

BEST USE STUDY
FOR THE WESTERN PART OF THE
CITY OF KIMBERLEY

Prepared for the City of Kimberley

By the Regional District of East Kootenay - Planning Department

INTRODUCTION

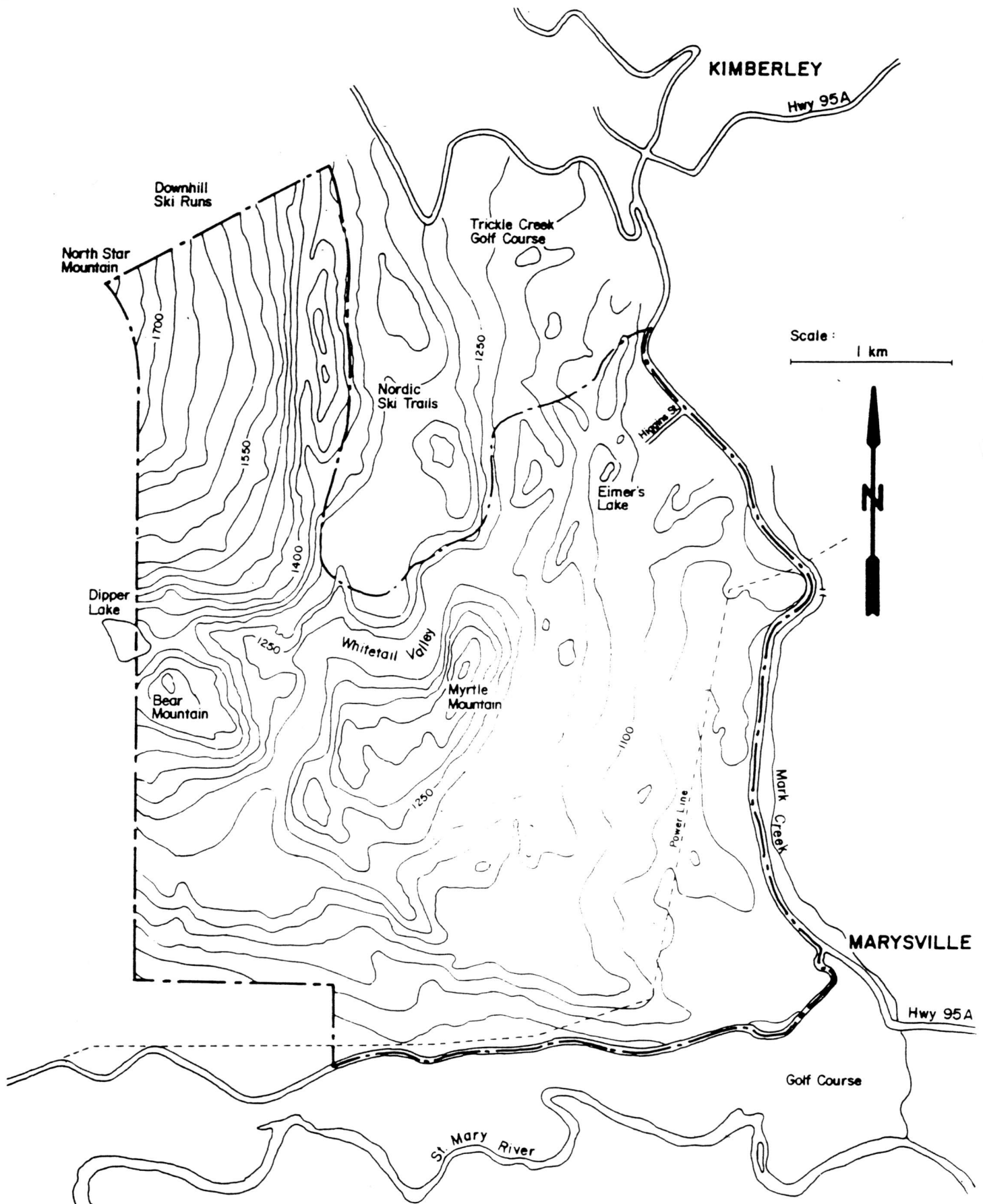
Late in 1990, the City of Kimberley requested the Regional District to carry out a study to determine the best use for a large area of undeveloped land within its westerly boundaries. The study area contains about 1736 hectares (17 square kilometres or 4290 acres), and is located south of Trickle Creek Golf Course, north of St. Mary's Lake Road, and west of Highway 95A. The study area boundaries are shown on Figure 1.

The need for the study was determined by future land use considerations resulting from the pending sale of the ski hill and recently developed Trickle Creek Golf Course. Terms of reference were finalized and a contractual agreement was executed in July, 1991. The terms of reference for the study are attached as Appendix "A".

Phase I of this study consisted of walking the study area and examining information relating to ownership, zoning, and Official Community Plan designations. The Canada Land Inventory Land Capability was also reviewed and a slope analysis was carried out.

The second and final phase of the study consisted of a review of existing studies and Council policies, and a meeting with representatives of groups who currently use the study area.

A preliminary report, marking the completion of the first phase of the study, was prepared and presented to Council on September 30, 1991. A brief synopsis is provided under Phase I of this report.



CITY OF KIMBERLEY BEST USE STUDY, 1991
STUDY AREA BOUNDARIES

PHASE I

OWNERSHIP:

Ownership information is presented in Figure 2. About 40% of the land is owned by Cominco. This is located primarily south of the Nordic ski trails and in the eastern portion of the study area. The City and individual owners hold small portions of land at the north and east boundaries of the study area. The remaining lands are Crown owned.

** who determines useage*

LAND STATUS:

None of the study area is within the Agricultural Land Reserve, nor are any of the lands included in the Provincial Forest.

The Official Community Plan currently designates the south and east sections of the study area as Conservation Area Two (Preservation Area) - C2, while most of the remaining area is designated Conservation Area One (Recreation Area) - C1. A new Official Community Plan for the City has been prepared but not yet adopted. The new Plan is silent with respect to the study area pending completion of this study.

The south and eastern parts of the study area are zoned RC3 Conservation Zone, and most of the remaining area is zoned RC2 Recreation Conservation Zone.

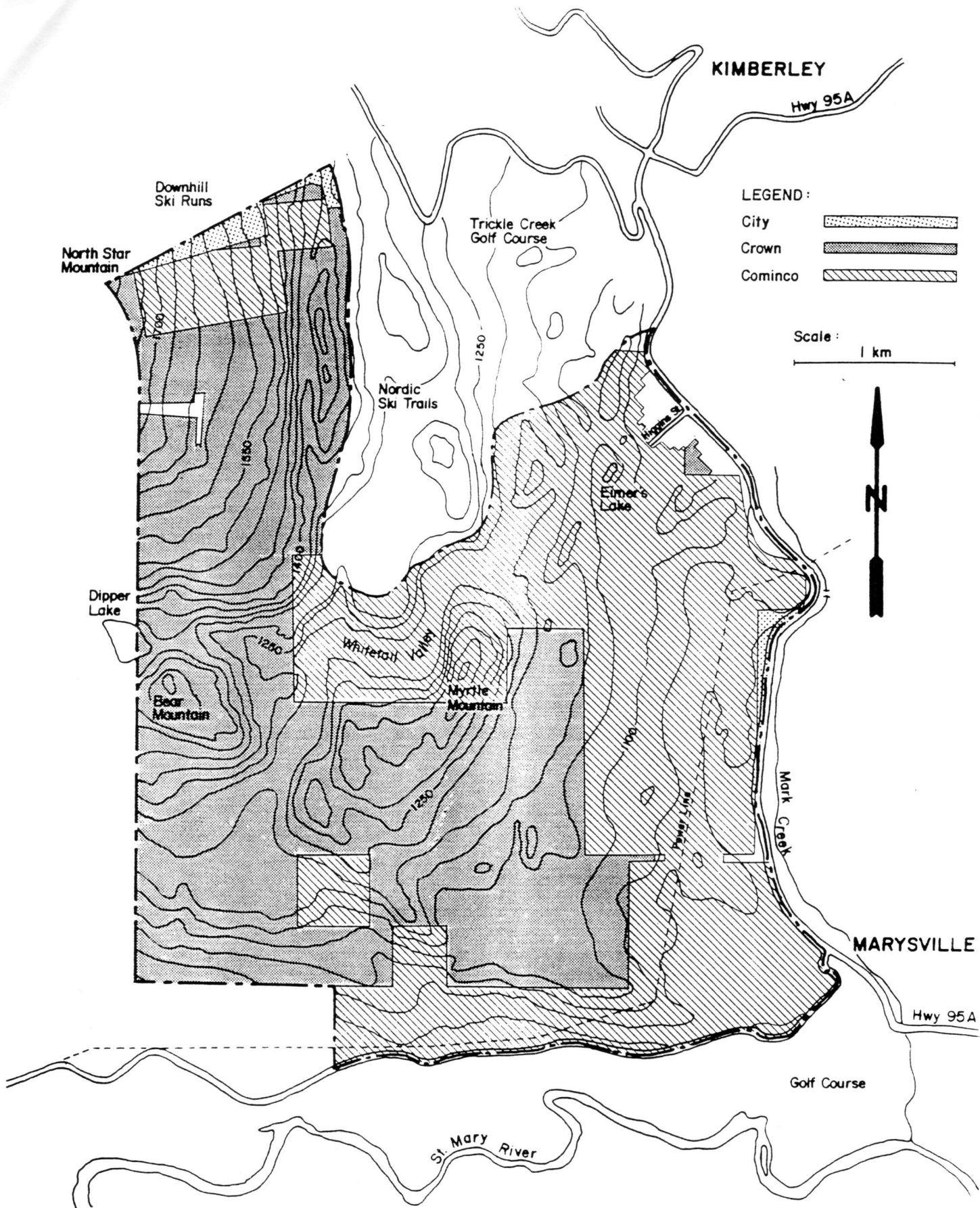
PHYSICAL DESCRIPTION:

One of the most significant characteristics of the study area is its diversity of topography, climate, vegetation, and wildlife.

Approximately 26% of the area (455 hectares) has slopes of 15% or less. Most of these lands are contained within two separate benches on the east side of the study area.

There are small areas with slopes of 15 - 30%, however, most of the study area contains slopes in excess of 30%. A slope analysis is shown on Figure 3.

Vegetation ranges from bunchgrass and ponderosa, typical of interior dryland locations of the province and found in southerly parts of the study area (Sunflower Hill), to cedars and ferns more typical of wetter regions and found in the Whitetail Valley.



KIMBERLEY

Hwy 95A

Downhill
Ski Runs

North Star
Mountain

Trickle Creek
Golf Course

LEGEND:

0 - 15% Slope

16 - 30% Slope

30% and higher Slope

Scale :

1 km

Nordic
Ski Trails

Dipper
Lake

Bear
Mountain

Whitetail Valley

Myrtle
Mountain

Elmer's
Lake

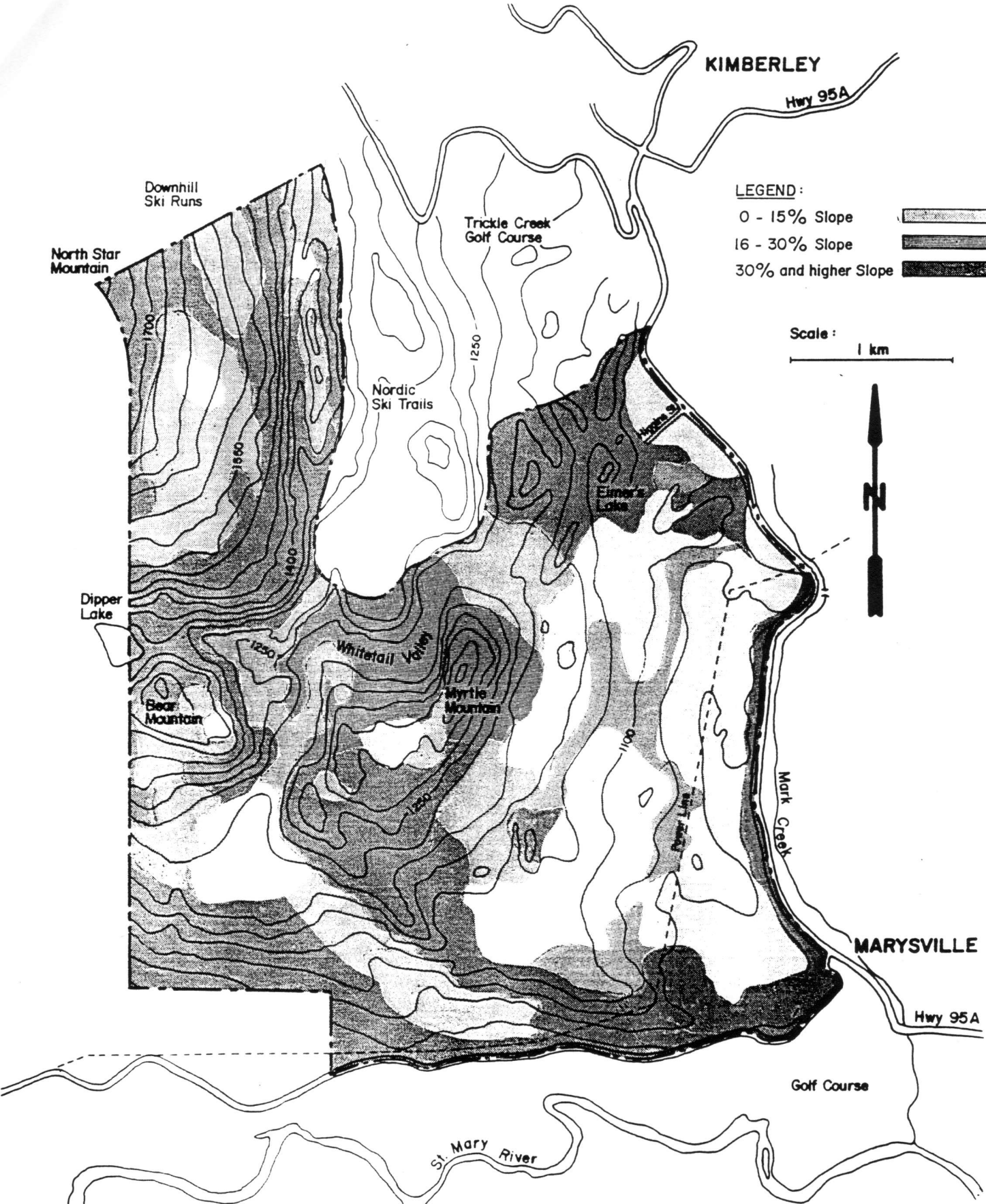
Mark Creek

MARYSVILLE

Hwy 95A

Golf Course

St. Mary River



As might be expected in an area with many slope and vegetation regimes, there is also a great diversity of wildlife. Various inventories have been carried out, the most thoroughly documented being the 1987 Ohanjanian-Jamieson study Options for Improving Wildlife Habitat and Wildlife Viewing Options in the Kimberley Wildlife Sanctum. In brief, the Ohanjanian-Jamieson report describes the presence of a variety of ungulates, including white-tailed and mule deer, moose, and elk. Black bears also inhabit the study area, and there is evidence of cougar, wolverine, marten, fox, and coyote as well. Smaller mammals, a number of different types of rodents, and a great variety of bird species take full advantage of the area's biological diversity.

CURRENT LAND USES:

The study area is heavily used for recreation. An extensive trail system has been developed and maintained over the years, principally through the efforts of the Kimberley Wildlife Sanctum Society (KWSS.) Major trails are shown on Figure 4. In addition to casual use by members of the general public, organized hikes are conducted by the Rocky Mountain Naturalists, and by Kimberley area schools. As well, snowmobilers use the study area for access to trails leading up the St. Mary's Valley.

An active gravel pit is located in the southeast corner of the study area. Although the study area is heavily claim staked, there is no other active mining occurring at the present time.

ACCESS:

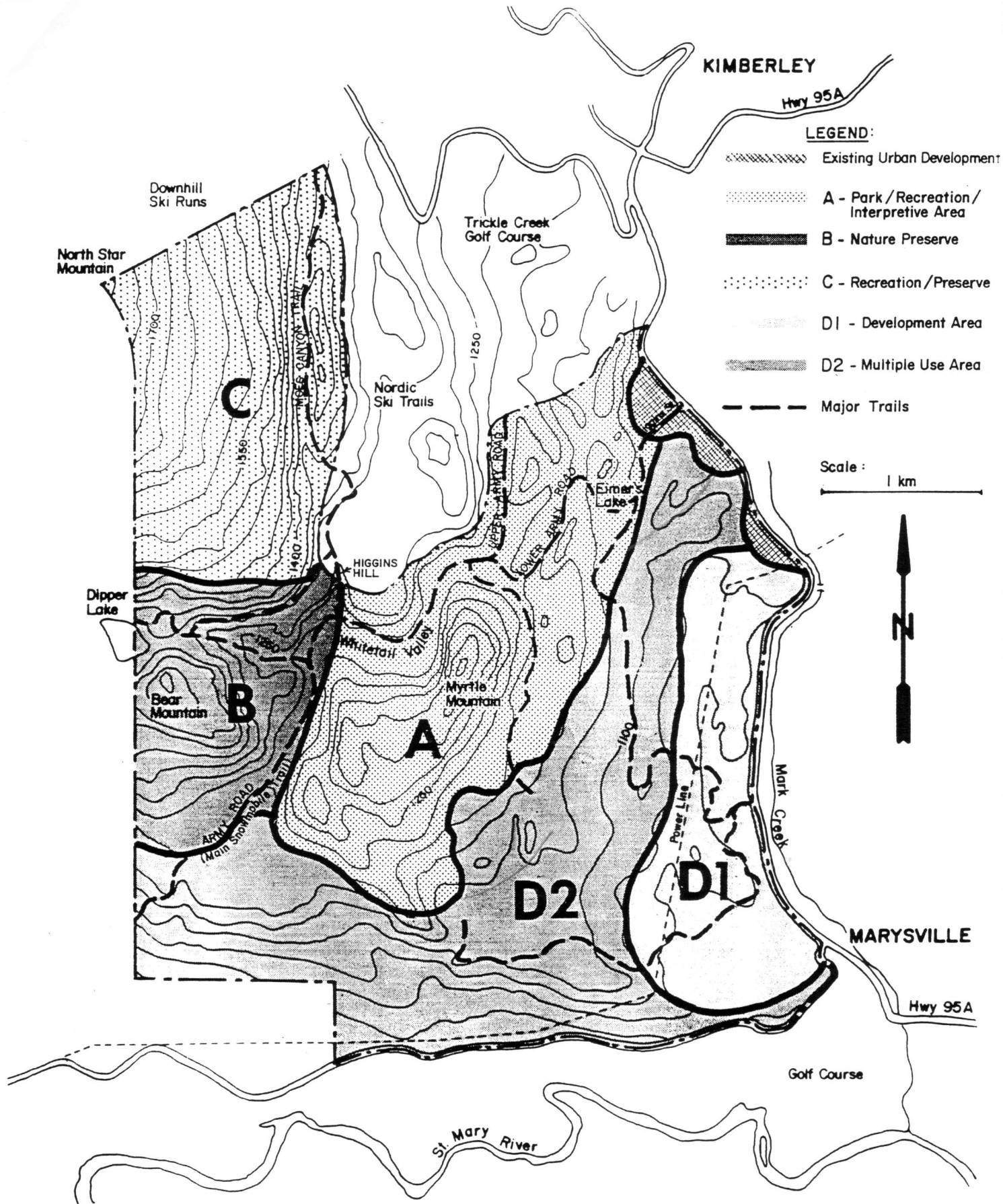
There are several points of access to the flatter benches - on foot, from the end of Higgins Street and by vehicle, from several rough and informal trails which leave Highway 95A between Marysville and the Kimberley core. Parts of the study area may also be reached from the Nordic ski trails.

better
access
needed

EXISTING COMMITMENTS:

Although much of the study area is used extensively for recreation purposes, there is no formal approval for the use of these lands by either Cominco or the Crown. KWSS has been active in pursuing the goal of managing much of the study area as a nature park, and the City has agreed that it would be appropriate to set aside some of the area for this purpose. However, no approvals exist from the two principal property owners and as there is no agreement on the boundaries, a master plan has not yet been prepared.

don't
we have
* let's



CITY OF KIMBERLEY BEST USE STUDY, 1991
LAND USE UNITS AND TRAIL SYSTEM

PHASE II

On September 30, 1991, Regional District staff met with Council to discuss the preliminary report, and to obtain further direction for Phase II of the project. At that meeting, Council asked Regional District staff to meet with representatives of the various user groups, identify the important issues, and from those issues, work toward a consensus regarding appropriate boundaries for the proposed nature park.

The meeting with user group representatives took place on October 24, 1991, with Alderman Bert Banks chairing the meeting. Representatives from the KWSS, the Rocky Mountain Snowmobile Club, and the Kimberley Nordic Club were present. A list of the meeting participants is attached in Appendix "B."

Intrinsic in the discussions about the character and boundaries of the nature park was the subject of an overall land use plan. The preliminary report to Council was presented to the user groups and following a general discussion about the study area as a whole, a review of each sub-area took place with consensus being reached on a number of land use issues.

UNDERLYING PRINCIPLES

As a result of field observations, the search of existing studies, and the meeting with user groups, two general principles regarding the character of the study area have emerged. These principles underlie the recommendations contained in this report.

First, it is recognized that since the study area incorporates a diversity of natural features and accommodates a wide range of activities, participation in future management planning will be similarly diverse. *

Second, in general, it can be said that the natural interpretative and recreational values are more critical in the north and west portions of the study area, primarily because topography and access limit the range of potential land use options. In the east and south portions of the study area, where topography is less severe and where there exists the potential for easier access, land use options are more varied. Sunflower Hill is an exception, however, because of its importance for ungulates. *

Using these principles and drawing on the items of consensus that were discussed at the meeting with user groups, a series of recommendations has been developed for Council's consideration. need larger area

RECOMMENDATIONS

Two terms require definition prior to discussing the recommendations in this report.

The expression "nature park" is used here to mean the area that we recommend be developed, marketed, and intensively used by the recreating public.

"Preserve" has been used in the context of areas that are less accessible than the area recommended for use as a nature park, and retain examples of diverse and relatively undisturbed natural habitat. These areas should be managed principally for their interpretative and natural values.

The recommendations have been divided into two sections: recommendations for each sub-area; and recommendations for an implementation process.

RECOMMENDATIONS FOR EACH SUB-AREA

Figure 4 shows the division of the study area into sub-areas.

AREA "A": PARK/RECREATION/INTERPRETATIVE AREA

This is the eastern part of the corridor that Council has already agreed to include in the nature park, together with the southwest slopes of Myrtle Mountain. The Higgins Street access to the nature park and Eimer's Lake are at its eastern edge, and the west boundary is the road between Bear and Myrtle Mountains.

Area "A" is the most accessible portion of the study area and the most heavily used by recreationists, including hikers, cyclists, skiers, snowmobilers, and, to a limited extent, trail bikers. It is also the most ecologically diverse section of the proposed nature park with the highest values for park and interpretative purposes. Care will be needed to strike a balance between the requirements for nature preservation and the needs and desires of the various users.

Some of the issues that must be addressed in this sub-area include:

- ACCESS:

There are two points of access into this area: via Higgins Street and Eimer's Lake at the east boundary, and via the Nordic ski trails from the north. This area includes roads that are maintained for fire access. The existence

can't have
"nature park" &
motorized
vehicles

snow
mobiles
do no
work,

trail
bikers
damage
nature
lots of
other
users
OK

trail bikers "D"

of these easy to use roads offers opportunities, but also presents a potential source of conflict. For example, snowmobilers use the major trail (Lower Army Road/Army Road) through to the power line, for access to routes beyond the boundaries of the study area.

Other user groups such as KWSS recognize this as an existing use and indicated at the October 24 meeting that present levels of trail use by snowmobilers does not present a problem. It should be noted that easy access to this area is not necessarily detrimental to wildlife. Old roads and trails, for example, are used by moose as travel lanes (Ohanjanian/Jamieson, 1987). Because this area is so accessible, it is recommended that user groups be consulted extensively in the formulation of an access plan.

* must not be encouraged

- NORDIC CLUB EXPANSION:

The Nordic Club representative at the October 24 meeting indicated that the Club wishes to expand into this sub-area. The interface between the trails and the other priorities of the proposed park will need to be considered during the planning process for trail expansion.

possible

- ARCHAEOLOGICAL SITES:

An archaeological site reconnaissance is recommended for the entire study area. Since it is known that there is at least one archaeological site on Myrtle Mountain, an archaeological impact assessment in Area "A" is particularly critical. Identification of findings and incorporation of these findings into the interpretative components of the nature park could add to the richness of experiences to be found in the proposed park.

AREA "B": NATURE PRESERVE:

This area is west of and contiguous to Area "A". It includes lands west of Whitetail Valley, and those portions of Bear Mountain and Dipper Lake within City boundaries. This has been identified as a separate sub-area as it is physically less accessible than Area "A", particularly to motorized vehicles. It is of major importance to the integrity of the proposed nature park. Because of its isolation and ecological diversity, this area is better suited to management with primary emphasis on its wildlife and interpretative values, and with a lesser emphasis on recreation.

protect all around Dipper Lake

AREA "C": RECREATION/PRESERVE:

This area is west of the most heavily used portion of the Nordic trail system and is located immediately south of the downhill ski runs. There is no vehicular access to this area, but there is good access on foot. Area "C" is characterized by recreation use, (Moe's Canyon trail and the trail around North Star Mountain) and wildlife use. The visual prominence of this area, its steep slopes and its juxtaposition to the Nordic trails and downhill runs preclude urban development and constrain other options which might have a visual impact. This area is closest in character to Area "A". For the reasons outlined above, it is recommended that this area be managed for recreation and wildlife values. Access could be improved to accommodate lower impact vehicles such as mountain bikes. The major issue which should be addressed in this sub-area is its interface with the ski hill.

- INTERFACE BETWEEN ALPINE AND NORDIC TRAILS:

Conflicts exist at the interface between the downhill runs and the cross country trails. At the October 24 meeting, it was noted that downhill skiers are able to gain access to Moe's Canyon. Presumably, the reverse is also possible. The management plan should address this problem.

Moe
Canyon
critical
from
ecological
point of
view

AREA "D":

The remainder of the study area is less ecologically diverse and has less dramatic topography, but has better access, therefore offering a wider range of land use options. It is recommended that this area be managed for multiple uses with site specific priorities. Area "D" is comprised of the two relatively flat areas (lower bench and upper bench) in the eastern part of the study area and the areas south of Myrtle and Bear Mountains, including the south facing slopes of the study area.

Area "D" has been broken into two distinct sub-areas to reflect our recommendation for different long term uses.

what
about
Apache
Trail
&
Duck
Pond

AREA "D1": DEVELOPMENT AREA:

This is the lower of the two relatively flat areas ("lower bench") which may be identified from the slope analysis information in Figure 3. Slopes in Area D1 are less than 15%. The western boundary of this sub-area is the 1070 m. (3510 ft.) contour line and the total area is about 170 hectares in size. Access can be gained from several informal trails off Highway 95A.

• LONG TERM STRATEGY:

Because of the relatively gentle topography and the relative ease of access to this area, it is recommended that it be designated, in the long term, for urban development. At this time, it appears that the City has adequate areas designated for industrial and commercial development for the foreseeable future. However, if the City's initiatives in attracting the tourist and retirement market are successful, additional lands will be required for residential use. It is recommended that this sub-area be reserved in the long term for housing.

why
not
small
acres

yes

The interface between this sub-area and other portions of the study area is critical. A special opportunity exists to create a unique residential environment in close association with the nature park and surrounding area. Among the special features to be incorporated into the long term development planning are seasonal migration paths of ungulates. In order to protect wildlife values within the nature park, it is also necessary to recognize the impact of surrounding land uses. Protection of these wildlife values should be achieved through the use of natural corridors of sufficient width to allow for animal migration, maintenance of their habitat, and human use and enjoyment of the adjacent areas. Before detailed design work is commenced, it will be necessary to identify migration routes and consult with wildlife specialists to ensure that buffer strips of suitable width and design are created. It will also be necessary to develop a management plan that takes into consideration the objectives in establishing these corridors, paying particular attention to the constrained physical area, the potential for future human interference, and existing problems associated with the proximity of wildlife migration routes to the highway.

A major feature of this development area is the existence of the two power lines that run on a roughly north-south alignment. One belongs to Cominco and the other to B.C. Hydro. Options for relocation of these lines should be explored in the detailed design process. Currently, these long open strips are used by trail bikers and a few snowmobilers. Consideration should be given to accommodating these two user groups in a more formalized manner in the long term.

OK

get
to keep
out traffic
+ signs

Taking into consideration the need to accommodate at least the B.C. Hydro power line (assuming that the Cominco line will eventually be abandoned), and making allowances for travel and wildlife corridors, it is expected that sub-area D1 could accommodate about 1260 housing units.

• INTERIM USE:

Until there is sufficient demand to develop these lands for housing, it is recommended that the lower bench be managed for multiple uses. The emphasis for interim use throughout this sub-area should be on wildlife. High values for ungulates exist in the south portion of this sub-area and a portion of the area is identified in the Canada Land Inventory as having high values for both big game and native (ungulate) purposes. Although the Sanctum Society would like to see the south portion of this sub-area included in the nature park, it may be possible to provide a representative example of this landscape feature further west within the study area.

The relationship between this sub-area and the proposed nature park must be considered at all phases of development so that the values protected by the nature park are not compromised. However, it may be possible to manage Area D1 on an interim basis without a negative impact on surrounding areas. It is recommended that some management of this sub-area for its timber values be considered. The City may wish to explore in detail the options available to manage the area as a community forest, possibly under the woodlot management program offered by the Ministry of Forests.

AREA D2: MULTIPLE USE AREA:

This sub-area comprises the balance of the study area. In general terms, it includes the second relatively flat area ("upper bench") above Area D1 and the south facing slopes from Sunflower Hill west to the City boundary. Management for a range of uses is recommended. The long term priority for this area should be to manage for the benefit of wildlife. However, some of the uses described below would be complementary to the wildlife use and would not require the area to be retained in its present state.

wildlife
more
than
ungulates

Good

• THE UPPER BENCH:

The upper bench has been identified separately from the lower bench as the two areas are physically separated by a slight bank. The upper bench is the steeper of the two, although slopes are less than 15%.

what benches

While the upper bench would be suitable for residential development, it is unlikely that there would be any demand for this type of land use in the foreseeable future. It does provide a good buffer area between the nature park (Area A) and Area D1 and its relatively flat topography presents an opportunity for land uses that could complement the nature park. As with Area D1, it may be possible to manage parts of Area D2 as a woodlot. It is recommended that Council also explore the feasibility of establishing a demonstration forest in this sub-area.

^

Consideration is being given by the City to the relocation of Happy Hans Campground. A possible new home for the campground could be found within this sub-area, where the campground could be linked to the proposed nature park by a trail system.

The Sanctum Society has proposed that an interpretative centre be constructed. An interpretative centre could be the key to attracting sufficient numbers of people to the nature park to make the difference between a local attraction, and a regional tourist destination. This sub-area could likely accommodate such a use. However, development of a master plan for the nature park would be a prerequisite to the allocation of any land for this purpose. Consideration should be given to an appropriate scale for this development and its relationship to the nature park, the remainder of the study area, and the City.

• SPECIAL AREAS:

The south portion of the upper bench contains some excellent examples of old growth that are quite accessible on foot. These areas deserve special treatment from both wildlife habitat and demonstration forest points of view.

*

A second special area is Sunflower Hill, which sees heavy seasonal use by ungulates. The flora of this area is unique and worthy of special attention and protection.

*

IMPLEMENTATION

PUBLIC INVOLVEMENT:

Management of the study area is best handled by the City or by an affiliated municipal body, along the lines of a recreation commission or economic development commission. However, consultation with the various user groups is essential to take advantage of their considerable knowledge and expertise of the study area and to ensure that their requirements are met.

TENURE:

Once the boundaries of the various land management units have been decided upon, the City should approach both Cominco and the Ministry of Environment, Lands and Parks to secure some type of tenure over those lands. It is particularly important to contact the Ministry of Environment, Lands, and Parks early on in the process, since that Ministry has not made any commitment to the use of Crown lands.

Although Cominco has agreed, in principle, to allow use of some of their lands for a nature park, the Company has made it clear that their mineral rights must be retained.

NEED FOR AN OVERALL MANAGEMENT STRATEGY:

Once the overall objectives for use and development of the study area have been agreed upon, and issues of land tenure have been resolved, it will be necessary to develop and refine land use priorities and responsibilities through a master plan. Terms of reference for this plan should include an examination of sources of funding for both development and operational purposes.

ECONOMIC CONSIDERATIONS:

Since the City owns almost none of the land within the study area, avenues other than outright ownership should be explored to allow for management of the land without incurring potentially prohibitive capital and operating costs. For example, the concept of "multiple use" includes the option of managing some of the area as a community forest or woodlot with money from the sale of timber products being reinvested in the study area. A demonstration forest offers interpretive as well as recreation potential and could strengthen Kimberley's position as a tourist destination.

*?
get
the
land

In managing the study area, the City has numerous groups and individuals whose expertise in various fields can be used. The trails are maintained largely through volunteer efforts now, and the City should take advantage of this enthusiasm that already exists, as well as investigate as other untapped resources.

ACCESS PLAN:

In order to protect wildlife values and preserve as many land use options as possible, it is recommended that development of an access plan should be a priority. Ideally, this should be done as part of the master plan, but because major access routes are already well established and the potential for conflict will grow with increased use, it may be desirable to designate specific routes for non-motorized vehicles, etc., prior to the development of a master plan.

*
yes

CHANGES TO THE OFFICIAL COMMUNITY PLAN:

Once Council has made decisions regarding the future development of the study area, it is recommended that the Official Community Plan be amended to formalize the City's intentions. Policy changes to the Official Community Plan can be based on written portions of this report, while Figure 4 provides a basis for map changes.

CONCLUSION

A special opportunity exists for the City of Kimberley to coordinate the development of a nature park and multiple use management areas to complement its growing participation in the tourist industry. Existing golf course and ski facilities cater to the needs for organized summer and winter recreation but increased public awareness of the environment also is producing another rapidly growing market to serve the naturalist or "eco-tourist". The diversity of topography and the proximity of the area to existing development make it uniquely suited to accommodate a variety of open space needs and fill out a range of year round recreational opportunities.

Implementation of a management plan is subject to considerations of tenure and associated costs for land acquisition, development and maintenance. Specialized forest management programs offer an alternative to outright land acquisition and would enable the City to protect certain areas for their wildlife and interpretive values while managing others for multiple use. The success of this approach will depend upon the effective delegation of management responsibility within a committee which includes representation from existing volunteer groups, users and stakeholders. Volunteer groups have already been instrumental in developing much of the existing trail network and, with their continued participation and support, the study area could serve as a model for land management with corresponding benefits to the City as a tourist destination.



City of Kimberley

APPENDIX "A" TERMS OF REFERENCE

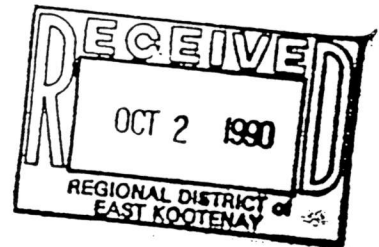
340 SPOKANE STREET
KIMBERLEY, B.C.
V1A 2E8
TELEPHONE: (604) 427-5311
FAX: (604) 427-5252

September 28, 1990

File: 7.29.1

Regional District of East Kootenay
19 - 24th Avenue South
Cranbrook, British Columbia
V1C 3H8

Attention: Mr. Dale Colton
Director of Planning



Dear Sir:

The City of Kimberley is presently reviewing the use of land between the new golf course and St. Mary's Lake road. All of this land is presently owned by the Crown or Cominco Limited, it is unserviced and undeveloped. Some of the area is used by various people for outdoor recreational activities such as hiking, trail biking and snowmobiling.

Because of the limited life of the Sullivan Mine and Cominco Operations, the City is actively seeking various methods to minimize the effect of the eventual closure upon the tax payers, and to ensure the viability of the municipality in the future.

We are therefore, asking that the R.D.E.K. consider carrying out a short, very general study on the "best use" of the land. By "best use", we mean "best use" from the viewpoint of a use that would best support the local economy as a resource for the municipality and its tax payers.

There is a special interest group that envisions all of this area as a Wilderness Preserve. Council has stated a willingness to support a limited amount of the area as a "Nature Park", but Council has viewed the economic viability of the City as the prime consideration in designating use of this land.



The Bavarian City of the Rockies

September 28, 1990
Mr. Dale Colton
Page 2

We would, therefore, also anticipate receiving some statement as to the ability of a town of 5,000 population to support the cost of a "Nature Park".

I have attached the following documents which may assist you in providing an estimate for this anticipated four or five day project:

- a) City of Kimberley Bylaw No. 1073;
- b) Map showing land ownership and zoning as it exists today;
- c) Map showing area council supports for a Nature park and the area which they may support for a Nature Park;

We have numerous letters and reports on file which we would make available to you; however, we would prefer you to review and select that information that you wish to have copied. If you need clarification or wish any additional information regarding this request, please contact myself or Mike Dodd, Projects Co-ordinator at your convenience.

Yours truly,



R. Michael Cave
Clerk/Administrator

RMC/hj
Enclosures