow (1989); Oetting (1989, 1990); Jenkins and Connolly (1990); Cannon et. al (1990); Fowler (1993); and, Aikens and Jenkins (1994). Several comprehensive overviews for the region have been written in recent years (Aikens 1978, 1982, 1993; Cressman 1986; Meatte 1990). As in the adjoining Northern Great Basin, the pioneering archaeological research in the Klamath River drainage was by Luther Cressman. Key sources of information include: Cressman (1940, 1956); Aikens and Minor (1977); Mack (1983; 1991); and Sampson (1985).

In sum, research projects identified above, as well as numerous cultural resource management field surveys by agencies and consultants have established an extensive body of knowledge concerning the character of Northern intermontane archaeological sites. Three basic site categories compose the northern intermontane precontact archaeological record: rock art, rockshelter and open site. The "open site" category represents a wide range of archaeological manifestations including "artifact clusters" (commonly labelled "lithic scatters"), "rock features" with or without chipped and/or ground stone debris, "residential features" (surface depressions and rock rings) sometimes with associated cultural debris, "toolstone procurement areas" such as quarries and dispersed raw material localities (float and ejecta); and artifact "isolates". Characteristics of each shall be briefly described below.

Occurrence of rock art consists of one or more elements pecked, ground or painted on a rock surface, usually either on a boulder or outcrop face. Rock art is commonly found near water courses and along rimrock of suitable stone surfaces, including large boulders at the base of talus slopes along the edges of valley floors. Rock art is not as pervasive across the landscape as most

of the site types, having only limited distribution in most areas. The most prevalent occurrence in the northern Great Basin is in Warner Valley and along the Owyhee River. Some key areas also include the mid-Columbia region (Keyser 1992). Rock art has cultural and public importance normally exceeding that of scientific use. Occurrence of rock art is often an indicator of resource-rich location and may be an indicator of group gathering areas. Scientific interest the regional patterning of various elements, perhaps suggesting contact between groups or replacement of one group by another in a region. Culturally all such sites are important, posing as tangibles reminders of ancestral use of the region. From the scientific perspective an important rock art locality normally should display a relatively large quantity and diversity of elements, contain an element or elements unusual for the region, or be definitively associated with a datable open site or rockshelter.

Rockshelters/caves include habitation, storage or human burial locations bounded on at least one side and at least partially overhead by a rock outcropping, often containing dry, dark organic stained stratified soils and preserved perishable cultural debris. The sites are commonly found along water courses and rimrock, except for lava tube caves in the northern Great Basin. Importance is derived from preservation of fibrous/organic materials representing a broad array of activities not represented at most open sites. This site type commonly has stratigraphic integrity and can be absolutely dated, though many do not, as well, having shallow deposits or moisture access from geologic formation fissures. Due to natural boundaries of the associated geologic formation, this site type offers a confined association of activities allowing greater opportunity for interpreting the archaeological record. Deposits are protected from the effects of deflation, a common threat to open site integrity, but the majority have been looted, confounding the stratigraphy and diminishing their scientific research value.

Artifact clusters include spatially associated lithic artifacts with no associated cultural features. The "scatters" are of varying density, ranging from low quantity/low diversity chipped and ground stone assemblages to high quantity/high diversity sites. In the northern intermontane, the clusters are largely composed of expedient chipped stone tools and manufacture discard debris. Normally, cluster boundaries are diffuse and difficult to precisely define. Low density (and correspondingly low diversity) clusters are pervasive along ridges and vistas and on stream terraces/benches along water courses with less accessible steep stream banks with aggrading soils; at relict spring locations; and, along lakeshores. High density/diversity artifact clusters are commonly located along broad, shallow intermittent water courses; dune locations containing chipped and groundstone tools and fishing items; at spring locations; in canyon bottoms; at the confluence of streams; and, at upland settings around ponds where plants were available for spring harvest. Recent studies assessing the role of sample size influencing the diversity of materials observed in artifact clusters clearly indicate that commonly assigned behavioral categories of "long term base camp" and shorter term "field camps" cannot be confidently assigned to northern intermontane sites without other factors being considered, such as positioning relative to physical environment, existence of house remains or storage facilities, or presence of ecofacts (bones, plant remains, etc.) (Thomas 1990: 282). Low density sites may either represent brief intensive occupations (base camps), or, more likely, infrequent limited activity occupations (field camps) or resource extraction locations coincidental through time.

Clusters with high density artifact clusters are assumed to represent a relatively large amount of activity (particularly if largely non-manufacturing and more from tool use and discard), although whether this represents intensive occupation (base camps) with a broad range of activities occurring within a limited period of time, or more limited site use (field camps/locations) over a long period of time with distinct activities occurring on separate occasions is not known. They are more likely a palimpsest representing the occurrence of all three site types through a lengthy time span (Thomas 1989; Beck and Jones 1990). Inferences based on landform and hydrologic associations may be more relevant than assemblage content for most scatters with no cultural features.

Rock features include alignments (circular and linear), cairns, and hunting blinds not associated with habitation sites. In drier regions they are commonly found at constricted access locations, such as canyons and overlooks at springs. In wetter hydrologic basins, they may be found along lakeshores and the top edge of rimrock in overlook locations. The features allow for functional interpretation of past site activities, a rare opportunity offered by open sites in the region. These sites may have low visibility due to being overgrown with brush and trees in woodland areas. The fragility of these dry-laid features makes them vulnerable to damage from many types of proposed activities.

Primary toolstone acquisition locations are commonly characterized by spent cores and primary reduction flakes. Like secondary lithic procurement areas, toolstone procurement sites are commonly high quantity and low diversity assemblages, representing limited activity locations unless accompanied by other tool types or cultural features, such as adits. Geologic outcroppings suitable for toolstone generally dictate spatial distribution. Such extensive obsidian procurement areas do naturally occur as float and ejecta. Distinctive chert sources occur throughout the region, such as a well-known "picture agate" on Idaho/Oregon state boundary. An extensive distribution of chert float occurs in many stream courses and alluvial slopes.

Isolates are singular occurrences of portable artifacts. These are pervasive across the landscape of the region. Of limited anthropological research value, they are informative on a regional basis for indicating intensity of land use in broad areas.

Another form of open sites are "village" sites, a label assigned to sites containing intact features, such as housepit depressions, hearths, storage facilities, house/habitation living surfaces, and rock ring foundations. [Note: human burials are not considered archaeological in nature based on the Native American Graves Protection and Repatriation Act]. Dark midden sites occur at marsh edges where marsh resources were procured. Substantial habitation is inferred by depressions found on gravel benches a few meters above stream courses, lake shores or sloughs. These sites are significant when found in contexts which can be absolutely dated (Greenspan 1990: 228). Sites with intact habitation features are of greatest anthropological interest among the open site types in the northern intermontane. They normally contain a broad diversity of tool types and toolstone and may include midden soil development, house depressions or rock ring foundations or preserved living floors. These sites reflect an adaptation to the physical environment, not well reflected in ethnographic information for some areas, such as upland

settings in the southern Plateau and in valley bottoms in the northern Great Basin.

Consequently, archaeological and traditional use sites are contained within cultural landscapes with certain site types (villages, base camps, field camps, simple locations, quarries, rockshelters/caves, rock art, root grounds, berry fields, fisheries, hunting locations) found in certain locations. Many traditional settlement locations and campsite "places" are now towns and cities.

In sum, the people continue to live in or near their sacred lands where visual evidences of their socio-cultural attachment in the form of landscapes, traditional use localities and archaeological sites are experienced daily. The land and its features serve as constant reminders of their spiritual identity. Because of this, adoption of a secular utilitarian attitude toward ancestral lands has been resisted.

Resources Uses

The climate of the northern intermontane region varies considerably from the well-watered valleys of the Kutenai and Coeur d'Alene subsistence areas to the semi-arid high desert of Shoshonean country. In this diverse region, native plant and animal species have been utilized through the millenia for food, medicine, shelter, craft production, firewood and fuel, commerce, and social and religious symbols.

Most peoples in the intermontane prior to non-Indian arrival participated in a lively commerce, trading goods with many others within the region and in adjoining regions. The various treaties signed in the mid-19th century recognized that the harvesting of plants and animals constituted both a means of economic subsistence and the foundation of native culture. Aboriginal rights were reserved to assure the peoples' right to maintain essential elements of that way of life. To-date, only a few resource use rights have been adjudicated in the courts, most notably fisheries in which States' involvement in off-reservation fishing was decided. In *U.S. v. Oregon*, Columbia River tribes' treaty fishing rights were upheld in a 1969 landmark decision. Hunting, gathering and grazing issues have not been so adjudicated in much of the interior Columbia Basin, though in *Stare v. Tinno* they were addressed for the Shoshone-Bannock tribes in southern Idaho.

Though European land ownership concepts are foreign to traditional American Indian societies in the region, patterns of resource use have always been clearly defined and mutually respected. "Ownership" of plots for settlements was recognized in addition to nearby fishing locations, berry and root patches and tracts used for hunting and trapping. Continued use of native plants and animals in this traditional manner is an essential component in maintenance of cultural identity. A complete assessment of contemporary plant use can be gained only from the Indian peoples themselves; and more appropriately sought on a more geographically local basis than this project currently offers.

Interior Northwest Indians specialized in selective harvesting of native plants and animals in a seasonal cycle differing in detail from region to region (Hunn 1986) (Fig. 8 and 9). The harvesting of species as they became available posed direct social implications. For example, in the highly dissected Nez Perce region, resource patches are relatively small, hence the scheduling of a complimentary set of locales as the resources became available would serve to bind a group of individuals together for a season (Ames and Marshall 1980: 29; see also Hunn 1981 on the sexual division of labor). As another example, camas roots may be found in great concentrations in the upper Columbia basin of northern Idaho and Montana in certain meadows and are associated with seasonal trips. Groups were often formed at camas grounds and journeyed together to the Plains for buffalo hunting. Hence, the camas fields and season played an integral role in determining band/tribal alignments for other subsistence activities (Chalfant 1974a: 130).

Further demonstrating the cultural importance of native foods, Shoshoni and Paiute groups of the Basin and Plateau were named after locally used foods. These names were only temporary by season and a "single group could be known by a series of names as they traveled from an area characterized by one kind of food to another named sector" (Murphy and Murphy 1986: 287). People did not call themselves by these names as much as other people calling them by these terms.

Today, as in the distant past, tribal members and tribal organizations may hold considerable natural resource information. Though much literature has been amassed over the past 150 years describing the history of American Indians in the intermontane region and their subsistence activities, most documents have been written by non-Indians, both professional researchers and popular writers. Only recently has the literature written by tribal members begun to grow (see Buan and Lewis 1991). Unlike non-Indian society where written word is supreme, in tribal communities oral information has dominated the transmission of knowledge down through generations. It has been claimed that while professional biologists debated the impacts of the dams on fisheries, tribal members testified early on to a pending marked decline based on their intense, local familiarity with the resource. Respect for the role of "indigenous knowledge" in solving modern-day problems is currently increasing (DeWalt 1994: 125). Whereas science seeks to be context-independent, indigenous knowledge is strictly local-based. It is believed that certain tribal members have special knowledge of ecological inter-relationships, thus ability in "monitoring and correlating the behavior of plants, animals, fish, birds, and insects to predict the condition of things widely separated" (Uebelacker 1984: 155). Such knowledge has commonly been overlooked or ignored by non-Indian society for being less "technical" (Meyer 1983: 72). Such inherent awareness of ecological interconnectedness could be invaluable for upriver restorative efforts in the future. The integration of accumulated localized Indian knowledge with contemporary scientific knowledge systems holds great promise to guide future land management actions, described by DeWalt (1994: 127) as "complementary sources of wisdom."

There exists today a recurrent theme of returning to the traditional resource base (Meyer 1983: 46). Elders "keep traditions alive through their practice and counsel to the younger generations" and "sustenance and comfort are still provided for those who follow the traditional

ways" (Corliss and Keith n.d.). Important elements of the universe include: land (residences, camps, hunting, fishing, ceremony, pasture, tools, plant gathering, sacred places); water (for ceremony, domestic, municipal, irrigation, habitat); animal (subsistence, ritual); fish (food, ceremony, trade); plant (food, medicine, shelter, ceremony, industry); air (health, ceremony); and sun. Many of these elements also support timber, ranching, agricultural, and tourism economies.

Fisheries

For many of the tribes, salmon and steelhead have long played a central role in "terms of subsistence, survival, culture, religion, or social status" (Meyer 1983: 43; see also Hewes 1947, 1973; Hoover 1993). Traditionally, salmon were utilized in many different forms with large quantities dried for storage and commerce (Schalk 1977, 1986; Rostlund 1952). Fishing also represents sport of the "highest order" with skillful fisherman receiving much social honor (Walker 1967, 1992). An example is that Nez Perce men have been traditionally considered fishermen first and foremost.

The Northwest Power Planning Council, charged with controlling mainstream dams, has estimated that prior to non-Indian settlement of the region the Indian catch in the Columbia River was about 42 million pounds a year. This quantity equates to about 5 to 6 million fish annually, more than double total annual fish runs of the 1980s. As a result, the average pre-contact population density of Sahaptin speaking people has been estimated to have been 20 persons per 1000 km², a density considered relatively high for an interior-focused foraging society (Hunn 1980: 2). This is largely due to partial reliance on a marine-oriented resource, salmon.

In Indian Country, spring is a special time of year when all life is reborn and the salmon return. It is a time of celebration and ceremony with the salmon's epic trek symbolizing the renewal of life. Tribal fishermen still supply many social needs with ceremonial spring fish for use in spiritual and cultural observances. Almost two centuries ago Lewis and Clark observed that thanks were ritually offered to the first spring Chinook by the whole community (Spier and Sapir 1930: 248-9; Gunther 1926, 1928). Today, a series of spring salmon and root feasts marks a ritual high point of the Indian spiritual calendar (Hunn 1980: 13). Deep respect is also accorded sculpin, suckers, lamprey, sturgeon, Dolly Varden, and trout and they are honored in ritual (Hunn 1980: 8). Suckers are still highly valued in some areas, being the first available fresh fish of the season (Hunn 1980: 14). Individual sucker bones even represent mythical animals.

The socio-economic value of fish to the northern intermontane tribes is reflected in the Sahaptin fish nomenclature and classification, with an unusual elaboration of terms being indicative of the particular cultural significance (Hunn 1980: 1). This significance is also reflected by the complexity of traditional fishing gear, including weirs, dip and set nets, baited bone chokers on hemp lines, fish spears, fish poisons, and gill nets (Hunn 1990: 119). A broad range of fishing techniques were also used (see Beckham 1984: 42-54; see Ray 1942). Dip net fishing from wooden platforms cantilevered out over the water continues today at a number of

locations, such as on the mainstem of the Columbia River just below The Dalles Dam, at Sherar's Bridge on the Deschutes River, and at falls on the Klickitat River two miles above its mouth (Hunn 1990: 273). A description of the variety of species traditionally harvested by the Wishram is provided by Spier and Sapir (1930: 174) including five species of salmon, steelhead trout, pike, sturgeon, sucker, chub, trout, smelt, and lamprey eels. Traditional commercial use of fisheries is reflected in their aboriginal trade value.

It is notable that the limiting factor of the pre-contact fishery was not the resource itself, but good fishing places (Hunn 1990: 93). Highly favored locations proved through time to yield the greatest return for the least expenditure of time and energy (Beckham 1984: 38). These prime traditional use locations are among the "usual and accustomed grounds and stations" identified by tribes who negotiated treaties with Governor Stevens in 1855. Tribes were careful to protect their traditional fishing activities at accustomed places throughout their subsistence territories, including retention of exclusive rights on reservation lands. The tribes granted to U.S. citizens through the treaties joint rights to fish at locations off-reservation. Exact locations were not identified at the time of the treaties and thus have been the subject of considerable litigation during the 20th century. The phrase was probably not considered as a limitation at the time of the treaties by Indians (Beckham 1984: 127). These locations were frequently adjacent to long-established villages, locations at falls or rapids, deep pools at the upstream ends of islands, mouths of rivers, and base of rocky bluffs next to deep channels (see Swindell 1942). The fishing sites were of greater interest than merely for subsistence purposes; in some areas, they were "owned" by individuals, families or collectively by several individuals with the location of access constituting a property right requiring payment for the privilege of use by others (Beckham 1984: 41).

Favored traditional fishing locations in the northern Great Basin include fisheries on the Middle Fork of the Malheur River (Prouty 1994: 579) and the Sprague, Klamath, and Williamson rivers in the Klamath region (Spier 1930: 11). The Coeur d' Alenes harvested anadromous fish from the North Fork Clearwater River and Spokane and Kettle Falls.

Cultural Plants

Though an abundant resource, the importance of native plant use to Indian peoples in the intermontane has received relatively little recognition by non-Indians when compared to fishing and hunting (Hunn 1990; Couture et. al 1986: 158; see also Benson et. al 1973; Ebeling 1986; Hart 1976; Hunn and French 1981; Turner et. al 1980; Minore 1972; Meillur et. al n.d.). Notable early exceptions were observations by Frederick Coville a century ago in the Klamath area (1897, 1902, 1904) and Blankinship (1905) in northwestern Montana. However, cultural use of economically important plants is at least equal, if not greater, in importance than fisheries. For instance, food-plant resource occurrence, not salmonids, has been considered the critical variable for determining locations of settlements in the Nez Perce region (Ames and Marshall 1980: 27). In describing the possible primary factors promoting settlement into villages in the pre-contact Plateau, Ames and Marshall (1980: 45) state, "Roots provided the critical storable resource

necessary for villages, with supplemental protein coming from fish and mammals." Further west in the Columbia Plateau, Hunn (1980: 8) states that the bulk of "calories was no doubt provided by the abundant and varied edible roots." Similarly for the northern Great Basin, Fowler (1986b: 92) stated that a significant proportion of the diet was derived from plants and plant products.

Even though some physiographic and botanical characteristics are similar in much of the northern Great Basin and the Southern Columbia Plateau (Prouty 1994: 577), actual plant utilization varies significantly. Basic categories of culturally used plants include roots, celeries, berries/fruits, and nuts. Industrial use also includes other floral types such as sedges and grasses. The term "root" is used here to include "all underground storage organs" such as roots, tubers, bulbs, corms, rhizomes, etc. (Couture et. al 1986: 159).

Several socio-cultural and natural factors have traditionally influenced plant harvests, and even plant behavior. People exercise "a certain degree of selectivity in harvesting their floral environments" (Fowler 1986b: 64). Plant species are not necessarily selected in a given area based on relative abundance and availability. One species may be more valued than other locally more abundant food plants (Couture et. al 1986: 156). For example, one root plant grows only in limited areas in the Harney Basin but is sought out due to a "high return on investment of time and energy" (Couture et. al 1986: 156). Such gathering activities, normally performed by women, require knowledge, skill and technological expertise (Hunn 1990: 122). Often before harvest for root plants begins, women may check several areas, first evaluating such factors as size of plants available and softness of soil to dig in. Roots may then be test tasted for "ripeness" and ease of peeling.

In regard to natural factors, cultural plants are the region's most restricted traditionally-used resources in terms of time and space. In the mid-Columbia area, Hunn (1990: 107) describes "complex phytogeographic patterns" represented by lomatiums, available at different times in different places. The plant foods are predictably found in the same locations annually with varying proportions of species in each location dependent upon minor variations in topography and water availability. In much of the northern intermontane, a strategy of seasonal upslope mobility is employed for adequate annual harvest, with plants maturing first on sunny south slopes (Hunn 1990: 107). Therefore, plant gathering camps are traditionally established progressively further from and higher above river valleys and main settlements from April through June. Historically in the Columbia Plateau, people residing in riverside settlements would move up along stream courses turning up each major tributary canyon with the women often climbing to the ridges to dig the root plants (Hunn 1990: 123). In the mid-Columbia area of the Columbia Basin, one important root species is harvestable in early April at an elevation of 500 ft., where it is readily accessible from permanent residences (in precontact times from riverside fishing villages) and it is still harvestable in late June at 6000 ft. (Hunn 1990: 107). The actual digging for cultural root plants normally occurs in small dispersed groups of women.

In the northern Great Basin "the numbers of individual plants available in a given area will annually vary depending on periodicity and amount of precipitation" (Housely 1994: 564).

As noted for the Harney Basin, most herbaceous growth occurs in a short period during spring and ends with loss of soil moisture in early summer (Couture et. al 1986: 155). Similarly in the mid-Columbia area, optimal conditions for the harvest of many species only lasts a few days at a given locality; thus timing of plant harvest critically relies on the careful reading of microhabitat effects on plant growth (Hunn 1990: 106). Food plants in the region are found in areas with particular soil composition and water-holding capacity. Intervening areas between resource patches are often used for camping and hunting. Use of a particular area depends on relative density, size and frequency of plants.

A number of important plants occur in lithosols (rocky, shallow soils). Therefore, it is considered by some that "root grounds remain relatively stable because they typically occur on thin Floke and Olson soils, which cover geologically stable bedrock sub-strata, and retain water very well" (Prouty 1994: 577). Such lithosols, favored by geophytic, tuberous roots, are common in the region but dispersed, making large associated camps often impractical (Hunn 1990: 127). These ecological settings are commonly found in upland areas characterized by volcanic basalt ridges and scarps, scabrock flats, and playas, in many areas capped by shallow soil associations on "bald" patches of exposed basalt which favor roots (Prouty 1994: 577). Spring use of lithosol plant communities of the upland areas would provide various roots and celeries for foods and medicines. Consequently, throughout the northern intermontane the lithosol-oriented spring plant collection constitutes a highly significant time of the year.

Of course, many important cultural plants grow in other soil types, with camas being an important example found in upland meadows. In lowland dune settings, various seeds were commonly harvested by late summer. In the fall, other seeds and possibly wapato could be found. With the proper amount of water, lakeshores could provide year-round palustrine marshland resources of tule, cattails, sedge roots, and willows (Housley 1994: 564). In contrast to much of the northern intermontane, the Klamath's primary cultural plant use centers around marsh/lake lands (Housely 1994: 569).

First-fruits ceremonies directed at "maintaining an abundant supply of roots, berries, game, and fish," in addition to numerous other events, are celebrated at longhouses, shorthouses, Shaker Churches and private homes. These ceremonies serve an integral role in maintenance of community well-being. These resources also serve to mark other annual feast days. Each marriage, naming, funeral, first kill, and even Sunday Service may include a meal of traditional foods. Plants particularly play a role in worldview by serving as sources of spiritual well-being. Big sagebrush, a most respected plant, is used in ceremonies; it's burning often signifies purification. Crushed sage is a medium through which messages are taken to spirits. Tobacco can have special importance in acquiring curative powers. In sum, plants remain an important focus for present-day activities, including ceremonies and subsistence uses (Kuhnlein and Turner 1986).

Use of many types of resource locations, such as root grounds, were often shared with a number of communities as well as other ethnic and linguistic groups (Ray 1936: 117). Root gathering is often associated with large groupings; comprised of members of several ethnic

groups, a festive event though actual digging is normally not related with groups but done on a family or local group basis (Couture et al. 1986). The social nature of root camps is still important (Couture et.al 1986: 155). One root camp in the northern Harney Basin of southeast Oregon is used simultaneously by Northern Paiute peoples from Warm Springs, Owyhee area, Yakama, Fort Hall, Fort Bidwell, and Fort McDermitt. Such gatherings have a long tradition and occur no doubt more frequently than is commonly known by non-Indians. For instance, the camas digging period in Kalispel country along the Pend Orielle River was "a time of much inter-tribal visiting and gaming...(with peoples) from the Spokane, Coeur d'Alene, Colville, Flathead, Pend Orielle, and even Kutenai came, with the permission of the Kalispel..." (Cote 1980: 10). In precontact times, coastal groups would travel as far east as the Nez Perce root ground near present-day Moscow, Idaho (Ames and Marshall 1980: 28). In the Klamath region, people would converge at late summer wocus gathering areas, particularly the Klamath Marsh, from a large surrounding territory for several weeks (Gatchet 1890: 28). The considerable movement and socializing historically enjoyed is still an important socio-cultural factor today.

With hundreds of native plant species available, traditional pharmacology focused on prominent pre-contact conditions such as colds, sores, and digestive problems. Wounds, bruises, sores, and rheumatism were often treated with ground leaves or roots prepared into ointments and poultices. A wide variety of minor ailments (colds and digestive problems) were frequently countered with oral medicines. Roots, leaves, flowers, or entire plants were made into teas, or boiled and the resultant liquid drank (French 1981; French and French 1979).

Plants, like fish, are collected commercially as well as for subsistence and ceremony. For instance, camas root in Coeur d'Alene country is normally abundant and a large surplus is gathered for trade (Walker 1978). Similarly, roots from the northern Great Basin are involved in an extensive trade network (Prouty 1994: 579). Cultural root plants have long been major trade items by the Harney Valley Paiute (Couture et. al 1986: 157).

In addition to socio-cultural and economic importance, traditional foods have a high fiber content and are rich in essential vitamins and minerals, well preserved by traditional drying technology (Hunn 1990: 283; see also Konlande and Robson 1972). Nutritionally, these provide carbohydrates (sugar and starches) and trace elements. For instance, the carbohydrate yield from yampah for the time and energy expended is relatively low in the Great Basin, but the plant is nutritionally high in certain dietary mineral values (Couture et. al 1986: 157). Berries and other fruits provide important quantities of ascorbic acid. The cellulose and hemicellulose of plants also provide necessary dietary bulk (Keeley 1980; Norton et. al 1984). However, most native plants are low in protein; thus the need for meat and fish, and with a low fat intake, increased need for carbohydrates.

In the semi-arid intermontane subregions which experience long and short term climatic variations, plant resources represent resilient and highly adapted organisms to a variable, unpredictable environment. Native peoples are commonly described as flexible and opportunistic in implementing their harvest strategies year to year. As described by Housely (1994: 569),

The plant communities...are mosaics composed of many different plant species that respond differently to fluctuating weather and climatic changes. Individual plant species are not dependable or predictable; however, the very diversity of the plant communities can always be counted on to provide some form of food resources.

The geographic occurrence of some native species have been artificially manipulated to some degree. Today some wild species are transplanted for convenience of access. In the Harney Basin such plants include several berry and fruit species (Couture et. al 1986: 157). Other plants are either encouraged or tolerated for their convenience including willow, dogwood, some root plants, some grasses, and sedges.

In summary, many native plants continue to be used for ceremonial, subsistence, commercial and medicinal purposes and for manufacturing of objects (e.g., baskets, cradleboards) for personal use or sale (see Fowler 1990, Schlick 1994, and Wilke 1988). These traditional activities occur frequently out of sight of the public and with little knowledge of the land managers (Harbinger 1964; Couture 1978; Couture et. al 1986: 157). Recent years have witnessed a renewed interest in plant use by many peoples in the region. Youngsters are being taught traditional ways and "root feasts" are held at some schools. Such a renewal is seen as socially rewarding and important for maintenance of traditional activities that provide continuity with the past and reaffirmation of Indian identity (Couture et. al 1986: 158). Traditional plant use reflects resilience and persistence, common themes in the intermontane region (see Hanes 1982).

Wildlife

Hunting is an important economic supplement to the traditional diets of many of the northern intermontane Indian communities, and serves a significant socio-cultural role. Though beliefs and customs with respect to animals varies considerably across the northern intermontane region, there are some common patterns. For example, animals are not regarded as some subordinate order of beings present at the convenience of humans, but rather as other-tahn-human persons with whom humans establish relationships. Indian identification with animals (and plants as well) is a key characteristic of traditional Indian life and is fundamental to Indian world view. Consequently, the taking of game animals is a rite of passage, a central ingredient in masculine identity. Prayer, pleading and reverence are necessary to hunt so that animals may consent to be captured. Generally, wildlife is estimated to account for only 10% of total calories in traditional diets (Hunn 1990: 118). Exceptions would be the traditional Plains-like bison hunters in the eastern portion of the intermontane. Except for the Yakamas who required formal permission, aboriginal hunting territory of one interior Columbia group was generally open to another (Ray 1936: 119).

In the northern Great Basin, the principal large wildlife species were deer, pronghorn and bighorn sheep; to the north and east in the Columbia Basin were also moose, elk, and bison, and in several areas bears were hunted for meat as well as fur (Fowler 1986b: 79). In addition,

during summer in Fort Rock Basin, yellow-bellied marmots were harvested in the talus and rock outcrops. In the fall, communal rabbit drives and pronghorn hunts were conducted, thus adding an important social dimension to the resource use (Couture et. al 1986: 154). Some groups, such as the upper Kootenai, followed a typical Plains lifestyle, spending a good part of the year on the Great Plains bison hunting (Walker 1978). Bird hunting was also a common practice in the intermontane (Fowler 1986b: 82).

In the upper Klamath River region, waterfowl is of major interest (Spier 1930: 159), not only for food subsistence purposes, but very importantly for spiritual purposes. An example of the latter is use of duck eggs for annual first sucker ceremonies.

Animals are considered powerful and can thus help or hinder a person's ability to progress through life. Thus animals constitute a major class of spirits. The power to cure disease frequently comes from such animal spirits (Fowler 1986b: 96). Fish and wildlife laws are regarded with disdain by those who view the respectful taking of such animals as their natural, aboriginal right.

Other Resources

Reptile and insect foods are poorly reported in the anthropological literature and currently addressed by tribes when discussing resource issues. Frequently caterpillars, grasshoppers, frogs and lizards are all that are represented in the scientific literature. They are not known to be important in today's diets (Fowler 1986b: 88). Consumption of snakes, lizards and frogs continue to be rare. Like sculpin, horned lizards and rattlesnakes are respected and feared in some areas (Hunn 1980: 11). These species may be significant because of mythological connections although they are of no substantial subsistence importance. Use of inorganic materials in traditional manner is still sought in some areas, but information is not well known.

Environmental Influences

A major implication for ecosystem management strategies and goals is recognition of what is a "natural" condition for vegetative communities. Contrary to many of the beliefs of non-Indian emigrants arriving in the region in the 19th century, the interior Columbia Basin and adjoining areas were not pristine wilderness areas, but ecological systems in which humans had been an active component for millenia (MacCleery 1994; Woolfenden 1993). Disruption of regional traditional lifeways in the 19th century led to substantial ecological changes. These changes highlighted the previous interactions which, in some instances, contributed to keeping at bay certain ecological states, such as maintaining low fire fuel build-up and inhibiting forest encroachment on non-forested settings.

Most groups manipulated or otherwise managed portions of their environments in various ways. Aboriginal use of fire to maintain or select certain vegetative states or manage wildlife

has received substantial attention in recent years (Fowler 1986b: 93; see Robbins 1994). It is perceived that fire was a more common component of nature's life cycle and for millenia it was introduced by humans through perhaps a combination of intentional and unintentional actions. The general benefit of fire is to increase valued non-woody species and decrease biomass stored as wood.

Adoption of the horse by Nez Perce, Cayuse, Bannock, and other interior Columbian groups in the 18th century introduced major environmental change to the region as well. Some broadcast sowing of wild seeds was also performed in the Great Basin, at times combined with burning. Intentional and unintentional pruning of willows for basket fibers also occurred (Fowler 1986b: 94). The transplanting of some species for convenience purposes, particularly near substantial settlements, was perhaps far more common than perceived today.

Certain hunting and fishing practices reflect a conservation ethic, such as catching principally male trout and salmon on the spawning beds and restricted fishing at nights or on certain days, thus allowing a portion of fish to pass. Selective digging techniques employed in plant food harvesting and the time of harvests for native plants and animals also embody conservation elements. There is a strong desire not to intensively harvest species so as to eradicate them from a particular area, but rather to sustain their presence in familiar locations.

Most importantly for land managers, many tribal members today still possess intimate indigenous knowledge of the ecological adaptations of native species in the isolated geographic pockets where the species persist today, and hence a sense for potentially useful "indicator" species.

The above discussion of the nature of resource and landscape use by American Indians illustrates, among other things, the relationship of food sources to religious beliefs, to ceremonies, to rituals, to other people, to the deities, to water, sun, and air, to time greater than one year, and to the land. The cyclical concept of Indian worldview has been often capsulized by non-Indians with traditional annual rounds of resources represented by two-dimensional linear seasonal round graphs (Fig. 8 and 9). However, a strongly cyclic life has even more to do with basic philosophy and world view that subsistence economies. The next section explores the modern-day management issues associated with the multiple interests briefly highlighted in this section.