Report on the Chilkoot River Corridor Strategic Planning Project

A community planning collaborative

December, 2003





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By

Burl Sheldon, Project Staff and the CRC Project working group

A community planning collaborative administrated by the Haines Chamber of Commerce

December, 2003	

Acknowledgments:

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Cover photo credits (clockwise from upper right):

Chilkoot clan house, 1894 (MSCUA, University of Washington, Negative No. NA3081); Daybreak, Chilkoot River, Anthony Crupi; Anglers fish the east riverbank, Kermoian Productions; Bear and Chilkoot Road traffic, Kermoian Productions; Stellar's Sealions in the Lower Chilkoot River, Jamie Womble; Tour-group views bear at Chilkoot Lake, Kermoian Productions; Dipnetting Eulachon, Jamie Womble; A hooking stand and the east bank, 1911, (MSCUA, University of Washington, Negative No. NA2841).

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Executive Summary

This report describes the scope, methods and results of the Chilkoot River Corridor (CRC) Strategic Planning Project (CRC Project), a community collaborative created to address recreational use impacts along Chilkoot Road and the adjacent Lower Chilkoot River. This "corridor" begins at the Chilkoot River estuary and extends upstream to the State Recreation Site at Chilkoot Lake (Figure 1, inside cover).

A stakeholder's working group, comprised of agency staff and individuals with diverse views on the area, was develop in late 2000. Over the course of 30 months, 36 meetings were convened to identify and implement planning strategies in a consensus process. Project activities were supported by seven different regional funding agencies, local dollars and in kind services. Initial momentum and the largest share of support was provided by the *Alaska Conservation Foundation, Sustainable Community Development Grant Program*.

Selected background information on area land management and ownership and natural, cultural and socio-economic resources is presented. For comparision, information is provided from the literature on the public's valuation and willingness-to-pay for nature-based recreation, such as is available along the CRC. Estimates of spending for similar recreational opportunities in other areas of the state are also presented.

Recreational use of the CRC is of great socio-economic importance to Haines. Public use of the CRC grew in the 1990's. Between 2000 and 2002, despite an overall decrease in Haines' tourist visitation, Chilkoot Road vehicle traffic grew 40%, indicating that residents and visitors target the area. Chilkoot River ranks second in popularity for Southeast Alaska freshwater sports fishing. Estimates of Chilkoot River angler spending indicate that in 2001 the fishery generated in excess of \$1 million in local economic activity. The economic significance of the fishery, which fluctuates with angler effort, increased in 2002. Commercial tour clients who used the CRC in 2002 generated economic activity estimated at \$1.5 million. Data does not exist to provide solid estimates of other independent visitor and resident use; however, counts of vehicles on Chilkoot Road during July -- October, the peak months of brown bear activity, suggest that visitation for non-consumptive sight-seeing, wildlife viewing and photography are primary and growing uses of the area. Comparisons to similar Alaska areas suggest that the economic significance of CRC wildlife viewing, by independent visitors and residents, exceeded \$1 million in 2002.

The *Consensus Action Plan* section outlines working group planning strategies, actions taken, justification and further action needed. Consensus strategies and actions resulting from the project include:

- ◆ Authority to manage recreational use on public lands within the CRC has been transferred within the Department of Natural Resources' (DNR), from Division of Land Mining and Water to the Division of Parks and Outdoor Recreation (DPOR).
- Overnight parking and camping on Chilkoot Road is now prohibited as a measure to reduce impacts to wildlife, vehicular congestion and inappropriate use of culturally important areas.
- ♦ A pilot "Chilkoot Bear Monitor" staff position was funded by the Alaska Department of Fish and Game in 2002 and expanded under DPOR supervision in 2003. As of this publication, private and public grant funds were being sought to further expand the DPOR position in 2004. The monitor program provides uniformed DPOR personnel--using an education and interpretation approach--to reduce negative visitor impacts to wildlife, habitat and cultural resources. To support monitor program development and continuity, a donation-based "iron-ranger" funding strategy was developed with a possible future partnership with an as yet unidentified non-profit entity.
- ♦ Strategies support Chilkoot Culture Camp continuity, monument Alaska Native cultural significance and document and protect cultural and historic resources in cooperation with the Sheldon Museum.
- ♦ A CRC Natural Resource and Native History Interpretation Planning Project is now fund (\$47,770) and underway. Completion is anticipated for December 2004.

Special Recognition

While many individuals share responsibility for the Chilkoot River Corridor Strategic Planning Project (CRC Project), the following outstanding contributions require special recognition:

- ♦ Funding by the *Alaska Conservation Foundation (ACF), Sustainable Community Development Grant Program* provided the initial momentum and ongoing support for the project. Other essential financial support for CRC Project initiatives was provided by the following foundations or government programs:
 - o Alaska Fund for the Future
 - o Coastal Impact Assistance Program of the National Oceanic and Atmospheric Administration
 - o Leighty Foundation
 - o National Fish and Wildlife Foundation
 - o Skaggs Foundation
 - o Watchable Wildlife Conservation Trust
- ◆ Participants on the CRC Project stakeholder's working group and regular members of the public have contributed over 1,000 hours in a respectful discussion aimed at addressing visitor impacts at Chilkoot. The Consensus Action Plan presented in this report displays the WG's mutually agreed upon strategies to sustain Chilkoot area resources for future generations.
- ◆ The Chilkoot Indian Association (CIA), the Haines Chamber of Commerce (HCC) and Lynn Canal Conservation (LCC), initiated the CRC Project and embarked on a unique approach to community problem-solving. This established an encouraging precedent for the community. The HCC provided consistent management and administrative support throughout the project.
- ◆ Local contributors and those who have donated services include: the City of Haines, the CIA, the HCC, the Lutak Land Use Service Area Board, LCC, Mike Case, Sheinberg and Associates, Burl Sheldon, Haines Airways, Wings of Alaska, The Captain's Choice Motel, the Sheldon Museum and Cultural Center and the American Bald Eagle Foundation.
- ◆ The project is grateful for agency staff participation including: Alaska State Division of Parks and Outdoor Recreation (DPOR) rangers, Bill Zack (retired) and Joel Telford and ADF&G Assistant Area Biologist, Polly Hessing. Participation on the working group by agency personnel was on personal time. The National Park Service (NPS) Rivers, Trails and Conservation Assistance Program provided early facilitation support and periodic guidance in planning through consultation with planner Cassie Thomas.
- ♦ The innovative and valuable research conducted by Utah State University graduate student, Anthony Crupi and the Chilkoot Bear Education and Research Station (CBEARS) is important to area planning and the sustainable management of CRC resources. The CRC Project is grateful to Crupi, his staff, Dr. Barrie K. Gilbert and CBEARS program funders including the Skaggs Foundation, LCC, the Alaska Division of Wildlife Conservation and the National Fish and Wildlife Foundation.

Project Description

A. PURPOSE AND ORIGIN

The Chilkoot River Corridor Strategic Planning Project (CRC Project) was formed as a collaborative of the Haines Chamber of Commerce, Lynn Canal Conservation, Inc. and the Chilkoot Indian Association. The project's initial goals were to: 1) develop and implement a plan for the long range sustainable management of the outstanding natural, cultural, historical and socio-economic resources of the Chilkoot River corridor (CRC); and 2) to create a community-based collaborative model to resolve future land use and natural resource related conflicts.

The need to address impacts caused by growing recreational use of the CRC was first discussed publicly at the Winter 2000, Haines Chamber of Commerce Tourism Forum, facilitated by Haines residents Dan Henry and Karen Hess. During spring-2000 a seed grant from the *Alaska Conservation Foundation*, *Sustainable Community Development Grant Program* was secured. The services of Community Planner, Barbara Sheinberg of Juneau helped provide early guidance in collaborative planning, project format, working group structure and facilitation. In December 2000, the project convened a community-wide forum, facilitated by Ms. Sheinberg, to introduce the planning process to the community and to scope public values and concerns regarding the Chilkoot.

B. CRC GEOGRAPHIC SCOPE

The project has limited geographic scope. The planning effort deals solely with the "corridor" of lands adjoining Chilkoot River: the DPOR managed campground, parking areas and the adjoining lakeshore, Chilkoot Road and the estuary (Figure 1, inside cover). Concerns dealing with management and possible negative impacts to the entire Chilkoot watershed have been periodically discussed during the process. The project has unequivocally recognized the importance of the upper watershed to the values enjoyed by the public in the lower Chilkoot River area (see Vision Statement), but has stayed geographically focused on the corridor area.



C. STAKEHOLDER'S WORKING GROUP

The initial working group (WG) was developed from a list of names generated during the forum of December 7, 2000. Guidance in selecting the initial working group came from Barbara Sheinberg, then Project Coordinator, Mike Case and organizational collaborators. Stakeholder groups represented on the Chilkoot River Corridor Strategic Planning Project working group include: Lutak Inlet area residents, the Lutak Land Use Service Area Board, commercial tourism interests, the Alaska Department of Fish and Game (ADF&G) the Alaska State Division of Parks and Outdoor Recreation (DPOR), the Chilkoot Indian Association and Native residents with cultural ties to the area, hunting and sports fishing interests, conservationists and the community at-large.

The initial seven meeting series of the working group were convened between January and May 2001. At the conclusion of this first cycle, eight recommendations were approved by consensus. Implementation of initial recommendations began in summer 2002.

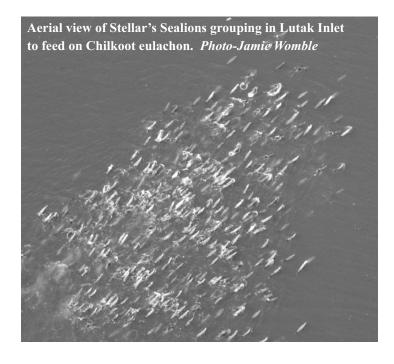
A second series of WG meetings began in October 2001 and continued through May 2002. A similar schedule was employed from October 2002 through April 2003. To improve meeting productivity, a modified Robert's Rules of Order with consensus voting was used beginning in May 2002.

Several of the original WG participants chose to leave the project for personal reasons in the Fall of 2001. After lengthy discussions on a method to replace these individuals, a "Working Group Protocol" was drafted and approved by consensus. The WG Protocol, provided in Appendix A, identifies a method to replace individual participants, the expectations of WG participants, the question of participation by alternates, vacancy advertisement, etc. The names of WG participants, their stakeholder group affiliation and year(s) of involvement are reported in Appendix B. All consensus approved WG planning strategies are presented in the Consensus Action Plan section.

D. PROJECT MANAGEMENT AND STAFFING

Throughout the project the HCC has handled the project's financial and administrative

responsibilities. The Chamber appoints a member of its board to serve as a Project Manager. The Chamber's president has also provided direct oversight. On several occasions a Steering Committee comprised of representatives from the three initiating organizations (HCC, CIA and LCC) helped with decisions affecting fund raising. For example, the decisions to apply for grants to support the development of Chilkoot educational material and Chilkoot interpretation planning were discussed and approved by both the WG and Steering Committee representatives. Project management and personnel are shown in Appendix C.



Background for Planning

A. COMMUNITY VALUES AND CONCERNS

The December 2000 community forum, convened in the American Bald Eagle Foundation, served to introduce the CRC Project and provided an important data collection point. Community Planner, Barbara Sheinberg provided an outline of community collaborative planning, guided participants in focusing on those aspects of Chilkoot that they value, and helped participants express their concerns regarding Chilkoot.

Among the most important values were wildlife viewing and habitat, scenic beauty, recreational opportunities and Tlingit culture and history. The most commonly expressed concerns dealt with bear-human interactions, crowding and traffic congestion and disrespectful behavior. A complete summary of data collected at the forum is provided in Appendix D.

B. <u>LAND OWNERSHIP AND MANAGEMENT</u>

Lands within the CRC fall into six categories. These are outlined below and shown in Figure 1 (inside cover):

- 1) Federal Bureau of Land Management (BLM) lands managed by the Haines State Forest (HSF) with tentative approval for state conveyance
- 2) BLM lands selected and managed by DPOR but which have a competing "historical selection" by a Native Corporation
- 3) State-owned road rights-of-way
- 4) Haines Borough land
- 5) Private property
- 6) Conveyed Native Allotments



A grave-site within Lot 2, USS 3707: one of two parcels on the CRC with Sealaska, Inc, ANCSA historical selections pending adjudication.

1. HSF Managed Federal Lands

With two exceptions described below, the BLM recognizes the transfer of Chilkoot area public lands to the state Department of Natural Resources (DNR) as tentatively approved (TA). According to BLM, this designation is equivalent to a patent (pers. comm. Sharon Warren, BLM). Public lands within the CRC are managed as a unit of the Haines State Forest with cooperative management agreements with DPOR.

The HSF Chilkoot Lake Management Subunit—8b is classified as Public Recreation Lands. Management objectives within the subunit are described by DNR planners as "similar" to those within the Chilkat Alaska Bald Eagle Preserve, which adjoins the northern portion of Chilkoot Lake. The full text of the Chilkoot area management intent is available in the August 2002, *HSF Draft Plan*.

Synopsis of the HSF Chilkoot Area Management Guidelines

- ◆ Protection of salmon habitat;
- ◆ Provision of public recreational opportunities at Chilkoot Lake State Recreation Site;
- ◆ Cooperative management of the CRC and the campground through agreements with DPOR;
- ♦ Allowances for dispersed and developed recreational uses;
- ◆ Exclusion of "development activities, including commercial motorized activity,...from sensitive sockeye spawning habitat" on the lake's western shore; and
- ◆ Prohibition of activity involving commercial use of "personal watercraft", mineral development and commercial timber harvesting.

2. Lands Under DPOR Management and Native Corporation Selection

Parks Division manages recreational use within the HSF at Chilkoot Lake State Recreation Site (CLSRS) and along Chilkoot Road. The recreation site includes the campground, boat ramp, parking area, adjoining shoreline, and the uplands along approximately 1000 feet of the roadway approach to the parking area. Parks-managed lands also include a roughly triangular shoreline parcel directly across the river from the parking area that extends from the NW corner of the George E. Williams Native Allotment upstream approximately 1,300 feet along the east bank of the Chilkoot River.

At the request of the CRC Project, a cooperative management agreement between the HSF and DPOR was adopted in 2002 (see page 33). This agreement expands the authority of the DPOR Ranger to include management of "pubic recreational activities and facilities" in the area described as follows:

"...the area west of Chilkoot Lake Road within the Haines State Forest, and the navigable waters of Chilkoot Creek between the inlet at Chilkoot Lake and its outlet at the intertidal area of Lutak Inlet. Tidelands within 250' of the ordinary high water of Chilkoot Creek in this intertidal area are also included."

a. Sealaska ANCSA Historical Selections –Case Number AA10508

The sole restriction to state ownership of selected CRC lands is a pending historical selection by Sealaska, Inc.—an Alaska Native Claim Settlement Act (ANCSA) Corporation. Provision for such historical selections are allowed under ANCSA, Section 14(h)1. Based on BLM, DNR and BIA records, the original selections included parcels totaling 78.94 acres. A significant portion of this area was conveyed as a Native Allotment to George E. Williams (Case #A061299).

Areas confirmed by BLM as still having competing, and pending, historical selections by Sealaska include:

- ◆ A roughly L-shaped parcel on the west river bank including the boat ramp and lake shore parking lot, portions of the campground, the area of the Chilkoot Culture Camp (CCC) and extending several hundred feet downstream and up-gradient from the CCC and riverbank;
- ♦ A 0.5 acre portion of the forested gravesite area near to Lutak Bridge on the west riverbank within USS 3707, Lot 2 (0.84 acres, photo on page 9; *this area is not highlighted in Figure 1*--inside cover).

The section of USS 3707, Lot 2 that is outside of the 0.5 acre historical selection is TA'd for conveyance to the state. The portion of this parcel co-joining the Lutak Road right-of-way (ROW) is widely used by the public. Although a survey has not been completed in many years,

this area probably includes portions of the informal parking areas adjacent to the Lutak Bridge outside the state ROW. It *may* also include the portions of the river access area downstream and adjacent to Lutak Bridge. The 1959 survey of this area is shown in Appendix E.

b. Revoked Federal Power Site Lands

The Chilkoot Lake Power Site Classification withdrawal originally included the entire lakeshore and all uplands to the 200-foot contour elevation. The State of Alaska petitioned BLM to revoke this classification and BLM complied in October 1998. The remaining power site withdrawl is the 61- area associated with the Connelly Lake Hydroelectric Project (previously named Upper Chilkoot Lake) — PP 11715-000.

National Park Service Planner, Cassie Thomas noted, "If the [Connelly Lake] project is licensed, portions of the withdrawn lands, along with other lands needed to operate the project, could be conveyed to the licensee under authority of the Federal Energy Regulatory Commission (FERC)." She added: "FERC has eminent domain over any lands needed to operate a power project."

3. State Owned Road Rights-of-Way

The State of Alaska has uncontested ownership of the Lutak and Chilkoot Road ROW's. The State Department of Transportation and Public Facilities (DOT&PF) is responsible for their management and maintenance.

a. Lutak Bridge

The Lutak Bridge ROW is 120 feet wide over the length of the bridge. However, the ROW is asymmetric from the bridge centerline: in a southward (downstream) direction it extends 82 feet from centerline; in a northward (upstream) direction it extends 38 feet from centerline. The bridge ROW ends at the mean high-tide mark of the Chilkoot River/Estuary.

- b. ROW Adjoining Robert David Allotment Subdivision (formerly USS 3707, Lot 1) Roadways adjoining private properties within the former Robert David Native Allotment have a 60ft wide ROW (portions of Lutak and Chilkoot roads). The ROW width on the river-side of parcels 1, 2, and 3 appear to be 26.5 feet (pers. comm. Robert Murphy, DOT+PF). For more information on the Lutak/Chilkoot ROW– see "1983 Lutak Rd PDF" at: www.dot.state.ak.us/sereg/surveydata).
- c. Chilkoot Road North of the Robert David Allotment Subdivision
 The ROW width between the lakeshore parking area and the northernmost point of the former
 Robert David Allotment is 100 feet—50 feet on each side of the centerline (pers. comm. R.
 Murphy, DOT+PF)

4. Haines Borough Land

The Haines Borough owns two parcels fronting the eastern river-bank (Figure 1). Borough ownership along the river extends from Lutak Bridge upstream approximately 700 feet. These lands include important Tlingit Native cultural sites including burial grounds:

- ♦ Alaska State Lands Survey No. 81-30: 62.74 acres, more or less
- ♦ US Survey 3748: 11.63 acres, more or less

The former (Third Class) Haines Borough and the CIA discussed the possible ownership transfer to the CIA of all or a portion of these parcels. At the time of publication no agreement had been ratified or transfer terms completed. The tribal government's request for the ownership transfer was tentatively approved in Haines Borough Ordinance 01-05 — "...scheduling the transfer of borough owned real property, identifying said lands and establishing a method of transfer." Borough lands assessor, Dan Turner, drew up a conservation easement pertaining to the property on the advice of the borough's legal counsel. To date the resulting *Deed*



Upstream from the east end of the Lutak bridge are lands owned by the Haines Borough. Bears tend to prefer crossing over the roadway, rather than under the bridge.

Photo -- Kermoian Productions, 2002

of Conservation Easement has not been agreed upon by the parties. Discussion of the matter last appears in the assembly minutes on August 21, 2001.

5. Private Property

Private parcels, once part of the Robert David Native Allotment, span both sides of the Chilkoot Road ROW. This subdivision begins with the McGuire property adjoining Lutak Road to the south and extends northward along Chilkoot Road to a point some 800 feet beyond the Lutak intersection. Eastwest lot lines in this subdivision continue to the meander-line of Chilkoot River. The meander-line extends to the mean high-tide mark. Of the original 31.39 acres allotted, some 26 acres have been sold to private individuals with the northernmost portion still in Native Allotment status. Plats of private holdings within this subdivision are available at the Haines Borough lands office.

6. Native Allotments

a. East River Bank

George E. Williams Native Allotment — US Survey No. 11300

Much of the Chilkoot River east bank is included in the Native Allotment owned by the heirs of George E. Williams. The 160-acre parcel extends upstream from the shared borough land boundary (beginning approximately 700 feet upstream from Lutak Bridge) to a point directly across the river some 350 feet directly upstream from the Chilkoot Culture Camp.

b. Western Side of River

Robert David Native Allotment — Lot 1, US Survey No. 3707

Of the 31.39 acres originally certified in 1960, approximately 5-acres are still in possession of the heirs to Robert David (based on Haines Borough land records). The northern-most boundary of the remaining 5-acre allotment extends to within approximately 650 feet of the Deer Rock parking area.

Paul S. Philips Native Allotment – Cert. 50-92-0712

A nearly square parcel of approximately 2.5 acres is located above the roadway approximately 600 feet directly north of the Deer Rock parking area.

C. HISTORICAL AND CULTURAL RESOURCES

1. The Sheldon Museum Chilkoot Archeological Information and Interpretation Project

The CRC Project secured funds from the *Alaska Fund for the Future* to compile text, photographic and archeological information on Chilkoot Native history. To the extent possible, previously existing

information from the Alaska Department of Natural Resources, BLM, Sealaska, tribal and clan sources will be compiled and made available to the public through the museum. As funding allowed, non-invasive field research was conducted to identify possible new archeological resources and better estimate the duration of human use. Persons interested in viewing information on Chilkoot historical sites are encouraged to contact the Sheldon Museum and Cultural Center.

A variety of references on Chilkoot are available at the Sheldon Museum and through the Haines Borough Public Library. Readers with interest in Chilkoot clan possessory rights and traditional histories can consult a number of easily accessed references. Two of particular relevance are:



A "HOOKING STAND" for gaffing salmon, looking towards the east riverbank, 1911. (MSCUA, University of Washington, Negative No. NA2841)

- 1. Goldschmidt, W.R. and Haas, T.H. (1998). Haa Aani': Tlingit and Haida Land Rights and Use. University of Washington Press/ Sealaska Heritage Foundation. A nicely formatted reprint of 1946 ethnographic research on Haines and other areas in Southeast Alaska.
- 2. Haa Shagoon, (1981). A video production of the Chilkoot Indian Association describing Native claims and concerns at Chilkoot, narrated by Austin Hammond, deceased leader of the Chilkoot Sockeye Clan (Raven Moiety).

2. Glacial Influence and Early Use

The lower Chilkoot River carves its way through the massive moraine of glacially deposited sediment and rubble visible as one approaches Chilkoot Estuary on Lutak Road. Based on data presented by Dr. Chris Larsen, a Geophysicist with the University of Alaska Fairbanks, an increase in land elevation of five to six meters, relative to the sea surface, has occured in the Lynn Canal area since approximately 1750AD--the peak of the most recent glacial event--"the Little Ice Age".

Research in the early 1990's by the DPOR, Office of History and Archeology dated cultural artifacts recovered from the area of the parking lot to approximately 1200 AD. More recent radio-carbon dating was made possible through the above referenced Sheldon Museum project. In 2003, a wooden cultural artifact collected by museum staff from the area of the Chilkoot estuary--possibly part of an early fish trap-- was dated to 2,160 year before-present (+/- 60 years, 95% confidence interval).

The current rate of glacial rebound effecting the Haines area land-mass is among the highest in the world--about 0.9 inch/year, or approximate one-foot of vertical rebound each 13 years. These effects undoubtedly produced marked changes to the Chilkoot ecosystem and landscape. Patterns and the duration of Chilkoot human use have been unquestionably shaped by glacial rebound. For example, at the height of the Little Ice Age, during high-tide events, sea-water would have entered what is now the freshwater lake. This may have affected lake chemistry and the rearing



Traditional clan houses, Chilkoot River, 1894. (MSCUA, University of Washington. Negative No. NA3072)

of lake-dependent sockeye and coho salmon. In that distant time, use by the Tlingit may have been very different than what was documented in the 1880's at the time of the early missionaries.

2. Chilkoot (Lkoot) Culture Camp

In 1972 Austin Hammond, a successful Haines fisherman and leader of the Sockeye Clan (Raven moiety), erected wall tents on the west bank of the Chilkoot River, creating the Chilkoot Culture Camp on land inhabited and claimed by his ancestors. Hammond's vision of a school to teach Tlingit

life-skills, arts and applied sciences to young people triggered a boom in native cultural education and was widely supported by Native and non-natives in the region. Acceptance of all students regardless of age or ethnicity is an important goal of the CCC continuing to this day.

In 1976, the Raven's Wing House, a permanent structure, was relocated to the site. According to Jan Steinbright, an early CCC collaborator, the building had previously served Haines as a library, brig and as a carving studio to Nathan Jackson. The original structure was expanded in the mid-1980's.



The Chilkoot (Lkoot) Culture Camp is situated on BLM land managed within the Haines State Forest. Lands associated with the camp, and portions of the State Recreation Site, are within one of two pending Sealaska, Inc. historical selections in the CRC.

The CCC facilitated instruction in a wide range of topics and skills including: beading, carving, bent-wood box construction, subsistence fishing and trapping and food processing, Native uses of local plants, traditional dance and song, oratory, Tlingit language and writer's workshops. Paul Jackson of Sitka noted, "Austin was the spiritual root. He wanted a place where kids can go to learn about their culture."

An important CCC goal is to link Tlingit elders with young people. Elders from Angoon, Haines, Hoonah, Juneau, Klukwan and Yakatat provided instruction; yet, in some instances non-Native instructors are also used. Over the years, agency support for CCC programs came from the CIA, Sealaska Heritage Foundation, Klukwan, Inc., the National Endowment for the Arts and the state's Older Alaskans Commission. Some recent programs have been sponsored through the Juneau School District. However, personal funds from Hammmond and other individuals were also important. The camp's most active period was from the mid-1980's to Hammond's death in 1992.

During peak activity, two or three residential programs were scheduled each summer. Each ran for about 10 days. While the aim of most camp sessions was youth education, some camps were aimed at adult education.

The CCC is less active today than at its peak and the Raven's Wing House an adjoining facilities are in disrepair. However, summer programs continue, although a number of inspirational Tlingit elders are now deceased. In recent years, new wood-frame structures were erected to provide sleeping accommodations. The CCC has Internal Revenue Service status as a 501(c)3 non-profit, but the camp's Board of Directors has been relatively inactive in recent years.

Section Contributors: Ray Dennis Jr., Dick and Julie Folta, Paul Jackson and Jan Steinbright.

D. FISHERIES AND WILDLIFE MANAGEMENT AND RESEARCH

1. Wildlife Management and Research

Management of Alaska's game and non-game wildlife is the responsibility of the ADF&G Division of Wildlife Conservation (DWC). The mission of the agency is to "conserve and enhance Alaska's wildlife and their habitat and provide for a wide range of public uses and benefits." Consistent with DWC's goal of promoting public participation in decision making, Assistant Area Biologist, Polly Hessing has been an active participant in the CRC Project, traveling to Haines from Juneau to attend meetings.

Having a monitor on site was among the first recommendations generated by the CRC Project working group during the winter of 2001. The monitor position was filled in August 2002 through temporary funding from a Strategic Wildlife Grant through ADF&G. ADF&G grant funding for a portion of the season was again secured in August, 2003 and administered through the DPOR.



The Monitor position was first piloted in late summer, 2002. Here the Monitor meets bear viewers on Chilkoot Road.

Photo -- Kermoian Productions, 2002

a. The Chilkoot Bear Monitor Program –Lessons Learned in 2002 and 2003

The experience of the monitor in attempting to reduce negative bear-human interactions provided DPOR, DWC and the CRC working group with valuable information about the management needs and allowed the determination of knowledge, skills, and abilities that a monitor should have. The position was initially filled by Mr. Tom Prang whose first activity in 2002 was in late August, near the peak of bear and human use. He sought to help visitors comply with state game regulations and minimize disturbance to wildlife. The position was largely educational and used encouragement, reminders and suggestions to influence behavior.

Prang noted that the general absence of law enforcement personnel at most times was a problem. While the public was mostly cordial and complied with his requests, a number of encounters demonstrated that some individuals required the prospect of a citation before they would modify behavior. He suggested that the position have better communication ability with local enforcement or be deputized to enforce appropriate regulations.

Although nominally supervised by DWC, the monitor also worked with DPOR staff. Prang provided a summary of the needs of the position in a report to the project and the Haines community at a fall 2002 presentation. The full text of Prang's presentation is provided in Appendix F. Prang stressed the need for the position, stating, "Much has been done to improve conditions on the Chilkoot River", and summarized future needs:

- ◆ The Monitor Program needs to continue to build upon the lessons learned each year and it is imperative that stable, long-term funding be created;
- The position should have direct access to Public Safety officers and have first aid training;
- ◆ Providing restroom facilities and education is an ongoing need as the "entire area is being used as a latrine";
- Bank erosion, caused mostly by anglers, is an ongoing concern;
- ◆ Problems caused by vehicular congestion during times of heaviest use are important to address;
- ♦ While noting improvement overall, the need to achieve consistent, model behavior from commercial operators remains a problem;

In 2003, the primary goal of the Chilkoot Bear Monitor Program was, again, to prevent negative bear-human interactions. District Ranger, Joel Telford broadly defines "negative" as being "any interaction where a bear changes its behavior due to a human presence." Funding for the 2003 program came through both ADF&G (\$8,000) and DPOR (\$2,000 plus vehicle/logisitical support). During August, September and October, 440 paid staff hours and over 200 volunteer hours were logged in Chilkoot Bear Monitor activites. Volunteer support was provided by the CLSRS Campground Host.

A range of factors contributed to 2003 being considered an improvement over the program piloted by DWC in 2002. Telford noted that first among these was highly experienced and diverse personnel. Monitor Anthony Crupi received his MS degree studying the Chilkoot brown bear population and Monitor Nick True had four previous years of DPOR employment and experience in resource management.

The program strategy of visitor education and interpretation emphasized a "voice of reason" approach, when dealing with people exibiting inappropriate behaviors. The educational flyer *Respecting Chilkoot: a community treasure* was reviewed with and distributed to visitors on an as-needed basis. An additional factor in 2003 was poor angling for both sockeye and coho salmon. Chilkoot River angler use was much lower than in 2002.

Specific strategies described as contributing to the 2003 success include:

- ♦ Visitor compliance and improved monitor visibility was aided by personnel using DPOR uniforms, and travelling in a marked DPOR vehicle;
- ♦ Improved signage helped to further reduce overnight roadway use and enforcement needs;
- Workload sharing among paid and volunteer personnel allowed for better support during stressful, high-use periods;
- ◆ Local supervision of personnel and better law enforcement access was provided through the Haines-based District Ranger.

Telford summerized the 2003 program:

"A July 15th start would have been ideal as the monitor is needed earlier and it would give Parks Division a better opportunity to secure highly qualified personnel. But overall I consider 2003 to be a very successful year for the monitor program. Thousands of people were able to view up to 16 different brown bears in close proximity with no injuried to either bears or humans."

b. Monitor Program Continuity

As noted in the Consensus Action Plan Section (Goal III), further development and stable financial support for a Chilkoot Monitor Program is crucial to the long-range implementation of this plan. Developing a community-based structure to sustainably fund one or more monitor positions through an existing, or new, non-profit enterprise is a CRC Project planning strategy. A portion of the funds to support the program would in concept be derived from visitor donations collected in an Iron Ranger. Chilkoot Road is a DOT+PF maintained thoroughfare; as such, mandatory fees or a toll cannot be charged for access.

Within a non-profit supported monitor program, collaborative supervision through DPOR and two divisions within ADF+G (Sport Fish and DWC) would be ideal. However, given DPOR authority to manage recreational use in the area, the Parks Ranger would have a leadership role in supervision. In concept, the Haines Borough Parks and Recreation Department might also have a role.

At the time of report publication, a grant application by LCC to the Rivers and Trails Conservation and Assistance Program of the National Parks Service was pending. If successful, the \$5,000 requested would be channeled to DWC to facilitate a mid-July start to the Chilkoot Bear Monitor position in 2004.

c. Lutak Area Hunting Closure and Bear-People Concerns

Hunting is prohibited in the Lutak Road Closed Area: "a strip 1/4 mile wide on each side of the Lutak Road between Mile 7 and Chilkoot Lake, and from the Chilkoot River bridge to the end of the Lutak Spur at the head of Lutak Inlet..." (2003 -Alaska State Game Regulations). Resident and non-resident hunters outside the Lutak Road Closed Area may take big game species as allowed by regulation.

Polly Hessing, DWC Assistant Area Biologist, and a participant on the CRC working group, summarized ADF&G brown bear managment in the Chilkoot River drainage and concerns regarding bear-human interactions in the CRC area:

"Over the past 10 years, approximately 1-2 brown bears per year have been killed by hunters in the Chilkoot River drainage, upper and lower river valley combined. There have been additional bears killed in this area under the Defense of Life and Property (DLP) clause of ADF&G regulations. Several of these bears became food conditioned because of poor food and garbage handling by area users and residents and were destroyed after becoming problems. Because the number of DLP bears killed in the area is included in the 16 bear guideline harvest, it is important that the negative effects on this population be alleviated when possible.

d. Wildlife Diversity

Haines' position in a transition-zone between the marine/estuarine ecosystem and the interior valleys of British Columbia and the Yukon makes the area a seasonal stop-over for migratory birds. Chilkoot has been used as a commerical tour destination by *Alaska Nature Tours, Inc* (ANT) since company formation in the mid-1980's. Their guides have routinely kept seasonal daily records of species sighted along the route from downtown Haines, along Lutak Road, past the Chilkoot River Estuary and along the river corridor to the lakeshore. The complete listing, provided in Appendix G, demonstrates the importance of the area from the perspective of habitat and as a premier area for viewing wildlife. At least six bald eagle nest sites, a high density, are located throughout the corridor. Mountain goats are routinely viewed on cliffs on the east side of Chilkoot Lake, and hunters occasionally kill one of these during the fall hunt.

e. Chilkoot Bear Education and Research with Utah State University (USU)
The Chilkoot Bear Education and Research Station (CBEARS) began education and research activities in 2000. Between 2000 and 2002, Station Director Anthony Crupi trained and employed 14 volunteers and compiled 3,700 hours of scientific observation on brown bear ecology and human activity along the river. His research, guided by bear behaviorist Dr. Barrie K. Gilbert, and his USU thesis committee, evaluates "bear behavior and ecology in the Chilkoot watershed in relation to human use patterns."

Crupi's research and public education efforts are important to the CRC Project and the community. Crupi has provided planning information to the working group and free educational presentations for visitors and Haines residents. On two occasions the working group has expressed consensus support for his and Dr. Gilbert's research funding proposals and has provided letters of support as requested (see Consensus Action Plan—Goal X). There is a continued need for resource data and the completion of Crupi's habitat assessment proposal will be an asset to long-range planning.

DWC Biologist. Polly Hessing noted her concern regarding impacts to wildlife and ongoing bear-human interactions at Chilkoot, as well as the importance of Crupi's research:

"In addition to observing bears obtaining fish scraps and human food from people, Crupi and his personnel have also documented exclusion of brown bears from the fish resource by inconsistent human practices by anglers and wildlife viewers. Their data also indicate a direct correlation between increasing vehicular traffic and decreased bears observed. Clearly, modifying some human practices may be in order."

2. Fisheries Management and Research

a. Commercial Fisheries

All five Pacific salmon and Dolly Varden char utilize the Chilkoot watershed, however, chinook and chum are relatively rare. The ADF&G, Division of Commercial Fisheries manages Lynn Canal drift gillnet fisheries with the goal of achieving long-term maximum sustained yield.

To provide reliable escapement and run timing data, the division operates the Chilkoot weir, with the primary target species being sockeye salmon. Coho salmon are not reliably counted at the weir because flood conditions during the fall run require removal of the weir prior to peak escapement. Chilkoot commercial harvest and escapement statistics show an increase in sockeye escapement following an all time low in 1995 (Table 1). Pink salmon, which attract brown bears to feeding areas, mostly in the lower reaches of the river, have also increased with a strong return in 2002.

Table 1. Chilko	Table 1. Chilkoot sockeye escapement and commercial and subsistence harvest. (source ADF&G).							
Category	Ave. 1976 -2001	1995	1996	1997	1998	1999	2000	2001
Escapement	66,439	7209	50,739	44,254	12,335	19,284	43,555	76,283
Commercial Harvest	109,625	7,946	18,861	28,913	2,206	4,258	14,133	67,502
Subsistence Harvest	unavailable	384	2,311	1,741	160	115	199	1440

b. Sport Fisheries

The ADF&G Sport Fish Division manages Chilkoot recreational fisheries with the goal of conserving naturally reproducing populations of sport-caught species and providing angling opportunities that maximize social and economic fishery benefits. Complete Chilkoot River sport harvest and effort data for sockeye, coho, pink, and chum salmon and Dolly Varden char for years from 1987 through 2001 are provided in Appendix H. Readers should note that "harvest" does not measure catch and release statistics.



Haines residents use the ADF&G weir to dipnet eulachon (American candlefish). The first eulachon arrive in February with the main run coming in late April or early May; Inset - Eulachon

Photos -- Jamie Womble

E. CHILKOOT PUBLIC USE ESTIMATES

The growing level of public use is the most important issue effecting the long-range sustainable management of Chilkoot area resources. Unfortunately, data on human dimensions of resource use are inadequate and may misrepresent intensity and patterns of use. How resource managers measure human use depends on agency goals and resources and some clearly under--or over--estimate use by a significant margin. For example, estimates of Annual Average Daily Traffic, compiled by the Alaska Department of Transportation and Public Facilities, utilizes a method that appears to significantly overestimate use (not used in this report). Conversely, DPOR counts of commercial tour-client use have only measured use within the State Recreation Site and therefore do not account for all CRC commercial use.

The data presented below constitutes the best available information on the level of public access and use of Chilkoot resources. Some of the bear and human use data collected by Utah State University graduate student Anthony Crupi are strictly count data and may overestimate or underestimate individual use.

1. Sports Angler Effort

Over the past ten years the Chilkoot River has been second in freshwater sports fishing popularity in the Southeast Alaska region. Only the Situk River, near Yakutat, has seen more angler effort. Between 1987 and 2001, the Chilkoot saw approximately 62% of the Haines area's freshwater sports fishing effort.

Table 2 compares Chilkoot with the total Haines area freshwater angler effort. ADF&G derives this data from the mail-out *State-Wide Angler Survey*. One angler-day is a day fished by one angler. As a measurement of fishing effort, angler-days do not consider the duration of the angling trip, only that a person fished on a given day. Data for 2002 was unavailable at publication; however, Chilkoot saw record runs of Coho salmon.

At the time of report publication, data for 2002 shows total Chilkoot effort of 15,921 angler days, 55 percent above the 1987-2001 average. Sport Fish Division Biologist, Randy Ericksen anticipates that 2003 Chilkoot angler effort data, unavaliable as of this publication, will show a decline.

Table 2. Chilkoot and Haines area angler effort 1996 through 2001; Average effort for period 1987 – 2001; Percent of Haines angler effort at Chilkoot as measured by angler-days fished (source – ADF&G).							
Effort Category	2001	2000	1999	1998	1997	1996	Average '87-'01
Chilkoot	12,493	9,130	6,331	3,174	6,776	6,818	10,289
Haines Area Total	18,291	13,622	11,572	6,888	13,024	11,584	16,520
Percent of Haines Total at Chilkoot	68%	67%	54.7%	46%	52%	59%	62%

2. DPOR Public Use Estimates —Chilkoot Lake State Recreation Site (CLSRS)

Based on comments provided in the Haines Borough's 2002 Chilkoot Dock Parking Permit Application, ten tour/shuttle operations utilized Chilkoot resources in 2002. These are shown in Table 4. The DPOR estimates public use of CLSRS using direct counts and statistical estimation methods. Direct counts are used for campground guests. Commercial tour client numbers are reported by operators. Multiple Use (MU) numbers—those who use lakeshore parking, picnicing, fishing, boat ramp areas, etc.—are derived using a statistical formula based on periodic counts by DPOR staff. Table 3 reports non-commercial and commercial use based on DPOR data for 1998 through 2002. In discussing data validity, DPOR staff were cautious. Recommending that all reported values be considered best estimates.

Table 3. DPOR estimates of Public Use of Chilkoot Lake State Recreation Site (CLSRS) Campground, Multiple-Use and Commercial Use (source – DPOR).							
Category	5 – YEAR AVERAGE	2002	2001	2000	1999	1998	
Non-Commercial Multiple Use	4,842	8,068	6,279	5,691	6,027	4,174	
Campground Occupation	3,993	2081	2880	7125	5487	2392	
Commercial Use	12,385	15,326	12,318	11,529	13,597	9,156	

Tour companies must appreciably use CLSRS facilities to be eligible for inclusion in DPOR commercial user counts. Some tour operations who rely on Chilkoot resources (Table 4) do not appreciably use the DPOR facilities and some may not report accurately or are not required to report. Indeed, some independent wildlife viewing tours may never enter CLSRS, if they are able to conduct the tour in the lower areas of the river. Hence, the total number of commercial tour clients using the CRC is higher than what is reported by DPOR.

An upward adjustment to DPOR counts of commercial users is warranted. A 10 to 20 percent increase would place total Chilkoot commercial visitation between 16,900 and 18,400 in 2002.

3. Visitation to Chilkoot by Independent Travelers

An estimated 50 percent of Americans include nature-based activities in vacation planning and 82 percent of vacationing families with children include this type of activity in their itinerary (Washington State Department of Fish and Wildlife Web-site). Presumably, a high percentage of Haines visitors are similarly interested in nature-based experiences.

Table 4.

2002 Haines-based shuttle/tour operations permitted by the Haines Borough that report Chilkoot as a tour/shuttle destination.

Absolutely Alaskan—Yeshua Guided Tours; Alaska Nature Tours; Captain's Choice Motel; Chilkoot Lake Tours; Deishu Expeditions; Eco/Orca Tours; Haines Shuttle and Tours; Keet-Gooshi Tours; Rainbow Glacier Tours; Sockeye Cycle

The City of Haines commissioned the McDowell Group to develop the *Haines Tourism Marketing Plan, June 2002*. The plan reports that approximately 55,000 independent visitors included Haines in their itinerary in 2001. Chilkoot's natural beauty, reliable wildlife viewing and angling make it a desirable excursion for many of these visitors. Even if one-third of Haines visitors used the CRC,

this would represent over 18,000 non-resident visitors. Naturally, some of these travelers would visit the CRC more than once.

In their evaluation of the potential visitor market, the McDowell Group identified ten different types of Haines area visitation. These categories and their average individual economic impact are discussed further in the Socio-Economic Value section (Table 10). Visitors to the CRC are likely included in a number of these categories.

4. Estimates of Chilkoot Vehicular Activity

An accurate estimate of vehicle traffic--including use by residents and non-residents--is needed to accurately describe visitor use of Chilkoot, and the potential for negative effects on biological and cultural resources caused by inconsistent and fragmented management. However data to determine precise levels and types of use by all groups is not available.

Vehicle-counts by USU-CBEARS staff were a component of Crupi's research. Visual counts of vehicles were taken through all daylight hours in 2000, 2001 and 2002 for July through October, the period of highest use by people and brown bears.

Crupi's data indicate steady growth in public use at Chilkoot. Total CRC traffic grew about 20 percent each year of the study. Figure 2 shows average hourly vehicle counts for the July – October field seasons.

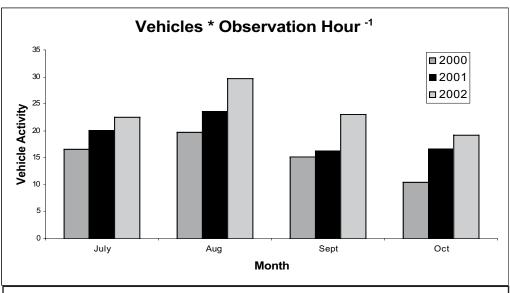


Figure 2. Average hourly vehicles observed traveling on Chilkoot Road during July – October for 2000 – 2002 (source – A. Crupi research, unpublished ADF&G report).

Table 5 below shows an estimate of the number of vehicles observed using the road to Chilkoot Lake for the study period. This estimate was extrapolated from average hourly vehicle counts and should not be used as an absolute count of vehicles. These numbers may underestimate vehicles of campground users who do not transit Chilkoot Road daily and Lutak residents, who typically access the area without a vehicle. Conversely, vehicles that move frequently, such as those belonging to anglers and independent tour operations that "cruise" in search of brown bears, may be overcounted.

Table 5. Estimates of total vehicles is equivalent to on report	•	*	`
Month	2002	2001	2000
July	11,067	9,858	8,370
August	14,446	11,098	9,641
September	8,880	6,570	5,790
October	6,014	5,704	3,472
Total Vehicles Observed	40,407	33,230	27,273

5. Summary of Seasonal Day Use of the CRC

While fine scaled data concerning absolute numbers of visitors and their activities are not available, it is clear that the CRC annually receives many visitors engaged in a variety of activities. The early planning efforts of the CRC Project will hopefully inform subsequent planning and management activities so that users of this area, can participate at levels that are sustainable and which minimize detrimental impacts to CRC resources.

As previously stated, Chilkoot's resources are important to many of Haines' 55,000 independent visitors in 2001. Many in this same group also participated in sports fishing. A scientific survey would be required to further clarify the intentions and activities of visitors and distinguish between resident and non-resident use. Between 2000 and 2002, total vehicle-based visitation during Crupi's study period grew nearly 40 percent.

U.S. Customs Inspector, Mike McClure estimates that the average summer-time vehicle carries 2.5 people. Assuming that two observed vehicles represent one round-trip to Chilkoot, a rough estimate of total use during the July --October study period can be derived. For this period in 2002 and 2001, the CRC experienced, respectively, approximately 50,000 and 41,000 independent day uses. This does not include commercial tour visitation or the months outside of Crupi's study period.

F. SOCIO-ECONOMIC VALUATION OF CHILKOOT RESOURCES

Chilkoot provides a wide range of social and economic values and benefits. Some of these can be quantified by estimating expenditures. But many nature-based values are difficult, or impossible, to measure objectively. How do we measure in economic terms the value to the Haines amateur photographer who photographs a brown bear sow with her three cubs? How do we measure objectively the ecosystem services, such as the nutrient transport from the river to the upland forests provided by brown bears? Beyond economics, such nature-based resources and benefits are part of the web that forms the community's environmental and social fabric (Environment Canada).

1. Categories of Chilkoot Benefits and Uses

Table 6. Examples of 0	Chilkoot Uses and Benefits		
Uses	Indirect Benefits	Ecosystem Service and Benefits	Existenceand Bequest Benefits
Boating	Recreation/Travel Industry	Flood control	
Fishing	Expenditures: Guided tours	Salmon production	Tlingit heritage and cultural site
Wildlife Viewing	Equipment sales State/local tax	Wildife production	A place for future generations to enjoy
Walking	Fuel sales	Atmospheric health	generations to enjoy
Scenic Musing	Real Estate Development: Residential construction	Nutrient transport	An attractant to future visitors— " allure of Alaska"
Nutrition	Real Estate sales	Nutrient retention	raiaska

Examples of the wide array of Chilkoot's benefits and uses are provided in Table 6. Yet, several categories of benefits which are frequently overlooked may be among the most important. The Tlingit heritage, artifacts and cultural importance can be considered priceless. The natural wealth of the watershed is important for its own sake, not solely as a market-based commodity. Each year Alaska's bequest value--its importance to future generations--is instrumental in luring new visitors to Alaska and Haines.

The importance of bequest values are implied in the CRC Project Vision Statement:

"...work together to develop and implement management guidelines that protect and sustain the natural, historical, cultural, social and economic resources of the Chilkoot River Corridor <u>for the generations to come</u> (emphasis added)."

2. Assessing Socio-Economic Significance and Value

a. Terminology

The significance of the public's opportunity to enjoy and benefit from the CRC can be estimated by evaluating cash expenditures. In addition to expenditures, such as sales, jobs, taxes, etc., the importance that visitors and Alaskans place on uses are estimated using survey data and economic models that measure attitudes and behaviors towards potential spending.

Economic Significance measures economic activity or impact in terms of the value of dollars actually spent and may also consider economic multipliers caused by secondary spending.

Economic Value is more difficult to measure, but is an important concept to consider wherever the value of non-market public resources are being considered. Economic value is the sum of economic significance and a dollar-value reflecting the public's additional willingness to pay (WTP) for resources and their benefits:

Economic Value = Economic Significance + Additional Willingness to Pay

(Environment Canada)

b. Problems in Assessing Economic Value of Wildlife

It is tempting to value wildlife solely in economic terms. However, many values cannot be easily measured. These include environmental services provided by the watershed, wildlife and bequest values. In his analysis of the economic value of Cook Inlet brown bears, Matz (2000) expressed concern and caution regarding the valuation of wildlife using market-based economic principles:

"Determining the value of wildlife in economic terms can be confusing and not as precise as often implied by conventionally used mainstream economic analyses. Mainstream economics routinely uses the market price of a good or service as a measure of its value. This works reasonably well with natural resource commodities, such as timber, that are bought and sold in an organized market, but not so well with amenities, such as wildlife, which are considered nonmarket goods or services....(Matz 2000)

3. Alaska Visitor Wildlife-Related Trip-Spending and Attitudes

Wildlife viewing appeals to persons with higher than average spending habits. The Washington Department of Fish and Wildlife describes the average wildlife watcher as spending "between \$100 and \$130 per day, not including travel", well above the \$55 average reported for average Haines independent visitors in 2001. Visitors who seek out scenery and wildlife, such as are provided at Chilkoot, will tend to spend more than the overall visitor average.

Research on non-resident visitor spending and the attitudes of non-residents towards wildlife-related vacation activities produced average expenditure data by trip-type and by the species of wildlife viewed. The research relied on the *Visitor Expenditure Survey* component of the *Alaska Visitors Statistics Program.* Table 7 shows that visitors who saw wildlife spent more money on their trip overall. The studies of Miller and McCollum reinforces what is already well known by many: among Haines' most recognizable economic assets are watchable wildlife.

Table 7. Visitor Expenditures in Alaska by Species Seen on Trip (from Miller and McCollum, 1994)					
Species Viewed		Percentage above or below average			
Species vieweu	dollars not inflation adjusted)	expenditures for all Trips			
All Trips	\$647	_			
Bald Eagles	\$716	+10.6%			
Brown Bears	\$821	+26.9%			
Mt. Goats	\$981	+51.6%			
Salmon	\$811	+25.3%			
Saw No Wildlife	\$406	-59.3%			
Saw No Big Game	\$339	-47.6%			

Research on visitor spending by *trip-type* suggests that management strategies play a role in how much the public pays for wildlife-related recreation. As shown below in Table 8, visitors traveling to view Alaska's wildlife as their "primary" or "high-priority" purpose spent significantly more on their trips (Miller and McCollum, 1999).

Table 8. A Comparison of Expenditures in A	laska and Visits by Trip Type (from	m Miller and McCollum, 1999)
Trip Type	Average Visitor Trip Spending (1994 dollars)	Percent of Total Expenditures in Alaska
All trips combined	\$647	100%
Primary-purpose wildlife viewing trip	\$1,051	39%
Wildlife viewing a secondary travel purpose, but a high priority	\$818	15.3%
Wildlife viewing was a secondary travel purpose, and a low priority	\$784	41.1%
Other	\$465	28.7%
Unknown	\$331	2.3%

Specific trip examples include spending for high-quality bear-viewing in a remote or wilderness setting. In 2002, at Wolverine Creek, west of Cook Inlet, an estimated 25% of visitation was solely to view wildlife—about 2,265 individuals. This sub-group spent about \$675,000 or \$298/person for a day-trip (Joe Meehan, ADF+G pers. comm.). An Alaska Discovery guided bear-viewing day-trip to Admiralty Island's Pack Creek costs about \$500/day (John Neary, USFS pers. comm.).

4. Willingness to Pay — Add-ons in Estimating Economic Value

Depending on individual tastes, landing a Chilkoot sockeye salmon or viewing a sow with cubs is worth much more than the expenditures to partake of these resources. People fish because they love to fish and the same can be said about viewing wildlife. Individual *willingness to pay* (WTP) for these benefits is also involved in basic decisions about where we live or what we accept as a living wage. For example, the difference between a person's potential income in Haines and higher earnings in another community for similar work can be viewed as that person's willingness to pay for Haines' well known attributes —fresh air, low crime, friendly people and great fishing.

The concept of an individual's willingness to pay *more than they actually pay* is important in determining the actual or potential economic value of nature-based resources such as Chilkoot. WTP values *are not expenditures*, but represent added value that the public is potentially willing to pay, to access resource-based opportunities. WTP values provide important information on the public's broader interest in spending and can be a valuable economic planning tool.

Interviews conducted with visitors to Alaska, following their return home from their Alaska trip, showed that, on average, visitors were willing to pay about \$400 more for their Alaskan trip than they actually spent (McCollum and Miller, 1994). Survey data were collected from 2,316 visitors and 2,370 Alaskan voters (results summarized in Table 9). Readers are reminded that previously referenced Pack Creek and Wolverine Creek trip-spending estimates are based on actual expenditures for bear-viewing, not willingness to pay.

Non-Resident

Table 9. Average	Willingness to Pa	ay for Day-Trip	s to View Wild	life – data ext	rapolated
from from McCollum and Miller (1999), (reports data from 1993-1994 with a 20% inflation					
correction to 2002)					
~	C · I D	Trantan	Massa	C D!1-	D II GI
Category	Grizzly Bear	Eagles	Moose	Sea Birds	Dall Sheep

\$300

The high value placed on wildlife by the resident public and visitors is an important consideration in land use and development planning and in helping the community choose between alternatives that may increase, or degrade, future use or socio-economic benefits at Chilkoot.

\$145

\$144

\$132

5. Native Cultural Context for Nature-Based Trips –Visitor Interest and WTP

Nature-based activities such as wildlife watching, guided natural history programs or fishing—presented in an Alaska Native context—are among the visitor activities that draw high interest and have strong potential economic return. Christensen et al. (2002) studied preferences of former visitors to Alaska and assessed their potential willingness to pay for various types of activities presented in a rural Native cultural context. Their research findings are instructive in characterising how Haines' visitor activities might have the highest economic value. Selected data from their research is presented in Appendix I. Research results demonstrate that nature-based visitor activities, such as may be suited to the CRC, or other Haines areas, generate higher visitor interest and potential revenue when they were conducted, or presented, in a cultural setting—as with an Alaskan Native guide.

6. Economic Significance of Haines' Visitors by Category

\$425

The average visitor's economic impact to the community varies depending on the type of visitation. The McDowell Group's 2002, Haines Tourism Management Plan provides estimates of the number and economic impact of various visitor categories. Visitor numbers, total spending and average spending are shown below in Table 10.

Based on correspondence with McDowell Group staff, the economic impact values reported in the *City of Haines Tourism Management Plan* do not include multipliers—secondary spending within the community made possible by initial purchases. Chris McDowell noted that multipliers for small rural communities such as Haines are low, "possibly between 1.2 and 1.3."

Multipliers increase the overall economic significance of visitor spending. For example, if secondary spending and estimated multipliers were considered, the \$55 spent by the average independent visitor would have an overall economic significance of about \$69, using a multiplier of 1.25.

Table 10.	Haines visitors and expenditures by category; Summarized from the 2002 City of Haines, Tourism	l
Managem	ent Plan (Data from FY 2001)	

VisitorCategories	Number and Year	Total Spending	Estimated Average Daily Economic Impact
Independent Visitors	50,000 to 60,000	\$3,000,000	\$55
Large Cruise Ship Passengers	1999 – 160,000	1999 – \$10,000,000	\$62.50
Skagway Cruise Passengers	2001 – 40,000 (Chilkat Cruises pass.)	2001 – \$4,200,000	\$105
Small Cruise Ship Passengers	2002 - 7,000	2002 – \$350,000 to \$400,000	\$50-57
Regional " Potential" Visitors (Juneau and Whitehorse)	70,000	Not given	_
Visitors for Special Events	5,000 to 7,000(Fair, Dick Hotch, etc.)	\$450,000 to \$600,000	\$72 to \$100
Adventure Travelers	2,000 to 4,000 (includes multi-sport vacation packages)	\$150,000 to \$300,000	\$50 to \$100
Fall/Winter/Spring Visitors	1,500 to 2,000 (Heli-ski, Eagle Fest, etc.)	\$150,000 to \$200,000	\$100
Non-Cruise Package-Travel Visitors	15,00 to 2,000	\$100,000 to \$150,000	\$67-\$75
Non-Resident Attendees at Meetings/Conferences	50 – 200	\$10,000 to \$60,000	\$200 to \$300

7. Economic Significance of Wildlife Viewing in Comparable Areas – Fish Creek, Hyder, Alaska

Hyder, Alaska provides a convenient and comparable example from which to consider the average economic impact that managed, road accessible bear viewing may have on the Haines economy. Hyder is located adjacent to Stewart B.C on Misty Fjord and within the Tongass National Forest. The community is accessed along the Cassiar or Alcan Highways and has not had ferry service for four years. The United States Forest Service (USFS) and the Hyder Community Association began a joint effort to manage the Fish Creek bear viewing resource in the early 1990's. In 2000,

Susan Craft with the Hyder Community Association characterized the visitation to Hyder during the period from July 15th through September 15th:

- 40,000 independent travelers during this period of which "40% are primarily bear-oriented";
- □ are largely uninterested in shopping;
- □ many travel in RV's and are fairly self-contained;
- □ 20% are anglers but most fishing is in saltwater;
- □ tend to be low-spending;
- □ about 15%-20% are European;
- □ many have been to Hyder in other years;
- □ some utilize shuttle-service providers;

the USFS funded major facility upgrades through an internal \$500,000 appropriation. New ADA compliant infrastructure includes restrooms, a series of boardwalks, interpretation, parking and three viewing platforms.

The USFS funds and staffs the Hyder facility. No local dollars were used for construction or ongoing site staffing. Eight USFS seasonal personnel are employed with one to three on duty at any given time, usually two. The season and hours of operation are 6:00am –10:00pm, 7-days/week commencing on July 4th and ending on about September 15th. Viewing facilities are structured to provide safe bear-human separation and utilize natural vegetation to screen viewing and facilities to the extent possible. Like the CRC, public access is not limited

The portion of Fish Creek nearest to the viewing area is closed to anglers seasonally; however, other nearby areas allow unrestricted angling during this closure period. Karen Brand with the Ketchikan Ranger District noted that the site receives 200-500 viewers each day during a 6-week peak visitation period that coincides with pink and chum salmon spawning.

Fish Creek has become a magnet for high quality, return visitors, as is evident by the "photographer groupies" that host a web-site appropriately named <u>fishcreek.org</u>. If Hyder's 40,000 peak-season travelers were similar in their spending to typical, independent visitors, (about \$55/day), and, 40 percent are "primarily bear-oriented", as described by their Community Association, over \$800,000 of annual Hyder-spending may be directly related to Fish Creek bear-viewing access.

Yet, because wildlife viewers tend to be higher spending, these estimates may be low. Those with wildlife viewing as a secondary purpose, are nonetheless leaving their money in Hyder because of nature-based assets. The total 2002 economic significance of the USFS Fish Creek bear-viewing program may be well above \$1 million.

8. Estimates of Chilkoot Resource Economic Significance

a. Sports Fishery

In 1996, freshwater sport fishing activities resulted in \$287,936,500 in total economic activity state-wide (sales, travel, taxes, licenses, fuel, equipment, etc). Total freshwater angler effort summed to 3,601,654 angler days (Maharaj and Carpenter, 1996). Based on this information, Table 11 shows average fresh-water angler expenditures and corrections for inflation to 2001.

Table 11. Statewide average total expenditure per freshwater angler day—1996. with adjustments for inflation 1997 – 2001 (based on Maharaj and Carpenter, 1996)			
1996 Average Expenditure/Angler Day	\$79.90/angler day		
Average Expenditure/Angler Day adjusted for Inflation to 2001 (12.3%)	\$89.70/angler day		

Chilkoot is a road accessible, largely non-guided, fishing destination. Fees for fly-in-guided trips are rare Haines expenditures. Furthermore, most Yukon anglers purchase equipment in Canada, not Haines. In comparison to state-wide averages, these conditions reduce the actual economic activity of the average Chilkoot angler and the overall economic significance of the sport fishery. Lowering the estimate for expenditures per angler day by 20 to 30 percent yields average spending ranging from \$63 — \$72 per angler-day.

The *Statewide Angler Survey* reports that in 2001 sport fishing effort at Chilkoot totaled 12,493 angler days (Appendix H). Using these values, the 2001 estimated economic activity generated by the fishery ranges between \$788,000 and \$899,000. As noted previously, spending has a multiplier. Overall economic significance including multipliers (using 1.25) is estimated between \$985,000 and \$1,125,000.

b. Commercial Tourism

Commercial tour clients access Chilkoot using approximately ten different tour and shuttle businesses (noted previously). Tours are diverse. Some include city, cultural, interpretive and meal components or emphasize broader "products" than solely Chilkoot resources. Therefore, attributing visitor spending solely to Chilkoot's nature-based resources is not appropriate; yet, Chilkoot scenic values and wildlife are well known as the "high-point" for many of these operations.

Tour clients come from both Skagway and Haines. Based on interviews with tour operators, an estimated 75-percent are pre-sold aboard cruise ships. Of those, an estimated 50-percent originate in Skagway and access Haines using the Chilkat Cruises, Inc. shuttle service. Table 12 provides an estimate of total spending on Chilkoot tours. As noted previously, an estimate 16,900 to 18,400 tour clients visited the CRC in 2002 with DPOR reporting 15,326 commercial clients using CLSRS facilities. Estimates of



A commercial tour operator gathers clients at the Port Chilkoot Dock in preparation for a tour to the CRC.

Photo, Kermoian Productions, 2002

"independent" tour clients (tours not sold aboard ships) are derived by deducting cruise-based sales estimates from the median 2002 estimate of 17,600 total commercial clients. Also noted in Table 12 are estimates for average net tour price, client numbers and gross spending by Chilkoot tour clients. Secondary spending increases the overall economic significance of Chilkoot's tour resource by about 25 percent.

Table 12.	Estimates o	f Gross	Spending	and Overall	Economic	e Significance of Chilkoot-based	
commercia	al tour opera	tions in	2002.				

Independent Sales \$30 4,400 clients \$132,000	
Pre-sold Sales \$104 (Includes shuttle from Skagway) 6,600 \$686,400	
\$58 (Originates in Haines) 6,600 \$382,800	

ESTIMATE TOTAL TOUR SPENDING- \$1,201,000 ESTIMATED ECONOMIC SIGNIFICANCE OF CHILKOOT-BASED TOURS - \$1,501,500

c. Independent, Non-Angler Visitors

Information does not exist to definitively estimate the spending of non-angler, independent visitors. This group includes local and non-resident photographers, families, boaters, wildlife viewers, etc. Those who are independent travelers seeking viewable wildlife exhibit higher than average spending. Others are residents whose vehicle expenses are their only expenditures for the CRC excursion.

Chilkoot day-use by wildlife viewers is probably higher than estimates reported for Hyder. Estimates of visitor spending by wildlife watchers at Hyder show that significant economic impacts result from Chilkoot's comparable resident and non-resident use. Based on this comparison, the 2002 economic significance for this group may be over \$1 million.

9. Synopsis of CRC Overall Economic Significance and Economic Value

The complete picture of the CRC's economic value is entwined in future WTP by the tourism sector, quality of life benefits, ecosystem services and existence or bequest benefits. Best available estimates of CRC-related spending and economic multipliers for three categories of day-users are provided, including: anglers, commercial tourism and independent visitors. The total economic significance of these groups was over \$3.5 million in 2002.

The lack of site-specific data make estimates of visitor WTP and the computation of CRC total *economic value* impossible; however, the importance of WTP is clearly shown through the research by McCollum and Miller on public interest and WTP for wildlife-based recreation.

Public WTP for CRC resources makes a continuous--and easily overlooked-- contribution to the Haines economy and quality of life and is an important consideration in Chilkoot area land-use planning. The high levels of spending and WTP for quality opportunities to view Alaska wildlife, such as at Pack Creek and Wolverine Creek, suggest that greater community economic benefits from CRC resources are possible.

Improving the quality of each visitor experience and addressing recreational use impacts will allow the community to attract higher-spending visitation and greater economic contributions. Among the important economic sectors that were not considered, is real estate and construction-related spending in the Lutak area.

Consensus Action Plan

The following section outlines the working group's agreed vision, managment guidelines and planning strategies. Readers should note that discussion of Consensus Action Plan items was extensive, occuring during 36 meetings and occasional field excusions between January 2001 and April 2003. Since the CRC Project was established on a model of consensus there were many extensively discussed topics and strategies that did not pass the test of full consensus. Several of the more time consuming, non-consensus discussion points are reviewed under Summary of Long Range Information Needs at the end of this section.

A. MANAGEMENT VISION FOR THE FUTURE

Overall Vision

Haines residents, descendants of the Chilkoot area, commercial operators, and government agencies work together to develop and implement management guidelines that protect and sustain the natural, historical, cultural, social and economic resources of the Chilkoot River Corridor for the generations to come.

Resource Management Guidelines

Natural Resources

The fish and game species, watchable wildlife, critical habitat areas, native plant species, quiet, clean air and water, and scenic beauty are identified and recognized as fundamental to many of the areas other resource values. Strategies are in place to ensure that natural resource values are sustained and protected. Biological research and data collection activities needed to fully understand habitat use, fisheries and wildlife population health and natural cycles of abundance are funded by appropriate agencies. Fisheries management data-collection systems use best available technology to provide timely salmon escapement and information and minimize physical obstructions to salmon migration.

Historical Resources

Special attention is given to ensure that graves, Native house-sites and other identified historic artifacts of traditional and customary Tlingit use are protected from further degredation

Cultural Resources

The Chilkoot Culture Camp continues to operate as an important cultural and educational resource, particularly for children. The culture camp is actively involved in enhancing Tlingit artistry and identity, and the general practice and understanding of Tlingit culture.

Socio-Economic Resources

The public's outdoor recreational, traditional and customary, residential, and commercial use of the area is consistent with natural resource and historic site stewardship.

Appropriate information is provided to the public to educate and guide public use and minimize human impacts to natural and historic resources. Human use is periodically evaluated to identify changing trends and patterns of use, and to address possible resource degradation.

B. GOALS, STRATEGIES, ACTIONS AND JUSTIFICATION

Goal I Improve State Agency Ability to Manage Recreational Use

Strategy

Recommend that DPOR enter into a Cooperative Management Agreement (CMA) with the Division of Forestry and DOT+PF to manage the lands, including the DOT right-of-way along the Chilkoot River Corridor, between the campground and mouth of the Chilkoot River estuary. The land would remain in the ownership of the Haines State Forest and the Department of Transportation. This recommendation includes lands tentatively approved for transfer from the BLM to the Haines State Forest.

Justification

The combination of private ownership and limited DPOR jurisdiction meant that the state had limited legal authority to manage recreational land use along most of the CRC (see Land Ownership and Management Section). The CMA now being implemented will allow DPOR to better address impacts caused by recreational use on and adjoining lands managed by the state.

Action Taken:

- a. CMA between the HSF, DPOR and DOT+PF was ratified in 2002 and is now included in 2002, Haines State Forest Plan. The CMA extends DPOR management authority to include recreational use along the CRC on adjoining state lands and the road right of way (Appendix F).
- b. Resolution passed by Haines Borough Assembly recommending adoption of CMA; resolution submitted to DPOR, DOT+PF and Division of Public Safety.
- c. Resolution passed by the Haines Borough Assembly requesting consistent and continuous Trooper and Fish and Wildlife Protection services.
- d. Request that DOT+PF seasonally provide to DPOR a vehicle traffic counter to consistently measure vehicle use.

Goal II — Reducing Overnight Use and Roadside Camping along the CRC

Strategy:

Recommend that camping and overnight parking be prohibited in the Chilkoot Lake parking area and along Chilkoot Road unless specifically authorized by the managing authority.

Justification:

The Chilkoot Road surface and pullouts are frequently used by overnight RV's and campers. Campers outside of controlled campgrounds are more likely to improperly store food, increase the opportunities for undesirable bear-human interactions and, in some instances, use wooded areas adjacent to Chilkoot cultural sites as a latrine. Along with the state-run campground at Chilkoot Lake, Haines has a number of private camper-parks and campground areas, and less congested roadways, that are more suitable for overnight use.

Action Taken:

- a. Resolution approved by Haines Borough Assembly requesting placement of signs and resolution forwarded to DOT+PF.
- b. Roadside camping signs installed —June, 2002.
- c. Enforcement of prohibition begins in Summer, 2002.

Further Action Needed—Continue support for improved enforcement, interpretation and signage and stable monitor program funding to improve compliance.

Goal III Reduce Human-Wildlife Conflicts and Monitor and Improve Visitor Activity and Behavior

Strategies:

- 1. Recommend that the state or local governments/agencies employ, through a local-hire, a monitor for the Chilkoot River Corridor. The monitor would:
 - serve as an interpretation and educational presence to help prevent bear-human conflicts,
 - record usage statistics,
 - remind visitors of guidelines and regulations
 - help protect cultural resources and
 - educate visitors about wildlife and the corridor's cultural and natural history.

Funding for the position could come from sources other than the state including the Haines Borough or the Chilkoot Indian Association. However, the position would need to work closely and receive supervision from ADF&G and/or the DPOR Ranger.

- 2. Develop a donation-based day-use payment system to raise funds to support a monitor program.
- 3. Explore needs/opportunities for non-profit administrative support to enable the CRC Monitor Program in cooperation with effected resource agencies.

Action Taken:

- a. Position description completed in Winter 2002; funding sought from CIA, ADF&G and Haines Borough.
- b. One-year-only seasonal position funded by ADF&G; personnel on staff in August, 2002; future funding uncertain.
- c. Inquiries made to local non-profits regarding an "umbrella" relationship that would facilitate administration of a CRC Monitor Program.
- d. Partial grant funding secured by ADF&G in 2003 and administered by DPOR; LCC seeking grant funds to enhance 2004 program budget

Further Action Needed:

a. Continue advocacy for monitor program implementation

- b. Work to secure non-profit administrative support that facilitates the full development of a monitor program, funded through a day-use "donation" system, including:
 - Developing cooperative agreements with an existing non-profit, local and state agencies;
 - Designing and implementing a donation drop-box system with assistance from DPOR and integrated within an overall Chilkoot Interpretation Plan;
 - Develop a Monitor Program based on best practices so to ensure program excellence;

Goal IV Help Visitors Reduce Impacts to the Area by Developing a Code of Conduct to Help Them Self-Monitor

Strategies:

- 1. Develop a Code of Conduct for users of the Chilkoot River Corridor
- 2. Develop and circulate educational and interpretive information for visitors.
- 3. Implement interpretation plan following May 2004 completion.

Justification:

Many visitor impacts are caused by lack of appropriate educational information. State agencies have not been pro-active in addressing the public's growing use and impacts and visitors frequently impact neighboring private residential property. Distributing a Code of Conduct, and increased access to educational information through improved interpretation, in conjunction with a monitor program, will help the public and agency staff by providing an educational tool with recommended behaviors to lessen negative wildlife and cultural site impacts.

Action taken:

- a. Code of Conduct developed by Working Group.
- b. Condensed Code of Conduct elements currently included in the educational flyer titled: *Respecting Chilkoot: a community treasure*.
- c. Funding for interpretation planning secured—plan completion scheduled for December 2004

Chilkoot Code of Conduct

- Respect the area as a cultural site.
- Respect all users and private property.
- ◆ Respect all fish and wildlife: follow posted regulations and the Chilkoot Checklist
- ♦ Avoid using the far river-bank--give bears and other wildlife undisturbed access.
- Pack out trash and leave only footprints!

This *Code of Conduct* is a condensation of the lengthy working group version. It and the Checklist (below), appear in the flyer *Respecting Chilkoot: A Community Treasure*.

Chilkoot Checklist

WILDLIFE WATCHERS AND PHOTOGRAPHERS:

- DO NOT--approach feed or follow bears on foot or with a vehicle.
- View bears, eagles and other wildlife from a safe distance--preferably remain in your parked car.

ANGLERS:

- ♦ Stop fishing if a bear is near you. Reel in--or cut-your line and wait until bear passes.
- Keep a 100-yard safety zone between you and bears.
- Clean fish in the river. Throw remains in swift water.
- Secure catch immediately in your vehicle.
- ♦ Avoid disturbing spawning areas.
- NEVER LEAVE FISH FOR BEARS.

EVERYONE:

- ♦ Help keep the river banks intact and free of trash.
- Use lakeside restrooms.
- Be aware -- bears may approach from any direction.
- Unattended food, fish, coolers and other belongings
 WILL attract bears. Secure ALL food and fish in your vehicle.

Goal V Minimize Impacts to Chilkoot Historical Resources

Strategies:

- 1. Conduct a comprehensive inventory of archeological sites.
- 2. Require that human activities that encounter artifacts or other evidence of historical human use stop immediately and archeological assessments be conducted before continuation.
- 3. Require trained, on-site archeological inspectors in all CRC development projects.



The village in the area of the Chilkoot Culture Camp as it appeared in the early 1920's. Louis Shotridge collection. (University of Pennsylvania Museum, Philidelpia. Negative No. S5-14774)

- 4. Identify sources, and collect, compile and make available oral, written and other historical information about the Chilkoot area.
- 5. Involve Chilkoot descendents in historical research.
- 6. Request DPOR &/or the Haines Borough support for installation and maintenance of additional toilet facilities along lower Chilkoot Road to improve public service and reduce off-road waste problems that often sully culturally important areas.

Action Taken:

Funding to compile Chilkoot archeological and historical information as a baseline to support the *Chilkoot River Corridor Natural*

Resource and Native History
Interpretation Planning Project secured
(Alaska Fund for the Future grant to
HCC—\$6,990).

Justification:

The working group is keenly aware of the destructive past-practices that have irretrievably damaged or destroyed historical resources at Chilkoot. Strategies are intended to minimize future impacts and increase community awareness and involvement in supporting historical conservation in the area.



CHILKOOT FISH TRAP, 1894. (MSCUA, University of Washington. Negative No. NA 3093)

Goal VI Increase Public Awareness of Chilkoot's Cultural Significance

Strategies:

- 1. Recommend creation of a monument recognizing the cultural significance of the Chilkoot River Corridor.
- 2. Produce educational material on Chilkoot Native history.

3. Secure funding for a Natural Resource and Native History and Interpretation Planning Project.

Justification:

The Tlingit's historical use of the CRC and the existing cultural remnants in the area are priceless values that must be honored and retained. Yet, these cultural values are a mystery to many visitors and residents. The Sheldon Museum's *Chilkoot Archeological Information Consolidation and Interpretation Project*, coupled with the *Natural Resource and Native History Interpretation Planning Project* will help to educate users, monument the areas historical use and honor the area's Tlingit history.

Action Taken:

- a. Educational flyer produced with funds from the Watchable Wildlife Conservation Trust; flyer distribution began—summer 2002 (Appendix L).
- b. Funding for Interpretation Planning Project secured with a grant from the Coastal Impact Assistance Program; completion date May 2004.
- c. Funding for *Archeological Information Consolidation and Interpretation Project* secured with grant to HCC and Sheldon Museum from the Alaska Fund for the Future.

Future Action Needed -- The continued funding of efforts to improve knowledge and understanding of Chilkoot's Tlingit history will support project strategies and enhance community cultural resources.

Goal VII Support the Continuity of the Chilkoot Culture Camp

Strategy:

Recommend that the Haines State Forest provide the Chilkoot Culture Camp with a legal agreement whereby they can continue to operate the culture camp in perpetuity.

Justification:

The Chilkoot Culture Camp provides an important link between the present and the past and its educational purposes are an asset to the community and the region. The Culture Camp is located on BLM land selected by both the State of Alaska and Sealaska Corporation and the land is currently managed by the State (see Land Ownership and Management section). An agreement for perpetual use of the land will promote Chilkoot Culture Camp continuity.

Action taken:

Correspondence to Trustees of the Chilkoot Culture Camp describing WG recommended strategy; forwarded in October 2001; No further action being pursued pending action by Trustees.

Goal VIII Conserve Habitat and Scenic Values

Strategies:

1. Determine ownership and deed restrictions on private property within the CRC.

- 2. Pursue land swaps, outright purchases, or conservation easements, to limit or prevent developments such as land clearing and construction which negatively impact scenic and/or wildlife habitat values on private property within the CRC.
- 3. Identify and support sustainable management of all habitat within the CRC that is critical or important to wildlife.
- 4. Request that state DOT+PF right-of-way clearing is aesthetic and uses manual clearing techniques.

Justification:

Conservation of the CRC habitat and scenic resources is important to the community. State management of the CRC now supports habitat protection and scenic or recreational values (see section on Land Status). However, future development of extensive private and Native allotment holdings within the CRCarea can significantly diminish the habitat and scenic values now enjoyed by the public.

Actions Taken:

Aside from discussion with DPOR staff, no action has been taken as of publication date.

Goal IX Provide Brown Bears Undisturbed Route of Access/ Egress to Chilkoot River Feeding Areas

Strategies:

- 1. Discourage sport fishing and other human use on the east bank downstream from the upper pool area by 1) recommending that anglers avoid this area and 2) encouraging private landowners to post signs that discourage use.
- 2. Support a narrow No Stopping Zone in key bear-crossing areas where vehicles would not be allowed to stop or park and which would allow bears undisturbed access and egress across Chilkoot Road.

Justification:

Use of the river by brown bears is an important natural and socio-economic community resource. Yet, vehicle and human use of the roadway is known to inhibit bear access to and from the river. This situation causes animals to undergo stress and reduces feeding efficiency. By requesting that anglers avoid the east bank, and posting private east-bank property, the bear population will have an area of undisturbed refuge and anglers will avoid potential safety and bear problems. This is expected to allow greater bear use of the river, improve feeding success, wildlife viewing opportunities and public safety.



The prospect of a close photograph of a brown bear is a powerful incentive to summer visitors. *Photo -- Kermoian Productions*, 2002

Action taken:

- a. Correspondence with heirs to George Williams Native Allotment in Fall 2000, described WG recommended strategy to reduce east-bank access; eastern bank private property posted by owners—summer 2002 and 2003.
- c. Recommendation included within Code of Conduct and in educational flyer *Respecting Chilkoot: a community treasure*.
- d. Strategy promoted through the CRC Monitor Program.

Goal X Identify and Interpret Brown Bear Habitat and Use Patterns to Augment Agency Data Needs and Guide Future Planning and Development Decisions

Strategies:

- Spring 2002: Support the work of Anthony Crupi and Barrie K. Gilbert PhD. of the Utah State
 University (USU) Fisheries and Wildlife Department to complete a Chilkoot River Corridor
 Bear Study and Ecosystem Design Project. Dr. Gilbert is an internationally recognized expert
 in bear behavior and habitat use.
- 2. Fall, 2002: Support proposal by Anthony Crupi to secure funds to continue evaluation of research data, assess habitat, and develop educational tools including a video on Chilkoot bear-human interactions.

Justification:

Brown bear use of the lower river is known to fluctuate yearly with salmon abundance. Yet, even with annual changes, the CRC is among the few places in the world where the public can drive and view brown bears. This viewable bear population, while economically important, has often been to the disadvantage of the bears. In recent years a number have been killed for reasons of public safety.

The need to scientifically study bear-human interactions at Chilkoot was first recognized by Haines resident Anthony Crupi. The completion of Crupi's research on Chilkoot brown bear habitat utilization and bear-human interactions will provide a valuable planning tool for the project. Although Dr. Gilbert's ecosystem design funding proposal (noted above) was not successful, Crupi's habitat interpretation, education and media project will provide Haines and state agencies much needed planning information to ensure that future public facility or access-related projects address habitat needs. Archeological site information would be integrated into the GIS-based maps of bear habitat and use patterns.

Action Taken:

- a. Letter of support written for Gilbert/Crupi USU research proposal to Conservation and Reinvestment Act (CARA) Grant program proposal unsuccessful.
- b. Letter of support written for A. Crupi education, interpretation and media proposal to AFF outcome pending.

Goal XI Limit Future Impacts of Motorized Use on Chilkoot Lake

Strategy:

Recommend to DNR that the Haines State Forest Plan prohibit Jet-ski (personal water craft) and commercial float-plane landings on Chilkoot Lake.

Justification:

Chilkoot has a history of generally low-noise multiple-use: quiet recreation, hunting and fishing, low-noise commercial uses, canoeing, camping, etc. The growing popularity of jet-skis means that before long they may be synonymous with Chilkoot. The WG viewed expanded jet-ski use as incompatible with values associated with Chilkoot. Similarly, regular use of the lake by commercial float planes, would dramatically increase the level of ambient noise for other users.

Action Taken:

Recommendations forwarded to DNR Planners; commercial jet-ski prohibition now included in HSF Management Plan.

Goal XII Utilize Best Available Technology to Monitor Fishery Escapement and Minimize Obstructions to Fish Passage

Strategy:

Request that ADF&G fisheries management data-collection systems use best available technology to provide timely salmon escapement information for management decision-making and minimize physical obstructions to salmon migration.

Justification:

This strategy attempts to balance two concerns—respect for traditional wisdom and management's need for good data. During the past century, Chilkoot's fish runs were over harvested more than once and accurate data is required to ensure adequate stock escapement. Fish weirs are an established method used state-wide to monitor escapement and provide consistent data on stock abundance. Yet, from the time of its first use in 1976, the seasonal operation of the ADF&G fish counting weir has been viewed by many Haines area Native people as disrespectful and deleterious to salmon.

Action Taken: Request forwarded to ADF&G.

Goal XIII Improve Lakeshore Parking Areas to Better Accommodate Larger Vehicles and Reduce Congestion

Strategies:

- 1. Request that DPOR allow modifation of an area near camp-site #1 and the outhouse for use as bus parking.
- 2. Modify/fill an area west of the parking area "tear-drop" to provide short-term parking improvement for buses.

Justification:

Reducing congestion in parking and roadway areas was widely viewed by the community as a project goal; however, the discussion of the range of possible modification to the campground, parking and roadways was as contentious an issue as any discussed during the project.

Review by the WG of proposed alterations included small fixes and grand proposals: in late 2001 and early 2002, and without agreement, the WG considered the extensive proposed parking, roadway and walkway developments of DNR Planner, Bill Evans. Discussions also focused on the potential need, and possible benefits of an extensive floating dock facility that would better accommodate the staging of lake-oriented commercial tour operations as well as non-commercial users; however, no consensus was reached on this concept or how to reduce the current level of boat ramp area use and congestion.

Action Taken:

- a. Short-term area filled and now in use for bus parking.
- b. Request made to DPOR for modification of area near campsite #1 and the outhouse.

C. <u>SUMMARY OF LONG-RANGE INFORMATION NEEDS</u>

With continued growth in area use, public concern regarding the spectrum of impacts outlined in this report will continue to be issues for community discussion. During the 27 month project, three comprehensive vehicle and traffic-related proposals were considered by the working group without consensus agreement:

- 1) DPOR Planners proposed major modifications to Chilkoot Road and pullouts, walk-ways and bear viewing facilities, a new pedestrian bridge and extensive paved parking near the current campground;
- 2) DPOR Planners and WG members have suggested an alternative lake access road that would use either the "Glory Hole Road" or would intercept the current right of way possibly near Deer Rock.
- 3) Staff developed a proposal that included a seasonal shuttle-based concept with a parking area, visitor orientation facility and start-point on Lutak Road well south of the current CRC. This option identified a three-tiered recreational use management structure to increase compliant behavior, regulated access and allow all customary uses to continue. Such a shuttle-based access system would require that the Chilkoot Road ROW be conveyed or leased to DPOR, the Haines Borough or another entity.

Below are summarized some of the major concerns discussed relating to the above proposals to modify access:

- Impacts to current campground areas caused by converting campsites to parking;
- Archeological impacts caused by construction of new parking near the lakeshore and camp ground;
- Concerns that question of limiting growth needs to be considered before infra-structural improvements are defined;
- Impacts to cultural resources caused by roadway and pullout upgrades;
- Impacts to cultural resources and scenic qualities caused by pedestrian walkways, wildlife viewing structures, etc—as proposed by DPOR;
- Increasing congestion in a CRC "bottleneck" by developing visitor accommodations along the roadway;
- Impacts to upland habitat caused by an alternative road alignment;
- Loss of customary access caused by a seasonal mandatory seasonal shuttle or possible loss of commercial opportunities;
- Inconvenience to anglers caused by loss of drive-up fishing, if a walk-in concept were pursued.

Prior to further consideration of a road realignment, or other access modification proposals, three broad categories of additional information need comprehensive evaluation:

- 1) Archeological evaluation of culturally important potions of the southern Chilkoot Lake uplands is needed;
- 2) Evaluation of the potential effects to habitat caused by road/parking development may be needed to address potential negative impacts to bear access/egress to the Chilkoot River (noted previously in Goal X);
- 3) Evaluation of visitor safety, public access concerns and sports fishery impacts is needed to better understand the effects of modified river access strategies.

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Appendix A: Working Group Protocol

1. Replacing Working Group Members:

A. Agenda and Discussion:

The project will be constantly reminded of the need to be active in seeking replacements for vacant seats. As long as there are vacant seats on the Working Group, at the end of each agenda the item: "Replacing Working Group Members" will be included.

B. Outreach and Advertisement:

Working Group members may recommend replacements for stake holder and at-large seats. Verbal or emailed recommendations from the public will be conveyed to a working group member for recommendation to staff. Meeting attendance by the prospect is required before the prospect is publicly discussed. Seats that remain vacant following a regular meeting will be advertised in both local news papers so as to increase public knowledge and the number of prospective applicants.

C. Replacement Strategy

Alternates

If a WG member needs an alternate, then they appoint an alternate, but the original member is responsible for making sure that his alternate is accountable to him/her and responsible to the project, reports back, etc.

Replacement of Stakeholder Representatives

The resigning or retired WG member appoints a replacement. In the case where these individuals are representing an organization, the executive committee of that organization must approve of the replacement.

Replacement of Community At-Large Representatives

The qualification of an "At Large" participant is to be determined as simply as possible. By definition, if by consensus the diverse WG confirms an At-Large replacement at a public meeting then the person is an "Community At Large" member of the working group. This system avoids having to define "at-large qualifications".

Meeting Protocol for At Large Replacement

The prospective At Large individual needs to attend the meeting and discuss their possible involvement, background, interest and ability to attend and other project responsibilities. The WG participants in attendance, and the public, may interview the person, ask the person questions as needed, etc. After the interview, staff will ask the working group in attendance if there are concerns regarding the individuals serving in an At Large seat. If individuals on the working group voice opposition to the persons active involvement on the working group, then there is no consensus on the person's WG membership.

If those WG members in attendance voice consensus support for the person, staff will interview any WG member not in attendance regarding the At-Large applicant. If <u>all</u> currently seated WG members agree to the person's involvement, then the person is approved as an At Large WG member.

If a WG member is unable to attend the meeting where a prospective At Large member was discussed, and is opposed to an applicants participation, that WG member must provide to the staff and other WG members a written description of specific concerns regarding the prospective persons involvement.

Persons who are not selected for At –Large seats may re apply at a later date.

2. Attendance Requirements

To provide for project continuity and maximize informed participation, all working group members are required to have an alternate who is able to responsibly attend meetings in their absence. Working group members who miss three meetings — whether through neglect or lack of a responsible alternate — will be replaced.

3. Term Limits

The term of a working group member is 3 years. Terms are renewable. The staggering and length of the first terms --determined following ratification of this Working Group Protocol -- will be determined by lottery. As a result of the lottery, one, two and three year first terms will be assigned.

Appendix B: Working Group Participants

Stakeholder affiliation, year of participation and participant name

The designation "01" reflects participation from January through May of 2001. The "02" designation are participants in the period from October, 2001 through the present.

Community At-Large—01: Carol Flegel, Daniel Henry Community At-Large—02: Andy Hedden, Pam Randles

Commercial--01, 02: Dan Egolf, Steve Hay, Shane Horton

Alternate —02: Ned Rozbicki
Conservation—01,02: Tim McDonough
Alternate—01,02: Norm Blank
Hunting and Fishing--01, 02 Herb Van Cleve
LLUSA—01,02: Sally McGuire

Alternate—02 Ann Myren
Lutak Residents Assoc.—01: Richard Buck
Alternate—02: Lori Teel-Crupi

Native Organization (CIA)—01: Jan Hill

Alternate—01 Della Brouillette

Alternate—02: Thomas (Sonny) Williams Jr.

Alternate—02: Charles Paddock

Native Organization

(Chilkat Indian Village)—01 Marsha Hotch (chose not to participate—02)

Native Organization

(Luk' aaxadi Clan)—01,02: Ray Dennis Jr. Alternate--01,02: Paul Wilson

Native Organization

(Kaagwanton-

Brown Bear Clan)—01: Richard Young Sr. (Mr. Young deferred to CIA for

representation in 02)

Appendix C: Project Management and Staffing

Management

- □ Robert Venables, Past Project Manager; Past President, HCC--00, 01
- □ Rich Kaloostian, Past President, HCC
- □ Jeff Stout, Current HCC President
- □ Bart Henderson, HCC Board Member -- Project Manager -- 01, 02
- □ Eddie Herzinger, HCC President 03
- □ Herb Van Cleve, Project Manager--03

Staffing

- □ Mike Case, Past Project Coordinator 00, 01
- □ Angie Hodgson, Past Project Staff -- 00, 01
- □ Barbara Sheinberg, Project Consultant and Community Forum Facilitation—00, 01
- Cassie Thomas, Planner with the National Parks Service Rivers and Trails Conservation Assistance Program. Provided early project facilitation and support to staff in plan development phase.
- □ Burl Sheldon, Project Coordinator/Staff 00, 01, 02, 03

Community Values, Issues and Concerns Regarding Chilkoot

<u>Input from December 7th, 2000 Community Forum</u>
The December 7th, 2000 Community Forum convened on in the American Bald Eagle Foundation introduced the CRC Project to the community and served as an important data collection point. Community Planner Barbara Sheinberg provided an outline of a community collaborative planning processes and guided participants in focusing on those aspects of Chilkoot that they value, and their issues and concerns regarding Chilkoot.

Public input was captured in two ways: through individual, verbal participation at the meeting and 2) through a questionnaire circulated during the forum.

Summary of Responses from Forum Questionnaire

Question 1: What do you value in the area? Why is the area important?

Value	# of Respondents
Wildlife viewing/Good habitat and wildlife	26
Scenery/Wilderness qualities	14
Fishing/Salmon and eulachon abundance	12
Ancestral home/Cultural site/Culture Camp	11
Recreational opportunities	11
Solitude/Quiet	7
Ease of access	5
Subsistence opportunities	3
Business opportunities	2
Rural lifestyle/Preserving residential use	2

Question 2: How do you use the area?

Use of Area	# of Respondents
Recreational activities	23
Fishing/Hunting	16
Property owner/Resident	11
Subsistence	10
Wildlife Viewing/ Photography	9
Business/Tour operator	5
Research/Agency work	4
Cultural Activities/Culture Camp activities	3
Spiritual renewal	1

Summary of Responses from Questionnaire--Issue and Concerns Regarding Chilkoot

		Average Intensity
Concern/Issue	# Responding	of Response (range 1-10)
Bear concerns	22	7.0
Traffic/Parking	10	6.5
Increasing use/Crowding	25	8.1
Disrespectful behavior		
(visitor, resident, tour op.)	7	8.0
Reduction in quality		
of experience	4	8.7
Destruction of fish and		
wildlife habitat	4	8.7
Lack of law enforcement	4	8.5
Motorized lake use	3	9.0
Boat ramp/launching congest	ion 3	not indicated
Upper watershed		
motorized access/developmen	nt 3	10
Subsistence use restrictions	2	not indicated
Fish weir impacts	2	8
Desecration of cultural sites	2	not indicated
Potential logging	1	1
Preserving vehicle accessibili	ty 1	10

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2002 Chilkoot Bear Monitor Summary A Presentation by Tom Prang, ADF&G Chilkoot Bear Monitor, Mid-October, 2002

Congratulations! The very fact that I am here this evening is proof of the positive impact this body is having on the Chilkoot. I have spent over 350 hours on the river from August 28 to Oct 15, and would like to share my observations on the successes of this position, as well as the challenges that will need to be faced in order to ensure this position reaches its full potential. This is only a brief encapsulation. I would need an entire evening to share most of the insights gained this fall. If interest is shown in setting up a separate meeting in order to receive greater details, I would be happy to comply. Also, for the long-term good of the Chilkoot corridor I will pull no punches and plan to tell it like it is. The successes of this position are more difficult for me to observe and quantify since I am focused on those exhibiting inconsistent behavior. Most of my time as the Chilkoot Bear Monitor for the Alaska Department of Fish and Game is spent on public interpretation and education. The goal is to bring about more consistent human behavior for the mutual safety of all life on the Chilkoot, as well as minimizing the varied impacts each user group brings to the corridor. The greatest efforts went into 3 main user groups:

Wildlife Viewers

The goals are to have people give bears room to pass. Also, we recommend that people not follow bears in their vehicle or on foot and not leave the roadway. The reality is that people will only change behavior if someone is regularly on site to educate and enforce clearly defined rules in an unbiased manner. A person must be present who can be friendly, accurate, fair, consistent, and motivated if you realistically expect to meet the goals set forth for such a position. Most people want to do the right thing. There was a high degree of success in explaining the bears' needs and behaviors while pointing out the ways bears reacted to human actions. The bears are much more consistent in their behavior than people. The pattern that I clearly see with bears is a relatively simple one of cause and effect. Wildlife viewers, privately and those brought to the Chilkoot for profit, are part of the powerful habituation process that takes place literally from the time bears come out of hibernation in the spring up to fall when most have left (or more accurately have been driven off). The worst user-group for crowding bears have been the photographers. I have regularly had people tell me they "had to get the shot." As they approached bears within 10-20 feet. I will guarantee that the bears' well-being and the concerns of you on the working group are completely ignored when selfindulgence and greed on the part of "professional" photographers are their motivating force. The Chilkoot is a commodity, time and effort have been expended by these individuals to get there, and there is no concern about how their current behavior will impact tomorrow. Professional photographers are knowingly violating ethical standards. Such behavior would never be tolerated at other dedicated wildlife viewing areas. This type of behavior is the impetus for other locations enacting strict regulations in order to maintain long-term stability. Not all photographers are in this category, but I spend an inordinate amount of time on this user-group's behavior.

The tourists taking photos are acting out of ignorance; this is where the bear monitor can be effective. Once people have learned what their impact can be on the bears they watch, many choose voluntarily to remain in or beside their vehicles, and will talk to others about appropriate behavior. This has been a particular success with this position.

Fishers

The goals are to make every effort to prevent a bear from obtaining their fish. Secure a catch as soon as possible--preferably in a cooler in a vehicle. Clean fish in the river and throw remains into deep/fast water. The reality is that many people show little regard for the well being of the Chilkoot in their actions. Once the bears have been forced by people to choose between feeding/survival and people crowding as close as possible, it does not take long before bears are drawn to food and fish left unattended and in plain view. This is really when the role of fishers comes into focus. I have about a 50% success rate in getting people to keep bears from being naturally attracted to where people recreate due to human food and salmon. The worst violators are Alaska and Yukon residents. The most common replies I receive to my initial recommendations are: "I know all about bears," "I have been coming here for 15 years," "do you have any authority to write tickets?", "I pay taxes and bears don't," "it's only Tips or Pixie or Boo Boo," etc. People regularly start fishing when it's too dark to even see their surroundings in the morning. I am much more successful with visitors from distant locations in part because they respect what I have to say and what I am trying to do. Also, fishers from outside the region see the rare components that make up this corridor, and show a much greater appreciation. Some local fishers are motivated by the concern that the river will be closed to fishing. It has been a pleasure to meet many of the fishers as individuals and as families. It would be rewarding to see humans act consistently in order to ensure future access to fishing. Most fishers have avoided using the far side of the river, leaving it open for bears and respecting private property rights. The common quote I hear is that the far side is the bears' side. This is

where I see the majority of the bears, and almost all of my sow/cub sightings. People currently have access to the lake with watercraft. The road offers access to one side of the river. People fish Lutak Inlet by boat and from shore. The most dangerous and least controlled fishing location is the far shore of the river from the Culture Camp to the lake. This area is accessed by boat, which affords fishers plenty of opportunity to use the lake instead. The far side of the river above the Culture Camp is also routinely used by bears as a safe location to travel and feed. People choosing to recreate on the far side of the river pose one of the greatest concerns, from my observations. Fish remains and garbage are continuing problems. I collect an average of 1 white kitchen garbage bag of trash during the busy fishing days. I have seen bears, gulls, fish, and crows tangled in fishing line, lures, and plastic this fall.

Campers

Campers have by and large cooperated with the goals of this working group by camping in established campgrounds or in areas outside the Chilkoot River corridor. I know this was a contentious issue, and long-term Yukon users feel particularly put upon by this. But I do feel it is a positive step in giving the bears some opportunity to use the corridor in relative peace for part of the night. People are on the river corridor from before first light until well after dark. The bears are forced off the river during the day by fishers and photographers on both sides of the river. People are routinely spotlighting bears after dark when they do finally have an opportunity to feed. It is obvious people know they are harassing bears because they try to shut off the spotlight and leave when I turn on my headlights and approach their vehicle. People are mobile, have secure homes, and come to the Chilkoot to recreate. Bears have a few months to feed, while trying to raise young, and have no other options about where to live. Currently, campers have the options of a state campground on site, private campgrounds on Lutak road and in town, as well as pull-offs on Lutak road and the Haines Highway. We are asking for approximately 1 mile of road to be left for wildlife at night.

Recommendations

Much has been done to improve conditions on the Chilkoot River. Consensus has been reached on important issues. We are now at a point where decisions must be made on how the corridor will be managed. Do not wait until next spring to consider funding sources for further on-site positions in 2003 and beyond. Continue the momentum and the solid foundations we have built this year. The monitor position can serve several public functions at once if organized properly. The monitor should have first aid training and equipment, basic car repair equipment in an easily recognizable marked vehicle, direct and reliable communication to EMS and enforcement in Haines, a background in natural and cultural history, and most importantly, the ability to enforce regulations. I see violations on a daily basis and am constantly frustrated at my inability to correct the unethical, inappropriate behavior. When I was first hired for this position and voiced my concern about a lack of immediate, on-site follow-up and enforcement, I was told I could place a call to town and get help. Of course by the time I drive to the ferry terminal, try to find the appropriate person, and explain the situation, then wait for a physical presence on the river, the events or parties involved are over and gone. If I am forced to leave the river to seek help, then even my presence is drawn away from the issue. The result is that I normally am forced to do what I can and take notes on the incident. To date there is no real follow-up or action that then occurs as a result of my extra time and effort. I do not know of a single citation issued on the Chilkoot since I started. Education has had a clear and positive impact on human behavior; but education cannot stand alone if one hundred percent compliance is to be achieved.

Most of the irresponsible, illegal, and selfish behavior I have personally witnessed takes place where people are brought into close contact with bears. The bridge, weir, road, and stretch of river from the Culture Camp to the lake mouth are the usual hotspots, though each area changes in priority depending on the time of the season, and the human use and focus at that time. Having specific parking, fishing, wildlife watching, garbage, and bathroom areas would help. These are long-term concerns pertaining to the Chilkoot River corridor. The following list does not contain a complete account of all the human impacts on the area, and is not just related to the bear monitor position.

- 1. The entire area is being used as a toilet. I personally see people (mostly fishers) enter the woods on a daily basis. The Tlingit cultural features are serving as the main repository. There is little respect for the sanctity of the cemetery located by the bridge. There is a lack of respect for posted areas and private property. Human waste, trespassing, garbage, vandalism, and potential injury/lawsuits are the results.
- 2. Continued erosion into the river from numerous trails, which result in impacts to vegetation and wildlife. I observe daily siltation in the river whilecollecting garbage and talking to visitors. This is obvious by silt being present on trash that had been deposited within the last day. Siltation from erosion has a direct impact on the survival rate of salmon eggs.

- 3. A definite problem exists with personal conveyances such as low-flying aircraft endangering themselves and others, fast-water kayaks being used in very close proximity to feeding bears, and hovercraft that displace marine mammals, birds, and
- fish. I have watched such craft run over archaeological sites and ignore other traditional user groups (such as fishers) while running the entire length of the corridor from the estuary to the lake. The air traffic poses the greatest danger, often flying in

the presence of hundreds of birds swirling over the corridor during salmon runs, and flying so low that the plane has to follow the course of the river rather than flying over the moraine proper. I have observed this on several occasions, and had concerned people approach me to inquire if such planes were having engine trouble.

- 4. Parking and people blocking off the road are most serious on cruise ship days with so many commercial vehicles, and when bears are spotted by wildlife viewers in large RVs and sport utility vehicles. The ferry system will routinely offload dozens of eager tourists with each arrival. This quickly overloads existing conditions, and though the majority of these visitors are eager for information and happy to comply, it still adds a lot of stress to already crowded conditions.
- 5. There is a range of inconsistent behavior on the part of all commercial operators and their employees. I have had to personally follow-up my initial meetings with owners and operators as I continue to see behaviors that are a cause for concern. These people stand out in sharp focus for the public, and I have often had independent visitors say that what they were doing must be right because they see the professionals doing it. Commercial operations must be held to high standards. They educate through words and actions. Profit, a feeling of personal ownership rights, laziness, and client expectations are the reasons for the actions I have witnessed. This is a major contribution to increased human use and impacts on the corridor. It is directly associated with the habituation and food conditioning process. All operators must comply with enforceable standards of behavior. As a whole however, there is a noticeable improvement from the majority of tour operators taking people out to view wildlife, since they have complied with recommendations by keeping their passengers in or next to vehicles during close-range viewing. Certain individuals have been consistently ethical and asked for feedback. I am personally impressed and grateful for their presence. A very few have shown no change in behavior and are a liability to your ongoing efforts.

People will regularly tell me they heard about the Chilkoot Corridor from friends, the internet, books, travel guides, radio shows, and advertising. People will continue to come in ever-greater numbers and have a greater impact than already exists. Just as the Chilkat draws people from around the globe to see "the Valley of the Eagles," the Chilkoot offers much more in a much smaller area. You are sitting on a gold mine in potential visitor interest. You are also sitting on a powder keg when someone is seriously harmed and all potential landowners and managers are slapped with huge lawsuits and negative publicity. Making the tough decisions and finding the money then will be too late. This is such an opportunity to be proactive, plan for the future and see the fruits of the current efforts pay off in long-term gains. The main barriers to harmony on the Chilkoot Corridor are human induced. The time to act as a mature, responsible, visionary group is now. We have a great opportunity to create a world-class, unique, multifaceted, and protected showcase now. But we must keep the momentum, act now, and rise to the occasion.

Appendix G:CHILKOOT WILDLIFE

Taken from Alaska Nature Tours Guide logs 1985 –1999 (an ongoing list):

* known or probable breeder (designation from Birds of the Chilkat Valley, Dan Birch Author)

** uncommon sighting

CHILKOOT RIVER & FOREST

*AMERICAN ROBIN

*BALD EAGLE

*BLACK CAPPED

CHICKADEE

*CHESTNUT-BACKED

CHICKADEE

*COMMON MERGANSER

*COMMON RAVEN

*COYOTE

*DARK EYED JUNCO

*DIPPER

*GLACOUS WINGED

GULL

*GREAT HORNED OWL

*HERMIT THRUSH

*HERRING GULL

**LYNX

**MARTEN

*MINK

*MEW GULL

*MOOSE

*NORTHWESTERN CROW

*PINE GROSBEAK

*PINE SISKIN

*STELLAR'S JAY

*TOWNSEND'S WARBLER

*VARIED THRUSH

*WHITE-WINGED

CROSSBILL

*WILSON'S WARBLER

*WINTER WREN

**WOLF

*YELLOW RUMPED

WARBLER

*YELLOW WARBLER

* RUBY CROWNED

KINGLET

* ORANGE CROWNED

WARBLER

BLACK BILLED MAGPIE TRUMPETER SWAN RUFUS HUMMINGBIRD BELTED KINGFISHER BLACK BILLED MAGPIE *BROWN BEAR *RED SQUIRREL *RIVER OTTER

CHILKOOT ESTUARY

STELLAR'S SEA LION

*BROWN BEAR

*BALD EAGLE

** FISHER

*BARN SWALLOW

*BONAPARTE'S GULL

*CANADA GOOSE

*COMMON RAVEN

*COMMON SNIPE

*GLAUCOUS WINGED

GULL

*GREAT BLUE HERON

*GREATER

YELLOWLEGS

*HARLEOUIN DUCK

*HERRING GULL

*LESSER YELLOWLEGS

*MALLARD

*MEW GULL

*NORTHWESTERN CROW

*SAVANNAH SPARROW

*TREE SWALLOW

*VIOLET GREEN

SWALLOW

NORTHERN SHOVELER

ARCTIC TERN

*BARN SWALLOW

BARROWS GOLDENEYE

COMMON GOLDENEYE

BELTED KINGFISHER

BLACK BILLED MAGPIE

BUFFLEHEAD

**NORTHERN GOSHAWK

**SNOWY OWL

* * MERLIN

OSPREY

GREATER SCAUP

GREEN WINGED TEAL

LESSER SCAUP

MARSH HAWK

OLDSQUAW (Long Tailed

Duck)

PINTAIL

ROCK SANDPIPER

SPOTTED SANDPIPER
WHITE WINGED SCOTER
WIGEON
HARBOR SEAL
* RIVER OTTER
STELLAR'S SEA LION

LUTAK INLET

*BALD EAGLE

*GLAUCOUS WINGED GULL

CDEATEDILE

*GREAT BLUE HERON

*GREATER

YELLOWLEGS

*HARLEQUIN DUCK

*HERRING GULL

*MARBLED MURRELET

*MEW GULL

*PIGEON GUILLEMOT

*SURF SCOTER

*WHITE WINGED

SCOTER

NORTHERN PINTAIL

COMMON LOON

**ARCTIC LOON

**YELLOW-BILLED

LOON

BELTED KINGFISHER

HORNED GREBE

RED-NECKED GREBE

HARBOR PORPOISE HARBOR SEAL

HUMPBACK WHALE

STELLAR'S SEA LION

Appendix I:

Selected Results on Research on Visitor Expenditures and Preferences (from N. Christensen et al.)

Selected results from research on visitor expenditures and visitor preferences. From Neal Chistensen et al. A presentation at 2002--Alaska Wilderness Recreation and Tourism Conference. Co-author Suzanne Miller (pers.com) noted that wildlife-related visitor activities—presented in a "native context, such as with a Native Alaskan guide"—attracted consistently higher spending and interest.

Interest in Small Rural Communities in Alaska Comparison of Activities – All Visitors

Fishing, wildlife viewing, bird watching, hunting, looking at wild flowers, or other nature activities	76%
Be with local residents to learn about local history and ways of life?	76%
Outdoor recreation activities like hiking, rafting, camping, mountain biking, etc.?	57%

Interest in Alaska Native Culture and Arts Comparison of Activities – by Market Segments

	Non-	Native Cultural Target	
Activity	Target	Fish	Shop
Visiting museums	65%	91%	91%
Wildlife viewing	54%	91%	87%
Fishing	38%	100%	0%
Village activities	30%	70%	62%
Native crafts	31%	60%	71%
Native folklore	30%	56%	50%

Importance of Opportunities in Planning Alaska Trip --by Market Segments % Responding that Opportunity was Very Important

	Non-	Native Cultural	Target
Opportunity	Target	Fish	Shop
Seeing natural scenery	81%	86%	86%
Seeing/visiting wilderness	51%	77%	74%
Experiencing solitude	25%	37%	27%

Average expenditures during Alaska Trip

	Non-	Native Cultural Target	
	Target	Fish	Shop
Total In-State \$ Spent	\$1,409	\$1,902	\$1,604
Daily Group \$ Spent	\$153	\$184	\$161
Daily Indiv. \$ Spent	\$80	\$100	\$82