Eagle River Nature Center

Master Development Plan

Department of Natural Resources
Division of Parks and Outdoor Recreation
December 31, 2010

Overview Map

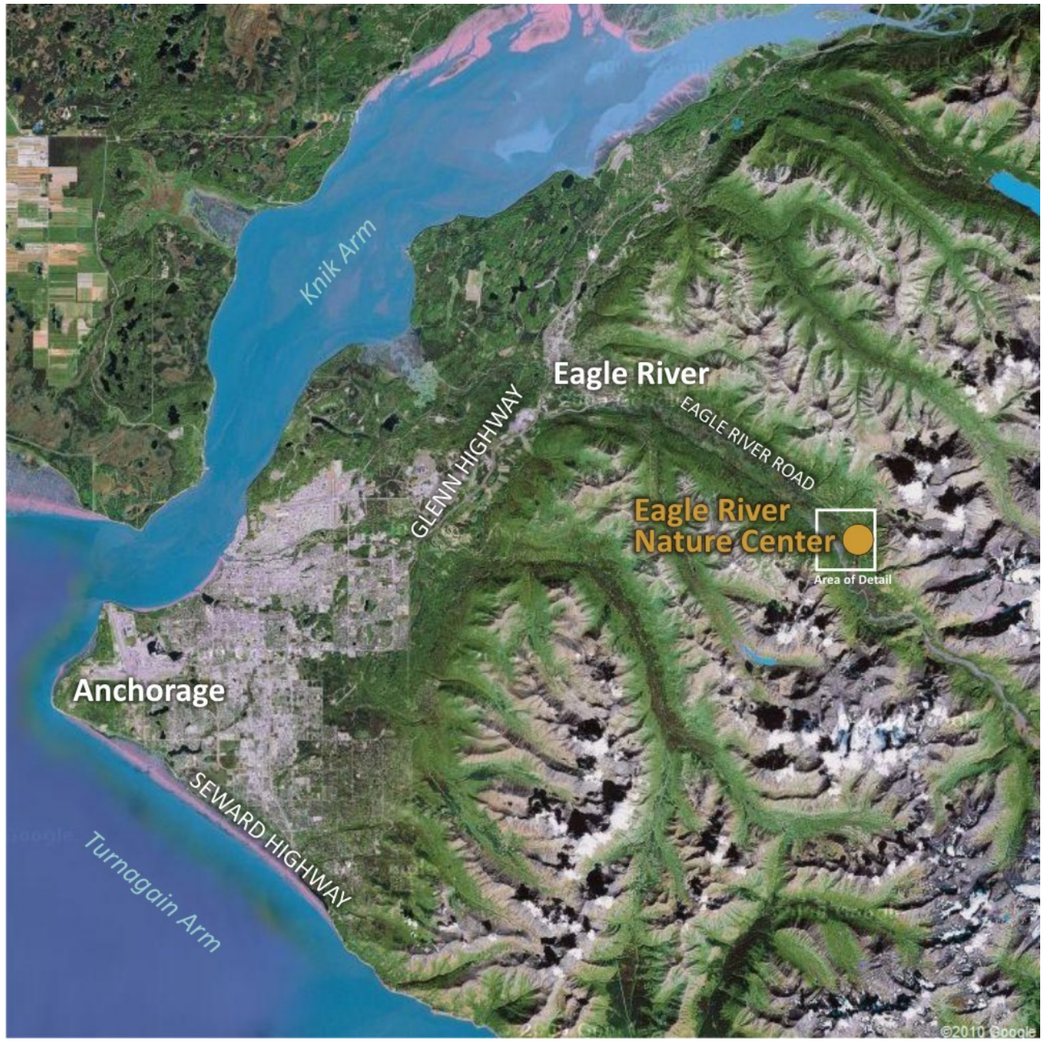


Figure 1. Overview map showing location of Eagle River Nature Center in relation to the Anchorage Bowl

Existing Conditions Map

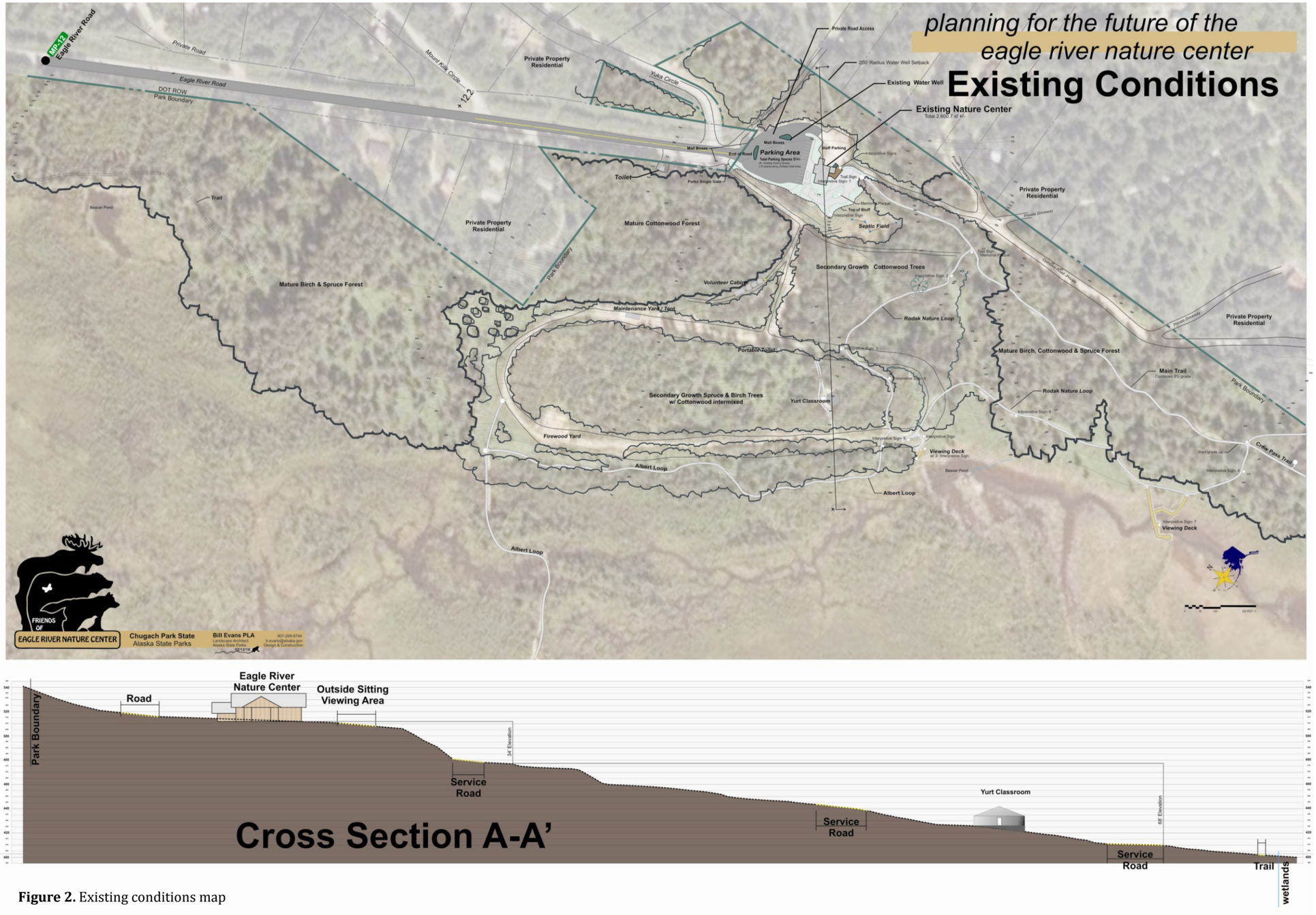


Figure 2. Existing conditions map

Table of Contents

Introduction

Located 25 miles north of downtown Anchorage in the heart of Chugach State Park, the Eagle River Nature Center welcomes 40,000 visitors annually to its facility, trails, and programming. The picturesque log center is surrounded by rugged mountains that rise 6,500 vertical feet to the summits of Eagle, Polar Bear, and Yukla peaks. Out the center's back door the historic Iditarod Trail meanders toward Eagle River and Crow Pass; miles of other hiking trails, sparkling rivers, and numerous wildlife—including moose, bears, eagles, and salmon—await visitors. The facility is open year-round and provides extensive interpretive programming for the public, as well as for private and public schools.

Since opening as a state-owned and operated visitor's center in 1981, the facility has always proven popular with the public. Friends of Eagle River Nature Center, Inc. was established in 1996 with the purpose of taking over operation of the visitor center from the state Division of Parks and Outdoor Recreation. In 2005, the Friends of Eagle River Nature Center was awarded a 25-year contract from the division to continue operating the center. Operation includes management of the main visitor facility, three public-use overnight facilities, a classroom structure, and volunteer cabins, and maintenance of 10 miles of trails.

Purpose and Need

Throughout the years, staff and board members have kept the organization relevant and financially stable, with major assistance from local businesses, foundations, and individuals. Adapting to programming changes and a growing audience has been a natural part of the center's evolution.

From early on, it was apparent that the nature center's buildings were becoming less and less able to accommodate the growing number of visitors and the center's programming needs. Its aging structures and utilities, plus restrictive and inefficient spaces, have been ongoing concerns.

In 2006, the Friends of Eagle River Nature Center, in partnership with Alaska State Parks, embarked on a project to identify and evaluate the center's shortcomings and needs with the intent to create a master development plan. Hundreds of visitor surveys and vehicular and pedestrian counts were collected, and the organization's operations were examined. During brainstorming sessions and public meetings, staff, board members, and community members envisioned ways that a renovated and/or new building, with adequate parking and trail access, could better serve the thousands of visitors who use the facility and trails.

This public process provided the foundation for the Master Development Plan, which:

- supports of the missions of the Division of Parks and Outdoor Recreation and Eagle River Nature Center
- illustrates the physical locations and relationship of landscape features to current and proposed facilities and forms the basis for future use and development of the Eagle River Nature Center

- recommends new facilities that provide for the daily operation of the nature center and provide a base for future growth and demands
- recommends new facilities within Chugach State Park while promoting the preservation and protection of the park's historical, natural, and recreational resources
- recommends programming that enhances the educational and interpretive opportunities available to Chugach State Park visitors

Mission and Vision Statements

Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation

Mission Statement
The Division of Parks and Outdoor Recreation provides outdoor recreation opportunities and conserves and interprets natural, cultural, and historic resources for the use, enjoyment, and welfare of the people.

Vision Statement
The Division of Parks and Outdoor Recreation envisions an affordable and accessible system of parks that provide diverse, safe, year-round, high-quality, family-oriented, outdoor recreation experiences; statewide programs that enhance the enjoyment and stewardship of the state's outdoor recreation, natural, historic and cultural resources; and a dedicated, professional staff that fully meets the needs of the public.

Friends of Eagle River Nature Center

Mission Statement
The mission of the Eagle River Nature Center is to provide connections to nature through interpretive education, resource protection and outdoor opportunities. (To maintain this vision while accommodating growth and changes in programs and audiences is a natural part of the evolution of the organization.)

Core Values
- stewardship
- excellence in service
- conservation
- respect for life
- excellence in education

Goals and Parameters

- Provide s*afe and adequate parking* to reduce pedestrian/vehicle/traffic conflicts and provide non-interrupted access for adjacent property owners to their homes and driveways
- Provide *trail access* for a variety of visitor groups, including hikers, skiers, program participants, school groups, and self-guided visitors
- Provide fully *accessible programs* and a trail system that complies with the Americans with Disabilities Act (ADA) and barrier-free standards
- Maintain the *character/atmosphere* of the existing nature center
- Maintain and enhance existing *interpretive programs*
- Address *inadequate space* and space conflicts for visitors, volunteers, and staff
- Develop a *maintenance facility* that is screened visually and audibly from neighbors, the nature center area, and entrance area/parking lots

Organization History[1]

The Eagle River Nature Center log building originally operated as the Paradise Haven Lodge, a privately owned business. In 1980, Alaska State Parks purchased the property and opened the Eagle River Visitor Center in 1981. The center prospered year-round and flourished in the oil-revenue heyday of the early 1980s. Operating with a paid park staff of five and a budget of $180,000, it welcomed thousands of visitors year-round. By 1995, however, budget cuts reduced its operating budget to $16,000. Faced with closing the center, the Division of Parks and Outdoor Recreation held public meetings to determine the facility's fate. The public asked to keep the facility open and the state responded by deciding to lease the visitor center to a private operator.

The Friends of Eagle River Nature Center, a 501(c)(3) nonprofit, won the bid to operate the center. The division retained full ownership of the building and grounds, stipulated certain maintenance duties for the permitted area, placed limits on staff salaries, and created compatibility guidelines for use of the permitted area. Operation and programming responsibility went to the new nature center board of directors.

Renaming it the "Eagle River Nature Center," the organization held a grand opening in May 1996 and expanded its program offerings in 1997. In addition to the popular interpretive programs, guided hikes, and daily nature walks, the organization added in-depth workshops for adults, like "Wildflowers of Eagle River Valley" and "Eating Wild Mushrooms." Working with the Anchorage School District, the center also refined its popular science education program. Additions to the center's grounds included a 260-foot boardwalk and creek-side viewing deck. The trail to the Eagle River also received a layer of gravel and native plants were added to the surrounding gardens. Visitors could enjoy most of the services and amenities for free, with fees only charged for parking, longer hikes, in-depth workshops, and school programs. In November 1997, nature center managers received an Alaska Land Forum first place award for the "Most Improved or Innovative Business" in the tourism industry.

However, the center also experienced growing pains. During busy summer weekends in 1997, the center's parking lot was full. In an attempt to alleviate the overcrowded parking, volunteers cleared brush to provide a stopgap solution for about 20 cars on the old racetrack area. However, some drivers ignored the parking fee or parked on nearby residential roads to avoid paying, annoying nearby residents. Although the nature center earned more than $23,000 in parking fees for the year, the manager estimated that about 20% of potential parking revenue went unpaid.

Since 1997, the situation has increasingly become worse. Strain on the parking area is now coupled with strains on the center's building capacity and aging infrastructure. These growing pains, along with the fact that the site was originally developed assuming fully subsidized facilities, indicates a need to develop a site plan to increase the center's ability to generate revenue. The center's ability to generate revenue will enable the Friends of Eagle River Nature Center to operate the facility without state assistance.

1. Information from internal Eagle River Nature Center document: "Eagle River Nature Center—Need for Parking Improvements and Site Plan"

Planning Process

The Eagle River Nature Center, in cooperation with the the Division of Parks and Outdoor Recreation, initiated the Master Development Plan planning process in 2006. Public participation in the planning process was instrumental in creating a site plan that meets the needs and concerns of the community. A series of open houses and presentations were conducted from August 2009 through March 2010. During this time the division collected and processed comments by members, neighbors, and other agencies.

Part of the outreach also included media releases, a project webpage, and over 200 postcard mailers that were sent to neighbors inviting them to participate in the planning process. The project webpage enabled those interested to track the planning process and receive updates. Maps, concepts, and comments were posted throughout the process to keep the public informed.

The following timeline includes key events in the planning process. See Appendix A for an overview of public comments received.

Timeline

2005

- Friends of Eagle River Nature Center was awarded a 25-year contract from Alaska State Parks to continue operating the center

2006

- Friends of Eagle River Nature Center was awarded a HUD (Housing and Urban Development) grant to produce a Master Development Plan for the center

December 2007- November 2008

- Information gathered, including visitor surveys, vehicular and pedestrian counts, and examination of the center's operations

Fall 2009

- Prepared proposals for possible site locations and evaluated alternatives
    - Prepared four possible site locations for a new facility that met criteria based on community's interests. Each location was assessed for its potential impacts
    - Public comments were gathered at the following meetings:
        - August 10 – Chugach Advisory Board meeting
        - September 10 – Friends and neighbors project introduction
        - September 17 – Open house meeting at the nature center
        - October 10 – Eagle River Chamber of Commerce meeting
        - October 14 – Eagle River Valley Community Council meeting

Winter 2009

- Posted public comments and prepared Draft Master Development Plan concepts
    - The planning team created three draft master site development plan concepts that reflected resource values and public and agency goals. The agencies reviewed the first drafts and addressed the community's concerns based on comments received

Winter 2010

- Public review of Draft Master Development Plan for Site Location "B"
    - Held a second series of public forums to allow community members the opportunity to comment on the draft master development plan and to identify concerns:
        - January 25- Friends of Eagle River Nature Center Board of Directors meeting
        - February 8 – Chugach State Park Citizens Advisory Board review
        - February 11- Friends of Eagle River Nature Center & neighbors meeting
        - March 4 – Community open house at Eagle River Nature Center
        - April 2nd – Public Comment for site concepts closed

Spring - Summer 2010

- Prepare final plan - reviewed agency and public comments and revised the plan as needed

December 2010

- The chief of the Design and Construction section for Alaska State Parks signed the Final Master Development Plan on December 28, 2010

Program Study Report

Data for trail use, vehicle use, projections for future trail and vehicle use, visitor use surveys, and environmental education programming are detailed in the "Analysis Results Report" written by Peter Holck, Ph.D. in 2009 (see Appendix B and C). A summary of those items is included below, along with a summary of other existing conditions.

Visitor Analysis

Number of Visitors

The Eagle River Nature Center welcomes over 40,000 visitors annually, mostly adults and families with children. Visitors are attracted by the natural beauty of the area, recreational opportunities, and the diversity of environmental education programming offered at the center.

According to the "Analysis Results Report," nearly 4,000 students attended formal programming offered at the center or off-site by nature center staff in 2007 and 2008. The report also states that many programming requests are turned down each year due to limited capacity at the center. See Appendix C for more detailed information.

Demographics

According to visitor surveys conducted November 2007 through November 2008 (633 surveys completed), 33% of respondents were from other parts of the U.S.; less than 2% were international visitors (see Appendix B for survey). During winter, only 12% of visitors are estimated to be from out of state.

The majority of resident visitors (about 93%) come from Anchorage and the Eagle River/Chugiak area, while those from the Mat-Su area (5%) and other parts of Alaska comprise the rest.

Non-resident visitors were not likely to visit the center multiple times; in contrast, Anchorage and Eagle River/Chugiak respondents were likely to visit 11 or more times per year.

The "Analysis Results Report" estimates future projections for visitation based on estimates for projected populations for the Anchorage and Eagle River/Chugiak regions. The report estimates a 10.4% and 7.2% growth in summer and winter visitation respectively by 2015 and 25% increase in summer visitation by 2025.

Activities

According to the 2007-2008 visitor survey, walking/running/snowshoeing are the most popular activities, while wildlife viewing and public programming are second and third (wildlife viewing was more popular than public programming during summer and vice versa during winter).

See Appendix C for more detailed information.

Services Offered and Staffing

Staffing

The nature center has four permanent staff members and approximately five seasonal, part-time staff. The Friends of Eagle River Nature Center is overseen by a board of directors. Volunteers also play a large role in the success of the center; volunteers act in a variety of capacities, including trail workers, greeters, and naturalists.

Services Offered

The Eagle River Nature Center is a year-round facility that offers recreational and educational opportunities for the public.. The center provides extensive programming for visitors of all ages, including school field trips, naturalist-led hikes, off-site classroom presentations, and much more.

The 10-mile trail system offers opportunities for exercise and nature study. The main trail network also connects with the Crow Pass/Iditarod Historic Trail, one of the most popular traverses in Chugach State Park.

The center also manages volunteer housing and three public-use cabins/yurts and a classroom structure.

See Appendix G, "Interpretive Prospectus," for more detailed information about the center's public and interpretive program offerings.

Road and Trail Access

The nature center is located at the end of Eagle River Road, approximately 12 miles from its intersection with Eagle River Loop Road, and is the only vehicular route to the nature center. Its current parking area has a maximum capacity of 65 vehicles (includes staff/volunteer parking and 20+ spaces in the road right-of-way); overflow parking is available, however, access is via a one-lane, loose-gravel track that is steep and not safe for many vehicles, including recreational vehicles and trucks with trailers.

A private access road goes around the outer edge of the parking area, through the staff parking lot, and alongside the Rodak Nature Trail.

A daily parking fee is required and annual passes can be purchased. The Rodak Nature Trail provides an accessible route to the greater trail system and is accessed directly behind the nature center.

The "Analysis Results Report" concludes that peak vehicular traffic typically occurs near early or mid afternoon. The report assumes that the average vehicle is parked in the lot for three hours and concludes that the data is correlated with trail user data. Of the 139 days of the 331 days recorded (42%), 250 or more vehicles were counted entering the nature center area throughout the day. The heavier usage days were more likely to occur on weekends or Fridays (59%) than during the weekdays. Interestingly, the report describes that in 76 of the 331 days of data [report says 330 but it is likely a typographical error; all other references to data collection give 331 days], the three-

hour maximum count was at 100 or more vehicles, meaning that 35 or more vehicles attempting to park at the center were unable to because of insufficient parking.

In reference to future projections, the report concludes that if the number of vehicles increases in line with the increased visitation projections, by 2015 30% of the days will have a 3-hour period during the day with more than 100 vehicles, and by 2025, the percentage would increase to 38%.

See Appendix C for more detailed information.

Public Perceptions

See Appendix A for a summary of public comments received during the planning process.

Trail System and Interpretation

Approximately 10 miles of trail are maintained by nature center volunteers; the Rodak Nature Trail (3/4 mile), Albert Loop Trail (3-mile loop), and the Dew Mound Trail (1/2 mile to 6 miles) originate from the nature center. The trails are used for hiking, wildlife viewing, environmental education programming, skiing, and snowshoeing. The center also provides access to the Crow Pass/ Iditarod Historic Trail, which stretches over 20 miles to Crow Pass.

According the "Analysis Results Report," there were more than 140 trail users per day on average during May through August of 2008, and 17% of the days had 150 or more trail users. Trail use is estimated to increase in the future. By 2015, 20% of the days recorded will have 150 or more trail users and by 2025, 27% of days are expected to have more than 150 trail users.

See Appendix C for more detailed information on data collected.

Design Study Report

The existing nature center building is an icon for the neighborhood and community. As the area has grown and developed, the nature center improved and upgraded its facilities as resources allowed. Improvements to the facility to date have included additions to the log building and other deferred maintenance projects.

The existing building has been evaluated several times for its code compliance and is lacking compliance in several areas, including its electrical wiring and roofing. While nostalgia for the existing building is understood, both the division and the Friends of Eagle River Nature Center feel that continuing to maintain and operate the existing structure, even if its footprint was extended, is not in their, and the community's, best interest. The State Historic Preservation Office also found that the building has no historical value (see Appendix D).

The existing facility is on the edge of Chugach State Park and bordered to the north and west by residential property. The division requested to evaluate the surrounding area of the existing nature center for a land base that would facilitate an estimated 20 acres of new development within Chugach State Park, but with a sufficient buffer from adjacent property owners.

During the fall of 2009, the division prepared and evaluated the four site locations (see Figure 3). Each site was evaluated based on planning issues, environmental resources, critical habitat, view shed, potential engineering and drainage issues, and natural and cultural history. Three sites are located on lands within the Bureau of Land Management (BLM) Power Withdrawal. The division currently has a management agreement with BLM and will be applying for a complete land transfer by the end of 2011.

Parameters and Considerations:

- The objective of site selection is to minimize the impact of the undisturbed mature forest.
- The community endorsed a short access road and minimizing the development's impact.
- Proposed park access roads have seasonal drainage and defined drainages flowing north to south down to the Eagle River floodplain or lowland wetlands.
- To reduce maintenance costs, a compact development that minimizes the road length and size of the parking area is preferred.
- The park entrance road will be a two-lane, 24'-wide paved access road with a maximum running grade of six percent.
- The design vehicle is a school bus or a recreational vehicle towing a passenger car.
- All proposed sites have mountain views and wildlife viewing opportunities.
- All sites are outside avalanche zones and are within upland areas.

Site Descriptions

Site "A"

Location: Mile 11.5 Eagle River Road, Falling Water Creek (approximately one mile from the existing nature center)

Description: Site "A" is located within the Chugach State Park boundary and the BLM Power Withdrawal Land. Site "A" has a year-round open water stream with spawning salmon and bears present in the fall. Vegetation in the site area is comprised of mixed birch and spruce, bordered to the south by a black spruce bog and an alluvial gravel fan with cottonwood trees and alders.

The closest neighbor is 0.15 miles to the northwest; mature trees screen the proposed site from the home. An overgrown pioneer road traverses the site parallel to Eagle River Road, which is used by local hunters and hikers to access the area.

Access to the site would require constructing a 0.33-mile road. Development at the site would require 10 to 20 acres of impact, including roadways, parking, building sites, trails, and interpretive exhibits. Development would require relocating existing trails and constructing a new one-mile trail connecting to the existing Crow Pass/ Iditarod Historic Trail.

Site Location "B"

Location: Mile 12.5 Eagle River Road, south of the existing nature center

Description: Site "B" lies within a disturbed area that was an old dirt race track oval and staging area developed by the original homesteader. It is within the Chugach State Park boundary and the BLM Power Withdrawal. The surrounding mountains, fresh water stream habitat, and mixed forest dominate the viewshed. Salmon and bears are present in the site area; the freshwater stream to the south lies within the Eagle River floodplain and includes a series of beaver dams and lodges. Bears follow the stream east and west, and cross through the neighborhood south to north to the high country peaks.

The elevation at the site is a moderate slope with an average of 12% cross slope. The soils are primarily glacial moraine silts & gravel with clay layers. The area is overgrown with secondary growth cottonwood, spruce, and birch trees.

The closest neighbor is 0.15 miles from the site. Access to the site would require constructing a 0.11- to 0.45-mile road and the proposed development would impact 10 to 22 acres of existing disturbed secondary growth of cottonwood, birch, and spruce. Screening using landforms and vegetation would be required to minimize light pollution and noise disturbance to neighbors.

Site "B" would enable the nature center to retain much of the existing trail infrastructure. The trail system does not, however, meet ADA standards and would need to be upgraded.

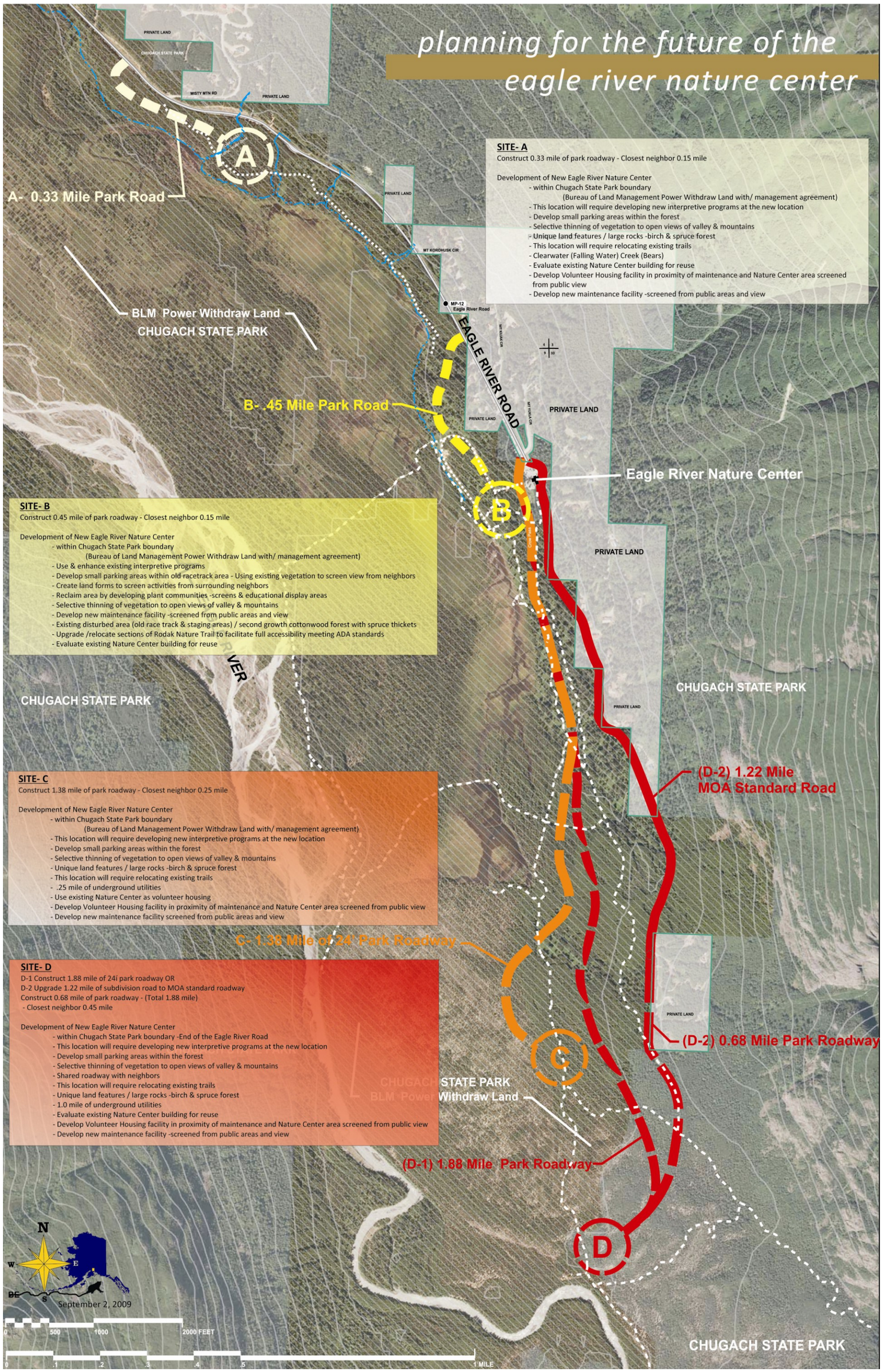


Figure 3. Site location alternatives

Site Location "C"

Location: Approximately 1.38 miles east of the existing center

Description: Site "C" is located entirely within the Chugach State Park boundary, outside the BLM Power Withdrawal. The site is fairly flat and located on the edge of a boulder field, lowland wetlands, and a floodplain. Of all the site locations, Site "C" was considered the most unique and offered a high wilderness experience.

The closest neighbor is 0.25 miles from the site. Construction of a 1.38-mile park access road would be required; the entrance road would impact 1.38 miles of the Crow Pass/ Iditarod Historic Trail and the Rodak Nature Trail would need to be relocated. The site would impact 10 to 20 acres of a mixed spruce and birch forest. Selective thinning would be required to provide views of the surrounding mountains. Due to the relocation of trails, Site "C" would also require developing new formal programming.

Site Location "D"

Location: Approximately 1.88 miles east of the existing center

Description: Site "D" would create an up-valley wilderness experience for visitors, similar to Site "C." The site's proximity to the main Eagle River channel makes it a beautiful location for a nature center. The closest neighbor is 0.45 miles from the proposed site. Construction of a 1.88-mile park access road would be required, including an upgrade of 1.22 miles to the existing subdivision road. This site is entirely in uplands and would impact 10 to 20 acres of a mixed spruce and birch forest. Selective thinning would be required to allow for views of mountain peaks. This site would also require developing a new trail system and formal programming.

Conclusions

The preferred site location, determined from an evaluation of alternative site locations and public input, was **Site Location "B."**

Site "A" was not a preferred choice primarily because of potential impacts to bear habitat and the additional cost of trail construction. Site "A" also did not meet the Friends of Eagle River Nature Center's goal to maintain their existing trail network and programming.

Sites "C" and "D" did not meet the Friends of Eagle River Nature Center's core objectives. The community also did not support the locations because of their potential impact to upper valley development. The cost of constructing the access roads and extending underground electric and phone utilities did not add to the desirability of development at these sites.

Site "B" has the highest value for wildlife viewing because of its proximity to the clear water stream. Although Site "B" had a greater grade change compared to the other three sites, which will require a higher development cost to reduce grades and open views, the grade change will add architectural variety to the design of the facility. Importantly, Site "B" retains much of the existing trail infrastructure and will enable the nature center to keep its current programming.

Master Site Plan

After Site B was chosen as the preferred location for new development, the Division of Parks and Outdoor Recreation presented three different alterative site development plans to the public. Based on the ideas and comments presented during workshops and public meetings, the preferred site plan chosen was **Alternative "C"** and has since been revised based on feedback from the public, division, and Friends of Eagle River Nature Center. (The Alaska Department of Fish and Game also concluded that Alternative "C" was the "best option for providing educational and recreational activities in Chugach State Park while also protecting the wildlife, fisheries, and habitat that visitors come to see." For a more detailed summary, see Appendix E.)

Figures 4 and 5 show the detailed site plan drawings for the final development plan and for Phase I.

The division and the Friends of Eagle River Nature Center prefer a facility that requires minimal staff to operate while satisfying the needs and desires of the community. The footprint shown in Alternative C is an optimal one; while an engineer's estimate is included in Appendix F, the actual construction costs, operational costs, and other issues will be evaluated during the next phase of development (architectural, environmental, engineering). Funding for the next phase has not been secured and will be dependent on the mutual consensus of the community, the division, and the Friends of Eagle River Nature Center.

Appendix G, "Eagle River Nature Center Interpretive Prospectus," provides a detailed assessment of current and recommended interpretive sites and services.

The following paragraphs discuss the design criteria and considerations for the final Master Development Plan.

Eagle River Road Intersection with Park Access Drive

The Alaska Department of Transportation and Public Facilities (ADOT&PF) is currently upgrading Eagle River Road from Mile 5.3 to the end at Mile 12.6. The upgrade will terminate at a new turnaround near the existing center. The existing nature center parking lot will be blocked off by a vegetated landscape earth berm, screening the proposed development from the neighbors. The Division of Parks and Outdoor Recreation has been working closely with ADOT&PF to determine the best location for the new access road. The design criteria is a 90-degree driveway with the first 30' being a maximum two percent running and cross slope, matching the final elevation of Eagle River Road. The proper site distance to the east and west must be present. The design vehicle is a school bus and a recreational vehicle towing a passenger car. No obstructions should be present within a 45' x 45' triangle on both sides of the intersection. The maximum height of any vegetation within this triangle should be a maximum of 24" high. No rocks or signs should be placed within the ADOT&PF right-of-way. Permits for the driveway and any highway directional signs will be required from ADOP&PF.

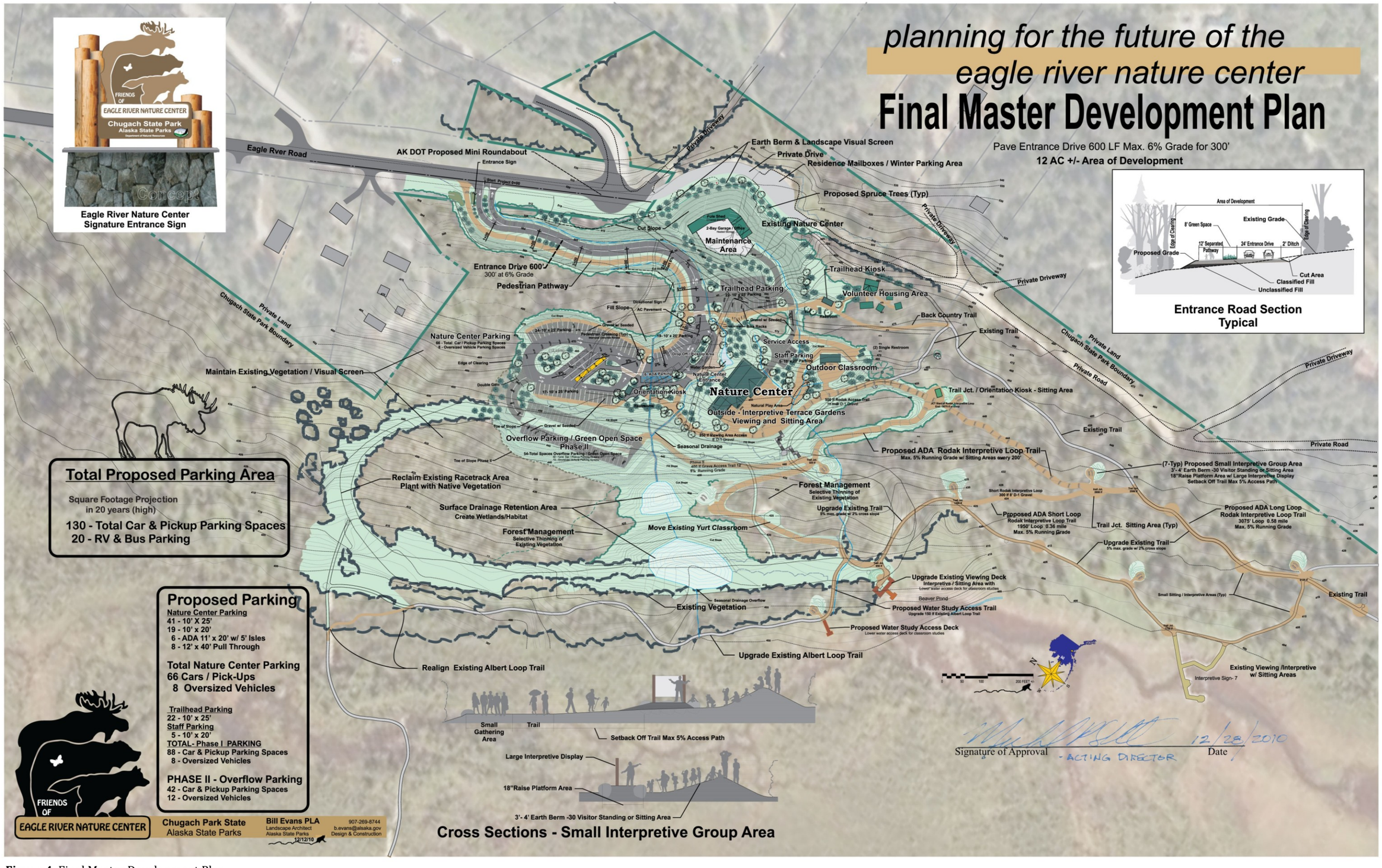


Figure 4. Final Master Development Plan

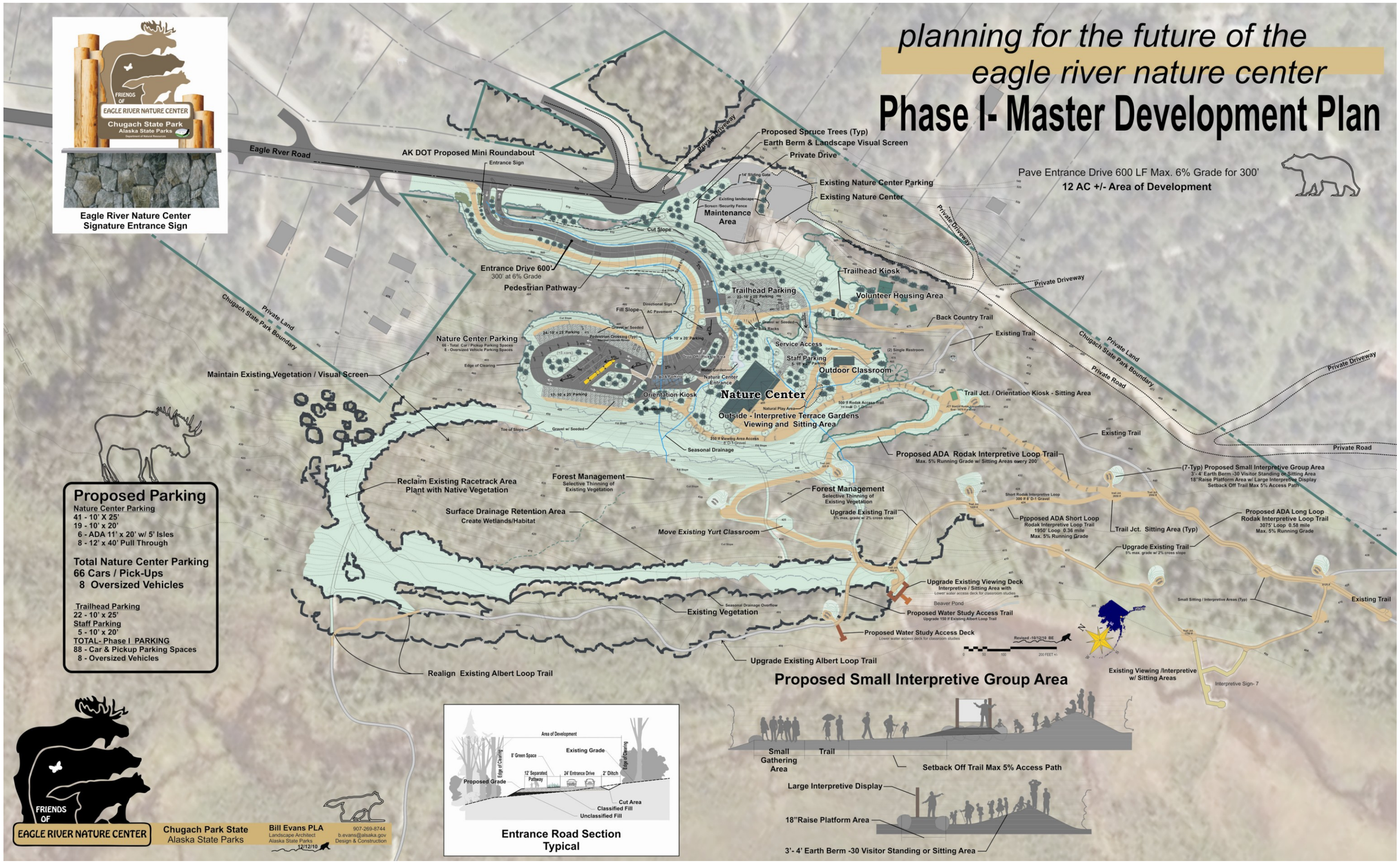


Figure 5. Phase I Master Development Plan

Existing Nature Center Building

The existing building, parking lot, and trailhead would remain in operation during construction of the new nature center, Crow Pass trailhead, and parking areas.

Private Access for Cumulus Road Residents

Cumulus Road is a private road that provides access for the residents who live east of the nature center. The road would remain in the same location. A pull-off at the beginning of the road would be developed on the south side for mail and newspaper boxes. A staging area for residents to chain up or temporarily park would be provided at the existing staff parking area once the new center is open. Residents would need to coordinate with the nature center for temporary parking within this area. No long term parking will be permitted.

Entrance Sign

A signature sign would be designed for the entrance of the facility. It would reflect the character and themes developed for the nature center and incorporate native stone and or heavy timbers. The sign would be placed outside the ADOT&PF right-of-way at a slight angle to the west.

A pre-warning sign one mile in advance of a highway directional sign would be installed to provide adequate stopping distance along the east-bound side of Eagle River Road.

Proposed Nature Center Entrance Access Drive

The proposed entrance drive into the new Eagle River Nature Center is 625’ long and 24’ wide, with two-foot, D-1 gravel shoulders and a two-foot ditch on the uphill side. A separated pedestrian path would be offset to the downhill side of the road by a 10’-long landscape island made of a two-foot-high maximum non-contiguous earth berm; the berm would be planted with native shrubs and perennials. The D-1 gravel surface pedestrian pathway would be 12’ wide and constructed parallel to the entrance road. The first 100’ of the entrance drive would be divided with a center landscape island. The first 200’, starting from the connecting edge of Eagle River Road, would include a transitioning vertical curve starting with the first 50’ at a two percent running grade then transitioning into a five-to-six percent grade at station 200+00. At station 600+00, the six-percent grade ends and transitions into a five-percent grade for 100’ then into a two-percent grade at the intersection of the Crow Pass/Iditarod Historic Trail trailhead parking area. Long term, this access drive would be paved, with a 24’-driving surface and a painted center line. No shoulder lines are required.

The design speed of the entrance road should be no greater than 20 mph and the design vehicle is a recreational vehicle towing a passenger car. This will also allow for a school bus, small panel delivery trucks, pick-up trucks, vans, and passenger cars.

On the downhill/south side of the entrance drive, between station 0+50 and 1+00, three-to-eight-foot native white spruce trees would be planted to screen the entrance drive from the closest

neighbor to the southwest. An open view of the nature center and mountain peaks across the valley should be maintained.

Crow Pass/Iditarod Historic Trail Trailhead Parking Area

A small, 22 space D-1 gravel parking lot (10' x 25' parking spaces) to the left side of the access drive would be developed for access to the Crow Pass/Iditarod Historic Trail. A trailhead orientation kiosk would be installed with a fee station, bulletin board, message board, and interpretive panel. A single vaulted toilet would also be located within this area.

Nature Center Drop-Off/Pick-Up Area

The drop-off and pick-up area would be a 24' wide, paved, single loop located between stations 6+75 and 7+75 on left side (eastside) of the entrance drive. A 20'-landscape/earth berm (maximum two-feet high) island would be built between the entrance drive and drop-off/pick-up area. The purpose of the drop-off/pick-up area is to provide an easy access for visitors. Parking would not be provided in this area. The design vehicle is a large passenger van, passenger car, or pickup truck. School buses and recreational vehicles must park in the oversized-car parking area. The design decision to limit the size of the vehicle to access the drop-off/pick-up area was made to minimize the overall amount of land disturbance.

Two bicycle parking areas would be located between the trailhead parking lot and the drop-off/pick-up area. The bike racks would be constructed of custom metal tubing and resemble the animal outline shapes in the Eagle River Nature Center logo (moose, bear, and wolf).

Three raised and stamped color concrete pedestrian cross walks would be constructed along the entrance drive; one would be located at station 6+50 and the other two would be located at the intersection (station 8+50) at the entrance of the large parking area and exit lane.

Nature Center Parking Area

The primary parking area for the new building would be located across from the drop-off/pick-up area. This area would accommodate 19 paved, 90-degree pull-in parking spaces (10' x 20'). Six ADA parking spaces would be located adjacent to the nature center building entrance on the left side of the entrance road between stations 7+80 and 8+50. Once past the intersection of the entrance drive and the parking area exit lane, the cross grade of the parking lot increases to five percent to reduce the amount of fill. Between station 6+00 and 8+75 the running grade is a maximum two-percent slope.

In the large parking area there are a total of 41 (10' x 25') gravel/green parking spaces with wheel stops and eight oversized, (12' x 40') pull-through paved parking spaces to accommodate buses, RVs, and trucks pulling trailers.

The total number of parking spaces in Phase I is 66 for passenger cars and eight for oversized vehicles.

Overflow Parking Area/Green Open Space – Phase II

An access drive would be constructed from the main parking area to the overflow parking area. The drive would be 100' long and 24' wide, with a maximum grade of five percent. The driving surface would be D-1 gravel. A double gate will be installed for controlled access. The overflow parking area would be a 75' wide by 255' long, D-1 gravel pad with a maximum five-percent cross slope.

The total number of parking spaces in the Phase II overflow parking area is 54.

Nature Center Main Building – Conceptual Design

The new center will have a covered outdoor entrance area that includes seating and possibly informational boards. The surface would be paved. The entrance façade should be similar to that of the existing building to invoke a sense of nostalgia for the original log building.

The center would appear to be a single-story, cozy log cabin from the front and visitors would enter the building on the perceived ground level. However, the proposed building would be two levels, with the bottom floor designed as a daylight basement that opens onto an outdoor viewing and sitting area. When viewed from the back, visitors would see the building's two stories and rustic design.

The building design should incorporate the Leadership in Energy Efficient Design (LEED) standards and be an example of fine architecture that complements the surrounding environment. The building and adjacent facilities and trails will also comply with the ADA standards and guidelines.

The main floor would be designed for visitor information and interpretation. A welcoming arctic entrance, information center, interpretive display area, child-centered play/learning area, lounge area, retail area, and restrooms should be on the main floor (see Appendix G for detailed interpretive recommendations). The main floor would also provide access to an upper viewing deck that connects to the lower viewing area and trail systems. A series of terraces would interact with the surrounding grades of the landscape. The main floor should be oriented to the southeast and provide views of the Eagle River Valley and Chugach Mountains.

The lower level would consist of a large multi-purpose area and food service/kitchen area. Additional small classrooms, storage areas, restrooms, and other related rooms should be located on this floor.

Table 1, "Space Requirements," identifies estimated capacity numbers for the center and its outbuildings as identified in October of 2010.

Main Building		
Item	***Qty***	***Square Footage***
Arctic entryway	1	100
Janitorial supply & equipment storage	1	25
Janitorial sink/wet area	1	25
Restrooms/water fountain/restroom supplies/coat storage	1	500
Interpretive display area	1	400
Interpretive display storage	1	120
Child-centered play/learning area	1	80
Lounge area/woodstove	1	400
Information center	1	200
Information center storage	1	25
Volunteer work area/locker space	1	75
Copy/general work area	1	50
Retail display	1	300
Retail storage	1	120
Rental storage	1	40
Multi-purpose auditorium (large)	1	2400
A/V room/storage	1	30
Table & chair storage	1	120
Classroom (small)	1	400
Classroom materials & equipment storage	1	150
Telescope area(s)- wildlife; astronomy	1	150
Director's office/staff conf room	1	150
Manager's office	1	120
Chief Naturalist's office	1	120
Asst. Naturalist work space	1	50
Other administrative work space	1	50
Staff/volunteer bathroom	1	35
Office equipment storage	1	50
Safe & secure storage room	1	25
SUB-TOTAL MAIN		**6310**
Food Service		
Food service area (to serve snacks, eat on deck)	1	120
Food service kitchen for snacks/commercial kitchen for auditorium (to serve both areas)	1	150
Recycling and trash area	1	100
Food service storage	1	50
SUB-TOTAL FOOD SERVICE		**420**

Housing		
Winter caretaker/visiting lecturer apartment	1	350
Resident volunteer housing- move and keep old housing (2 @ 120sf)	1	240
Resident volunteer kitchen/dining	1	100
Resident volunteer bathroom w shower & storage	1	75
Resident volunteer lounge area	1	200
SUB-TOTAL HOUSING		**965**
Maintenance		
Trails & grounds workshop (heated)	1	200
Equip repair shop/garage (heated)	1	225
Equipment/machinery storage (unheated)	1	1750
Tool storage (unheated)	1	100
Fuel storage (unheated)	1	25
SUB-TOTAL MAINTENANCE		**2300**
TOTAL NATURE CENTER BUILDING AREA		**7695**

Table 1. Space Requirements

Outside Interpretive Terrace Gardens Viewing & Sitting Area

The building's interior spaces should tie into the useable outside upper and lower interpretive gardens viewing and sitting areas. These areas will be designed in conjunction with the nature center building. The large multi-purpose area and the classrooms should have an outdoor space that will not interrupt the general visitor's activities. The upper viewing area terraces should interact with the surrounding grades of the landscape to the lower viewing area. Small sitting areas and interpretive displays and spotting scopes should be available.

A natural play area between the indoor classrooms and the outdoor classroom should be developed. Large rocks, gravel, sand, logs, and stepping stones over a seasonal rain/melt water system should allow opportunities for creative natural play.

Outdoor Classroom

The outdoor classroom would be a covered amphitheater terraced into the slope. A small storage area would be built for interpretive display items and staff materials. A presentation area with a large fire pit should be on the lower level with ADA access to both the upper and lower levels. The sitting area would be orientated to allow views of the Eagle River Valley and Chugach Mountains.

The architecture of the covered structure should take the character of the main building. Logs from the existing nature center could be reused if the timing for construction of the structure coincided with the demolition of the existing building.

Two single vaulted toilets would be installed on the top level of the classroom area, with service access to each. Single toilets were chosen because of their small footprint.

Service Access and Staff Parking Area

A small staff parking area to accommodate five to ten vehicles would be located in the service access next to the lower level of the building. A vegetated earth berm would screen the service area from main entrance and the outside viewing and sitting areas. The service access road would be 14' wide and have a compacted, D-1 gravel surface with a maximum five-percent grade. A vehicle turnaround would allow a delivery van turn around and back in.

Volunteer Housing Area

The two existing volunteer cabins would be moved into this area. The yurt could be used as a volunteer lounge area and/or storage. In the long-term plan a common kitchen, dining, lounge, restrooms, showers, and laundry area should be located within the volunteer housing area.

Entrance Trails and Connecting Pathways within Parking Areas

The main parking area would have an orientation kiosk and a single vaulted toilet. The orientation kiosk would have the same architectural character as the nature center. A pedestrian walkway

would lead visitors from all the parking areas to the orientation kiosk and to the front entrance of the nature center.

The main trail leading from the orientation kiosk in the main parking area to the outside viewing and sitting areas would be 250' long and 8' wide, and have a compacted D-1 gravel surface with a maximum five-percent grade. A staircase would connect each area to the Rodak Nature Trail.

A 400' long, 12' wide service access trail would be constructed of compacted D-1 gravel with a maximum five-percent grade. The trail would connect the overflow parking area to the Rodak Nature Trail. A 600' long, 8' wide service access trail would also be constructed to connect the lower viewing area to the Rodak Nature Trail Trailhead Orientation Kiosk. The trail would be compacted D-1 gravel with a maximum five-percent grade.

Rodak Memorial Interpretive Loop Trail

Slight modifications to the existing Rodak Nature Trail are included in the master development plan to accommodate different user groups and establish trail connections. The trail incorporates two loops and is designed to coincide with interpretive programming. At the first trail intersection there would be an orientation kiosk with a sitting area and a small group gathering/program area. The first loop is approximately 1/3 of a mile long, with a maximum five-percent running grade and maximum two-percent cross slope. The trail would be eight-feet wide with a compacted D-1 gravel surface to provide full accessibility to the primary interpretive program. Six small group gathering/program areas would be located along this first loop. About halfway through the first loop there is easy access to a small viewing deck overlooking a clear water stream. The existing deck would be upgraded to provide full accessibility.

The second, larger loop builds off the first loop and follows the existing trail alignment. New construction would include upgrading 1,200 feet of trail to meet the ADA Recreational Trail Guidelines and creating an eight-foot-wide surface of compacted hard D-1 gravel. The maximum running grade of the second loop would be eight percent with a two-percent cross slope. The second loop would tie into the existing Crow Pass/Iditarod Historic Trail. Four hundred and twenty-five feet of the existing trail would need to be upgraded to meet the ADA Recreational Trail Guidelines. Two small group areas would be located along this section of trail and five individual sitting and interpretive areas would be spaced 200' apart. The total length of the two loop trails is just over one-half mile.

The existing salmon viewing deck should be upgraded to follow the direction of the Interpretive Prospectus (see Appendix G).

Small Group Areas

The small group areas would be set off the trail to provide sufficient space for a small classroom group of 25-30 visitors to gather for lessons and instruction. The areas would be a minimum of 10' long by 6' wide. The base would be compacted D-1 gravel, with a maximum running grade of five percent and a two percent cross slope. The area would open to a similarly-sized space where an interpretive panel would be displayed on a 19" high pedestal. The instructor could stand on the

pedestal if desired and the outer edge could be used as a bench. A small grassy earth berm graded into the surrounding landscape would create a small amphitheater for sitting or standing. A passive vegetated buffer between the trail and the small group area should be maintained.

Sitting and Interpretive Areas

Individual sitting and interpretive areas could be spaced 200' apart along the Crow Pass/Iditarod Historic Trail. These areas should have a maximum two-percent cross slope. Trail intersections will have a three-post trail sign with the name of the trail, its length, grade, and an overview map. Trail conditions and points of interest could also be included. An area could be provided for temporary signs such as bear sightings or trail closures.

Albert Loop Trail

The Albert Loop Trail will need to be upgraded, including select vegetation management to reveal scenic views. To ensure the safety of visitors, two hundred feet of the trail would need to be rerouted to direct hikers back to the nature center. The reroute would provide access to an elevated light-penetrating deck that could be used as a small outdoor classroom space to bring students safely to the stream edge. A small group area would also be located nearby.

Maintenance Compound

During construction, the maintenance area would need to be temporarily relocated to the existing septic field area. When the nature center moves into the new building, the maintenance compound could be developed at the existing nature center site. The maintenance compound would be built into the slope to muffle noise and screen the facility from the neighbors. The heated maintenance building and covered outdoor storage areas would be tucked into the slope, with retaining walls as their back walls. A security fence would be built around the maintenance compound with a sliding double entrance gate and a four-foot service entrance gate.

If funding is not available or if the material under the existing nature center is not useable for fill, the maintenance compound could be located on the existing nature center parking area and the existing nature center building could be retained for this purpose. This item will require further evaluation and discussion.

Surface Runoff, Water Garden, and Surface Retention Ponds

The proposed Phase I development area is about 10 acres. The additional overflow parking area and storm water retention ponds would increase the development area to 12 acres. The design plan is to channel all the storm water from the entrance road and parking areas to two retention ponds. A water garden near the nature center entrance would also be developed. All rain water from the roof of the center would be directed to the water garden and natural play area. The retention ponds could be used for winter activities and would provide wildlife viewing opportunities from the outdoor viewing and sitting areas. The lower retention pond would tie into the subsurface water system and create wetland habitat.

Landscape Plan & Reclamation of Disturbed Areas

The old race track would be designated for overburden material and for stock piling useable materials for reclamation during construction. The final grading of this area should fit into the natural grade and provide adjacent property owners privacy. The grading should also attempt to discourage visitors from trespassing on private property. In an attempt to use all materials excavated during construction, all clearing and grubbing material must remain on site; stumps and brush would be required to be turned into mulch for slopes and landscaping material.

Area Lighting

Street or parking lot lighting is not necessary unless needed for safety or security. All necessary lighting would be directed down to the required area to prevent light pollution.

Forest Management

The area outside the development footprint should be evaluated to determine if a forest management plan would be beneficial. Forest management would be an ongoing task and include items such as clearing trees and brush for views and safety concerns. Management of invasive species could also be included.

Appendices

Appendix A: Summary of Public Comments

Planning for the Future of the Eagle River Nature Center – Master Site Development Plan Comments- January 28, 2010

Site Planning- Division of Parks and Outdoor Recreation, Design and Construction Section

Comment # and subject	Issue Statement / Public Comment	Division of Parks and Outdoor Recreation Response
1. ***Work with what we have***	A new site development and building expenses would be enormous and the impact of existing property, trails and habitat as well as new roads would also be traumatic. There is adequate room to expand the existing facility and/or construct a new facility without the need for a new road. A new road will increase the project cost, future maintenance cost, and result in less money to spend on important environmental education and outreach the nature center performs. Has the State considered "no action" as an option, no action would not mean terminating the ERNC. The creation of a new access road does not seem necessary. There are benefits to having the traffic flow to the "end of the road" as opposed to having a four way intersection along Eagle River Road with traffic coming in and out of the valley intersecting with nature center, visitor traffic and neighbor driveways opposite the new proposed access.	*The Friends of ERNC have been working with the current facility since 1996; it was an undersized facility then and is today. The Eagle River Nature Center (ERNC) has been feeling growing pains since the very early years and it has become apparent continuing to ignore the safety issues and growth needs is not responsible on behalf of the ERNC or Division of Parks and Outdoor Recreation (DPOR).* *New development and impacts to the area will be difficult to accept, as well, the cost of completing a major project such as this will be costly, however, as stated above it is inconsistent with the Mission of the ERNC or DPOR to ignore the existing impacts and program needs.* *DPOR is not considering "no action" as an option for the reasons stated above.* *Any proposed intersection on Eagle River Road would be permitted through Alaska Department of Transportation and Public Facilities (DOT&PF) to meet the AASHTO design criteria. DPOR will make recommendations to DOT&PF to make the end of the road fit into the community landscape and provide a new access to Eagle River Nature Center.*
2. ***Trails***	The removal or disruption of the current trail system for building a new road or making the current trail system more ADA friendly would destroy the integrity of the trail system for 98% of the population, this seems unnecessary.	*The State is required by Americans with Disabilities Act to provide a fully accessible program. We will work with the existing trail system to bring it into compliance and to improve the quality of experience while maintaining the integrity of the trails.*
3. ***Parking***	The proposed expansion of parking does not seem sufficient to accommodate future projections of visitor use/traffic, considering much of the current overflow parking takes place along Eagle River Road, blocking neighbor driveways. Many people parking along the road are not using the Nature Center, instead they are accessing the parks many trails. As a result visitors not wanting to pay the $5.00 fee have	*As part of identifying the ERNC shortcoming and needs hundreds of vehicle and pedestrian counts were collected and the data from that survey information produced the "Analysis Results Report" by Peter Holck PhD. In the document it clearly projected the number of parking spaces required in a 15 year projection. This is the guiding document for our expansion projections.* *Parking fees for the ERNC are separate from Alaska State Park parking fees as outlined in the 25 year concessionaire permit which includes a provision to*

	created a safety issue along Eagle River Road. Overflow parking is mostly needed at the height of the summer season during major events. Could the "overflow parking" area be reopened using the existing road to the maintenance site? The road could be widened and a new parking lot could be put where racetrack and educational yurt exist. Also, better signage and more designated handicapped spaces by the front door should take care of the problem. Would reserved handicap parking be an option?	*allow the collection of parking fees by the Friends of Eagle River Nature Center to help offset operational costs to the ERNC.* *The overflow parking area has become the ERNC maintenance yard as a result of a lack of sufficient space, site alternatives are being explored where additional parking, utilizing the footprint of the racetrack would alleviate the current need for safer parking. Reserved accessible parking spaces are a consideration; however the new Master Site Development Plan will address the appropriate number ADA of parking spaces needed for the facility.*
4. Parking	Parking should be small, with additional parking at the North Fork, and a shuttle service (paid for by users) to bring people to and from to keep the impact onto Nature Center and its inhabitants to a minimum (as in Denali Park).	*Vehicle and pedestrian counts were collected and the data from that survey information produced the "Analysis Results Report" by Peter Holck PhD. The figures illustrate the numbers of parking spaces for projected growth of the ERNC. DPOR will propose a parking area in the relationship to the ERNC facility to accommodate the projected needs of the center. Therefore, a shuttle service would not be required for park visitors.*
5. Current Location	Relocating the ERNC to the furthest extent of its current footprint creates new impacts for additional neighbors, damages more pristine resources within the area, and does not best utilize existing trail networks. It is not necessary to build a new nature center or a huge maintenance facility. Instead with minimal work an expansion and remodel of the existing facility could add classroom and lobby space. Perhaps building up or a creative design using the slope with piling and retaining walls could facilitate generous parking on top and new building underneath if an expansion over the hill was done. Renovating the intersection directly at the nature center entrance could also allow for better vehicle access.	*It is understood any development will impose an impact, however, through good design we intend to minimize the amount of impact to the resources and existing trail network. Retaining the existing facility is not in the best interest of the ERNC or DPOR as the current location does not provide adequate space for much needed parking and the proposed building square footage.* *Our planning team is looking at all possible options, however, retaining the existing structure is not recommended. To bring the structure up to code would require a complete remodel and it would still not address the parking and circulation issue.* *To have the building and parking on different elevations would disrupt the visitor experience; also, this would not follow good design practice and lead to further problems.* *As part of our planning process we are looking for ways to minimize safety concerns at intersections with the current end of the road design proposed by DOT&PF. DPOR is looking to reduce conflicts with non park visitors.*
6. Current Location	The old lodge could serve as a commemorative entrance and reception area.	*See answer above. Also, at this time the Friends of Eagle River Nature Center have expressed they do not have the resources nor the funding to operate two facilities, considering staffing, maintenance and cost.*
7. Site A	Site A is an undeveloped location that would result in substantial impacts to pristine, undisturbed wetland and upland habitats, including new development along an anadromous stream with high wildlife habitat	*At this time we have analyzed the existing natural and social resources to avoid or minimize impacts to high value wildlife habitat and resources.* *The Historical Iditarod Trail is defined as a corridor though this area of the Eagle River Valley. The actual*

	and migration value. Alternative A is too far from the existing trail heads in the park, does the historic Iditarod Trail runs through here? Also, introducing an intersection as shown for Site A could bottleneck traffic creating a road hazard, as well there could be people crossing the road by foot to have their picture taken at Falling Water Creek endangering pedestrians.	*trail location changed with each winter conditions and is located from the river bottom to trails that cut though some locations along the valley. DPOR is working with the Alaska State Historic Preservation Officer and BLM Iditarod coordinator to make sure we do not impact the historical values of the Iditarod Trail corridor.* *There is an existing road cut thought Area A, it could have been used as the Iditarod Trail in the past, however there is evidence of this site being used as a hunting camp in the past.* *Regarding road impacts refer to comment 1 response.*
8. Site A	Site A is likely the best place, because it does not degrade the current trail system. Site A could be a modest site and supplement to the current center- have one be the main education research center and the other more for hikers and park visitors embarking on walks.	*Site A was chosen because it afforded sufficient land base for a new facility location, however, after further consideration Falling Waters creek divides the usable area in half segregating the buildable area. Also, Site A does not retain the existing interpretive program of the ERNC.* *Regarding having two locations, the Friends of ERNC have expressed they do not have interest, resources or funding to maintain two structures.*
9. Site B - road	The ERNC indicates that it wants to minimize disturbance to neighboring properties, however the road shown in Site B cuts off property owners living adjacent to the park, reduces property values, adversely affects the views from adjacent properties, increases noise and effectively turns properties into islands between two roads. In addition the project cost, future maintenance costs results in less money to spend on the important environmental education and outreach work the Nature Center performs. The new road as proposed in Option B would impact areas which have been less impacted in recent years and which appear to be critical wildlife habitat. Moose, brown bear, lynx, beaver and coyote have been observed in the area of the proposed road. This area boasts a diverse forest composition, wetlands unimpeded by trails or culverts and rare human/dog traffic. Abundant wildlife trails show the importance of this area for animals moving up and down and across the Eagle River Valley, as wildlife traverse from Ram Valley to the Eagle River, following Falling Water Creek and smaller creeks running through residential properties and into the area of the proposed road. Putting a road as shown in Option B goes directly against what the Park is all about. The road approach to the Alternative B site	*Our planning team is working to evaluate all possible options for road construction at Site B. DPOR concurs the road proposed on Site B could affect the neighbors and wildlife habitat, however would minimize the amount of cut and fill slopes as opposed to an access road near the current building.* *DPOR's Mission states to "provide outdoor recreation opportunities for the use and enjoyment and welfare of the people" also, to conserve and interpret natural, cultural and historic resources. The road proposed on Site B provides safe access for park visitors, it is the responsibility of DPOR to explore all safe possible options for access to Site B.* *DPOR is aware of the potential environmental and wildlife impacts in the area of the conceptually proposed road in Site B. We understand the concern of wildlife using this area as a corridor crossing the valley and are looking into other potential alternatives to providing safe vehicle access to Site B. DPOR has two alternatives for vehicle access to Site B for evaluation.*

	needs to be reevaluated with other options for accessing the new site for the Nature Center. The current proposed access road alignment for Alternative B is not the only option, other approaches need to be re-evaluated, it may require additional engineering and design for safety, but are feasible.	
10. Site B - racetrack	The existing site is well suited for an expanded or new facility this area is already impacted by development yet has superb natural features and views within close proximity, has excellent access to the existing network and variety of trails, and could best make use of existing resources including the current center, toilet facilities and volunteer housing at the "race track". However, would "vegetation" adequately mask/hide the building and parking lot?	*Current concept site plans are considering use of existing disturbed areas, including the race track, septic field, current building location, maintenance area and educational yurt location. It is good sustainable design to use as much disturbed or existing impacted areas as possible.* *DPOR cannot guarantee re-vegetation of the site would adequately mask / hide the building or parking areas, however, it is through good design practice we intend to minimize impacts to the neighborhood through site planning, re-planting and screening with existing vegetation. Disturbed areas will be seeded or shrubs and trees will be planted during construction to help restore the site back to a natural state.*
11. Site B - racetrack	Site B would allow the facility to develop at its existing location, expanding into the "racetrack" area if necessary to provide additional parking, maintenance, and interpretive space. Site B is most consistent with the stated mission of the project: to "address the daily operations of the Nature Center and provide a base for future growth the meet demand," and to "further the educational and interpretive opportunities available to the park visitors … develop new facilities … while promoting preservation and protection of the historical, natural and recreational resources."	*DPOR agrees we will follow our Mission as stated to "provide outdoor recreation opportunities and conserve and interpret natural, cultural and historic resources for the use, enjoyment and welfare of the people. "*
12. Site B - racetrack	Emphasis on Site B, locate the new building site close to the existing center, build directly below the current site, near the septic system leach field, the parking lot could be located nearby, and perhaps move the volunteer cabins to where the current maintenance structure is. Move the maintenance structure closer to the new Nature Center, and put the parking lot where the volunteer cabins currently are.	*DPOR has reviewed all comments received and will work with those ideas that fit the Mission of the ERNC and DPOR to see how those ideas may be incorporated into the concept site plans as the DPOR Design Team see fit based on the Mission.*
13. Site B - support	Option B should be brought forward for detailed planning and analysis to maximize the use of existing developed land and previously disturbed habitat. Next stages of planning should include: Additional variants for automobile, bus, and	*DPOR will consider all listed items in the Master Site Development Plan.* *As stated above regarding site plan consideration; refer to comment 12 responses.*

	bicycle traffic into, through, and off site Multiple variants for short-term and long-term parking and pedestrian movement Multiple building-location variants to maximize existing view shed, trails, site conditions and utilities while minimizing development of previously undisturbed habitat Multiple trail variants to clearly plan efficient use of existing trails, recognizing the multiple types of user groups with various, sometimes conflicting, needs Multiple building design variants to include reuse of the existing building, net-zero building designs, or living-building designs, to further minimize the impacts and various footprints associated large, community buildings	
14. Site C + D	If Site C or D is selected the traffic flow along Cumulus Road would increase the noise and residents would lose their feeling of seclusion. Road conditions are less than favorable in summer and winter. Funding to complete and maintain the road would be difficult to obtain by the Nature Center. Also, would Parks and Outdoor Recreation compensate homeowners for the disturbance, or offer to purchase adjacent property? Options C and D could also degrade the value of the interpretive trails and program which make the nature center so successful. Under Options C & D, a heavily used road and parking area would be constructed along these interpretive trails or on the adjacent private road. The interpretive trails would suffer increased noise and vehicle traffic, degradation of wildlife habitat and loss of wilderness atmosphere. Options C and D would destroy the very assets that created the need for expansion and growth. Options C and D should be rejected in favor of an alternative that preserves the atmosphere along the interpretive trail and at the viewing decks. Options C and D would further encroach upon the more remote trails, cabins and the rapids yurt site and the wilderness enjoyed by backpackers and day hikers. Many park users view the parking area and visitor center as the "gateway" to Crow Pass and other more pristine trails within the greater Chugach State	*Sites C & D provide a facility in the park but the impacts would not allow the ERNC to continue the existing interpretive program they have built their outreach on. Sites C & D are world class sites and to introduce a vehicle road system, parking and a new interpretive program will impact the natural and social integrity of the Upper Valley of Eagle River in Chugach State Park.* *DPOR is not considering the purchase of land from adjacent homeowners of their property.*

	Park. Options C and D would move the "gateway" - and its radius of popular interpretive trails - further into the park, encroaching upon trails which currently reflect a more "wilderness" flavor. This is not consistent with the plan's mission to "protect the historical, natural and recreational resources" of the park. Alternatives C or D do not meet the objectives stated for the ERNC's current or growing needs.	
15. Site D	Site D has the longest road to be constructed; it also appears to be located in the floodplain. Any required drainage features might be dammed by beavers.	*Site D would have the longest road constructed at 1.88 miles and is located at the edge of the bolder field and upland forest. It is several thousand feet from the active beaver area or stream.*
16. Site D	Site D is the best location because the site is far enough from the local residents; it would be more costly, however, would put the facilities in the park and not disturb neighbors or residents. Also, it is not on a bear crossroads although, of course, bears use the area and may be attracted to garbage unless suitable storage facilities are provided.	*Site D was a chosen Site Location because there is sufficient land base for a new facility and program; however, this location would not retain the existing interpretive programs an important consideration.* *All of Alaska is considered bear country and any new development will follow the appropriate State and Municipal standards for trash storage.*
17. Site D	Site D has great views looking up the Eagle River valley and adjacent peaks. The site should be constructed on the large terminal moraine where an underground building could be placed-- a building similar to the one at Denali National Park.	*Regarding Site D location; refer to comment 16 responses.* *Parks is looking into all sustainable options available in building construction and design.*
18. Alternative Locations	With 500,000 acres in Chugach State Park it is more than possible to develop an alternative that does not impact the neighborhood if the Nature Center and Division of Parks and Recreation are willing to work with neighborhood members A potential alternative location for the Nature Center could be considered at Mile 7.4. The location offers adequate parking, river access and potential for a pedestrian bridge for access to the south side of the valley which could link with the Symphony Lake Trail via Eagle River Overlook Trail.	*The Upper Eagle River Valley is the project focus for a proposed location of the ERNC. It is important to the ERNC and DPOR to retain the current interpretive program.* *DPOR has been working with the neighbors and public during this public process by collecting comments and personal accounts from adjacent neighbors of the ERNC. DPOR has been working with the public throughout the planning process.* *The trailhead at the North Fork of Eagle River is outside the recommended project area for development of the ERNC.*
19. Wildlife Impacts	The area between the Albert Loop Trail, the race track and Eagle River road is an important calving and feeding corridor for moose especially in the spring, early summer, and winter. Black bear and brown bear frequently travel through and use this area as well. The old growth cottonwood supports great horned owl nesting and an abundance of prey such as squirrel and snowshoe hare. It is imperative the Master Site Plan is thoroughly reviewed by	*All areas within the Upper Eagle River Valley and the existing ERNC are in bear county. Understanding the high value wildlife habitats to habitat corridors in this area will be analyzed by and working with naturalists and biologists with DPOR and the Department of Fish and Game.* *The area referred to in the comment would be described as wildlife habitat and will be evaluated. Alternatives will be presented to avoid or minimize impacts to wildlife*

	Alaska Department of Fish and Game Wildlife Biologists. Alternative B locates the road and a new visitor center next to the Albert Loop Trail. This trail is closed every year in the fall while brown bears feed on salmon in the beaver ponds and streams. It would be unwise to put people and development in close proximity to an area of known annual bear activity. The trail is closed for public safety because of previous bear attacks. The salmon provide the nutritional requirements for bears before they hibernate. The road will cause impacts and disturbance to bears that will affect their survival. It is irresponsible and inappropriate management of natural resources to develop the access road and the Nature Center in this area.	*habitat areas.*
20. Planning Process	It has been requested the Nature Center and Parks and Recreation suspend the current proposed master plan alternatives and work with the neighbors to develop an alternative that avoids impacts to the neighborhood and provide a sustainable plan for the future. There has been a lack of notification to the affected property owners in the Gateway to the Park Subdivision. Notice was not sent to neighbors regarding the September 10th or 17th meeting. The Nature Center and the Division of Parks and Outdoor Recreation have not shown regard for the property owners in the Gateway to the Park Subdivisions and have failed to properly notice and involve the affected public. Residents were not directly contacted before the alternatives were developed. It would have been helpful if someone described the problem/need for expansion. The presenters seemed to assume that we all know that the center needs to expand. It has been strongly suggested the Nature Center and Division of Parks and Recreation to establish a subcommittee of neighborhood representatives to work with the Nature Center and Division of Parks to assist in developing alternatives that would not impact any of the neighboring properties.	*The Friends of ERNC and the DPOR have developed a public process for the Master Site Planning Development of the ERNC and have been working with the residents and neighbors towards a sustainable plan. We have collected sufficient information and have encouraged involvement from all stakeholders via written comment.* *Regarding Public Involvement; refer to comment 18 responses.* *DPOR has a public process for this project that will invite the public including the neighbors of the ERNC to provide public input.* *The planning process is to evaluate the existing site and possible alternative sites in the Upper Eagle River Valley, Site Alternatives A-B-C-D were requested by past DPOR Directors to evaluate the possible best locations for the Eagle River Nature Center to meet their needs and objectives. This process was a DPOR in-house question brought forward to the public for their input and transparency.* *Information regarding an expansion at the ERNC has been in planning since the early 1980's. As part of the latest planning effort by the Friends of the ERNC, media releases and information was published on the DPOR and Friends of ERNC webpage's. The ERNC also, conducted visitor surveys for those people using the ERNC. Mail out flyers had been sent to over 200 residents within the vicinity of the ERNC.* *The problem and need for expansion at the ERNC in short-* *"From the early years, it was apparent that the Nature Center's physical facilities were becoming less able to accommodate all the various groups being served. Its aging structure and utilities, plus constricted and inefficient spaces, have been ongoing concerns. Most*

		importantly, the facility has not been able to accommodate the programming needs of recent years." - *Asta Spurgis, ERNC Director*
21. Planning Process	Adjacent properties will be adversely impacted and the character of residents property and subdivision impaired by the alternatives proposed in Site B. It has been requested the Nature Center and Division of Parks and Recreation suspend the current proposed Master Site Plan alternatives and work with residents to develop an alternative that avoids impacts to our property and our neighborhood, and meets visitor needs.	*To maintain the existing parking area at the ERNC, will have greater impacts to the surrounding neighbors then if DPOR works with the adjacent neighbors to minimize such impacts in the Master Site Development Plan. DPOR will continue working with the neighbors to understand the possible impacts to each neighbor.* *DPOR and the Friends of ERNC do not intend to suspend planning for the Master Site Development Plan.* *As stated above Regarding Public Involvement; refer to comment 18 / 20 responses.* *"The Alaska Division of Parks and Outdoor Recreation envisions an affordable and accessible system of parks that provide divers, safe, year-round, high-quality, family-oriented, outdoor recreation experiences; statewide programs that enhance the enjoyment and stewardship of the state's outdoor recreation, natural, historic and cultural resources; and a dedicated, professional staff that fully meets the needs of the public. "* *The Division of Parks and Outdoor Recreation Ten-Year Strategic Plan 2007-2017*
22. Neighbor Impacts on Property	A resident in the Gateway to the Park Subdivision states they have owned their property since 2006 and found no publicly available information regarding the proposed Master Site Plan during their research prior to purchase. Alaska State Certified Appraiser, Susan K. Crosson, she specifically noted the following in the site description: ".,..The subject is bordered by Chugach State Park and has a secluded setting with no development allowed on the parkland to the south..." Alternative B would directly and adversely impact their property (Block 2Lot 1" of Gateway to the Park Subdivision) by constructing an additional Park access road immediately adjacent to their property and their neighbors. They feel this is unacceptable and must not be carried forward as a viable alternative.	*The area to the south of this private property was never zoned as undeveloped land or wilderness. Alternately, it was considered in the 1980's as alternative access to the park, however was never developed.* *DPOR will apply design techniques to minimize the visual and noise impacts to the neighbors. Existing visual and noise impacts to the neighbors have already been evaluated and will continue to be evaluated during the planning process. DPOR will present other alternative that will avoid habitat impacts as well.*
23. Bus and Recreational Vehicles	Are there potential plans to expand access for large tour buses and recreational vehicles through the Gateway of the Park Subdivision?	*The mission of ERNC is to provide community programs focused on education. The ERNC does not intend to focus their education outreach to commercial tour companies. The design vehicle for the site will be a large school bus and a recreational vehicle.*

24. Building Character and Setting	The building's rustic charm a feature that has maintenance drawbacks helps visitors slow down, remove their city hats, and focus on exploring and appreciating nature. Future plans should aim to preserve the existing character and atmosphere of the nature center. It is a unique place and could be negatively impacted by overcrowding and over extending its current programs. The new building should maintain its rustic charm and not shift to an institutional approach and crowd control.	*As outlined the Core Values of the Friends of ERNC "Excellence in Service" their guiding principle is to practice the art of conversation, take time to listen to visitors experiences, and help visitors see and enjoy the area. The ERNC intends to preserve the existing character and atmosphere of the ERNC as described in the Goals and Boundary Conditions developed by the Friends of the ERNC for this planning effort.* *The Friends of ERNC have stated they would like to "retain the character of the existing structure. They intend to keep what is cherished, and add what is needed with minimal impact to the environment."*
25. Building	The existing Nature Center building should not be torn down. It is an historical landmark and should be used for something appropriate, perhaps volunteer housing or turned into some type of cafe/coffee shop. Residents have expressed interested in acquiring the building. Perhaps the Mountaineering Club of Alaska could be interested.	*The ERNC is not a historical landmark or historic property and is not on the Alaska Heritage Resources Survey. The Alaska Department of Natural Resources Office of History & Archeology was requested to evaluate the building for its historical significance. The ERNC does not meet the National Register Criteria for Evaluation.*
26. Signage	Could the park or Nature Center take some of the funds allocated in the expansion project to fix the signage in the park? Currently, the signage is confusing, misleading and often takes visitors onto adjacent private property. Better signage is needed to keep visitors and neighbors safe.	*Current signage is inaccurate and misleading; it would be specified as part of the Master Site Development Plan (MSDP) to upgrade signage to keep visitors on the associated trails and within the program zones. However, current funding is allocated for the planning of the Master Site Development Plan, not for Deferred Maintenance and signage.* *This issue has been brought forward to DPOR management and currently DPOR Interpretive and Education Section is working on updating trail maps and creating a trails brochure for the ERNC. Trail signs are not a part of this funding, however, would be addressed in the MSDP.*
27. Noise and Maintenance	The current maintenance structure should be relocated to minimize the impact on the local landowners. On a regular basis volunteers can be loud and disruptive. Relocating this structure and blocking off the upper section of the old race track (to be used only for emergency vehicles/access to helicopter landing zone) to both Nature Center maintenance activities, and pedestrian traffic would solve this impact. Those park users who are utilizing the Albert Loop trail should be re-routed to stay on the lower race track. This would create a greater buffer between park trails and private property. Visitors come to the Nature Center to enjoy education programs and gain an appreciation for nature not to see trucks and ATVs.	*The ERNC located the maintenance yard at the existing overflow parking area on the old race track as a result of a lack of sufficient space. This site was chosen for the ease of accessibility to surrounding trails for program needs. ATV's are an approved part of the maintenance and operation at the ERNC.* *The proposed alternative sites for the maintenance facility will be evaluated to reduce visual and sound impacts to the neighbors.*

28. ASP Mission	Our parks have been set aside in the interest of outdoor activities and preservation, not for indoor education, entertainment, and other programs.	*The Mission of DPOR is to "provide outdoor recreation opportunities and conserve and interpret the natural, cultural and historic resources for the use, enjoyment and welfare of the people."* *"Build a strong identity and broad public support with high-quality education and interpretive programs and innovative communication strategies."* *The Division of Parks and Outdoor Recreation Ten-Year Strategic Plan 2007-2017*
29. Facility Need?	More development and improvements will bring more over time until the very essence of the area is lost. Even though plans are not for a big intrusive Nature Center at this time, it will be just a matter of time before still yet another; bigger center with more ancillary facilities is required to keep up with demand. Would this facility compete with the state-of-the-art ventures such as Campbell Creek and Portage? Is a new Nature Center "needed"? Some people want services and facilities to be "improved' or expanded but that doesn't necessarily translate into a "need", unnecessary infrastructure in our State Parks only adds to the incurring maintenance costs.	*As our population grows more developments and improvements will need to be made in our parks, it is our responsibility as a public agency to do our best to follow our Mission and provide outdoor recreation opportunities. We have a need for park improvements to promote outreach, education and interpretation. Good planning and management can set the foundation to obtain the operation and acceptable capacity of the site.* *The Friends of ERNC do not intend to compete with Campbell Creek Science Center or the Begich Boggs Visitor Center. Both facilities have Missions that are different from DPOR and the Friends of ERNC, as each public agency; BLM and US Forest Service is serving a different need to the public.* *Because the ERNC is DPOR's only nature center there is a need to continue the outreach, education and interpretation currently programmed. As stated above, improvements are needed to continue the daily operations and quality of programming.* *"The centers physical facilities are becoming less able to accommodate all the various groups being served. The Nature Center is an aging structure with aging utilities; the building is constricted in space and efficiency. Most importantly the facility is not able to accommodate the programming needs of recent years."* *– Asta Spurgis, ERNC Director*
30. Fire Service	The Anchorage Fire Department and the Alaska Wildland Fire Coordinating Group has done extensive preparation to help us understand Wildfire Protection Planning and preparedness. The Emergency Watch Group for Misty Mountain, an organization with 16 families in their watch area, has a newsletter and would like Parks to stay involved with the Alaska Wildland Coordinating Group regarding Fire Service and how a new Nature Center Facility might impact the Valley. Could the new Nature Center bring fire service farther down valley? Currently, fire service only extends six miles up Eagle River Road. Please remember fire	*DPOR has contacted the Anchorage Fire Department and the Wildfire Protection Group to learn more about how we can work with Eagle River and the Municipality of Anchorage to be Fire Wise. The proposed site will be designed to provide access for emergency services and fire emergency service vehicles to the ERNC. We will look at applying Fire Wise and the Wildland Urban Interface Code concepts to the surrounding landscape at the proposed facility site.* *As for extending fire service past mile six of Eagle River Road, DPOR suggests speaking with your local Eagle River Valley Community Council.*

	protection and EMT issues with the greater number of visitors, traffic accidents as well.	
31. Volunteer Housing	Volunteers need to stay presentable to the public, better housing with convenient bathing and cooking facilities is important.	*The ERNC has identified improved facilities for volunteers and winter caretaker is an important part of the program.*
32. Communication	There needs to be *better communication* between the ERNC and State Parks. Many projects performed by the ERNC end up being done so "under the radar" (wood lot/splitting area relocate), are not done professionally and end up having to be either redone by state parks (bridges and viewing decks), or abandoned entirely (Albert Loop expansion trail of 1997-8), with the result that the parkland suffers unnecessary impact. This also results in unnecessary noise and impact on the local landowners and park users. Plus, it's a waste of valuable ERNC and Park funds. Also, a better, more efficient strategy for harvesting wood needs to be implemented. The amount of 4-wheeler activity required for transporting all the wood used is getting out of hand; also, the brush pile on the lower race track is a major fire hazard.	*DPOR was aware of and approved the wood lot/splitting area relocate, this activity is generally only conducted on Thursday.* *With the adoption of DPOR's Trail Management Policy, future trails will be designed and constructed to sustainable standards and guidelines. As with all Trail / Management Plans developed by DPOR we hope they will reduce waste and increase efficiency in our parks.* *As for the disturbance of the ATV's to the programming, the planning team is considering ways to keep operations efficient with minimal impacts to the visitors and programming.* *Regarding the brush pile on the lower race track it is an operational management issue and the planning effort will look at maintenance and operational practices to minimize such impacts to the surrounding area.*
33. Motorized Use	The trail systems at the ERNC are being adapted for motorized use, creating a trail system that is losing its appeal. Residents have questioned the impacts and validity of 4-wheelers being used when bicycles are not even allowed on the trails around the center.	*In conducting logistics, operations and maintenance and park management functions, these trails are traveled on by ATVs in accordance with the concessionaires 25 year contract.* *The trails at the ERNC are not being adapted for motorized use. The draft Chugach State Park Trails Management Plan is not recommending them as motorized trails.*
34. Road Concerns	Currently, visitors to the Park trespass on Cumulus Road and ignore the fact that this road is not the park often in the spring and summer months, and I feel that if plans C or D are implemented this would be more of an issue.	*Through good site design and with the use of minimal signage could help direct visitors from areas we do not intend them to go. Evaluation of the trails will be required to make recommendation for vegetation barriers and minimal use signs. However, this is an operational issue outside the scope of the project, and Chugach State Park Management has been notified.*

Planning for the Future of the Eagle River Nature Center – Master Site Development Plan Concepts Comments- July 7, 2010

Site Planning- Division of Parks and Outdoor Recreation, Design and Construction Section

Comment # and subject	Issue Statement / Public Comment	Division of Parks and Outdoor Recreation(DPOR) Response
1. ***Work with what we have***	Why does the ERNC want to start completely from scratch, eliminating the entire existing infrastructure, building entirely new roads, new initial trail access and of course new buildings?	*The Eagle River Nature Center's board members and staff (ERNC) have always tried to work with what we have. We built a large yurt to serve as a classroom space. We built 3 storage sheds and a Quonset hut to store our trail equipment, educational materials, gardening supplies, and maintenance supplies. This band-aid solution has worked, but with great inconvenience to our staff, volunteers and program attendees. For instance, the yurt is much too cold during the winter months. These add-on facilities have helped, but overall, they have made operations inefficient and labor intensive. ERNC had a builder look at designing a classroom addition to the existing facility. To do this, windows in the main space would need to be eliminated; the back gardens and outside area would be considerably reduced; and the original facility would need to be updated to current standards and codes (electrical, mechanical, structural, ADA). This would be very costly and we would still have too few restrooms, no space for coats and student's backpacks/lunches; the same parking challenges; a trail that is no longer ADA compliant; and scattered maintenance and storage facilities.* *A new building could consolidate these spaces under one roof and make operations more unified, building systems more energy efficient, and provide the types of spaces needed for a nature center. Please keep in mind that the building was once a bar and later renovated by State Parks to be a visitor facility in the early 80's. The work was done by a passionate group of State Park individuals who converted it into the lovely space we all know. Unfortunately, over the years, they too realized that the space had significant limitations. As the population has grown and as the ERNC's work with school children and families has increased, so too, has the need to provide more space for these activities. It is not ERNC's intent to construct a grandiose facility. ERNC has looked at an optimal plan as a starting point. ERNC would like a small, efficient and economically viable building which maintains the character of the existing building and addresses the inadequacies of the current situation.*

2. *Project Scope*	Of the options put forth to the public they have footprints that are beyond the scope of the mission of the Eagle River Nature Center, and the needs and desires of the most frequent users.	*The footprint shown in Concept C is an optimal one, but not necessarily the size that would be built. Construction costs, operating costs, and other issues that are sure to arise in the next phase of development (architectural, engineering) are yet to be evaluated. ERNC prefers a facility which requires the least amount of staff to operate and satisfies the needs and desires of our community* *As our population grows, more improvements will need to be made in our Park. It is our responsibility as a public agency to do our best to follow our Mission* and to provide outdoor recreation opportunities. There is a need for park improvements to promote outreach, education and interpretation. Good planning and management can set the foundation.* ** The Division of Parks and Outdoor Recreation provides outdoor recreation opportunities and conserves and interprets natural, cultural, and historic resources for the use, enjoyment and welfare of the people.*
3. *Entrance Road*	In Concept C there is a divided entrance road, what purpose does it serve? Perhaps it is for slowing traffic however, what would DOT recommend?	*The intention of the divided entrance is to slow traffic and to offer the visitor a sense of arrival. By dividing the entrance DPOR is better able to buffer the road and offer a more 'park like feel' to the entrance. DOT will be consulted regarding this design.*
4. *Site B - racetrack*	DPOR should consider minimizing impacts to the slough from onsite activities related both to construction and future operations of the planned facility. By pulling the facility back from the slough and sighting it in the cover of the woodlands is to invoke visitor curiosity and wonder – exactly what a nature center is intended to do. While Option C provides the greatest buffer, the less than 1200' proposed seems far less than adequate.	*DPOR has designed the facility the greatest distance from the slough as possible while maintaining as much of the natural vegetation.* *DPOR and ERNC agree that the approach to a new nature center should do its best to invoke curiosity and wonder. It is our hope that this can be accomplished using Concept C site plan. This plan will help guide the architectural planners in the next phase. Ultimately, the scale of the facility will be dependant on environmental and economic factors and community desires.*
5. *Concept C- Wildlife*	The nature center, outdoor classroom, and most of the parking is perched on an artificial bluff. If the new slope is relatively steep and at least 40-60 feet high it may deflect most brown bears away from areas heavily used by visitors.	*DPOR has taken into account the presence of black and brown bears in the area. Although it is nearly impossible to restrict migration patterns of bears, placing the Nature Center away from the stream and feeding areas will hopefully deter bear activity around the Nature Center facilities.*
6. *Concept C*	After evaluating the three alternatives, ADF&G recommends Concept C as the preferred alternative in regards to habitat and potential brown bear and human interactions.	*No comment needed.*

7. Concept C - support	Concept C works for the following primary reasons; it minimizes noise and visual impacts to neighbors of the ERNC; it minimizes the overall footprint while meeting the ERNC's future infrastructure needs; and it pulls the footprint away from the existing clear water slough habitat and its associated natural resources.	*Concept C is intended to minimize the impacts to the surrounding landscape by designing a more compact parking and building area. By utilizing existing disturbed areas, Concept C successfully nestles the infrastructure into the landscape.*
8. Concept C- Parking / Buffer	If there is no feasible alternative to a Phase II parking area, then consider a parking area located on top of the bluff. If this cannot be done, the proposed surface drainage retention ponds could be redesigned to provide somewhat of a buffer between the proposed Phase II parking area and brown bears. If the ponds were combined and wrapped, in an "L" shape, around the Phase II parking lot, the relatively deep water may deter bear movement along the toe of the new slope, through the parking lot, and may deflect a charging bear, responding from the woods to human activity on the parking lot. The pond would have to be at least 6 feet deep and 20 feet across to enhance its potential as a barrier. There is no guarantee that this barrier would be 100% effective, which is why sitting the entire facility on the bluff is preferable.	*DPOR has considered many alternatives to the location of parking, however, due to site limitations, the bluff is not a preferred location for an overflow parking location. The retention ponds will be examined in greater depth in the next phase to determine their potential as a barrier.* *All areas within the Upper Eagle River Valley, including the existing bluff that the Nature Center is built on, are bear territory. Bears are often seen on the bluff, as well as, below the bluff.*
9. Concept C - security	The ERNC and DPOR need to provide for security at the new ERNC- The relocation of the main ERNC as shown in concept C requires adequate security monitoring and even on-site caretaker year round. A motorized gate, security monitoring on the entry road and all access points from the ERNC trails to the ERNC building- especially during winter months when access from the Briggs Bridge to the ERNC via the frozen Eagle River is possible need to be included in any final plan.	*The ERNC currently has an on-site winter caretaker and on-site summer host volunteers. The parking areas would be designed with security gates and the issue of having security monitoring has been brought to the attention of DPOR and the ERNC.*
10. Building / Buffer	If the nature center building is going to be torn down, it's very important to my family that we look down on a beautiful landscaped area, and do not see maintenance buildings, or hear maintenance noise.	*DPOR and ERNC agree that the maintenance facility should be "tucked away" from view and to minimize disturbance to neighboring residences. We feel that this can be accomplished in a creative and beautiful manner.*

11. Building	It is in the best interest of DPOR to present cost/maintenance choices in looking at the type of building you ultimately choose at the Site C.	*DPOR and the ERNC agree that this is essential during the next phase. Funding for the next phase (architectural, cost analysis, operational analysis) has yet to be secured and will be dependant on the mutual consensus of the community, Alaska State Parks and the ERNC.*
12. Building	The new building for the ERNC should not be a log building, instead something more sustainable.	*DPOR and the ERNC have not decided on a method of construction for the new Nature Center. The intent of the new structure is to hold the characteristics of a log structure without necessarily being log.*
13. Maintenance Area	The maintenance area would be best located on the existing racetrack area near the proposed parking lots, instead of near the private road in Concept C.	*The location for the maintenance area in Concept C was chosen for its relationship to the trails and building.*
14. Alternate Option	DPOR should consider of a lower-impact fourth option that would build a new building in the existing location. A new parking lot could be created on a terrace below, where the current utility road is. This parking lot could be used for over-flow only purposes, allowing maintenance efforts and costs to be kept at a minimum.	*The existing location was determined to be too small an area to accommodate future needs. Conflicts of this site include: private residential road access, steep trail grade no longer satisfies new ADA requirements, and nature center operations would need to be halted for an indefinite amount of time.*
15. Visitor Use	The proposed concepts, with their large footprints, sacrifice the existing unique quality—threatening to make the ERNC just another wasted area targeted at summer visitors, rather than Alaskan families.	*The ERNC feels that a new building can be designed in a way that maintains the warm atmosphere of the current facility. Classroom space and adequate public facilities (restrooms, coat area, parking, etc) should make the center even more attractive to Alaskan families. It is a priority for the ERNC that the design will improve on the inadequacies of the current facility and replicate the parts that make it so special.*

Appendix B: Visitor Survey

Eagle River Nature Center
Visitor Survey 2007-2008

Thank you for taking the time to complete this visitor survey. Our goal is to learn about the expectations and interests of visitors to the Eagle River Nature Center. This information will assist us in our efforts to better manage this site and to better serve you.
Please return to the front desk or mail to Eagle River Nature Center, 32750 Eagle River Road, Eagle River, AK 99577. Fax: 907-694-2119

Today's Date: _____

Day of Week: Mon Tue Wed Thu Fri Sat Sun

Time: _____ am or pm

1. Are you a member of the Nature Center? Y ☐ N ☐

2. Where do you live? _____

3. What mode of travel did you use to get here?
☐ Car
☐ Minivan, SUV, pick-up or similar sized vehicle
☐ 8-15 passenger van
☐ 15+ passenger bus
☐ RV (recreational vehicle)
☐ Other _____

4. How many people in your vehicle, including yourself?
Adults_____ # Children under 16 yrs ____

5. How long do you plan to stay? _____ hour(s)

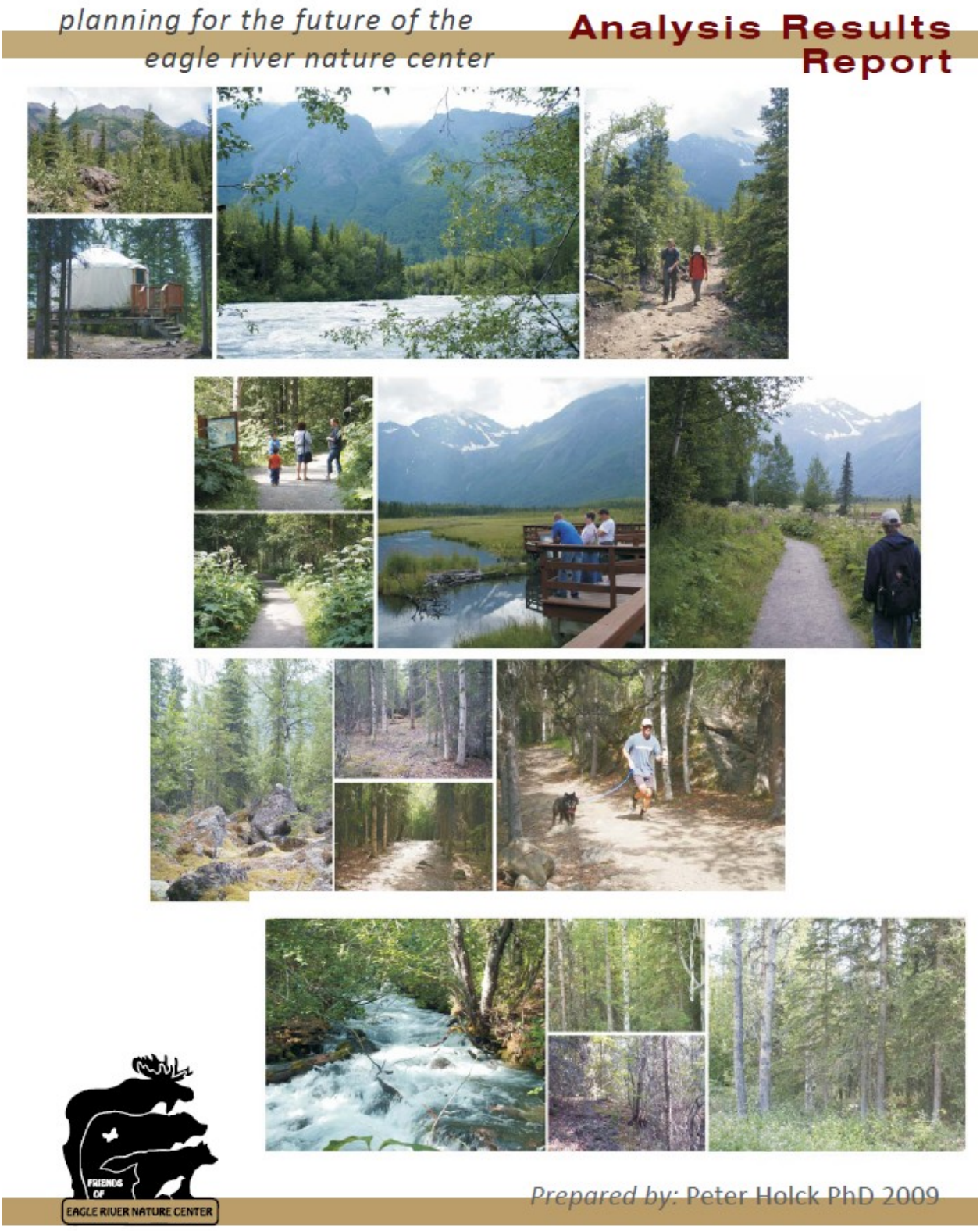
6. What is the purpose of your visit today?
☐ Attend a program
☐ Walk, run or snowshoe
☐ Ski
☐ Wildlife viewing
☐ Cabin or yurt stay
☐ Tent camping/backpacking
☐ School or group visit
☐ Other _____

7. Which trail (s) do you plan to go on?
☐ Rodak Nature Trail/Viewing Deck (< 1 mile)
☐ Albert Loop Trail (3 miles)
☐ Dew Mound Trail (6 miles)
☐ Crow Pass Trail (up to 25 miles)
How many miles do you anticipate to cover? _____

8. How many times, on average, in a year do you visit the Nature Center? ____

9. Do you have any suggestions for improvement or change of the Nature Center in the near future?
Please provide comments on back.

Appendix C: Eagle River Nature Center – Analysis Results Report



Trail Use Data Results

A counter at the head of the main trail leaving the Nature Center counted individuals entering and leaving the trail for most days from the period of Dec 2007 through Nov 2008. In addition to counting the individuals, the counter also records the time of day and date each time it is triggered. Thus the counter data are useful in understanding trail use patterns, specifically seasonal, day of week, and time of day trends. For these purposes (as elsewhere in this analysis), summer season is defined as May through September, while winter season includes October through April.

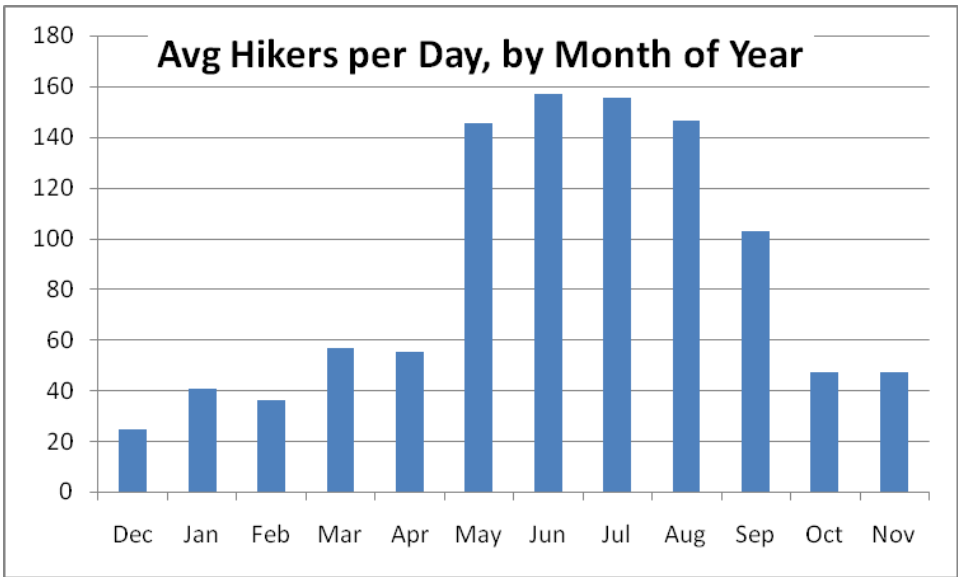
The trail use counter does have some limitations. Persons walking side by side will likely trigger the counter only once, thus under-representing the true number of hikers. Direction of travel (beginning or ending hike) is not discernable; for this analysis we have divided the total by two, assuming all persons using the trails will pass by the counter twice. A small proportion of persons will return from their hike via the nearby service road and fail to trigger the counter twice. Backpackers entering or exiting at different trailheads will also trigger the counter only once. These limitations suggest that numbers presented here are an undercount of the true number of hikers using the trails near the nature center.

An additional consideration is days for which counter data exists varies by month and season. For this reason in the figures and tables where applicable we have reported average trail use per day, adjusting for the number of days of data available for a given unit of comparison. Two months in particular, Dec 2007 and Jul 2008, saw limited data collection (collected for less than 50% of the days). The counter malfunctioned during July, resulting in reduced data collected. Similarly, December 2007 marked the initial use of the counter, and a complete month was not recorded. Use is likely to vary within December somewhat as many holidays and vacations occur more towards the end of the month. Our data are from the beginning of the month, and may not be representative of December trail use in general. July is typically a heavy use month, but there is little reason to believe much trail use variation exists within the month (except perhaps due to weather). We suspect that our daily average results presented for July are therefore representative of trail use in July.

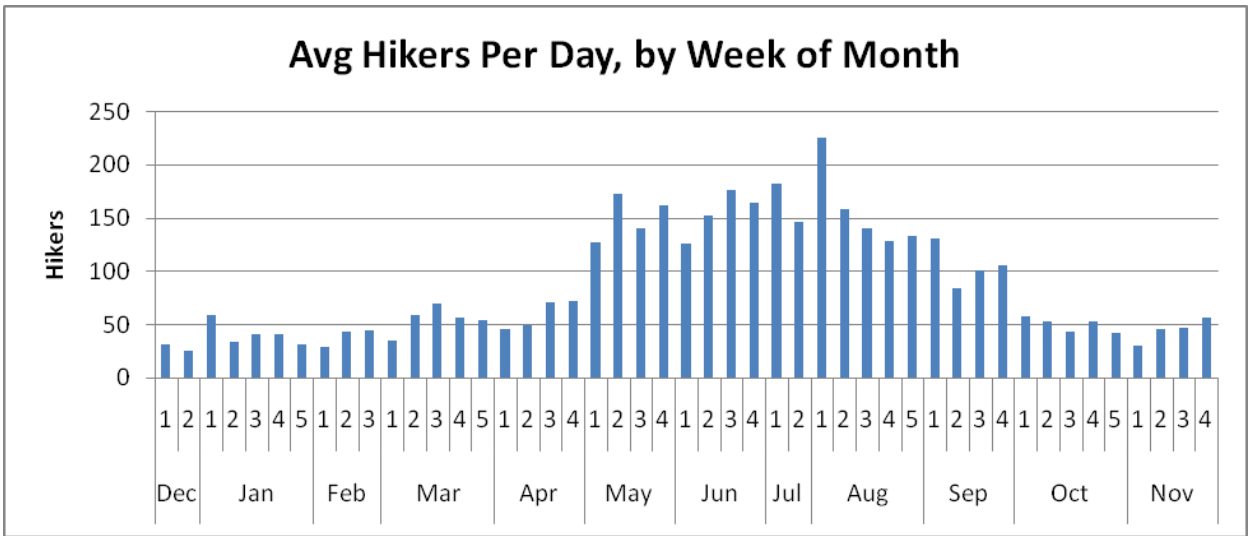
Proportion of Days Trail Use Data Collected, by Month

Month	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Prop of month recorded	42%	100%	66%	100%	97%	100%	100%	42%	100%	80%	94%	100%

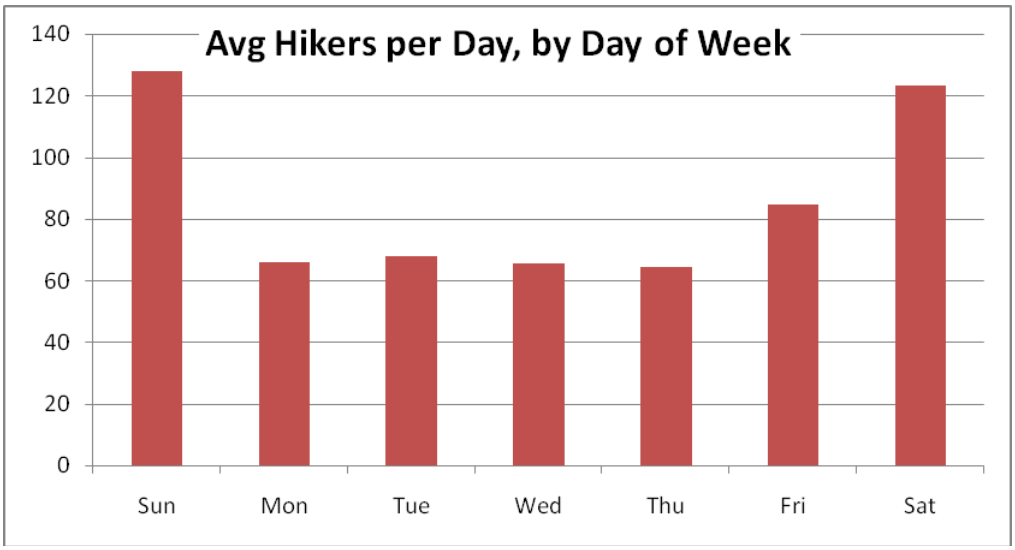
The number of days of recorded trail use by season is summer 129, winter 182, for a total of 311 days of trail use data. For all seven weekdays we have either 44 or 45 days of recorded trail use data, implying consistency in day of week data collected.



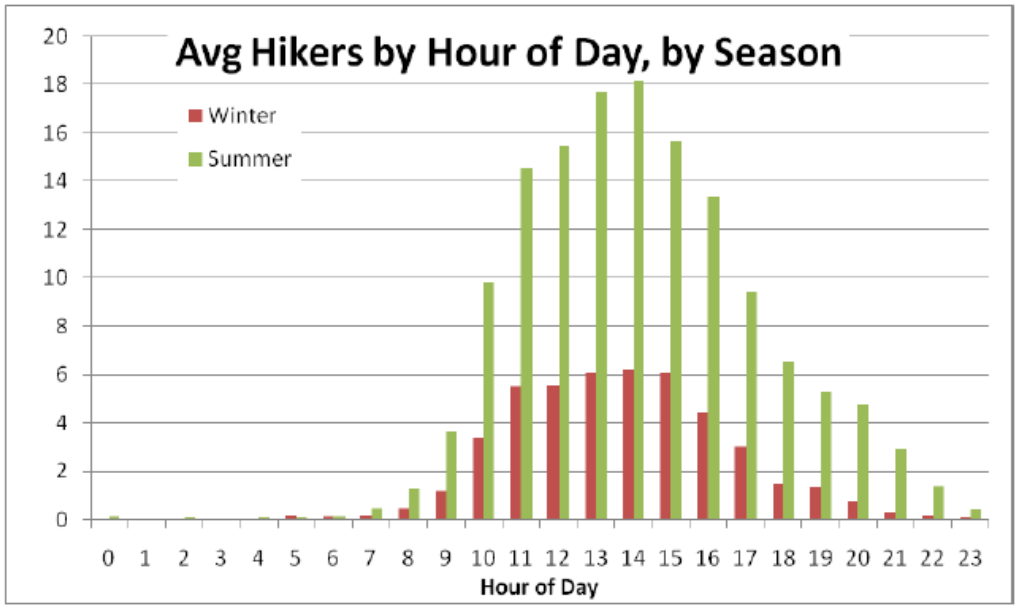
Average hikers per day unsurprisingly differs by month of the year. As the above figure indicates, there are more than 140 trail users/day on average during May – August, and 17% of the days have 150 or more trail users (data not shown). These monthly averages obscure variations by day and week (which are likely weather dependent as well). For example, the following graph showing how the number of hikers per day varies by the week of year. It's possible that May usage is still ramping up at the beginning of May, and likely influenced by the Memorial Day weekend in the last week in May. Also note that for some months, data is missing for some weeks..



Large variations exist as well by day of week, with more trail use on Saturdays and Sundays:

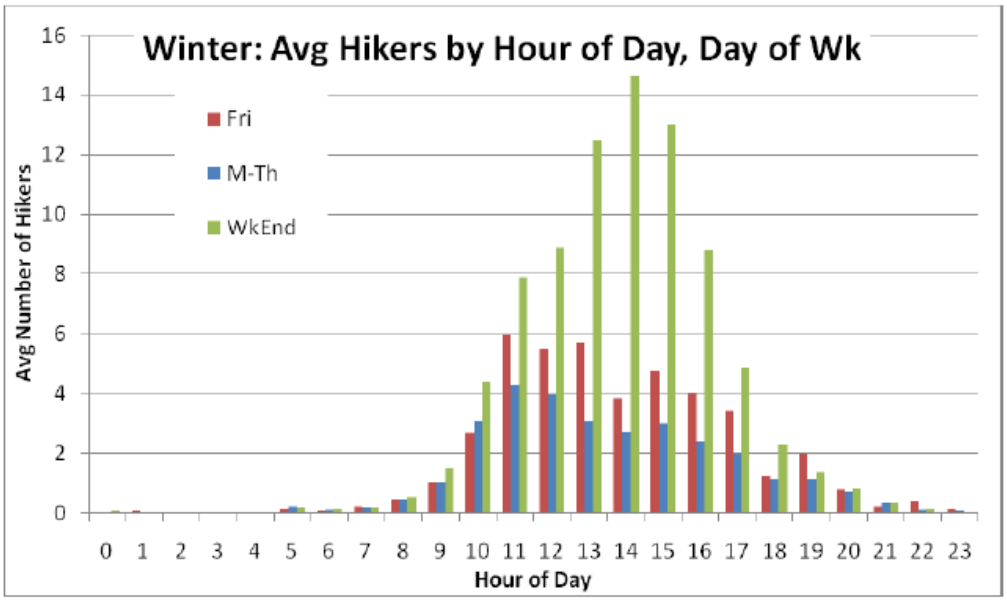


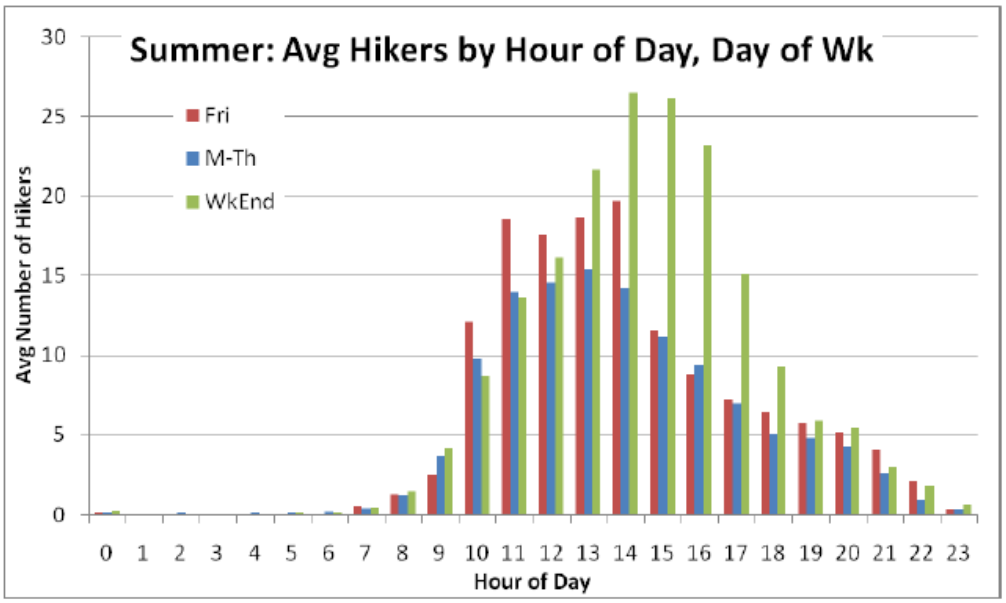
The time of day which persons trigger the counter varies as well, of course. While many more trail users trigger the counter in the summer than winter, the time of use is shifted also shifted to later in the day during the summer. Average summer use at 6 or 7 PM equals average winter use at peak times during the day (early afternoon).



Time of day when the trails are used also depends somewhat on the day of week. On the weekend trail use peaks in mid afternoon, while during the week it is more likely to peak close to noon or early afternoon. In addition in the winter there are greater differences in usage between weekdays and weekends (and to a small degree weekdays and Fridays) then in the summer: weekend use surges in the winter compared to weekday use

(though still dwarfed by summer usage). Tourists (most frequently arriving in summer) are less sensitive to day-of-week visiting, and likely smooth out differences in day of week effect during the summer months.





Vehicle Usage

On the road prior to the entrance to the Nature Center parking lot is a counter that counts each car coming and going from this dead-end location. In addition to recording the number of vehicles, the time of day and the date when the counter is triggered is also noted. These data can be used to approximate the number of cars likely to require parking at the Nature Center parking lot, which has a capacity of about 65 spaces. The captured counter data do not distinguish the type of vehicle, be it motorcycle (which take up fewer parking spaces per vehicle) or likely more frequently RV's (which utilize multiple parking spaces for each vehicle). Nor do the data captured indicate if the vehicle is arriving or leaving. Because each vehicle is counted twice by the counter, we have divided totals by two in this analysis; each "event" represents arrival and departure of one vehicle.

As is the case with the trail user counter, data for the vehicle counter are not entirely complete for all days of the year (though somewhat more complete than the trail user data). No data exist for December, and for 3 or 4 other days throughout the year: data are available for 331 days of 2008.

Because approximately 12 houses lie beyond the Nature Center, on average perhaps 20 -30 vehicle trips per day can be attributed to use by these residents. Note that the majority of resident vehicle arrivals and departures are likely to occur earlier in the morning and later in the afternoon. As we shall demonstrate below, peak vehicular traffic (and thus peak usage of Nature Center parking spaces) typically occurs near early or mid afternoon. We suggest therefore that the bias introduced by these residents' vehicle trips on estimates of peak parking usage at the Nature Center is minimal.

Additional assumptions must be made in order to estimate the number of vehicles likely to be parked at the Nature Center at any particular date and time. Knowing that a car passed the counter does not indicate how soon after the car then departed. Clearly if each car arriving remained only 2 minutes, then parking capacity is much greater than if each car arriving remains all day (e.g. 2 minutes per car arriving uniformly over an hour would allow 2 parking spaces to accommodate 60 vehicle visits per hour. If each car instead remained 2 hours, 2 parking spaces would accommodate only an average of one vehicle visit per hour). Fortunately we have an indication of likely length of visit time from survey data collected from visitors to the Nature Center throughout the year. Sixty-five percent of respondents replied that they spent 2-4 hours at the Nature Center and environs, while just 15% replied they spent 1 hour or less. While these survey respondents are not necessarily representative of all visitors to the Nature Center, and responses are in fact likely biased towards visitors who are more likely to linger, in light of the long estimated visit times reported, an average of three hours visit time for each park visitor does not seem unreasonable. For the purposes of assessing parking capacity, examining vehicle traffic during 3 hour windows should therefore provide a plausible estimate of the number of cars present in the parking lot.

As implied above, vehicle traffic varies dramatically with time of day and day of week (and not surprisingly, is correlated with the trail user data variation examined above). Certainly particular periods throughout the year see very heavy traffic at the Nature Center. The table below highlights this heavy usage by presenting the three-hour windows (and vehicle counts) throughout the year for days when 200 or more vehicles were counted during a three hour period . All of these "heaviest use" days occurred in the summer.

Days/Times of Heaviest Vehicular Traffic (>=200 Vehicles in a 3 Hour Period)

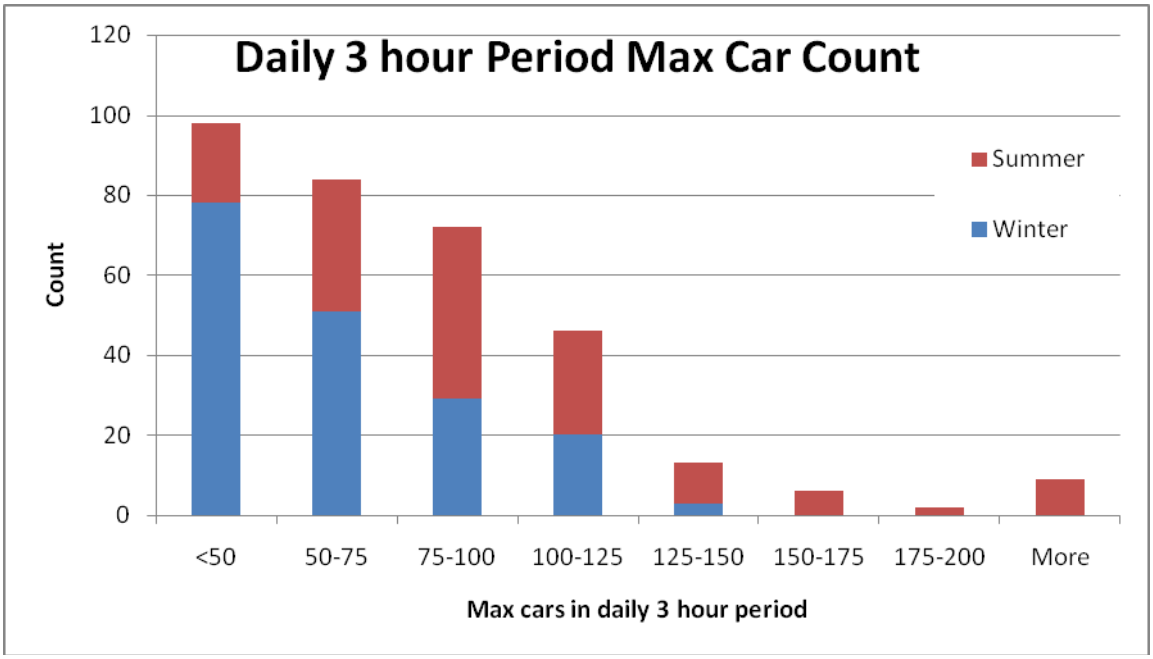
Date of Visit	Total Cars	3 hour period
Saturday, July 19, 2008	386	11-1 PM
Saturday, July 19, 2008	337	10-12 PM
Saturday, July 19, 2008	273	12 -2 PM
Monday, May 26, 2008	248	1-3 PM
Sunday, May 25, 2008	242	1-3 PM
Friday, May 16, 2008	235	12-2 PM
Sunday, May 18, 2008	234	1-3 PM
Sunday, May 25, 2008	229	12-2 PM
Sunday, May 11, 2008	229	1-3 PM
Sunday, May 25, 2008	226	3-5 PM
Saturday, May 10, 2008	221	10-12 PM
Sunday, May 18, 2008	214	12-2 PM
Sunday, July 27, 2008	214	1-3 PM
Sunday, May 11, 2008	207	12-2 PM
Saturday, July 19, 2008	207	1-3 PM
Monday, May 26, 2008	206	3-5 PM
Sunday, July 06, 2008	205	1-3 PM
Sunday, July 27, 2008	205	3-5 PM
Sunday, May 25, 2008	203	4-6 PM
Monday, May 26, 2008	200	12-2 PM

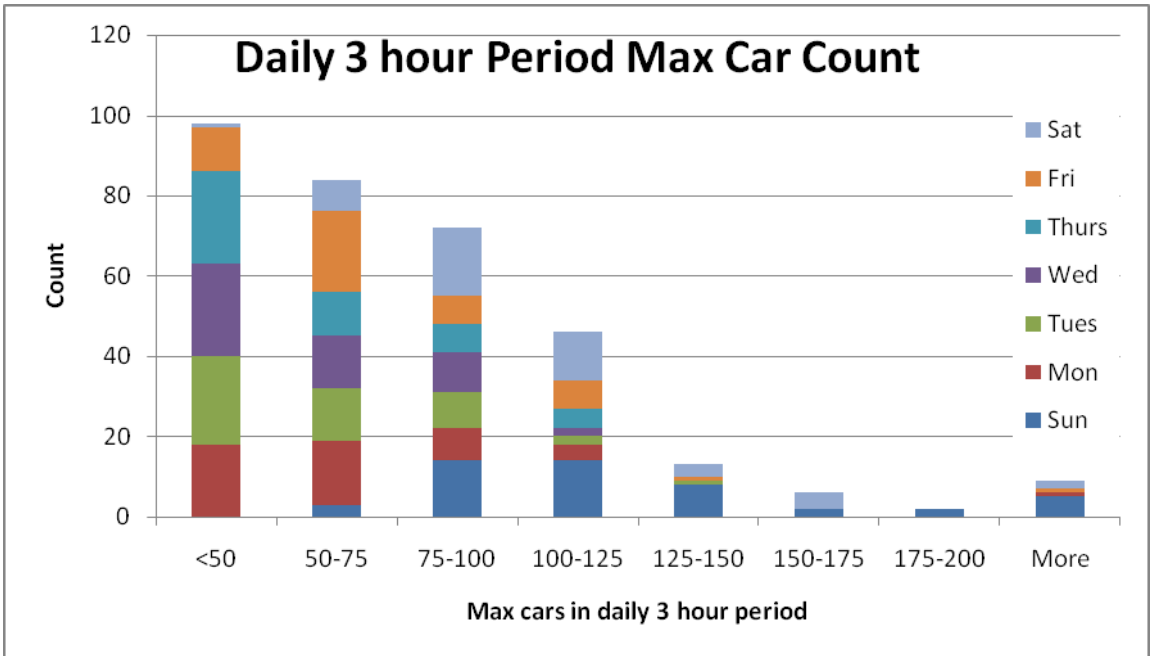
In 139 days of the 331 days recorded (42%), 250 or more vehicles were counted entering the Nature Center area throughout the day. These heavier usage days were more likely to occur on weekends or Fridays (59%) than during the weekdays, as the following table illustrates.

Days with More Than 250 Vehicles Counted, by Day of Week

Day of Week	Number of days with >=250 cars
Sunday	28
Monday	15
Tuesday	15
Wednesday	15
Thursday	12
Friday	23
Saturday	31
Total	139

For all days for which data exists, we identified the 3 hour period during each day having the maximum number of vehicles recorded. Again, these *most often* occurred during the two 3-hour-windows between noon and 4PM, and virtually always occurred sometime between 10AM and 6PM. However there were variations by day of week, and by season. The two following histograms show the number of vehicles in these daily maximum 3 hour periods, categorized by season, and then categorized by day of week.





In 76 of the 330 days of data, that 3 hour maximum count was at 100 or more vehicles. Thus in at least 76 days throughout 11 months of the year an excess of 35 or more vehicles are estimated to have been at the Nature Center (or attempting to be at the Nature Center) than were parking spaces available. Even given potential inaccuracies in assumptions made for these analyses, a conservative estimate suggest that in well over 50 days per year parking capacity is handily exceeded, with perhaps as many as 100 or more days a year experiencing above capacity vehicular traffic.

Although substantially more of the days with data occurred in the winter season rather than summer, the first graph highlights that most of the heavy-vehicle-use (though not all) days occur in the summer. Similarly most of

Projections for Vehicle/Trail Use in the Future

Projections for future use of the Nature Center facilities is based on estimates of future growth in tourism, of future local population growth, and assumptions that historical use trends are likely to continue into the future. It is necessary to understand the current mix of Nature Center users (tourists, local residents, others) in order estimate future capacity requirements of the Nature Center.

Survey data collected by the Nature Center during 2008 permits an estimate of the impact of tourists (for our purposes defined as non-state-residents visiting the Nature Center) on Nature Center use. Survey results are not necessarily representative of all visitors to the Nature Center, though survey recruitment methods suggest little likelihood of overt bias. It is plausible that tourists were more likely surveyed then local users, given the more relaxed visit and schedule afforded by persons on vacation, although this overrepresentation is likely not dramatic. About 33% of survey respondents were from other parts of the US (less than 2% were international tourists). However in the winter only a 12% of visitors are estimated to be tourists, while in the summer 51% of respondents were tourists.

Tourism data for the state of Alaska indicate that over the last several years tourism has increased at an annual rate of about 6%. However, year to year variation has been substantial (see table below), and the recent downturn in the US economy will likely lessen tourism growth in the next few years. Based on these data we have used a conservative estimate of a constant 2% annual increase in tourist visits for projections in future years.

Tourists Visits to Alaska, by Year

Year	2001	2002	2003	2004	2005	2006
Tourists	1,202,800	1,275,000	1,310,100	1,447,400	1,632,000	1,631,500
Yearly increase		6%	3%	10%	13%	0%

Sources: 2001-2004 data from Alaska Visitor Arrivals studies (conducted by Northern Economics, Inc.)
2005 data based on 2006 visitor/resident ratios obtained for AVSP V (conducted by McDowell Group, Inc.).
http://www.commerce.state.ak.us/oed/toubus/research.htm#2006

Survey data also provides information about resident use of the Nature Center. About 93% of resident visitors come from Anchorage and Eagle River/Chugiak (approximately equal proportion from each area). Only about 5% come from the Mat-Su area, and a small number from other parts of Alaska. Utilizing projections of future growth in the Anchorage and Eagle River/Chugiak areas can supply adequately accurate estimates of future growth likely in Nature Center resident users.

The following table presents projected population for the Anchorage/Eagle River/Chugiak regions over the next several years. Alaska has a young population compared to the rest of the US, although as in the rest of the US the population of Alaska is aging. Rather than growth in the general population, it is most applicable to consider growth in the population of likely vehicle and trail users; persons between the ages of 20 to 69 inclusive. The

second set of numbers below indicate a projected increase of slightly more than 4% every 5 years over the next 5-10 years, followed by a decline to close to 2% growth over 5 years in subsequent years.

Anchorage/Eagle River/Chugiak Projected Poplulation Increase, and Percent Growth

Year	2006	2010	2015	2020	2025	2030
Population	282,813	293,323	306,902	322,087	337,706	350,871
% Growth		4.6%	4.6%	4.3%	4.0%	3.5%

Age 20-69 Anchroage/Eagle River/Chugiak Population Projections

Year	2006	2010	2015	2020	2025	2030
Population	181,635	189,510	196,868	200,314	204,731	207,970
% Growth		4.3%	3.9%	1.8%	2.2%	1.6%

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit.
http://almis.labor.state.ak.us

Based on the above assumptions of projected growth patterns among both tourists and residents, we can estimate growth in Nature Center vehicle use and trail use in upcoming years. Because projected growth rates differ between tourists and residents, and because the ratio of tourists to residents varies by season, projection of changes of Nature Center use will also vary by season. As summer use is higher, and is more affected by tourists, and because tourism growth is projected to be greater than resident population growth, the disparity between summer use (higher) and winter use (lower) will likely grow in the future.

Estimated Percentage Population Increases

		Proportion of Total Visits: Summer	Proportion of Total Visits: Winter	2010	2015	2020	2025
5-Year Increases	Residents	48%	87%	2.1%	3.9%	1.8%	2.2%
	Tourists	52%	13%	4.0%	10.0%	10.0%	10.0%
Cumulative Increases	Residents			2.1%	6.1%	8.0%	10.4%
	Tourists			4.0%	14.4%	25.8%	38.4%
Combined Cummulative	**Winter**			**2.3%**	**7.2%**	**10.3%**	**14.0%**
	Summer			**3.1%**	**10.4%**	**17.3%**	**25.0%**

Using the estimates from the above table we conservatively estimate 3.1% growth in summer Nature Center use by 2010, and 2.3% growth in winter use by 2010. By 2015 growth above current levels is estimated at 10.4% and 7.2% for summer and winter use respectively. A 25% increase in use is conservatively estimated by summer 2025.

Currently for more than 20% of days the number of vehicles in the most busy 3 hour period during the day exceeds 100 vehicles (and summer only, 55 of 149 days with data collected, or 37% of days), yet only 65 parking spaces are available. If the number of vehicles increases in line with the increased population projections, this situation will worsen. By 2015 we estimate 30% of the days will have a 3 hour period during the day with more than 100 vehicles, and by 2025 that proportion is likely to grow to more than 38%. If we consider only the summer season, when currently 37% of the days have a 3 hour period with more than 100 vehicles, we

anticipate at least 46% of summer days reaching that level by 2015, and by 2025 60% of summer days having a 3 hour period with more than 100 vehicles.

Extremely heavy vehicle days during the summer (3 hour period with 150 or more vehicles) will increase from 11% of summer days to 15% by 2015 and 22% by 2025.

If we estimate that during the summer season 10% of vehicles visiting the Nature Center are RV's, then because these vehicles typically occupy 2 space, we need to increase by 10% the number of spaces required during these peak summer days.

Trail use will increase accordingly as well. Currently 17% of days recorded have 150 or more trail users (and all of these days are in the summer). By 2015 that is expected to increase to 20% of the days and by 2025 27% of days are expected to have more than 150 trail users.

Summary: Both trail use and vehicle traffic are estimated to substantially increase in coming years. We suggest that by measures most relevant to anticipating parking capacity, inadequate or nearly inadequate capacity will grow from about 37% of summer days currently to 60% of summer days by 2025. It is important to remember that these growth estimates are based on conservative projections of population and tourism increases; the likely increases of vehicle traffic and trail use at the Nature Center could quite possibly be much greater.

Based on the above estimates, we can project the number of parking places required to reduce from the current 37% of days with an excess of 35 vehicles in a 3 hour period (currently 100 or more vehicles for 65 spaces) to only 20% of summer days with a 3 hour period with more than 35 vehicles in excess. An extra 20 parking spaces should result in "just" 20% of summer days with a 3 hour period with more than 35 cars in excess of the new 85 spaces. If we further adjust that figure by assuming 7-10% of vehicles are RVs requiring two spaces, than an additional 5-8 spaces are required. Similar calculations can be made to accommodate future projected visitor growth. The following table displays these results:

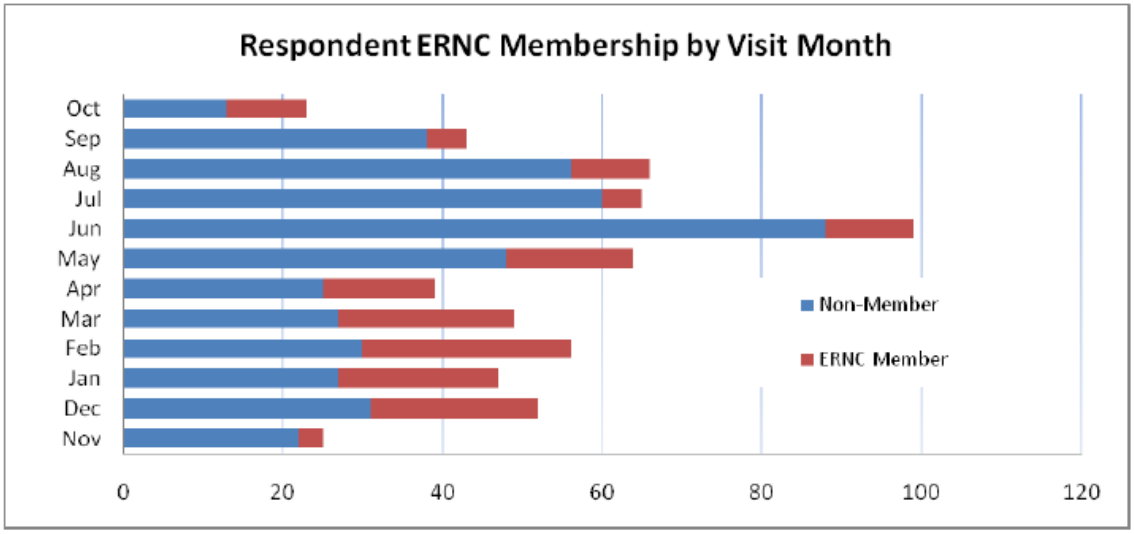
Projected parking spaces required to achieve 80% of summer days with 35 car excess or less during maximum usage 3 hour period

Year	2008	2010	2015	2020	2025
Min vehicles in top 20% of 3 hour period days	120	124	132	141	150
Spaces required for at most 35 vehicle excess on all other days	85	89	97	106	115
Spaces required assuming 8% RVs	92	96	105	114	124

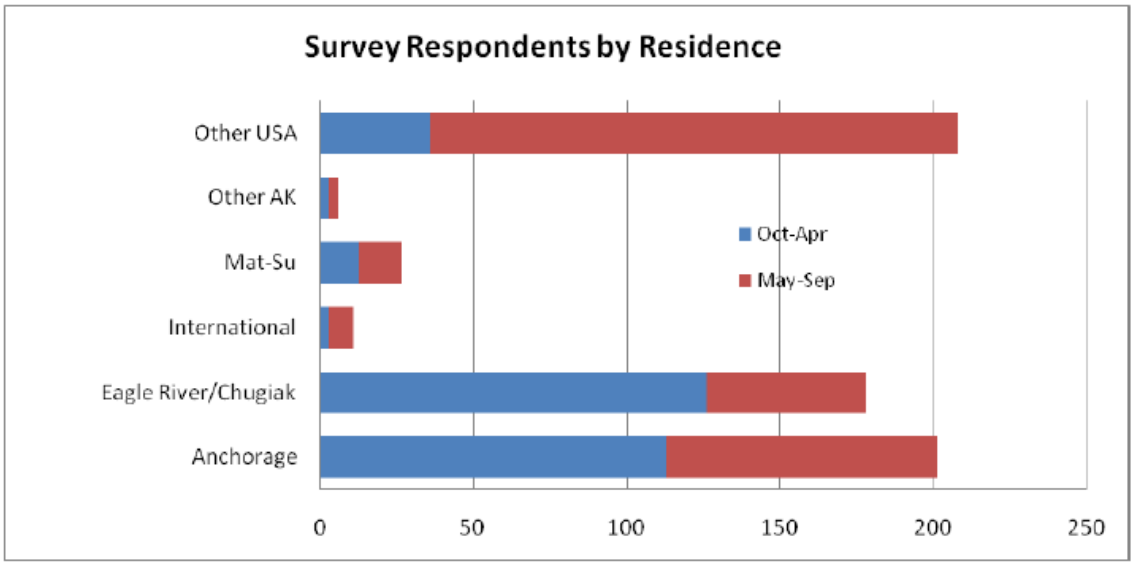
Survey Results

Surveys were conducted from the last week in November 2007 to the last week of November in 2008. A total of 633 surveys were completed. During some periods people were actively recruited by Nature Center volunteers to complete a survey, while the remainder of the time surveys were available via passive recruitment. We do not have information on the quantities of surveys completed categorized by recruitment method.

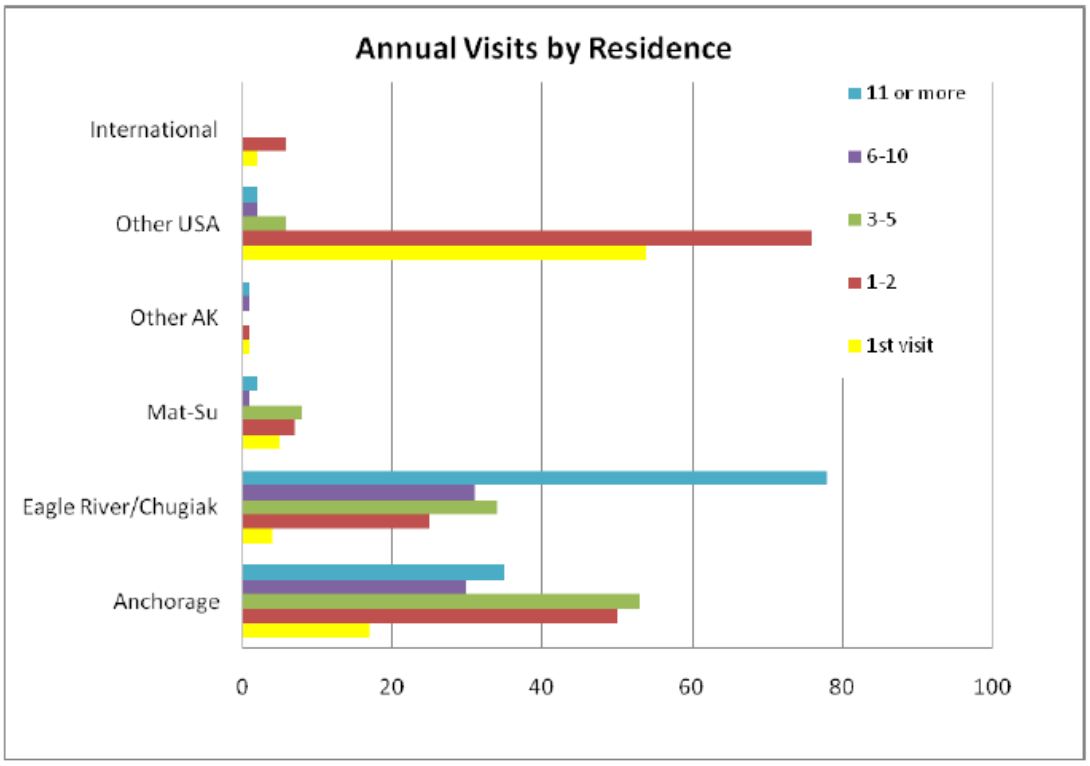
Surveys were most often completed in June, with other summer months seeing more recruitment than the winter months. Respondents were infrequently members of the Nature Center.



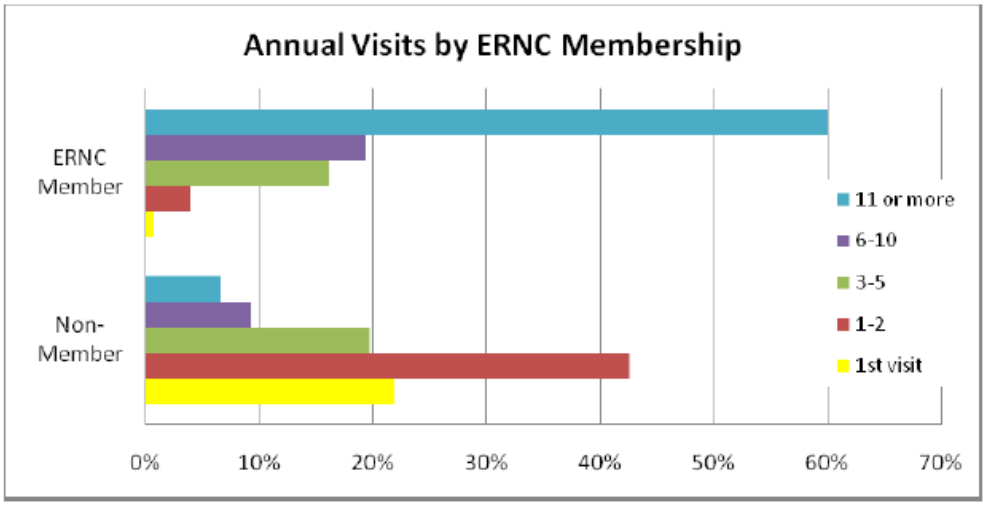
A much lower proportion of surveys were completed by non-Alaska residents during the winter then during the summer, when many more tourists completed a survey. About equal numbers of Anchorage and Chugiak/Eagle River residents responded to a survey, which in turn equaled the number of other tourists from other parts of the US responding. Roughly 2/3 of respondents lived in Anchorage, Eagle River/Chugiak, or Mat-Su.



Not surprisingly tourists were much less likely to visit the Nature Center multiple times; nearly all visited just once or twice. Multiple annual visits were common among Anchorage and Eagle River/Chugiak residents, with Eagle River/Chugiak survey respondents most likely to visit 11 or more times a year.

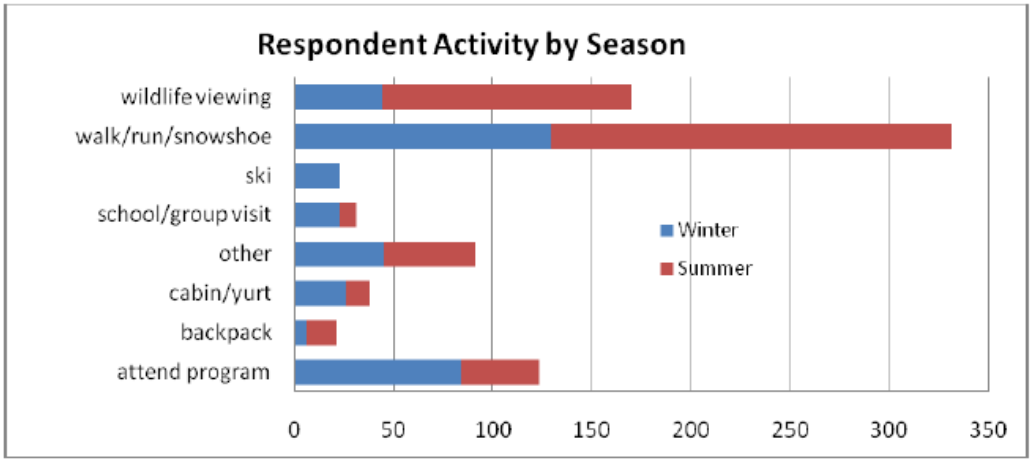


About 60% of respondents who said they were ERNC members visited 11 or more times per year, while only 7% of non-members reported visiting so frequently.

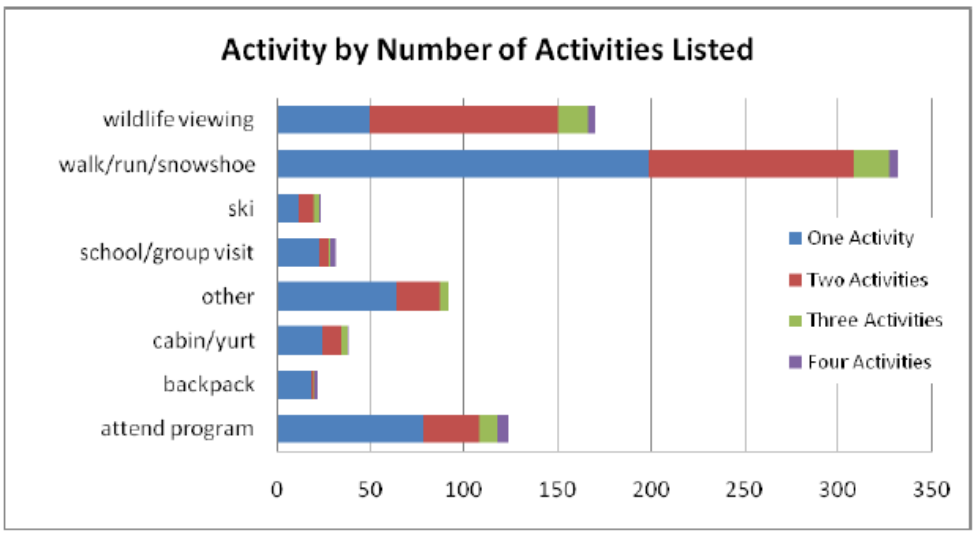


The most common activity in either summer or winter of respondents was walking/running/snowshoeing. During summer months, wildlife viewing was the second most popular activity specified, while in the winter it was attending a program (which was nearly as often listed as walking/running/snowshoeing). Attending

programs was less popular in the summer, both as a percentage of all activities listed by summer respondents and as the total number of respondents attending programs in the summer vs. winter.

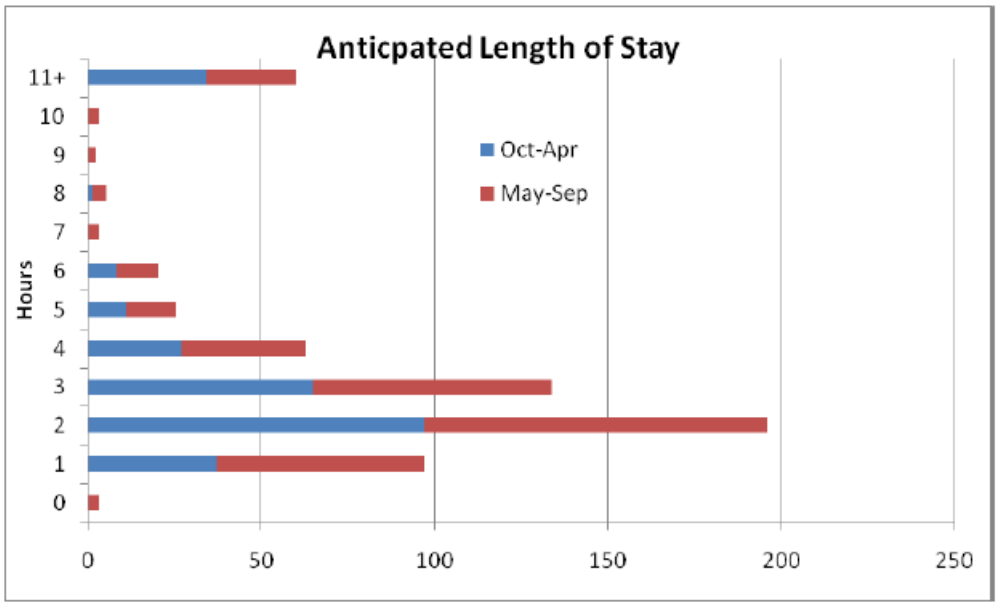


Note that multiple activities could be listed by each respondent, with the average number of activities reported being 1.3 per person. Thus most people who specified wildlife viewing as an activity also listed at least one other if not two or more other activities as well. A similar, though not as extreme pattern was seen by persons listing walk/run/snowshoe as an activity. Persons responding with other activities were much less likely to state multiple activities, as exemplified by those listing backpacking as an activity which was nearly always the only activity listed. Interestingly those listing attending a program as an activity were not so likely to list other activities, in part likely due to the larger proportion attending programs in the winter.

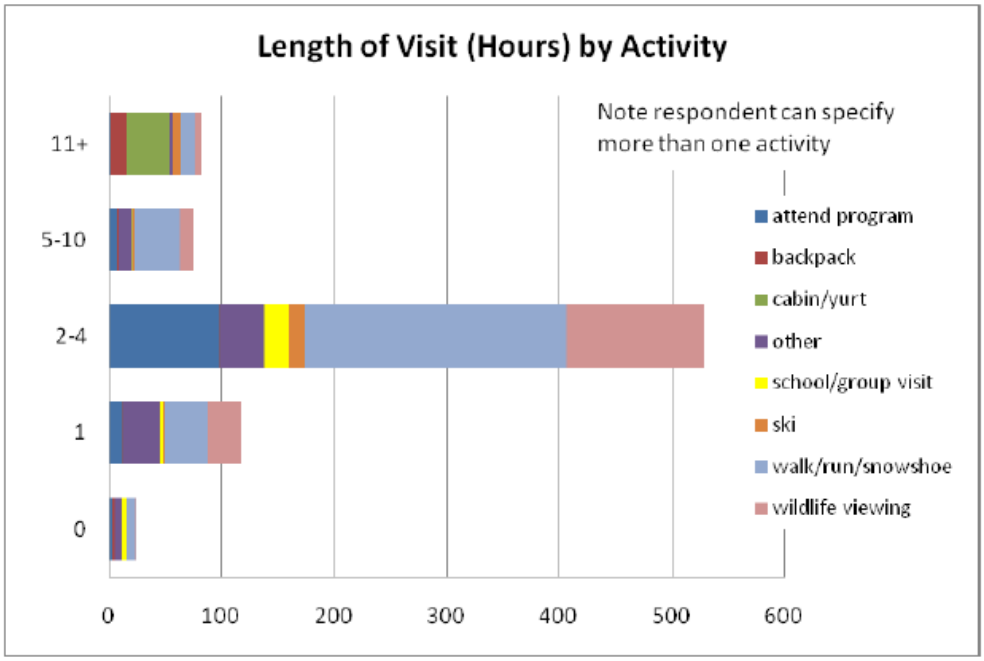


The most common anticipated length of stay was 2 hours, followed closely by 3 hours. 16% of respondents planned to stay less than 2 hours, and 51% planned to stay 3 hours or more. Ten percent of respondents were likely overnight visitors, planning on staying 11 hours or more. Relative lengths of stay did not differ much by

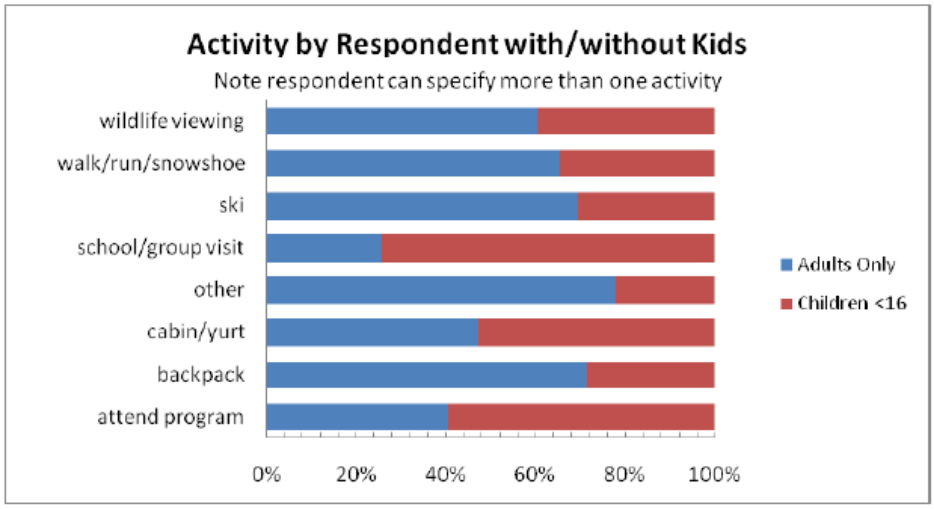
season, with the exception that winter respondents were unlikely to visit more than 6 hours unless they planned to spend the night.



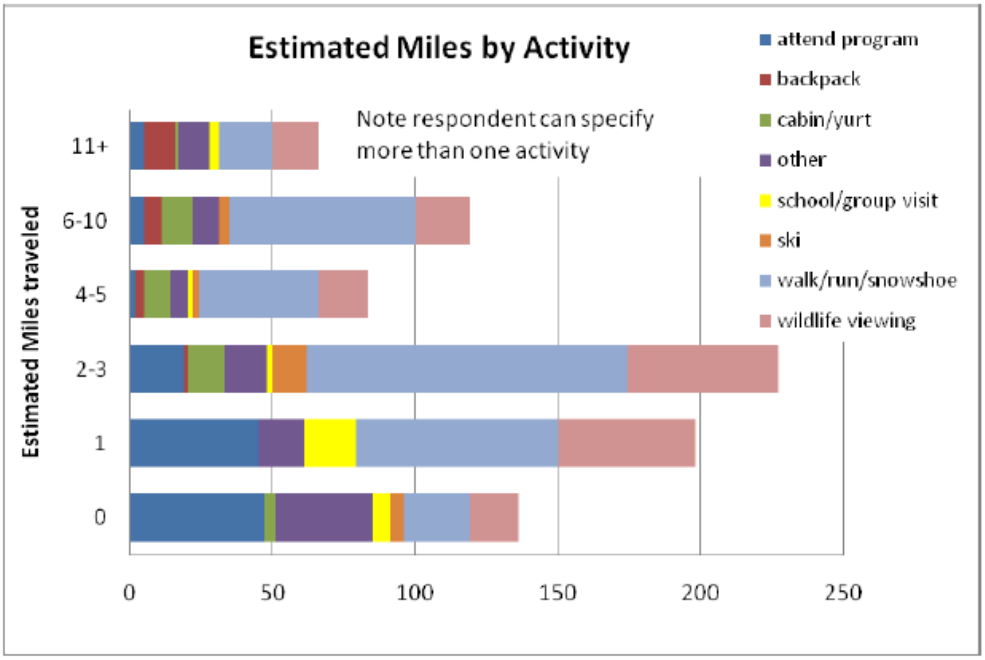
Reported length of visit also varied by the activities listed. Those staying more than 10 hours were likely to be backpacking or staying in a cabin/yurt. School/group activities or attending a program typically lasted 2-4 hours, as did skiing. Those visiting for less than an hour listed "other" or walk/run/snowshoe.



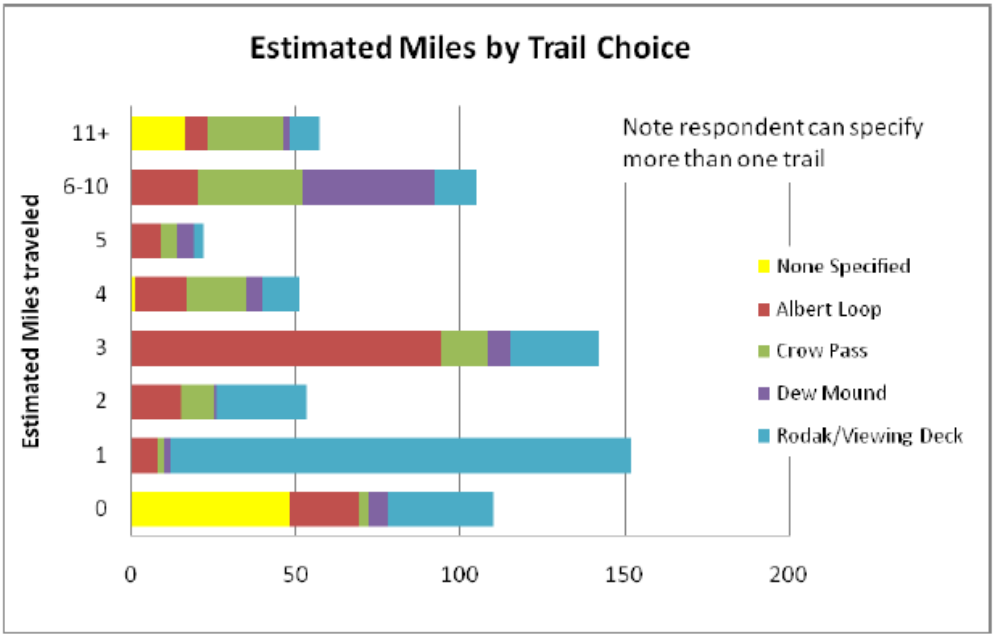
Activities specified by respondents with children <16 in their party differed from those specified by respondents without children. Most popular activities by respondents with children included attending programs (60% listing this activity had children), school/group visit (70% were with children) and cabin/yurt (slightly more than 50% of those listing this activity had children in their party). Skiing, backpacking, and "other" were less frequently listed by respondents with children in their party.



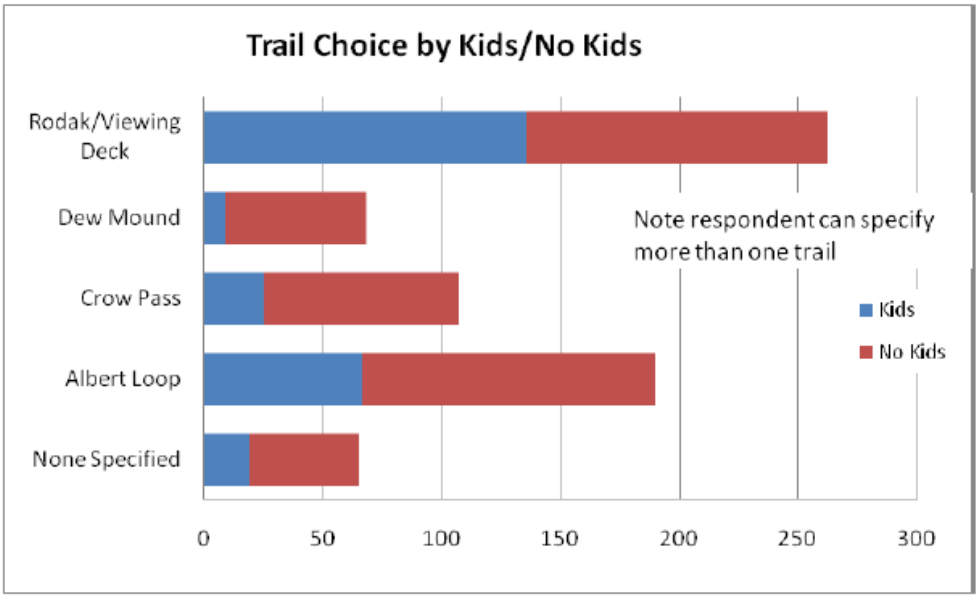
Estimated miles travelled naturally varied by activity as well. The most common response of miles travelled was 2-3 (29% of respondents), yet many respondents travelled fewer miles (38% travelling 0 or 1) and many travelled further (33%). While recalling that respondents could specify more than one activity, those attending programs were most likely to travel 0 or 1 miles, as were school/group visits. Of course backpackers nearly always travelled 4 or more miles, while skiers seldom did.



Trail choice also dictated mileage reported (or vice-versa). Noting that more than one trail could be specified, Rodak/Viewing Deck trail was by far the most popular trail comprising 38% of all trails listed. Albert Loop was listed more than 27% of the time, Crow Pass more than 15% of the time, and Dew Mound just 10% of the time. Note that some of the popularity of the Rodak trail is due to it being listed by respondents traveling further on other trails, as is also clearly the case for the Albert Loop trail. Only slightly more than half of respondents listing Cross Pass trail traveled 6 or more miles. Those using the Dew Mound trail were unlikely to report less than 6 miles traveled.



If the respondent had children under age 16 in their party also influenced the trail choice. Crow Pass and Dew Mound were much less popular by respondents with children, while Rodak/Viewing Deck was of course quite popular, and Albert Loop about half as popular. In contrast, those without children were equally likely to list the Albert Loop and Rodak/Viewing Deck trails.



Student Education Results

The Eagle River Nature Center offers an exciting educational destination close to a major metropolis. The programs, guided walks, classes, and activities offered by the Nature Center are very popular among schools; in 2007 and 2008 nearly 3000 students per year attended programs offered by the Nature Center staff (usually specifically requested by schools). In addition, more than 500 other students (scouts, day-camp students, etc.) were served by the Nature Center in each of the last two years. Finally, about 250 students are served each year by Nature Center staff outreach visits to locations outside of the park.

Class requests for Nature Center activities are seasonally dependent. More than half of the annual utilization by school classes occurs in September and May (with May being most popular). Unfortunately many school class requests are turned down each year due to the limited capacity of the Nature Center facilities. Illustrative of this limitation is the Center's need to rent additional latrines during the two months of heaviest utilization. More problematic is the limitation posed by having just one multipurpose room which must simultaneously house educational classes, host the interpretative displays designed for perusal and enjoyment by all Nature Center visitors, and house the center store, information desk, restrooms, children's corner and wood stove heat source. Inclement weather exacerbates the disruption and conflict resulting from different groups needing to use the same space simultaneously. Center staff report that visitors have been observed to return to their vehicles and forego visiting the Nature Center when encountering the overflowing main lodge area on a busy day.

While Center staff strive to serve as many (varied) groups as possible, demand far exceeds the resources available and requests for educational programs for visiting classes in particular have to be limited. Current facilities can accommodate only two classes in the Nature Center at any one time, while many schools would like to bring more than two classes at a time. Popular dates are quickly filled and interested teachers must settle for less attractive options than guided tours/walks/classes, such as self-guided activities or alternate destinations. A stop-gap measure to address some of these problems has been the construction of the educational yurt. However, as it lacks electricity and is far from the Center it has been able to only partially address these restricted resource problems.

The following excerpt from a naturalist at the Nature Center illustrates many of these issues well:

> "The general public can be overwhelmed entering the main lodge when we have 60 students plus all their chaperones (12 or more). And then over lunchtime, there may be double that number mingling in and around the main lodge, as the morning classes are waiting for their bus, and the afternoon classes have already arrived. Another problem is teaching with the level of noise from all the various groups. We typically spend between 15-30 minutes teaching in a classroom setting before heading outside, even in good weather. Bad weather makes the situation worse, as most classes will also be eating their sack lunches at the Nature Center, and we don't make them eat outside in the rain... Another complicating factor can be self-guided groups – no matter how crowded the building is,if it's open, then self-guided groups want to come inside and see exhibits, shop in store, ask questions of front staff, etc, and therefore we cannot keep them out on account of a class in session.

> Therefore I think the primary reason for needing classrooms is that we are currently operating in a manner that is less than ideal for *both* the students involved or the general public wanting to visit the center. Separation of teaching and public areas is therefore critical, in my opinion, in order to provide both groups with a better, quality experience."

Other local locations offering somewhat similar experiences are limited to the Campbell Creek Science Center within the city limits of Anchorage. The Science Center's offerings and capacities have continued to grow as demand has grown over the last several years, however the Nature Center has been unable to similarly expand to the increasing demand it faces. While the Science Center too is now limited by space constrictions, the Nature Center has been operating at and beyond capacity for many years.

With continuing population growth and increased incorporation of environmental and natural science topics into K-12 education, demand for services offered or possible at the Nature Center are quite likely to increase beyond the current overwhelming demand. Without additional classroom resources, the educational opportunities offered by the Nature Center to students throughout the Anchorage Bowl will necessarily continue to be far below the requested demand. In order to maximize the population served by stretching available resources, the Nature Center must at least marginally diminish the quality of services that are offered to the limited number of students that can be served, as well as adversely affect the Nature Center experience of the general public. Additional classroom space would permit both meeting current and future educational demand, and providing a superior Nature Center experience to students as well as the general public.

Appendix D: State Historic Preservation Office Findings Letter

12/14/2010 3130-2-1 Eagle River Visitors Center

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

Division of Parks and Outdoor Recreation
Design and Construction

SEAN PARNELL, GOVERNOR

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ANCHORAGE, ALASKA 99501
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RECEIVED
DEC 13 2010
OHA

December 14, 2010

Re: Finding of No Historic Properties Affected pursuant to AS 41.35.070

Ms. Judith Bittner
State Historic Preservation Officer
Alaska Office of History and Archaeology
550 W. 7th Avenue, Suite 1310
Anchorage, AK 99501-3565

No Historic Properties Affected
Alaska State Historic Preservation Officer
Date. 12/14/2010
File No. 3130-2-1 Eagle River Visitors Center

Dear Ms. Bittner:

The Alaska Department of Natural Resources – Division of Parks and Outdoor Recreation Design and Construction (ADNR-DPOR D&C) is proposing to demolish the Eagle River Nature Center building in Chugach State Park (Section 10, T13N, R1E, Seward Meridian, USGS Quad Anchorage A-7, Sheet 1). Pursuant to AS 41.35.070, Preservation of Historic, Prehistoric, and Archaeological Resources Threatened by Public Construction, ADNR-DPOR D&C finds that no historic properties would be affected by the proposed project.

The Chugach State Park Eagle River Nature Center is located in the old Paradise Haven Lodge. The Paradise Haven Lodge was constructed in the 1960's. The lodge served dinner and had a full bar. In 1980 ADNR-DPOR purchased the lodge and surrounding property. ADNR-DPOR converted the lodge to the Chugach State Park Eagle River Visitor Center and opened the facility in 1981. Funding for the Eagle River Nature Center dramatically decreased in the mid 1980's. In 1996 ADNR-DPOR signed an agreement with the Friends of Eagle River Nature Center to be the concessionaire for the Eagle River Nature Center in Chugach State Park. The Friends of Eagle River Nature Center continue to manage the Eagle River Nature Center facility.

Over time the Friends of Eagle River Nature Center have outgrown the Eagle River Nature Center building. They intend to build a new facility that will accommodate their needs. Once the Eagle River Nature Center building is constructed, the existing Eagle River Nature Center building will be demolished.

The Area of Potential Effect (APE) includes the Eagle River Nature Center building (Sheet 2). The Alaska Heritage Resources Survey (AHRS) was reviewed on December 14, 2010 for the status of the Eagle River Nature Center building. The AHRS did not contain any information on the Eagle River Nature Center. ADNR-DPOR D&C concludes demolishing the Eagle River Nature Center building will not affect known historical sites and there will be "No Historic Properties Affected" by this project.

Please direct your concurrence or comments to me at the address above, by telephone at 907-269-8745 or by e-mail at tana.stone@alaska.gov.

"Develop, Conserve, and Enhance Natural Resources for Present and Future Alaskans."

Sincerely,

Tana Stone
Environmental Impact Analyst

Enclosures: Sheet 1. Location Map
Sheet 2. Existing Conditions with Area of Potential Effect

Appendix E: Alaska Department of Fish and Game – Site Concepts Comments

STATE OF ALASKA

SEAN PARNELL, GOVERNOR

DEPARTMENT OF FISH AND GAME

DIVISION OF SPORT FISH

333 Raspberry Road
Anchorage, Alaska 99518-1565
PHONE: (907) 267-2289
FAX: (907) 267-2464

MEMORANDUM

TO: Bill Evans
Engineer/Architect I
Department of Parks and Recreation
Anchorage

FROM: Marla Carter MC
Habitat Biologist

DATE: April 22, 2010

SUBJECT: Eagle River Nature Center Site Concepts Comments

The Alaska Department of Fish and Game (ADF&G) reviewed the proposed site concept plans for new facilities and improvements to the Eagle River Nature Center (ERNC). The Department of Natural Resources, Division of Parks and Outdoor Recreation (DPOR) is working with the Friends of the Eagle River Nature Center (Friends) to relocate the ERNC from its existing location to one of several proposed locations. Some reasons for the change include providing a larger main facility, improving trail access, providing an Accessible program to meet ADA requirements, developing a maintenance facility, and addressing the inadequate space and space conflicts that are occurring among visitors, volunteers, and staff. Through these improvements, the ERNC staff intends to promote educational programs that meet the mission of the ERNC while furthering opportunities available to Chugach State Park visitors. The proposed plan phases are intended to meet current and future demands and goals over the next 20 years.

After evaluating the three alternatives, ADF&G recommends Concept C as the preferred alternative in regards to habitat and potential brown bear and human interactions. Chugach State Park (Park) provides largely undisturbed habitat for denning and foraging bears and is populated by at least 50 brown bears. Without the Park it is unlikely that brown bears could survive in the Anchorage area. Salmon are a critical food source for brown bears and because much of the salmon spawning habitat in the Anchorage area lies outside the park, many brown bears are forced closer to human activity to feed. Clearwater Creek, however, is an important bear feeding area largely inside park boundaries.

The existing visitor center is located about 900 feet from the nearest point on Clearwater Creek and is perched on a steep bluff that deflects most brown bear movement along the north side of the creek away from the facility. ADF&G does not have data on bear numbers or movements

along Clearwater Creek, however, reports from visitors and the history of bear attacks in the area attest to its attraction to brown bears during the summer and fall when salmon are spawning in the creek and readily available to foraging bears. Spawning salmon congregate below beaver dams on the creek and one of the most reliable places to see a brown bear in Anchorage is in the vicinity of the viewing platform on Clearwater Creek below the visitor facility. One or more brown bears are seen in this area nearly every day during late summer and fall, based on reports of hikers, park rangers, and ERNC staff. During this time brown bears and their tracks, scat and other sign are often seen on and near the Albert Loop Trail and along Clearwater Creek. A visitor facility located in the area below the bluff will likely result in more bear and human interactions including an increased risk of attacks.

In the late 1990s three people were mauled by brown bears on the Albert Loop Trail. Beginning in 1998 the trail has been closed during the period when spawning salmon attract brown bears. Since then, no one has been injured by bears near the ERNC and no brown bears have consequently had to be shot at or near the facility. It is our understanding that the new site plans intend to continue seasonally closing the Albert Loop Trail to ensure public safety. ADF&G fully supports this decision.

Concepts A and B show the main facility sited below the bluff and closer to the creek than Concept C. Both A and B have outdoor terraced gardens with a sitting and viewing area about 100 feet from the beaver dam where many of the brown bear encounters have occurred. Bears can be unpredictable and the close proximity of the public to these bears can create unsafe situations for both. Concept B is slightly better than Concept A in most respects. Concept A has about 5,000 feet of new road surface. Concept B has about 3,000 feet of new road surface and more compact parking areas, and the parking is farther from the creek. Concept B has much less road along Clearwater Creek. However, both concepts are likely to have increased problems with brown bears. For these reasons, ADF&G does not recommend Concepts A and B.

Concept C addresses many of these concerns. The facility is farther from the creek and more compact, with only about 1,000 feet of new road surface, most of it near the existing access road and presumably using the old access road to the maintenance facility. The nature center, outdoor classroom, and most of the parking is perched on an artificial bluff. If the new slope is relatively steep and at least 40-60 feet high it may deflect most brown bears away from areas heavily used by visitors.

Although Concept C is much better in terms of providing parking outside of the area where most brown bear use is anticipated, the Phase II parking area is still a concern because it is located below the bluff in the area frequented by brown bears. Currently, on some days, visitors are forced to park within the DOT right of way along Eagle River Road. Perhaps some temporary overflow parking can be accommodated along the shoulder of the new access road. Roadside parking is not ideal from a safety perspective, but crowding is uncommon at the ERNC and minimizing the road and parking lot surface will minimize maintenance and snow removal costs. It's possible that the trailhead parking area could also function as overflow parking for special nature center events.

If there is no feasible alternative to a Phase II parking area, we recommend that the parking area be located on top of the bluff. If this cannot be done, the proposed surface drainage retention ponds could be redesigned to provide somewhat of a buffer between the proposed Phase II parking area and brown bears. If the ponds were combined and wrapped, in an "L" shape,

around the Phase II parking lot, the relatively deep water may deter bear movement along the toe of the new slope, through the parking lot, and may deflect a charging bear, responding from the woods to human activity on the parking lot. The pond would have to be at least 6 feet deep and 20 feet across to enhance its potential as a barrier. There is no guarantee that this barrier would be 100% effective, which is why siting the entire facility on the bluff is preferable.

As stated above, ADF&G finds Concept C to be the best option for providing educational and recreational activities in Chugach State Park while also protecting the wildlife, fisheries, and habitat that the visitors come to see.

Thank you for the opportunity to comment on the proposed site concept plans for the Eagle River Nature Center. If you have any questions or concerns regarding our comments, please feel free to contact me at marla.carter@alaska.gov or 267-2103.

Cc by email:

Rick Sinnott, ADF&G/WC, Anchorage
Jessy Coltrane, ADF&G/WC, Anchorage
Dan Bosch, ADF&G/SF, Anchorage
Paul Blanche, ADF&G/HAB, Anchorage

Appendix F: Engineer's Estimate

ENGINEER'S ESTIMATE
EAGLE RIVER NATURE CENTER
PHASES ONE AND TWO
20 Year Master Development Site Plan -60%
BASIC BID

ITEM	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	AMOUNT
201(3A)	Clearing and Grubbing	Acre	$5,000.00	9.5	$47,500.00
201(4B)	Hand Clearing	L.S.	$25,000.00	All Req'd	$25,000.00
202(1)	Removal of Structures and Obstructions	L.S.	$50,000.00	All Req'd	$50,000.00
203(3)	Unclassified Excavation	C.Y.	$12.00	61500	$738,000.00
203(6-A)	Borrow, Type A	Ton	$22.00	48876	$1,075,272.00
204(1)	Structure Excavation	C.Y.	$14.00	1425	$19,950.00
301(1)	Aggregate Base Course, Grading D-1	Ton	$45.00	6799	$305,955.00
401(1)	Asphalt Concrete Pavement, Type II; Class B	Ton	$185.00	467	$86,395.00
607(3)	Chain Link Fence	L.F.	$65.00	175	$11,375.00
608(1b)	Concrete Sidewalk, colored and stamped	S.Y.	$184.00	252	$46,368.00
608(7)	Asphalt Pathway	Ton	$285.00	125	$35,625.00
615(1)	Standard Signs	S.F.	$125.00	15	$1,875.00
618(1)	Seeding	Acre	$8,500.00	8	$68,000.00
620(1)	Topsoil	S.Y.	$6.25	38725	$242,031.25
621(1)	Tree, 12 foot	Each	$130.00	300	$39,000.00
621(2)	Shrub	Each	$45.00	120	$5,400.00
625(1)	Hand Railing	L.F.	$110.00	80	$8,800.00
640(1)	Mobilization and Demobilization	L.S.	$65,000.00	All Req'd	$65,000.00
641(2)	Temporary Erosion and Pollution Control	C.S.	$37,500.00	All Req'd	$37,500.00
642(1)	Construction Surveying	L.S.	$22,000.00	All Req'd	$22,000.00
642(3)	Three Person Survey Party	Hour	$175.00	15	$2,625.00
643(2)	Traffic Maintenance	L.S.	$11,500.00	All Req'd	$11,500.00
646(1)	CPM Scheduling	L.S.	$7,500.00	All Req'd	$7,500.00
647(2)	Wide Pad Dozer, 65 HP Minimum	Hour	$185.00	20	$3,700.00
650(3A)	Park Bench, Type A	Each	$200.00	30	$6,000.00
650(4)	Round Firepit	Each	$400.00	1	$400.00
650(7)	Bearproof Garbage Can	Each	$575.00	3	$1,725.00
650(8)	Single Entrance Gate	Each	$4,750.00	1	$4,750.00
650(9)	Double Entrance Gate	Each	$7,500.00	1	$7,500.00
650(13)	Viewing Deck	S.F.	$235.00	192	$45,120.00
650(14)	Dock (Float) (Gangway)	L.S.	$17,000.00	All Req'd	$17,000.00
650(17)	Concrete Parking Bumper	Each	$185.00	147	$27,195.00
650(21)	Barrier Rock	Each	$250.00	200	$50,000.00
650(29)	Pole Barn 100' x 24'	Each	$46,500.00	1	$46,500.00
650(30C)	Interpretive Kiosk, Type C	Each	$9,200.00	1	$9,200.00
650(32)	Fee Payment Station	Each	$23,550.00	1	$23,550.00
650(33)	Nature Center, two story daylight	Each	$4,500,000.00	1	$4,500,000.00
650(34)	Roof top garden	Each	$11,225.00	1	$11,225.00
650(35)	Outdoor classroom	Each	$28,875.00	1	$28,875.00
650(36A)	Bulletin Board, Type A	Each	$9,500.00	1	$9,500.00
650(36B)	Bulletin Board, Type B	Each	$15,000.00	1	$15,000.00
650(37)	Information Board	Each	$6,500.00	1	$6,500.00
650(38)	Entrance Sign	Each	$6,500.00	1	$6,500.00
650(40A)	Interpretive Sign, Type A	Each	$8,750.00	1	$8,750.00
650(40B)	Interpretive Sign, Type B	Each	$9,225.00	1	$9,225.00
650(40C)	Interpretive Sign, Type C	Each	$9,750.00	1	$9,750.00
650(41A)	Trail Sign, Type A	Each	$4,000.00	10	$40,000.00
650(41B)	Trail Sign, Type B	Each	$4,500.00	1	$4,500.00
650(41C)	Trail Sign, Type C	Each	$5,000.00	1	$5,000.00
650(51)	Maintenenace Facility	Each	$72,000.00	1	$72,000.00
650(##A)	Relocate single cabins	Each	$15,000.00	3	$45,000.00
650(50)	Orientation Kiosk	Each	$22,000.00	1	$22,000.00
654(1)	Vaulted Toilet, single CXT	Each	$46,000.00	5	$230,000.00
670(1)	Painted Traffic Markings	L.S.	$19,250.00	All Req'd	$19,250.00
			TOTAL ESTIMATED CONSTRUCTION CONTRACT		$8,238,386.25
			CONSTRUCTION ADMINISTRATION (15%)		$1,235,757.94
			TOTAL ESTIMATED CONSTRUCTION COST		$9,474,144.19

Appendix G: Interpretive Prospectus

Eagle River Nature Center

Master Development Plan – Interpretive Prospectus

Department of Natural Resources
Division of Parks and Outdoor Recreation
December 15, 2010

Table of Contents

Purpose

For thirty years, the staff and volunteers at the Eagle River Nature Center have been sharing the cultural and natural history of the Eagle River Valley with visitors through dynamic programming. Interpretation and environmental education have always been vital to the visitor experience at the center: from the "close-up corner" to the salmon viewing deck, visitors benefit from hands-on learning and close encounters with the natural world.

As the Division of Parks and Outdoor Recreation and the Friends of Eagle River Nature Center plan for the future of the center and trails, it is also critical to plan for new interpretive programs and media that will complement and enhance the center's environmental education and public programs.

The purpose of the *Interpretive Prospectus* is to establish a long-range vision for developing and maintaining an effective interpretive program at the new center. Interpretation at the center should not only tell visitors what is interesting about the site but also aim to convince them of its value, encourage conservation, and inspire them to further explore the area. The *Interpretive Prospectus*:

- supports the mission of the Division of Parks and Outdoor Recreation and Eagle River Nature Center
- outlines goals and objectives for interpretive programs and media
- provides an assessment of existing and potential visitor profiles
- provides an overview of existing interpretation and programming concerns
- provides guidelines for future planning

Mission Statements

The mission of the *Division of Parks and Outdoor Recreation* is to provide outdoor recreation opportunities and conserve and interpret the natural, cultural, and historic resources for the use, enjoyment, and welfare of the people.

The mission of the *Eagle River Nature Center* is to provide connections to nature through interpretive education, resource protection and outdoor opportunities.

Goals

The goals outlined below are the desired outcomes for interpretation that will help the division and the Friends of Eagle River Nature Center achieve their missions. They describe how interpretation will make a difference in the management of the site.

Interpretation will:

- enhance the visitor experience and conserve natural resources through effective programming

- provide staff and volunteers with the necessary tools to assist visitors in making connections with the natural world
- encourage participation in the center's environmental education programming
- provide visitors information about how to safely travel in bear and moose country

Interpretive Themes

Themes are the primary messages visitors should understand about an interpretive site or presentation. The central theme will bring a sense of continuity to the visitor experience and assist managers when developing the content for interpretive materials. Every interpretive product should support the central theme.

Central Theme

The Eagle River Nature Center is a natural gateway to Chugach State Park; sculpted by glaciers, this dynamic landscape supports a diverse plant and animal community and provides recreational opportunities for people of all ages and abilities.

Subthemes

1. The Eagle River Valley has a long history as a transportation corridor for people and animals.
2. Once referred to as "Little Yosemite," the Eagle River Valley owes its dramatic mountain landscape to glacial sculpting and geologic processes, evidence of which is visible from the center and its trails.
3. Plant and animal communities in the Eagle River Valley enhance the visitor experience and influence the changing landscape.
4. The trails at the Eagle River Nature Center provide visitors access to a wide range of recreational activities.
5. Teaching visitors how to safely travel in moose and bear country is a critical component of education at the center.
6. The new Eagle River Nature Center incorporates green technology and was designed to complement the landscape and historical facade of the original building.

Target Audience

The Eagle River Nature Center welcomes over 40,000 visitors annually, mostly adults and families with children. Visitors are attracted by the natural beauty of the area, recreational opportunities, and the diversity of environmental education programming offered at the center.

Age of Visitor

Interpretation should be targeted to both adults and children by layering the message of each exhibit or presentation. For example, a trailside interpretive panel designed primarily for adults can have vivid graphics, tactile components, or a pull-out specially designed for children. Likewise, adults could still find pleasure from a "close-up" corner that thrills children with the textures and scents of natural objects.

Exhibits could also be designed for specific age groups, such as two exhibits with the same topic: one written and designed for adults and the other designed to appeal to children.

Type of Visitor

Interpretation should consider the needs of the independent traveler(s) versus those visiting as part of an organized program. Interpretation must be designed to complement both user groups, even if tailored more toward one. For example, large format panels designed for trail junctions will primarily be designed for the use of large groups (such as a 4th-grade class). However, the context of the panel must still be relevant for independent visitors who may not be receiving supplementary information from a guide.

The digital audience must also be considered. The number of people seeking information about parks and natural areas via the Internet, social networking sites, and mobile media (such as podcasts) is increasing at a dramatic pace. Careful consideration must be given toward integrating mobile media into interpretation at the nature center in order to reduce the possibility of potential user-group conflicts. Mobile media is, however, a great way to reach a broad audience and inspire people to visit the nature center, become a member, and conserve the natural environment.

Existing Conditions

Information and Orientation

The Eagle River Nature Center's front desk, website, and social media page are the principle ways visitors receive information about the site. The nature center also distributes information via email, press releases, and local marketing. Members receive monthly newsletters.

The nature center prints a series of brochures and flyers, including the Rodak Nature Trail Guide, Birds of Eagle River Nature Center Checklist, and Eagle River Nature Center Trail Map.

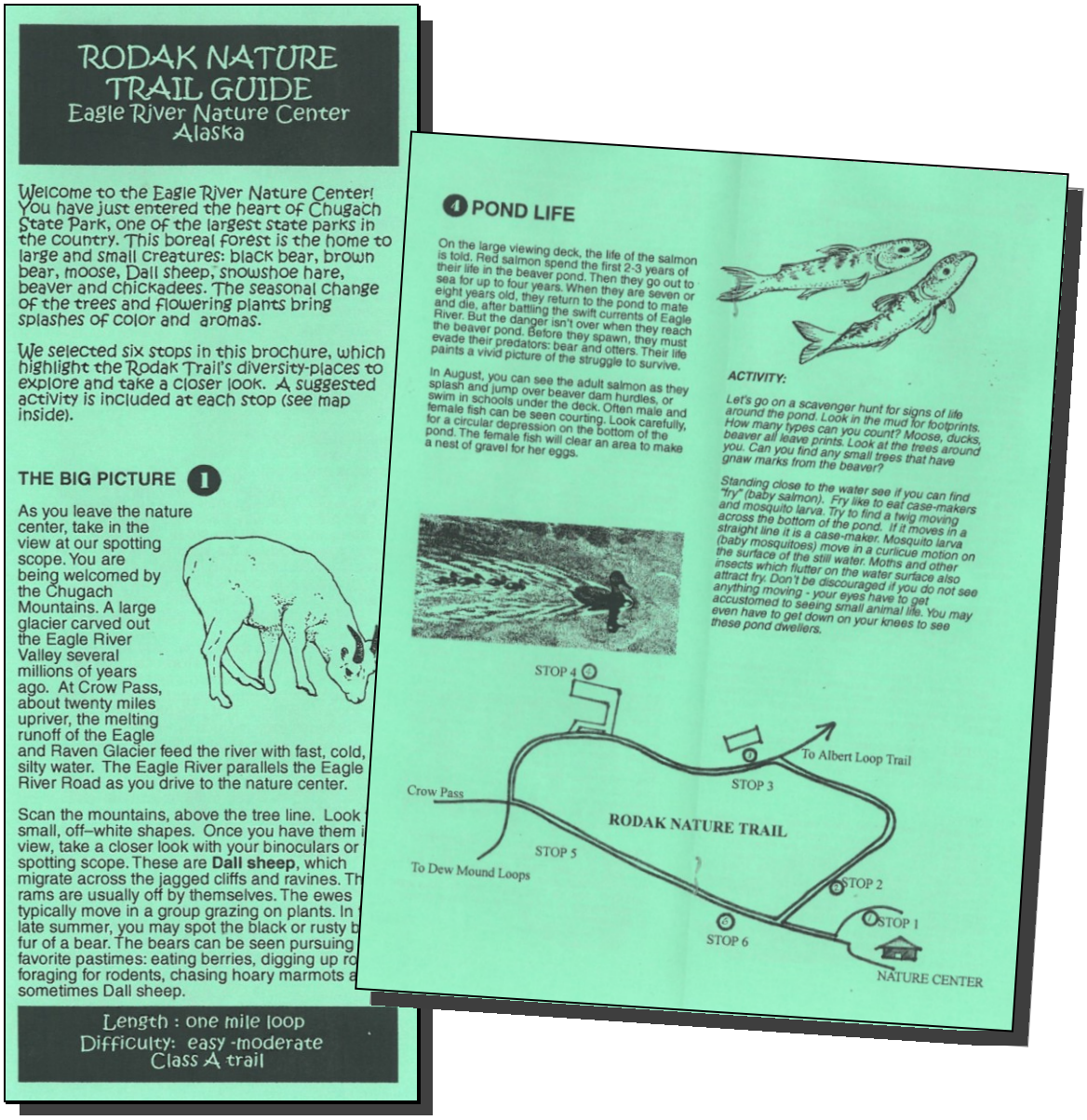
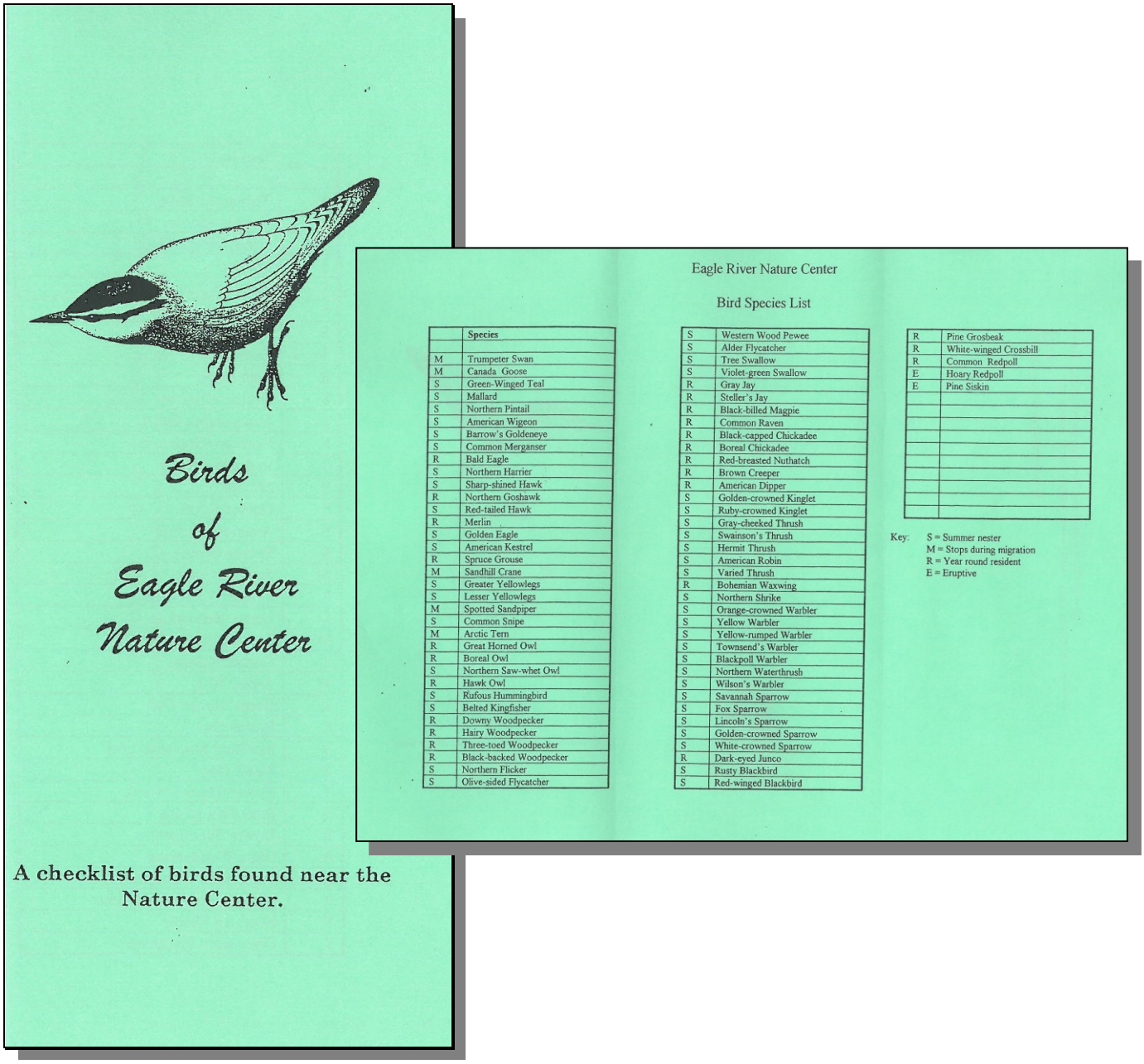


Figure 1. Rodak Nature Trail Guide



Birds of Eagle River Nature Center

A checklist of birds found near the Nature Center.

Eagle River Nature Center

Bird Species List

	Species
M	Trumpeter Swan
M	Canada Goose
S	Green-Winged Teal
S	Mallard
S	Northern Pintail
S	American Wigeon
S	Barrow's Goldeneye
S	Common Merganser
R	Bald Eagle
S	Northern Harrier
S	Sharp-shined Hawk
R	Northern Goshawk
S	Red-tailed Hawk
R	Merlin
S	Golden Eagle
S	American Kestrel
R	Spruce Grouse
M	Sandhill Crane
S	Greater Yellowlegs
S	Lesser Yellowlegs
M	Spotted Sandpiper
S	Common Snipe
M	Arctic Tern
R	Great Horned Owl
R	Boreal Owl
S	Northern Saw-whet Owl
R	Hawk Owl
S	Rufous Hummingbird
S	Belted Kingfisher
R	Downy Woodpecker
R	Hairy Woodpecker
R	Three-toed Woodpecker
R	Black-backed Woodpecker
S	Northern Flicker
S	Olive-sided Flycatcher
S	Western Wood Pewee
S	Alder Flycatcher
S	Tree Swallow
S	Violet-green Swallow
R	Gray Jay
R	Steller's Jay
R	Black-billed Magpie
R	Common Raven
R	Black-capped Chickadee
R	Boreal Chickadee
R	Red-breasted Nuthatch
R	Brown Creeper
R	American Dipper
S	Golden-crowned Kinglet
S	Ruby-crowned Kinglet
S	Gray-cheeked Thrush
S	Swainson's Thrush
S	Hermit Thrush
S	American Robin
S	Varied Thrush
R	Bohemian Waxwing
S	Northern Shrike
S	Orange-crowned Warbler
S	Yellow Warbler
S	Yellow-rumped Warbler
S	Townsend's Warbler
S	Blackpoll Warbler
S	Northern Waterthrush
S	Wilson's Warbler
S	Savannah Sparrow
S	Fox Sparrow
S	Lincoln's Sparrow
S	Golden-crowned Sparrow
S	White-crowned Sparrow
R	Dark-eyed Junco
S	Rusty Blackbird
S	Red-winged Blackbird
R	Pine Grosbeak
R	White-winged Crossbill
R	Common Redpoll
E	Hoary Redpoll
E	Pine Siskin

Key: S = Summer nester
M = Stops during migration
R = Year round resident
E = Eruptive

Figure 2. Birds of Eagle River Nature Center Checklist

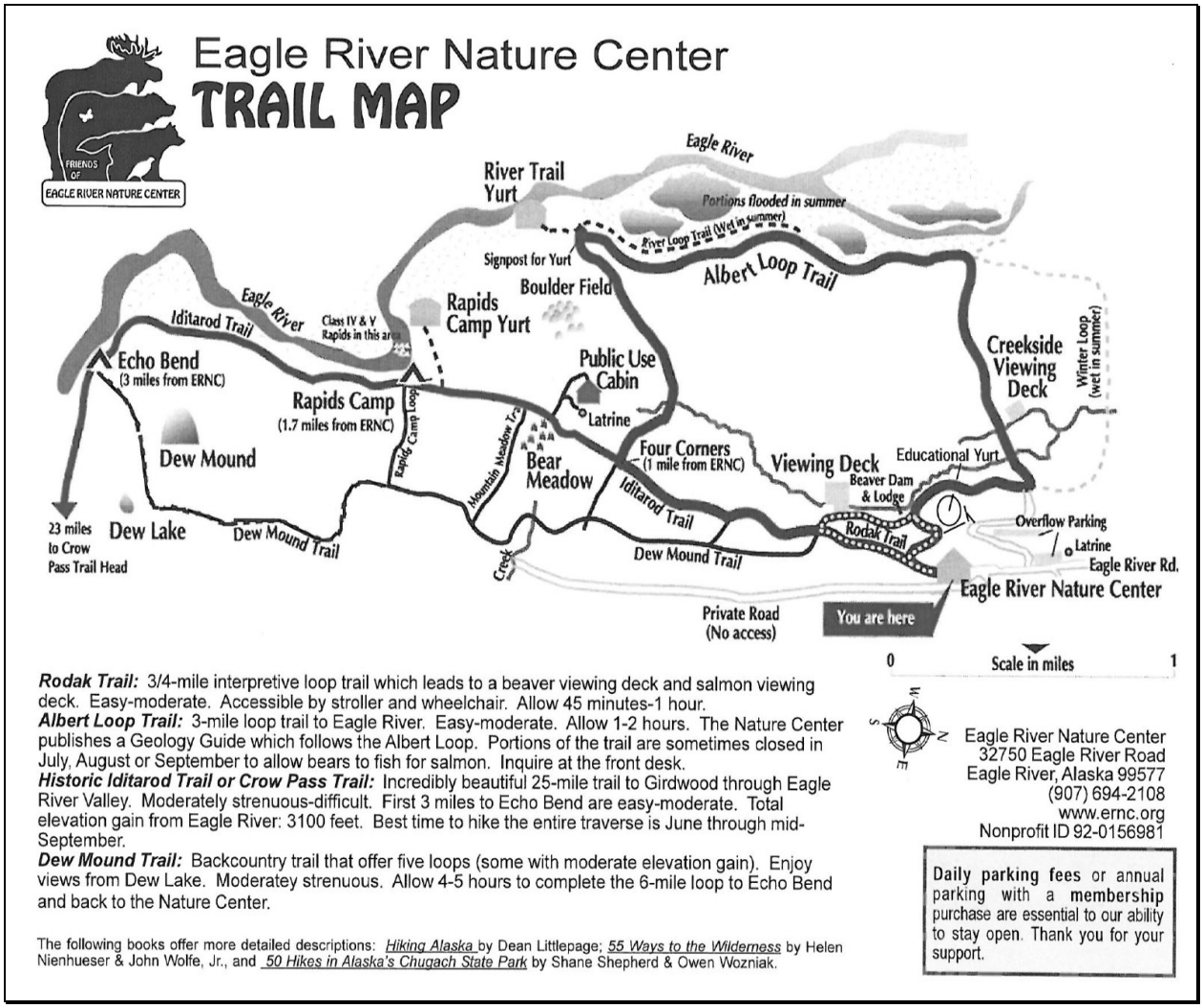


Figure 3. Eagle River Nature Center Trail Map

Environmental Education and Public Programs

Environmental Education

The Eagle River Nature Center offers a Nature Studies Program for school groups year-round. Groups choose from 15 naturalist-led science programs, which include an indoor orientation and science presentation followed by a guided walk. There is also time for lunch and exploration of exhibits. In addition to on-site programs, the nature center offers in-school programming whereby naturalists bring their presentations to the classroom.

Similar programming is offered for homeschoolers, scouts, youth groups, and adult groups. The center also offers a summer camp program and nature-themed birthday parties.

Public Programs

The Eagle River Nature Center's public programs include:

- Kneehigh Naturalist Program (designed for children ages 3-5 accompanied by a parent; program focuses on outdoor exploration)
- Junior Naturalist Program (designed for children in K-6th grade accompanied by a parent; program covers a variety of natural history topics and activities)
- General Audience Programs (primarily designed for adults and cover a wide variety of natural history topics)
- Astronomy Programs (local astronomers present a special topic inside before leading participants outdoors to view the night sky)
- Craft Programs (designed seasonally for both children and adults)
- Recreational Hikes (volunteers who are avid hikers lead hikes for a visitors of all ages and abilities)
- Daily Summer Walks (designed for newcomers and those uncomfortable hiking alone in bear country)

Interpretation

Interior – Non-personal

Displays

The majority of the interior exhibits are seasonal and cover a variety of natural history topics. The seasonal exhibits are displayed on two triangular units that are set on casters and can be moved from the central exhibit space for large events. There is also seasonal bird identification information displayed in the corner overlooking the bird feeders, accompanied by a viewing scope.

There are two permanent displays: an interactive, "guess the answer" board and an exhibit that labels mountains in the valley.

Children's Area

A children's area includes craft items and nature-themed toys specially designed for young children.

Animal Collections

The center has a nice collection of mounted animals: beaver, three bald eagles, three owls (Great Horned, Northern saw-whet, and Snowy), lynx, coyote, and two bear pelts. The center also has a butterfly collection.

Other

Latex animal tracks are displayed on the front counter. Visitors enjoy touching the items and figuring out the animal they belong to.

Close-up Corner

The "close-up corner" is a visitor favorite. Tucked in a quiet niche—designed to resemble a trapper's cabin—this interactive exhibit allows children and adults to see and feel items from nature. Items in the close-up corner include animal bones, fossils, furs, beaver-chewed wood, antlers, and skulls. There is also an area with hidden items. Visitors hesitate as they insert their hand into the dark hole, not knowing what type of feeling to anticipate. The corner is loved by children and adults alike.

Exterior – Non-personal

Trailside Interpretation

There are 10 interpretive panels located along the Rodak Nature Trail and one located on the upper viewing deck. Seven of these panels were produced approximately 10 years ago and exhibit an older style of graphic presentation; the remaining four panels were produced approximately five years ago and exhibit a modern graphic style. The modern panels are the division's standard horizontal size: 30.5"h x 36.5"w.

Modern Panels

There is one panel located on the upper viewing deck near the nature center. The panel identifies the visible mountains and is titled "Chugach Mountain Cliff Notes." The panel is in excellent condition.

There are three panels located at the first river viewing deck along the Rodak Nature Trail. The topic of these panels is "beavers" and all are in excellent condition. They are titled:

- "With Sticks and Stones They Build Their Homes"
- "Tools of the Trade"
- "In the Beaver's Wake"

Programming Concerns and Suggestions

These modern panels will need to be relocated when the new facility is constructed. The "Chugach Mountain Cliff Notes" panel should be placed where the view is similar to that of the panel's background image. The beaver panels should be located near (if not at) their current location.

Figure 4. Modern Panels. Clockwise from top left: *Chugach Mountain Cliff Notes*, *With Sticks and Stones they Build Their Homes*, *In the Beaver's Wake*, and *Tools of the Trade*

Older Panels

The seven panels exhibiting an older style of graphic presentation are large format, approximately two times the division's standard size. The panels are arranged along the circumference of the Rodak Nature Trail, with one panel located on the salmon viewing deck. The panels are titled as follows and are listed according to their location on the trail when traveled counterclockwise from the nature center:

- "Can a Snowflake Carve a Valley?"
- "Ice: An Artist of Grand Change"
- "Cosmic Reasons for the Seasons!"
- "Season Extremes in a Stream?"
- "The Forest—what fuels the food web"
- "Change of Values"
- "A Lifetime of Change"

These seven panels are in good condition. The colors have not faded recognizably and there is little to no physical damage to the panels. However, some of the topics and placement of the panels are no longer relevant and the graphics are outdated.

Figure 5. Older Panels. **Top Row:** *Can a Snowflake Carve a Valley?, Ice: An Artist of Grand Change, Cosmic Reasons for the Season!;* **Middle Row:** *Season Extremes in a Steam? , The Forest—What Fuels the Food Web, A Lifetime of Change;* **Bottom Left:** *Change of Values*

Programming Concerns and Suggestions

Concern: "Can a Snowflake Carve a Valley?" and "Ice: An Artist of Grand Change" are useful topics for environmental education programs but their placement is no longer relevant. "Can a Snowflake Carve a Valley?" describes Eagle River's U-shaped valley, but the valley cannot be seen because of the thick tree cover. "Ice: An Artist of Grand Change" asks readers to study the mountains across the valley and look for glacially created features. It is difficult to view the mountains because of the thick tree cover. Additionally, some of the glacial features are no longer present.

Suggestion: Create one new panel to satisfy geology/glaciology of the valley

Concern: "Cosmic Reasons for the Seasons!" is too complicated. There are too many topics for one display and this panel is not often used for formal programming.

Suggestion: Focus instead on "winter adaptations" for the exterior panel and present "astronomy" inside the new center.

Concern: "Season Extremes in a Stream?" is not used often for formal programming. It is located adjacent to the three modern panels on beavers.

Suggestion: Develop a similarly themed panel to be displayed on the salmon viewing deck

Concern: "The Forest—What Fuels the Food Web" is used for formal programming but the content is confusing. Generally the naturalist will use the graphics as an aid to talk about photosynthesis and the food web.

Suggestion: Simplify the panel theme to complement formal programming.

Concern: ""Change of Values" is not often used for formal programming.

Suggestion: Reassess the relevancy of the theme and design a new display that complements formal programming.

Concern: "A Lifetime of Change" presents the salmon lifecycle and is appropriately located on the salmon viewing deck. The graphics, however, are dated and the panel is very text heavy.

Suggestion: Create smaller salmon ID panels that have a tactile element. Create one panel that presents the salmon lifecycle.

Recommendations

Information and Orientation

Brochures and Flyers

A series of brochures and flyers for the nature center could be created to complement the website's colors and design. A thematic approach to design would create continuity between products and assist in marketing for the center. The brochures and flyers would provide current and potential visitors information about the site, its amenities, and natural and recreational attractions. All brochures and flyers could be available for viewing on the website. Consideration should also be given for creating products in different languages. German, Spanish, and Japanese are commonly heard languages.

Suggested topics include:

- Albert Loop Trail Guide
- Dew Mound Trail Guide
- Iditarod National Historic Trail Guide
- Kneehigh Naturalist flyer
- Rental brochure (for cabins and yurts)
- Revised Birds of Eagle River Nature Center Checklist
- Revised Nature Studies Program flyer
- Revised Rodak Nature Trail Guide
- Revised trail map
- "Special Places" brochure

Building Entrance

Entryway

Incorporating the style of the existing building's entrance into the design of the new building would create a sense of place and nostalgia. New thematic elements, such as door handles made out of beaver-chewed branches, could add character and an interpretive element to an otherwise standard item.

Sustainability Information Sign

Outside the entrance to the new building, a visually appealing sign should be installed that explains how environmentally-friendly designs and products were used during construction and are part of ongoing operations. This sign would be more informational than interpretive.

Environmental Education and Public Programs

As mentioned in the prospectus's "Purpose," dynamic programming has always been vital to the visitor experience at the center. The personal connections between visitors and the staff, volunteers, and natural environment leave lasting impressions. It therefore makes sense that environmental education and public programming should be considered foremost when developing interpretive products. Future planning should ensure that interpretation complements the existing programming.

Staff members and volunteers should periodically review the effectiveness of environmental education and public programs to ensure management and interpretation goals and objectives are being met. Visitor numbers, surveys, and questionnaires can be valuable tools for evaluating programming.

Natural Play Area

A natural play area on the south side of the nature center should be designed to complement the landscape and interpretive themes. The play area would be located within sight of the nature center and the outdoor classroom and would allow children a fun, designated place to play.

Water features, log features, and unique steps and climbing equipment would be included. Elements could include a mix of natural products (such as boulders) and manufactured products meant to resemble natural features (such as a hollow log made of concrete).

Figure 6. Examples of thematic, manufactured "natural play" products

Interpretation

Interior – Non-Personal

The central interpretive theme should be evident after viewing interior exhibits. Each subtheme should be well represented so that visitors have a complete understanding of the opportunities available in and around the center and on its trails. This can be accomplished in a number of ways including unique architectural elements and art pieces, interpretive exhibits, animal mounts, and many other possibilities.

Seasonality

Interpretive exhibits should be designed so that components can be changed seasonally. This will assist staff and volunteers with programming and also keep information relevant for visitors. Four wall graphics or hanging banners could highlight the four seasons and be displayed year-round. Visitors would then get a sense for the area's diversity of scenery during all seasons.

Figure 7. Sample concept for seasonal wall art or hanging banners. Images for concept only. Permissions not obtained.

Modular

Interpretive exhibits should, ideally, be movable. Potential for the central exhibit space to be used as a meeting area and for special events is high. If located along the edges of the room, the displays could be permanent or semi-permanent.

Close-up Corner

The close-up corner should be reconstructed and possibly expanded in the new building. Designing the space to resemble a "trapper's cabin" is an excellent concept and could be replicated in the new center. A digital trapper (a hologram) could appear when visitors walk by and share stories about homesteading in Eagle River Valley. The Islands and Ocean Visitor Center in Homer, AK, has an excellent example of this type of application.

Kids Corner

A "Kids Corner," with vivid graphics and interactive elements, could be included in the building's design. A thematic name could be given to the area, such as "Cubs' Corner" or "Kits Korner" and displayed at the corner's entryway. Crafts, toys, and nature-themed games could be included.

Planetarium

The center's astronomy program would greatly benefit from a dedicated indoor area where participants could gaze at the night sky. The area could be located on a second level or loft that included a significant skylight and telescope. Incorporating a planetarium into the building's design is also a desired feature.

Salmon Tank

A tank integrated into an exhibit on the salmon lifecycle would be a valuable teaching tool for the center. Staff could rear young salmon in the tank, providing visitors a unique opportunity to watch the eggs develop into juvenile salmon. The tank would complement the live video feed from the salmon viewing deck nicely and help present the whole lifecycle story and concepts of natural resource management. (See the recommendations under "Salmon Viewing Deck" for more information on the live video.)

Exterior – Non-Personal

Pullouts for Organized Groups

The existing large-format panels work well for large groups. The pullouts provide space for groups (of up to thirty) to step off the main trail and gather to listen to the naturalist. The panels provide a visual element to enhance the messages the naturalist is sharing with the group. While the naturalist may not read the panel text verbatim, the graphics can reveal more of the story and enhance learning objectives.

Nine group pullouts have been identified based on the master development plan trail alignment. Each of the areas is located at a major trail junction. Design of the pullout could include a slope that enables participants standing in the back to see the guide and the panel. Panels should not be placed where they obstruct the viewshed.

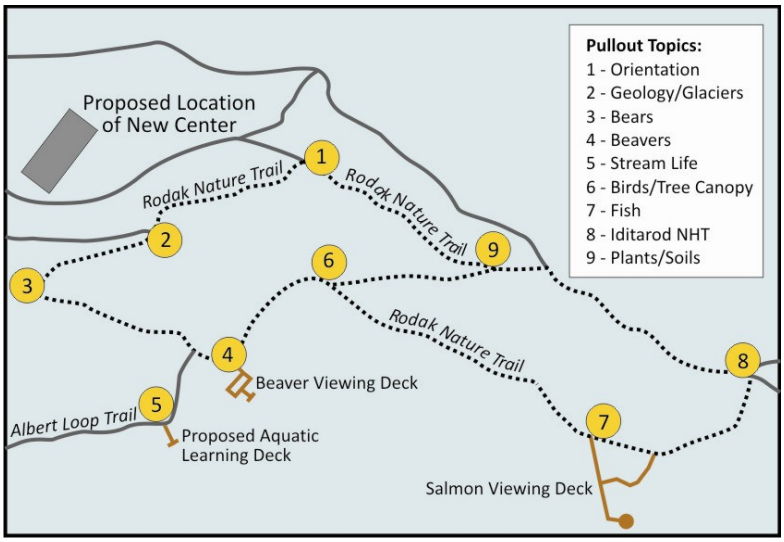


Figure 8. Proposed pullout locations and topics

Preliminary topics for the seven panels are: orientation, geology/glaciers, bears, beavers, steam life, birds/tree canopy, fish, Iditarod Trail, and plants/soils. The panels should be designed with eye-catching graphics and minimal text and be slightly smaller than the current size, but large enough so they can still be viewed by a group. If possible, a component just for

children should be included. For example, the bottom corner of the "birds" display could have a picture of a chickadee and say "Can you find the chickadee in the picture?"

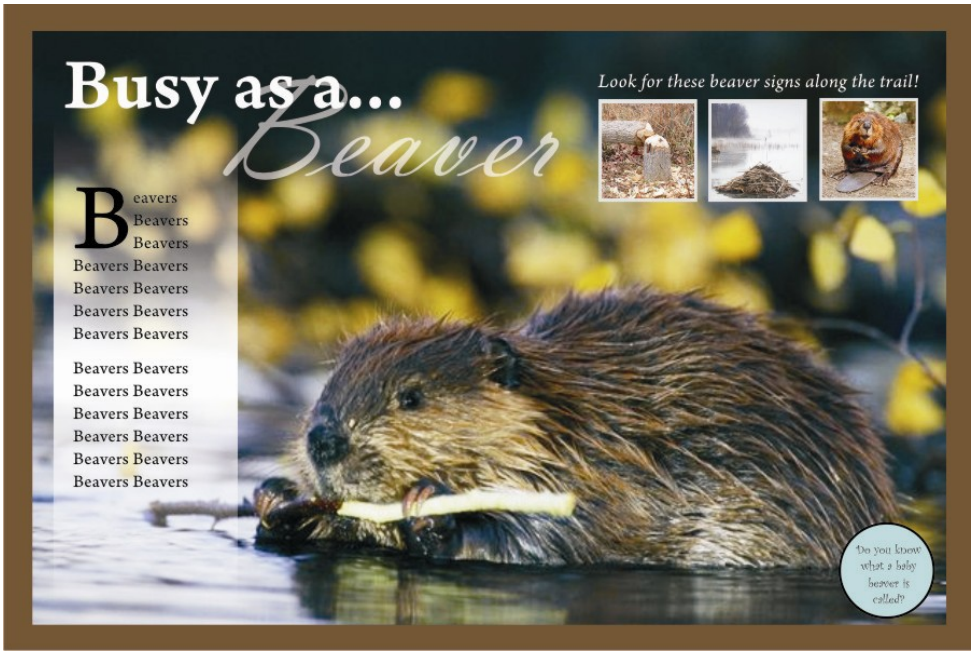


Figure 9. Sample concept for large-format panel. Images for concept only. Permissions not obtained.

Beaver Viewing Deck

The three modern interpretive panels located on the beaver viewing deck are appropriate for that site. If the deck is expanded, the panels should be reinstalled at an appropriate place on the deck.

Proposed Aquatic Learning Deck

If a new deck is built off of the Albert Loop Trail for the purpose of hands-on learning, consideration should be given toward the type of interpretive materials that would enhance the experience.

Small tactile panels could be installed on the deck that would introduce visitors to a selection of aquatic creatures that live in the wetlands. A damselfly, for example, could be displayed as a raised object and complemented by a fun interpretive message. The panels could be in the shape of a magnifying glass.

Figure 10. Sample concept for aquatic learning deck panel

Salmon Viewing Deck

Interpretive Panels

The salmon viewing deck offers expansive views of Eagle River Valley. The "Lifetime of Change" panel should be removed from the deck and replaced with small, individual salmon ID panels that have a tactile element or creative shape.

In addition to salmon ID panels, other topics could include mountain identification, stream life, and Dall's sheep. Consideration should be given to the number of panels so as not to clutter the deck.

Figure 11. Sample concept for salmon ID panels

Telescopes

Two telescopes would enhance the experience at the viewing deck by enabling visitors to scan the valley for wildlife and get a close-up view of natural features. There should be one standard telescope and one that complies with ADA standards.

Underwater Camera

An underwater camera could provide live video of salmon to those inside the visitor center. This dynamic feature would allow visitors a "salmon's eye" view of the pond and add a sense of movement to complement static displays. The video screen could be integrated into an interior exhibit on the salmon lifecycle.

Trailside Interpretive Panels

Trailside interpretation will benefit both independent travelers and organized groups, such as school field trips and public programs. Trailside interpretation should not be placed randomly or at set distances on the trail; rather there should be a specific purpose for the placement of a panel. Messages should be predetermined and then locations chosen that will best communicate that message. It is also important to consider that not every feature or viewshed needs a static interpretive panel. Information on these resources can be provided using other media, such as a self-guiding brochure, or shared personally by a naturalist.

Interpretation should be concentrated along the Rodak Nature Trail and near the nature center in order to provide the most accessible programming.

Primary Topics

Primary topics for trailside interpretation include: geology and glaciers, fish, animals (particularly beavers, moose, bears, and birds), the changing landscape, and plants and soils. Placement and topics of individual panels should directly relate to the environment and key features on that section of trail. For example, the section of trail between the "orientation" pullout and the "geology"

pullout should begin to introduce visitors to the concept of geology, glaciology and the changing landscape.

Design

Trailside interpretive panels should be tailored toward independent visitors; those visiting as part of a formal program will not likely have time to explore each panel. However, vivid graphics, tactile components and catchy titles and theme statements would still benefit visitors who are traveling the trail more quickly. These same types of elements would be attractive to both adult and youth audiences. These panels can offer a more detailed story than those presented on the "large-format" panels located at the group pullouts.

Read from Your Car

Signs alongside the entrance road could reveal the central theme or the geologic history of the area. Visitors would be able to read the signs from their car and it would set the stage for the visitor experience. The main objective of the signs would be to establish a sense of place for visitors and put the setting into perspective. The signs would also elicit excitement for the visit.

Figure 12. Example "read from car" sign. Image for concept only. Permission not obtained.

Other Interpretive Media

Sound elements for exhibits

Staff members at the nature center do not want the exhibits to be highly technical, but are interested in incorporating some electronic media into the new nature center. In order to balance visitor's desires for the type of experience they would like have, elements that involve sound should be paired with headphones or located in an area that would not be disruptive to other visitors.

Potential sound elements:

- Outdoor microphone placed in the bird feeding sanctuary that pipes natural sounds into the building
- "Sounds of the season" display that plays natural and animal sounds from different seasons. This element could be combined with a type of visual matching game for children.
- Exterior trailside display on birds could include a sound element for different songs and calls. Trailside exhibits with sound elements should be located away from major visitor areas, like the salmon viewing deck.

Mobile Media

Podcasts are recommended to highlight the center's interpretive themes. Visitors could download the podcasts and listen to them at home or bring them to the nature center to enhance their experience outdoors. Similar to the content that would be offered in the Rodak Nature Trail brochure, the podcasts could provide more detail and include the voices of the center's naturalists.

Another podcast could combine an exercise route with information about the trail. For example, a 20-minute podcast that has catchy music, prompts listeners to do certain actions (like walk quickly, pump their arms, and breathe deeply), and shares natural history information could guide them along the Rodak Nature Trail. A great example of this type of media is the Mississippi National River and Recreation Area's "Healthy River, Healthy You" podcast. The podcast is marketed to help you *"take steps toward building a healthier lifestyle and river by offering health and environment tips and fun river facts and history while you walk alongside the Mississippi River"* (http://www.nps.gov/miss/hrhy.htm).