

Chapter 6—Major Actions

Major Actions for North Campus

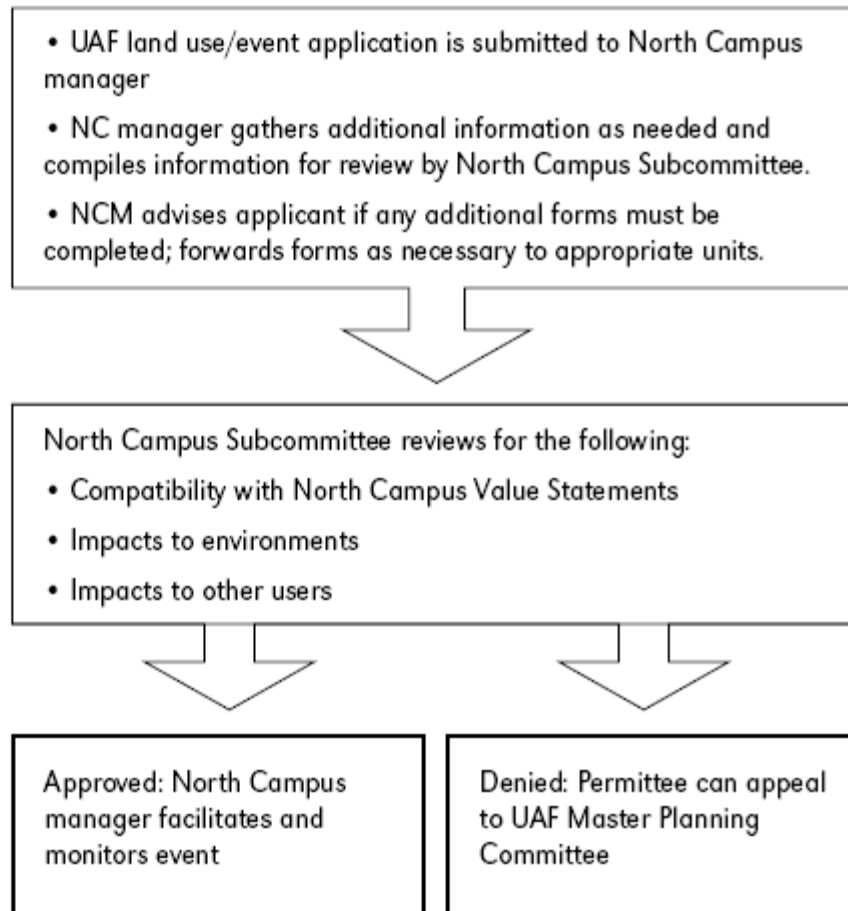
The following actions provide specific direction for meeting the broad management goals of the plan. Each action is described in this section, and a Guidelines and Implementation section follows.

Actions	Completion date
A1. Implement an effective management process.	Immediate
A2. Implement a permitting process for specific activities.	Immediate
A3. Develop and implement a system to monitor conditions, features, and uses	Ongoing
A4. Review and update existing plans for safety and security.	December 2004
A5. Develop and implement plans for areas of special concern.	May 2005
A6. Develop criteria for the design of Tanana Loop extension that pertain to issues of concern	December 2004
A7. Adopt and implement a wayfinding and signage plan	May 2005
A8. Remove abandoned infrastructure and restore original site features	August 2006
A9. Resolve trails designation and use issues	August 2005
A10. Adopt and implement standards for trail design and maintenance practices	May 2005
A11. Develop trail connections between main campus, North Campus, and surrounding areas	December 2004

A1. Action: Implement an effective management process.

The highest priority for the North Campus Plan is to establish a management process for the area to ensure that the vision, goals, and objectives of this plan and the UAF Campus Master Plan are achieved over time. This process must be flexible, responsive, and efficient while at the same time protecting university interests and providing for approved research, education, and recreation activities.

FIGURE 6.1—North Campus Permit Application Process



The catalyst for this process is a North Campus manager (NCM) position. Funding should be secured to hire a manager as a year-round staff employee who is the first point of contact for those wishing to use the area. An equally critical element of an effective management process for North Campus is the North Campus Subcommittee (NCS). It will continue as a standing MPC subcommittee to assist the MPC in fulfilling the goals of the UAF Campus Master Plan.

A2. Action: Implement a permitting process for specific activities.

A permit must be obtained for activities that meet certain criteria prior to using the lands on the North Campus. The plan distinguishes between passive (e.g., individual or small-group recreation, most educational activities) and active uses (e.g., organized research, large-group activities, and commercial uses). Passive uses generally do not require a permit, although faculty should notify the NCM about class use of the area. The permitting process is intended to provide better data on research, education, and recreational events that take place in the area. Additionally, it will provide better monitoring and protection of research areas and projects.

A3. Action: Maintain and update the database on existing conditions, features and uses.

The database is a reflection of existing conditions, features and uses of the North Campus. It is a management tool that must be continually updated and should reflect both short-and long-term changes. An example of a short-term change in use that will have to be updated regularly is current research. There are also long-term projects that would enhance the usefulness of the GIS database. Examples of such projects include continued

trail mapping, soil survey data, and a vegetation classification. This type of information will be of considerable value to all users.

A4. Action: Review and update existing plans for safety and security

All campus emergency plans should be reviewed by the UAF Fire and Police Departments, the Environmental Health and Safety Office, and Facilities Services to determine appropriate actions specific to North Campus. NCS will provide information on NC resources to facilitate this review. Items of particular concern will include fire response, routes for best access for rescue purposes, and possible hazardous materials locations.

A5. Action: Develop and implement plans for areas of special concern.

Five areas of special concern on North Campus have been identified: the former West Ridge Campground site, the Rifle Range, Smith Lake, Ballaine Lake, and the Arboretum. The specific concerns and suggested remedies pertaining to these areas appear in the Guidelines and Implementation chapter. The NCS will develop individual plans that solve problems associated with each of the areas.

A6. Action: Develop criteria for the design of Tanana Loop extension that pertain to issues of concern.

The CMP identifies the completion of Tanana Loop as a major action that is directly related to three of the five goals in the plan. The successful design of this roadway requires that many issues of concern be identified, verified, and prioritized for solution, including those related to the North Campus. Many issues were identified by the North Campus Subcommittee in the course of their work. However, these issues must be considered within the broad context of development of the campus as a whole and the increasing pressures of growth on West Ridge.

A7. Action: Adopt and implement a wayfinding and signage plan.

A wayfinding and signage plan (W/S) will guide and inform users of the North Campus, including current location, permitted uses, access, and general information. A comprehensive W/S system that provides needed information to the diverse users of the North Campus is needed.

A8. Action: Remove abandoned infrastructure and restore original site features.

As part of the permitting process, specific plans for removing infrastructure at the close of a project or activity will be required. Reclamation will also be required in order to stabilize and return an affected area to its original state. Abandoned infrastructure (equipment, materials, fences, etc.) from past projects that currently remains in the NC but is no longer used shall be removed, as it poses a safety hazard and detracts from the esthetic value of the NC. The NCM will be responsible for documenting abandoned infrastructure, contacting responsible units, and making arrangements for removal. Responsible units will bear the costs.

- At all NCA entry points, signs will be posted with North Campus Manager contact information, and notification of research permit and group use requirements.
- Access points will be limited in order to control access and funnel users through trailheads with adequate information.
- "Confidence" markers will be installed along trails, and at all trail junctions directional signs with maps and use restrictions will be posted.
- The signs will be in compliance with UAF sign guidelines.

- All naming activities (trails, ski huts, etc.) must follow UA Board of Regents Policy P05.12.08-Naming and Use of Campus Facilities.

A9. Action: Resolve trails designation and use issues.

The UAF Campus Master Plan directs the North Campus Subcommittee to develop a plan that promotes the UAF trail system as a valuable campus and community asset. The trail system, although an important component of research and education, primarily serves the recreational interests of the UAF community and provides recreational diversity for the Fairbanks area. However, the trail system and its uses must be compatible with the other uses that occur on the North Campus and the value statements of the North Campus.

The majority of the North Campus trails have confirmed uses, locations, and designations. The remainder of existing trails, both formal and informal, requires clear resolution regarding approved uses, locations and designations, as some may be unsuitable.

A10. Action: Adopt and implement trail design and maintenance standards and practices.

The UAF Master Plan calls for the promotion of the UAF trail system as a significant campus and community asset. To realize this goal, there must be trail design and maintenance standards that support the trail system and allow for future use while meeting the criteria set forth by the North Campus value statements.

A11. Action: Develop trail connections between main campus, North Campus, and surrounding areas.

Consistent with planning efforts and directives put forth in the Campus Master Plan, the Circulation and Parking Plan, and the Campus Landscape and Outdoor Art Plan, the NCS supports the development of trails that connect the main campus to the North Campus trail system, as well as to surrounding trails in the FNS Borough. These connections would be consistent with the value statements of the North Campus.

Guidelines and Implementation

This section of the plan provides specific guidelines pertaining to the research, education and recreation aspects of the North Campus, as well as specific implementation steps that support the actions outlined in the Major Actions chapter of the Plan.

Both short and long-term priorities have been identified. Some steps can be taken almost immediately and at little cost. Others require longer-term development and/or have budgetary impacts. For example, hiring a North Campus manager could be done relatively quickly; however, funding for the position has not yet been identified.

Regardless of the timeline necessary to implement the actions of the plan, the North Campus Plan is an integral part of the overall Campus Master Plan. It will bring improved organization, management and process to a very important part of the campus. It is anticipated that these actions, once implemented, will have the following consequences:

- Comprehensive and coordinated management will increase the benefits and quality of the experience to all users.
- No unchecked development will occur.
- Research needs will be better facilitated.
- Research will face more scrutiny with respect to infrastructure in the North Campus.

- Existing educational uses will be preserved, while evolving educational needs will be considered when evaluating future growth.
- Recreation opportunities will continue to be available at current levels, including the diversity of quality ski trails and supporting infrastructure.
- Multi-use trails may be improved.
- Although recreational use may increase, there may not be a corresponding increase in designated trails.
- Skiing will neither take priority over, nor compromise, other uses.
- Negative impacts to groomed ski trails will decrease with better management of access and improved communication among users.

Through the implementation of this plan, North Campus will truly become a multiuse area that provides opportunities for research, education and recreation.

A1. Action: Implement an effective management process.

1. Continue the functions of the North Campus Subcommittee

GUIDELINES:

The NCS will be involved in setting priorities for planning and management of North Campus lands. It will have primary responsibility for approving and monitoring routine activities affecting the area (e.g. routine trail maintenance, conducting resource inventories, etc.). In doing so, it will work in close coordination with the NCM and Facilities Services. It should continue to have a diverse membership representing research, education, and recreation interests and Facilities Services. The NCS should meet regularly (at least monthly) to discuss both routine and non-routine matters affecting North Campus. Management questions brought before the NCS that are not routine, that raise significant policy questions, or that are in conflict with the North Campus Plan or the Campus Master Plan will normally be elevated for MPC consideration and recommendations. Ultimately, it is the Chancellor who has authority to make management decisions not otherwise delegated.

IMPLEMENTATION:

1. Fill all vacancies on the NCS; add a representative from the Arboretum Committee
2. Complete implementation steps necessary to hire the NCM.
3. If funding for the NCM is not available, prioritize tasks outlined in position description (see Appendix J) and take necessary steps to accomplish actions through the NCS.
4. Make regular reports to the MPC regarding progress on implementation of the NC plan

2. Hire a North Campus manager (NCM)

GUIDELINES:

The North Campus manager will provide a vital function in serving as the first point of contact for all uses and activities in the area. The reporting structure will be determined by senior administration. The NCM will be a member of the Arboretum Committee, as well as an ex officio member of both the NCS and the MPC, where s/he will report regularly on North Campus matters.

IMPLEMENTATION:

1. Finalize position description (see Appendix J) and reporting structure
2. Secure funding for position
3. Obtain hiring authority; advertise, interview and hire individual to fill position

3. Continue direct involvement of Facilities Services in North Campus matters.

GUIDELINES:

The third essential element of the North Campus management process involves Facilities Services (FS). FS staff, primarily Grounds, must be actively involved in NC decisions, both through membership on the NCS and direct consultation with the NCM. With guidance from the NCS, FS must approve and supervise all maintenance and construction, including volunteer labor activities. FS has the responsibility to ensure that safety, risk management and compliance requirements, and proper design and construction standards, are satisfied.

Conversely, FS will not initiate activities on NC without notifying the NCM. For example, major improvements to any existing infrastructure will require review and approval by the NCM/NCS. Exceptions are routine maintenance and/or immediate safety situations.

IMPLEMENTATION:

1. Work with Facilities Services to finalize trail design and maintenance standards and practices
2. Coordinate wayfinding and signage design and installation with Facilities Services
3. Facilities Services representative signs off on all maintenance and construction activities for which a permit is required
4. All volunteer work on NC lands involving maintenance and/or construction must be supervised by Facilities Services
5. NCM meet regularly with the Grounds staff of Facilities Services to review NC activities progress

A2. Action: Implement a permitting process for specific activities.

1. Modify and implement the UAF land use authorization/event application process for North Campus activities

GUIDELINES:

In order to streamline the processing of permit applications for use of the North Campus lands, there will be one point of entry: the North Campus manager. Any individual or group wishing to use the lands must file a permit application (see Appendix K) with the NCM for activities such as research projects, large group activities, classes, etc. All research, education and recreation proposals must be examined to ensure that they do not conflict with the stated values and mission of the NC. Another reason for the permits is to ensure that non-sponsored users carry required insurance, will indemnify the university and, in most cases pay a fee to execute the permits. This includes events that have been held in the past. Failure to submit a permit application and obtain approval for using NC lands will result in termination of the project or activity.

The NCM will be responsible for doing the initial evaluation of all permit applications for North Campus, and will determine whether or not additional paperwork must be filed to meet university requirements, particularly in the case of groups not directly associated with the University. The NCM will assist all applicants in filing the necessary paperwork. As use of the North Campus continues to increase, it will be important to ensure that permitted activities do not occur over an existing research plot. In order to provide this protection for research,

it is critical for NC management to know where research is located and the duration of the projects. At the same time, it is important for the NCS to evaluate research proposals to ensure they are compatible with the North Campus values. As part of the process, any permit requests denied by the NCS can be appealed to the MPC.

Applications for land use and events proposed for identified management areas (e.g., Mini-Track, CIGO site, Biological Reserve, Rifle Range, Arboretum), which have their own management structures and restricted access, shall also begin with the NCM. However, the NCM will forward a copy of the proposal to the appropriate chief administrative officer (e.g. Institute Director or Dean). The officer will then review the application and provide her/his recommendations to the NCM.

If additional land use approvals are required, the NCM will advise the applicant and assist with completion.

IMPLEMENTATION:

1. Finalize the draft permit application (see Appendix H)
2. Disseminate information regarding the permitting process to current users, as well as through general campus information channels
3. Inform current users that all currently allowed uses will be continued; however, expansion in use will be subject to review by the NCS and NCM.
4. Provide assistance to applicants with paperwork required by permitting process
5. List approved permits on NC web site; update database accordingly

2. Evaluate all permit applications based upon the specifications set forth in the North Campus plan.

GUIDELINES:

Projects and activities on NC lands are evaluated based upon whether they are passive or active. Passive uses do not require any permit. Active uses require a permit, which is processed through the NCM.

Passive uses include individual and small-group recreation (e.g. walking, running, skiing, picnicking), most educational activities, or non-consumptive uses involving small groups. Fishing in Ballaine Lake is also considered a passive use when consistent with applicable regulations. These uses do not require any permit or formal notification to the NCM. Small, formally organized groups (for example, school groups) are encouraged to inform the NCM in advance about their intended uses and needs. However, the NCM, in consultation with the NCS, has the authority to require a permit, regardless of group size, depending upon the nature of the activity.

Active uses involve any organized research, commercial activities, consumptive use of resources (other than fishing in Ballaine Lake), creation or modification of infrastructure (e.g., roads, buildings, trails), significant modification of land resources, and organized events or group activities involving larger groups (normally 30 people or more), whether or not university-affiliated. These require notifying the NCM and securing a permit.

For active uses, the NCM will conduct the preliminary evaluation of the permit application. The NCM will review the permit application expeditiously, consistent with guidelines established by the NCS. The permit may stipulate limitations on uses, including but not limited to timing, location, impacts on other uses or resources, and requirements for insurance, cleanup and reclamation. For larger or more detailed applications, the NCM may require that the applicant make a presentation to the NCS.

As part of the permitting process, any permit application denied by the NCM or NCS may be appealed to the MPC and ultimately to the Chancellor.

Existing research projects may continue, assuming that a reclamation agreement is signed and the project meets NC access and management guidelines. If an existing project conflicts with these guidelines, the NCM will work with the PI to bring the project into compliance, if possible. Permission to start new projects may be dependent on satisfactory cleanup and/or reclamation of prior research projects sponsored by the same schools or institutes.

IMPLEMENTATION:

1. Evaluate the amount of required infrastructure and environmental manipulation for the proposed project or activity
2. Check all research proposals to: a.) ensure that there is not an existing project or that educational users are not displaced in the area; b.) identify incompatible infrastructure; c.) ensure a plan for removal of all equipment and infrastructure at the completion of the project
3. Ensure protection of research projects by locating away from existing trails when feasible, concealing to reduce vandalism and visual impact to other users, or fencing (as a last resort)
4. Review existing research projects to determine whether or not a reclamation agreement is in place. If not, contact the PI and get an agreement signed and on file
5. Continue to accommodate special events such as the Equinox Marathon, cross country and Nordic ski races, UAF Trails Day, BLM Outdoor Days, and other educational events originating with community and school groups.
6. If a project requires power, it should be located in the areas where power is currently present, unless it can be demonstrated that this condition poses an insurmountable obstacle to a project deemed important to UAF.

3. Promote the permit system.

GUIDELINES:

Although some aspects of the permitting system are currently in place, it is not widely adhered to by North Campus users. It is essential that the permitting system become widely understood and used. Promotion of this system will be critical.

IMPLEMENTATION:

1. Post flyers at trailheads indicating that the permit is required for research, education and recreation, the latter two for large-group activities.
2. Distribute information regarding the purpose of the permitting process
3. Actively promote the permit process among past users.

4. Expedite the permitting and approval process in order to make it as efficient as possible.

GUIDELINES:

In order for the system to work, the application process must be simple and quick, and applications must be processed with expediency. With one entry point for all activities on NC, the system will be relatively uncomplicated. However, processing of applications must occur quickly so that users gain confidence in the system and do not try to circumvent it. The amount of time for review will depend on the complexity of the proposal.

IMPLEMENTATION:

1. Set a schedule for permit application submission and review. Make the schedule available to a wide audience, including web postings.

2. If additional information is required of an applicant, request it as soon as possible, in writing.
3. Advise the applicant of approval or denial of the application immediately.
4. All appeals will be forwarded to the MPC for immediate consideration by the Executive Committee. The MPC will be informed of the appeal and, if the complexity of the proposal merits, will be considered by the entire body.

A3. Action: Develop and implement a system to monitor conditions, features, and uses

GUIDELINES:

A monitoring system is required to ensure that the recommendations of the plan are met. The monitoring system will compare current conditions to desired conditions. The GIS database that has been developed will provide a key component in the monitoring of the conditions of the NC. Monitoring of conditions will be one of the primary responsibilities of the North Campus manager.

IMPLEMENTATION:

1. Monitor the following related to NC use:

- The number and width of trails developed to access research sites
- Total number of research projects and size of new research infrastructure
- Number and types of university classes that use the NC
- Areas used for education
- Increase or decrease in trails (including new or expanded) related to all NC activities
- Width of the trails, as measured on average trunk to trunk
- Amount of disturbed ground cover on trails, as measured by instances within a given trail mile
- Evidence of change to permafrost conditions (melting, heaving, etc.)
- Incidences of reported conflicts between education, recreation and research

2. Maintain and update the Geographic Information System (GIS) database that has been developed.

GUIDELINES:

The following information is currently contained in the existing GIS database:

- Research: location, size/shape of site, type, timeframe, PI
- Education: location, size of area, class, instructor for areas used for education
- Roads: location, length, name, right-of-way for AK Department of Transportation roads
- Trails: location, length, width, seasonal uses, surfacing, grading
- Arboretum: location, size of area, vegetation classification, Multi-band aerial image circa 1978, aerial image circa

1948

- Trailheads: locations
- Gates: locations
- Fences: locations, lengths
- Digital Elevation Models
- Visual bands aerial image, circa 2002

The main trails and roads are mapped, as are some of the user trails; however, many user trails remain unmapped. A multi-spectral image of the North Campus should be acquired to aid in the management of and planning for scientific research on North Campus. The multi-spectral image can be used for classification of vegetation communities. This process will be greatly facilitated by the existing vegetation classification done on the Arboretum that can be used for highly accurate training areas. The Natural Resources Conservation Service (NRCS) has completed the fieldwork for the Fairbanks Soil Survey. The data are currently being digitized..

IMPLEMENTATION:

1. The NCM will have primary responsibility for the tasks associated with maintaining and updating the database
2. Obtain a multi-spectral image of the North Campus
3. Incorporate digitized files from the Alaska NRCS ftp site and incorporate into the database
4. Document the formal boundaries of the Smith Lake buffer zone

A4. Action: Review and update existing plans for safety and security.

GUIDELINES:

Safety and security actions specific to the North Campus must be part of existing plans. All plans should clearly identify the potential problem (fire, personal injury, assault, etc.) and appropriate responses.

IMPLEMENTATION:

1. Identify and compile all documents that are concerned with issues of safety and security on North Campus. Of particular importance are:
 - The response plan for fires in the North Campus
 - Routes to access areas of the North Campus for rescue purposes
 - Hazardous materials that may exist in the North Campus
2. Work with the UAF Police, Fire, and Environmental Health and Safety Departments to identify issues of concern for the North Campus that are not covered in the aforementioned documents.
3. Post safety and security information at appropriate locations throughout North Campus as part of the Wayfinding and Signage Plan.

A5. Action: Develop and implement plans for areas of special concern.

1. Develop and implement a plan for the ridge top area (previous campground) of West Ridge

GUIDELINES:

The area formerly known as the West Ridge Campground requires consideration for best use. Given its proximity to the Georgeson Botanical Garden and the Arboretum, as well as other current uses, there may be ways to enhance the ridge top area that will be of benefit to all users. The NCS shall review current and past uses of the area and develop potential strategies for improvement, which may include no formalized use of the area.

IMPLEMENTATION:

1. Identify all potential stakeholders and issues associated with the ridge top area
2. Form an ad hoc working group with wide stakeholder involvement to review and evaluate all uses of the area (past, current and potential); develop a plan for the area if appropriate that will be mutually agreeable, and include control of access, prevention of vandalism to research, safety concerns, and minimize environmental effects to the area.
3. Identify funding sources to implement the plan for the area.

2. Investigate the feasibility of re-establishing a campground on campus

GUIDELINES:

Interest has been expressed in reopening the West Ridge Campground. Although the NCS recommends against re-opening the West Ridge campground due to concerns over safety, impacts to the land, and vandalism to research, it acknowledges that there are other pertinent issues relevant to the use of this ridge top area (see Step 1. above). If it can be documented that a campground on campus is a legitimate need, the NCS should investigate possibilities for North Campus or elsewhere.

IMPLEMENTATION:

1. Document the history associated with the creation of the campground, particularly the involvement of the Alumni Association and ASUAF; make a recommendation regarding outstanding issues surrounding the previous operation;
2. NCM will conduct a study to determine if there is a legitimate need for a campground on campus. If there is, identify a user group to determine the appropriate scope of operations, including management, and potential locations, either on North Campus or elsewhere on campus
3. As part of the evaluation of the ridge top area, include consideration of a campground

3. Develop and implement a plan for the Rifle Range

GUIDELINES:

The rifle range is a unique education facility on the UAF campus and a valuable facility for the UAF Athletics and Recreation Department. Concerns have been raised over the facility's present conditions and whether it is actually used to its full potential. The NCS shall develop a plan if continuation of the rifle range is deemed appropriate.

IMPLEMENTATION:

1. Determine actual uses and frequency, both by the university and the community;
2. Assess the range for safety as well as noise; this should be done in collaboration with the UAF Athletics and Recreation Department and Facilities Services;
3. If documented usage indicates a clear need for the range, form an ad hoc working group with appropriate stakeholders, and develop a plan for its continued use and improvement. Include noise mitigation measures, controlled access, and specific hours when the rifle range can be used.
4. Identify funding sources to implement the plan for the area.
5. All requests for use will be processed by the NCM.

4. Develop and implement a plan for Smith Lake access

GUIDELINES:

Smith Lake is a unique area of North Campus. In 1950, the Board of Regents created a 100-yard "park" around the lake. There are legitimate concerns about the various access points to the lake, as well as the park designation itself.

Access to Smith Lake has been an ongoing issue for many years. Specific concerns related to the parking situation on Sheep Creek Road have been raised by the Alaska Department of Transportation. Although access is more of an issue during the winter months when Smith Lake provides early season skiing, as well as a flat area for beginners and children, to date there has been no effective solution to the Smith Lake access issue. The NCS shall develop an access plan for Smith Lake.

IMPLEMENTATION:

1. Review all pertinent documents related to Smith Lake and the specific designation of a "park" that may have implications for access. Revisit the designation to determine its applicability to the current plan.
2. Formally identify the actual 100-yard buffer zone boundaries around Smith Lake.
3. Consider the following restrictions on all trails within the hundred-yard buffer, if it is retained:
 - a. The trail connecting the south side of Smith Lake to the Potato Field can be no wider than 30 ft. measured from tree to tree.
 - b. The trail connecting the northwest side of Smith Lake to the T-Field Road can be no wider than 30 ft. measured from tree to tree.
 - c. The trail connecting the east end of Smith Lake to the T-Field Road can be no wider than 15 ft. measured from tree to tree.
 - d. The remainder of the trails will be no wider than 5 ft. measured tree to tree.
4. Identify both current and desired uses for the area. Major access from Sheep Creek Road at the existing trail to the lake should not be encouraged.
5. Review plan status for both the realignment of the Alaska Railroad and the Miller Hill Bike Path and how either or both could impact access to Smith Lake.
6. If there are no legal impediments to the use of Smith Lake, a plan for safe access and minimal impact from some point along Sheep Creek Road shall be developed. Elements of the plan would include:
 - a. Parking should be limited in size, so as to not become a surrogate access point for other trailheads, such as Ballaine Lake, the Ski Hut, and Musk Ox Farm.
 - b. Ideally, parking should be north of West Tanana Loop/ Sheep Creek Road so users do not have to cross the road to

access the NCA; however, encroachment into the NCA is strongly discouraged. A preferable alternative is rerouting the road to the south, allowing parking on the campus side of the road.

c. The North Campus Subcommittee should be highly involved with any planning process and subsequent decisions made regarding parking along West Tanana Drive which will affect the NCA.

d. Converting the intersection of the West Tanana Drive, Sheep Creek Cutoff, and Sheep Creek Road into a three-way stop should be investigated.

7. Identify funding sources to implement the plan.

4. Develop and implement a plan for Ballaine Lake

GUIDELINES:

Ballaine Lake poses a special subset of management concerns. The lake is easily accessible from Farmer's Loop Road, is stocked with fish by ADF&G, and receives heavy use. Because of the heavy use there continue to be strong concerns about bank erosion, litter, and human waste. Issues to consider include:

a. Effective management strategies with increased use

b. Should additional infrastructure be installed at the site (waste containers and portable toilets)?

c. Bank erosion should be monitored and mitigation steps taken if needed. Mitigation steps might include boardwalks or temporarily closing certain sections of the bank to use.

d. Management signs are needed (such as "please keep this area clean", "stay on designated trails," etc.).

IMPLEMENTATION:

1. Conduct a review of Ballaine Lake uses and current management with representation from all stakeholder groups

2. Identify funding sources to support management of Ballaine Lake

3. Implement recommendations of management study.

5. Coordinate with the Arboretum Committee on all matters pertaining to the Arboretum

GUIDELINES:

The Arboretum was established primarily for research and education. There should be no significant expansion of trails in this area. Although the Arboretum is under the direction of the Arboretum Committee, all uses of the area must comply with the NC Plan. Since it comprises a significant portion of the NC (approximately 300 acres), it is imperative that the NCS and the NCM coordinate management efforts with the Arboretum Committee. The NCM is the first point of contact for all permit applications relating to the Arboretum. The Arboretum Committee will review and act on all such applications.

IMPLEMENTATION:

1. Appoint a member of the Arboretum Committee to serve on the NCS.

2. The NCM will serve on the Arboretum Committee

3. The NCM will review all permit applications involving the Arboretum and forward them to the Arboretum Committee for action.

A6. Action: Insure that the design of Tanana Loop extension addresses issues of concern.

GUIDELINES:

Until the Tanana Loop extension design is completed, there is no way to know exactly where and what the impacts of this roadway will be on North Campus. Based on preliminary designs, however, there are anticipated impacts which must be considered prior to design work. Although potential impacts have been identified during the NC planning process, these impacts must be further scrutinized. It will be essential that the NCM and the NCS lead a process that clearly identifies, from the list of recommendations, those issues that are insignificant and possible "red herrings;" those that can be easily mitigated, say through planned relocation, and those that present significant difficulties and require substantial funding or other resources to solve. Issues discussed herein have not been fully reviewed yet to determine their relative merit.

When design work does commence on the road, there should be at least one representative from both the NCS and the MPC on the user group.

The most significant potential impacts of the proposed Tanana Loop extension are:

- . long-term research plots, as well as some storage and instrumentation buildings, may require relocation
- . increased lights and noise could significantly compromise wildlife research
- . new security measures may be required as accessibility increases
- . trail alignments and access may be impacted and require relocation

Based upon the information that is currently available regarding the potential alignment of Tanana Loop, the following recommendations for its design include:

General:

- a. As part of the project, include funding for relocation of trails, critical trailheads, trail access points, warm up huts, research projects and other impacted structures used for research, education and recreation.
- b. If possible, align the road so that it stays within the existing cleared area as much as possible. In all likelihood, soil conditions will dictate much of the alignment as well as circulation and increasing parking demands on West Ridge. Minimizing encroachment into North Campus, however, is in accordance with Value Statement 1 and contributes to the overall well-being of UAF faculty, staff and students.
- c. Design the road and include crossings to ensure safe and convenient access to the North Campus. Every effort should be made to include tunnels or bridges to accommodate all research, education, and recreation users, minimize at grade road crossings for public safety, and promote the idea that the North Campus is, indeed, part of campus. During the summer months gates can be installed to prevent vehicles from entering the trail system, with the gates open in winter so grooming equipment can pass.
- d. Visitor parking needs to be provided convenient to the trailhead. The possibility of a central parking area, trail access, and beginner's ski area on the land NE of the museum and south of the proposed Tanana Loop extension should be explored. This could be adjacent to, and coordinated with the proposed UA Museum/NSF open space. Plans for this open space should allow for North Campus trail access in case this is necessitated by construction of Tanana Loop.

Research:

Current research areas and associated issues with the roadway include:

There are 17 documented research sites within 200 meters of the proposed road alignment. The IAB Biological Reserve, including the paper birch tree grove and its transition into spruce forest north of the ski trail behind the Irving and O'Neill Buildings, is an environmental resource for research and education. The Reserve is unique and irreplaceable on the UAF campus in terms of accessibility by students and researchers and as habitat rich in diversity of plants and animals but reclusive and undisturbed enough for study. It contains a

variety of animal holding facilities, and observatories. The Biological Reserve has been used since the 1960s for physiological and ecological studies. Several long-term research plots may not be re-locatable. Current and proposed research investment in this area includes \$15M in programs.

The close location of the Biological Reserve to Irving Building allows for research instrumentation connections between field site and labs, access to power and water, access to labs and lab equipment, and better security than more remote sites. Research sites used for animal research require oversight and inspection by federal agencies and/or their representatives at UAF. Any relocation of animal research will require compliance with federal animal health regulations.

The GI storage areas may have to be relocated, as well as the College International Geophysical Observatory Data Interface Analysis shed.

Recommendations:

- a. Minimize, as much as possible, impacts on long-term research areas.
- b. Evaluate existing research projects and facilities to determine feasibility of relocation, including designation of alternative research sites.

Education:

The NCA is a major teaching resource for UAF and the Fairbanks community. The trails just north of GI, O'Neill and Irving as well as the ski hut trailhead are the major access routes for biology, natural resources, oceanography and other UAF science classes. Additionally the IAB Biological Reserve and the area just northwest of the ski hut are used for instructional activities in several Biology & Wildlife classes (e.g., ecology and animal behavior). The proposed Tanana Loop extension could possibly eliminate the white birch stand (north of the Irving Building) annually studied by ecology students and may also require relocation of animal holding facilities that are used by classes studying hibernation and other animal adaptations to the cold. The trailhead (ski hut area) and nearby overlook parking area is the principal staging area for K-12 school activities in the North Campus area. The Borough-wide Outdoor Days, in which more than 900 school children participate in science-related activities, is centered in the woodlands immediately west to northwest of the existing Tanana Loop.

Recommendations:

- a. Road alignment designs will need to ensure convenient and safe access to the NC for students and instructors.
- b. If possible, the road should be designed to avoid relocation of animal holding facilities in the Biological Reserve.
- c. Road alignment designs should provide for parking and a staging area for larger school groups (K-12) that use the NCA for science activities.

Recreation:

The area north of the West Ridge buildings contains major access points to the North Campus area from the main recreational trailhead to a portion of the historic Skarland trail that parallels the existing parking area. The trailhead, in particular, is used heavily by UAF, school groups, the community and visitors for personal as well as group recreational activities. Local high schools, in particular, use this area for competitive cross country running and ski events, and the extension would bisect a portion of the Equinox Marathon trail. The existing ski hut and main trailhead to North Campus could be displaced by the proposed Tanana Loop extension. If relocated, the new site could be significantly improved over the current location if it included

enough space to accommodate buses for school events and a large staging area for races.

A portion of the Skarland trail could perhaps be eliminated or isolated. The Memorandum of Understanding with the FNS Borough states that UAF will make every attempt to preserve this trail since it is also part of the Borough trail system; however, UAF does reserve the right to relocate the trail. This portion of the trail system also includes the major access points to North Campus trails systems. The proposed Tanana Loop extension would require relocation of the trail. Without relocation, 0.4 miles of existing trail will be isolated from the rest of the trail system, and 0.4 miles of trail would have to be eliminated. Trail relocation will, in turn, impact the Biological Reserve Research area and other storage areas.

Recommendations:

- a. Multi-use trails lost due to the construction should be relocated, especially the historic Skarland Trail. For every kilometer of lighted trail lost a new section of trail should have lights installed.
- b. The 6-Mile Trail should be continuous. The width needs to be 15 feet to accommodate skate skiing and classic skiing.
- c. A vegetation barrier should be left between the new road/bike path and the trail system. This helps to keep vehicles off the trail, reduces noise, provides a buffer for research projects and education programs, and helps maintain the natural setting.
- d. The trails should be aesthetically pleasing with gentle meandering curves. Avoid long straight sections close to the road.
- e. If wet ground is crossed, chip trail or other appropriate coverings should be installed to facilitate use in the summer.
- f. The location of the ski hut should have good visibility from a campus building to prevent vandalism.
- g. All-season vehicle access to the ski hut needs to be provided.
- h. A wide area with gentle grades needs to be provided near the ski hut. The area can double as a starting zone for running and ski races. For a race start the widest part of the trail needs to be at the start line. The trail should continue at full width for 100 yards, after which it can slowly narrow in width with no constrictions.
- i. Possible trail connections between the proposed UA Museum of the North/NSF open space and the North Campus must be factored into both the design of Tanana Loop and the proposed Troth Yeddha' Park, as well as trail connections between core campus and North Campus.

IMPLEMENTATION:

1. Catalog all anticipated impacts of Tanana Loop completion. For each impact, a specific reference to a research project, infrastructure, educational program, event, etc. must be made.
2. On a case-by-case basis, examine each impact identified in 1. and clearly identify whether it is: an insignificant issue; an activity that could be relocated to another area on North Campus or elsewhere on main campus; an activity that cannot be terminated or relocated and will require significant planning and resources to tackle.
3. Through the MPC, make recommendations to the Chancellor for consideration of Tanana Loop issues in the design process.
4. Have representation on the Tanana Loop user group; NCM should attend as an ex officio member

A7. Action: Adopt and implement a wayfinding and signage plan

GUIDELINES:

Wayfinding and signage are critical to the North Campus. Of primary importance is marking trails for safety and directional purposes. Users need to know where they are at all critical juncture points. Posting information pertinent to trail use is also important, including approved and unapproved uses of particular trails.

IMPLEMENTATION:

1. Post signs at all NC entry points with NCM contact information, and notification of research permit and group use requirements.
2. Limit access points in order to control access and funnel users through trailheads with adequate information.
3. Install "confidence" markers along trails, and at all trail junctions post directional signs with maps and use restrictions.
4. All signs will be in compliance with UAF sign guidelines.
5. All naming activities (trails, ski huts, etc.) must follow UA policies and practices. All existing names on NC that have not been formally approved must go through this process.

A8. Action: Remove abandoned infrastructure and restore original site features

GUIDELINES:

NC values are maintained by restoring lands to near-original conditions when developed land uses have ended.

All structures and equipment from projects or activities must be removed within a reasonable time from the end date of the project. A "reasonable time" will be defined by the complexity of the equipment removal, the time of year in which the project ends, and potential for project renewal. Responsibility and funding for removal must be identified in advance as part of the approval process. Each project must be directly affiliated with, and under the responsibility of, a UAF school, institute, or department and must file appropriate permit applications. This is also applicable to any non-affiliated organizations. The reclamation process, including possible reestablishment of natural vegetation, needs to be a best effort as determined by the NCS.

New or expanded structures or equipment will be subject to the permitting process described in A2.

IMPLEMENTATION:

1. Review the database to determine how many existing projects have signed reclamation agreements on file; draw up agreements for those that are not on file and get them signed
2. Develop a schedule for project reclamation. Where old projects are identified but the responsible unit is unknown, work with Facilities Services to reclaim the area.
3. Conduct periodic on-site review of all research sites to identify any existing or potential problems; notify primary investigators whose projects are scheduled for completion for details of clean up plan, including removal of all equipment.
4. Review all proposals that require new or expanded structures or equipment, or significant land use.

A9. Action: Resolve trails designation and use issues

GUIDELINES:

This document supersedes all previous trails plans, including the earlier UAF Skarland Trails Management Plan that was never formally approved. However, numerous trail issues still require resolution pertaining to designation and/or use. Two examples are the connector trail behind the ASF antenna and the T-Field trail. There is also a network of informal trails that is not necessarily disputed but has developed over time, often for no other reason than being the shortest route between two points. Some of these trails may result in unnecessary degradation of the land and could be eliminated.

For approved trails, the following apply:

- a. On designated, groomed ski trails: dogs, walkers and wheeled vehicles are not allowed in winter.
- b. Trails within the Arboretum will not be widened (i.e., the average width as measured trunk to trunk will not increase over current conditions nor will extensive brushing be allowed).
- c. The T-Field road should be improved to accommodate wheeled vehicle use during the wet times of the year
- d. Access to research plots during winter should be limited to snowmachine or non-motorized means only; no heavy, wheeled vehicles are permitted in wet areas during the rest of the year.

Research sites need to be accessed in a means appropriate for the management regime of the trails and roads involved.

The NCS suggests that, if needed, a snow machine is available for accessing research plots in winter (researchers can coordinate with the NCM). When required, access that negatively impacts ski trail grooming or wet areas should be coordinated with the manager so that corrective work can occur. It should be noted that recreational snowmachine use is not allowed in any areas of campus.

IMPLEMENTATION:

1. NCM, in conjunction with NCS, identifies locations and issues surrounding all disputed trails and roads.
2. NCS brings together all stakeholders of disputed trails and roads to discuss issues and determine designations and uses.
3. The NCM identifies the locations and issues surrounding the informal trail network. The NCS will evaluate the informal trail network and determine which trails will be eliminated or receive formal designation and approval. Some issues for consideration include:
 - a. The feasibility of a multi-use corridor, which can be used for non-motorized commuting from West Ridge to Yankovich Rd. should be explored.
 - b. College International Geophysical Observatory site has specified buffer zones in which new trails cannot be developed. This must be considered when examining a route for such a commuting corridor.
 - c. If an informal trail is eliminated, it should be returned to its original state.
4. Consider increasing the number of groomed winter walking trails.
5. Continually update the official trail map to reflect any trail changes

A10. Action: Adopt and implement standards for trail design and maintenance practices

GUIDELINES:

In order to establish consistency with regards to trails throughout campus, design standards are essential. With the exception of the current trail conditions that are set out in Appendix I of this plan, formal trail design standards have never been developed. One design feature that must be finalized is the issue of expanded lighting. Due to the potential for negative effects on research, increased lighting is not planned at this time. The most often cited areas for expanding the lights are the T-Field road, followed by the Midnight Express and Big Whizzy loops. Another design issue that must be investigated is how the 1990 ADA standards relate to the NC trail system.

Trail maintenance issues have also been identified, e.g., areas of bare ground, persistently wet trails, trail width, etc. However, maintenance standards must be developed as well before these issues can be solved in a systematic and consistent manner. Another issue associated with trail maintenance is the long tradition of volunteerism associated with the NC. Again, guidelines pertaining to the use of volunteers on NC lands must be developed.

IMPLEMENTATION:

1. The NCS will develop standards for trail design and maintenance practices based on the current trail features as identified in Appendix L, and the draft design and maintenance standards in Appendix M. These standards shall be submitted for review and approval to the MPC, for recommendation to the Chancellor.
2. The NCM will develop an inventory of resource experts to assist in the development of trail design and maintenance standards, as well as provide guidance on future issues related to implementation of such.
3. Determine if ADA compliance is required on NC.
4. Identify all individual volunteers and organizations that have provided services on NC. Include a plan in the design and maintenance standards and practices for the continued use of volunteers that speaks to issues of liability, supervision, and training.

A11. Action: Develop trail connections between main campus, North Campus, and surrounding areas

GUIDELINES:

Although the NCS has identified potential trail locations (see Appendix N), a strategy is needed for linking trails on main campus to those on North Campus and surrounding areas. Given that this is primarily a circulation issue, it is appropriate that the Circulation and Parking Subcommittee (CPS) be designated by the MPC as the lead in this effort. The strategy must be developed in concert with the NCS and consider both existing and future plans for campus and surrounding areas.

Of particular interest will be the proposed development of a bike path along Miller Hill and Yankovich roads, to the west and north respectively. This could have significant impact on the western boundary of North Campus but will be of benefit to the campus and Fairbanks community. NCS must be involved in the planning efforts for this path, which will be funded through the State of Alaska.

IMPLEMENTATION:

1. The MPC will direct the CPS to develop a trail strategy to link Lower Campus, West Ridge, and North Campus, as well as other surrounding trails off campus. The NCM and NCS will be directed to assist in this undertaking. Input from the campus community is essential during the planning process.
2. Identify funding sources for implementing the campus wide trail strategy.