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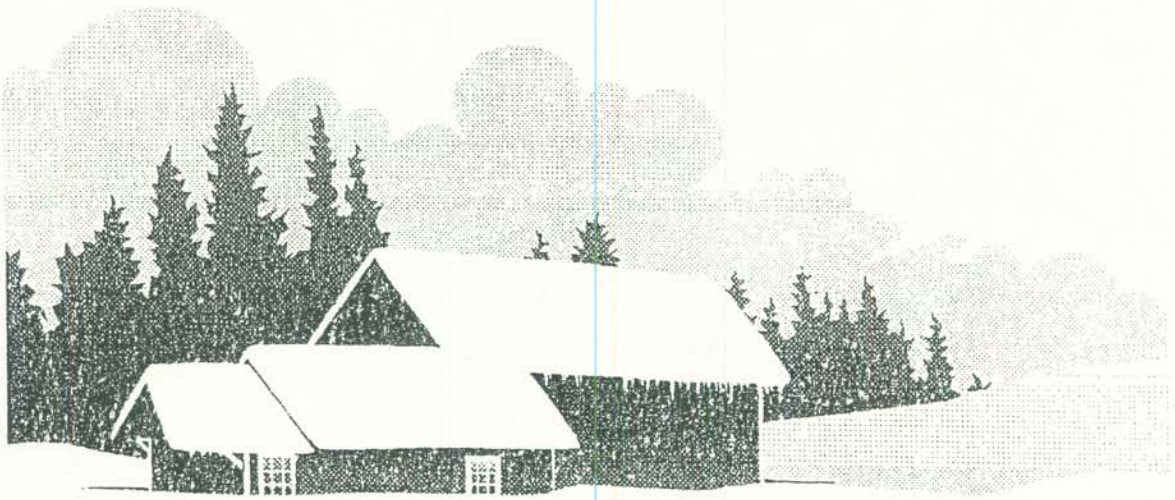
THE CANYON PLAN

AN AMENDMENT TO THE FLATHEAD COUNTY MASTER PLAN



FLATHEAD COUNTY RESOLUTION NO. 1009A

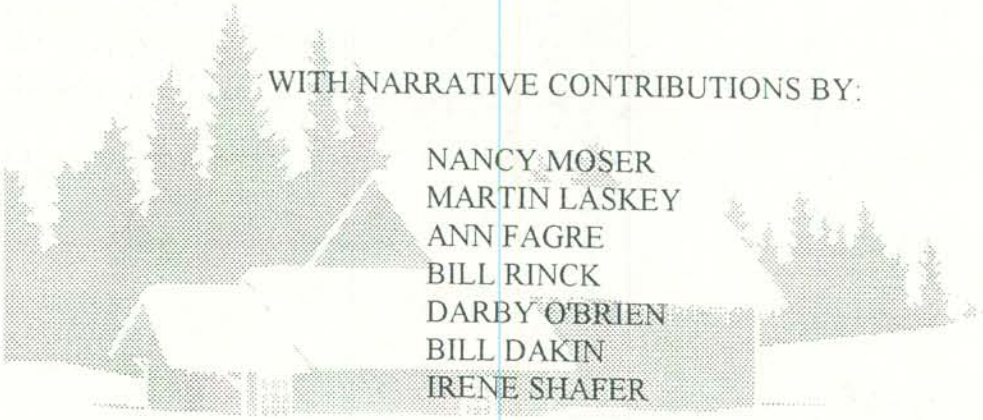
ADOPTED MAY 17, 1994

THE CANYON PLAN

AN AMENDMENT TO THE FLATHEAD COUNTY MASTER PLAN

PREPARED FOR:

THE CANYON CITIZEN INITIATED ZONING GROUP



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Preface
THE CANYON PLAN

TODAY I'D LIKE TO TAKE YOU ON A ROAD TRIP---ABOUT 30 MILES "UP THE LINE" TO THE INFAMOUS CANYON AREA.
NOW SOME WHO ARE NEW TO THE VALLEY ARE PROBABLY QUESTIONING "WHY INFAMOUS --- THAT'S A LOVELY AREA?"
AND THERE ARE SOME WHO MAY SKEPTICIZE, SAYING "ONLY IF WE'RE GOING TO THE PARK."
AH.... BE A SPORT....COME ON UP....SEE WHAT WE'RE ALL ABOUT.
OH--WE HAVE HORSE DRAWN CARRIAGE RIDES UP THERE TOO--LETS CLIMB INTO ONE OF THOSE, SO WE DON'T HAVE TO SPEED THROUGH THE NEIGHBORHOOD.

WHEN MY FAMILY FIRST MOVED FROM "PHILA" TO THE OLD SILVER TIP RANCH IN MARTIN CITY IN '71', LIFE WAS MUCH DIFFERENT UP THE CANYON THAN TODAY. OF COURSE, THINGS HAVE CHANGED ALL OVER THE VALLEY, AS WELL, OVER THE PAST 20 YEARS.
COMPARED TO THE REST OF THE COUNTY, WHAT WE LACKED IN CITY GOVERNMENT AND ORGANIZATION, WE HAD IN LOCAL LIVING COLOR.

I REMEMBER ONE OF MY FIRST WELCOMING EXPERIENCES....IT WAS A LATE SATURDAY AFTERNOON---DURING SPRING BREAK-UP WHEN THE LOGGERS AND OUTFITTERS WERE LITERALLY COMING OUT OF THE WOODS.
I WAS SITTING AT THE DEERLICK BAR IN MARTIN CITY--CLOSE TO THE DOOR-- WATCHING EVERYONE AND EVERYTHING. THE PLACE BECAME A VERITABLE TOWN HALL, WITH WOMEN AND CHILDREN COMING TO MEET THE MEN WHO HAD BEEN UPCOUNTRY FOR WEEKS ON END. THE CAFE BEGAN BRINGING OUT FOOD, AND COUNTRY MUSIC ROSE UP FROM A GROUP OF MUSICIANS OVER IN THE CORNER.
I WAS QUIETLY THINKING OF HOW GREAT IT WOULD BE TO GET TO KNOW SOME OF THESE <u>LIVELY</u>, <u>REAL</u>, <u>WESTERN</u> PEOPLE!!
WHEN JUST THEN, ONE OF OUR NEIGHBORS RODE THOUGH THE FRONT DOOR ON HIS DAUGHTER'S HORSE, SHAWNEE, AND SAUNTERED UP TO THE BAR---RIGHT NEXT TO ME!!
I WAS IMPRESSED!!
THE BAR MAID NONCHALANTLY PLACED AN ICE CUBE TRAY FILLED WITH BEER ON THE BAR IN FRONT OF SHAWNEE, THEN AS SHE HANDED A GLASS OF THE SAME TO THE RIDER, CALMLY STATED "IF SHE....DEFECATES ON THE FLOOR, YOU CLEAN IT UP!"
MIND YOU, I HADN'T EXACTLY FELT AS THO I HAD DIED AND GONE TO HEAVEN---<u>BUT WHAT A PLACE TO LIVE!</u>--TOTALLY UNLIKE ANYTHING I HAD EVER KNOWN, AFTER ALL,
I WAS TRYING TO ESCAPE, WASN'T I?
AND THE BEAUTY OF THE PEOPLE--NOT AT ALL PREOCCUPIED WITH THAT BUNK OF WHAT OTHERS MIGHT BE THINKING.

THESE ANECDOTAL MEMORIES OF THE PAST CAN HARDLY BE RELIVED, FOR TODAY WE ARE BEING FACED WITH A RAPIDLY CONSUMING INFLUX OF CHANGE.
BUT WE, THE CITIZENS OF THE CANYON, ARE TRYING TO PRESERVE WHAT LITTLE OF OUR PAST QUALITY OF LIFE IS LEFT.
PERHAPS THE NON-CONFORMING APPEARANCE OF OUR NEIGHBORHOODS, AS WELL AS THE REPUTATION WHICH PRECEDES US, IS OUR ONLY SAVING GRACE.

IN JUNE OF '92', WE ORGANIZED OURSELVES AS THE <u>CANYON CITIZEN INITIATED ZONING GROUP</u>, FOR THE PURPOSE OF WRITING OUR OWN AMENDMENT TO THE COUNTY MASTER PLAN, ON WHICH EVENTUAL ZONING WILL BE BASED. WE INCLUDED THE 70 MILES STRETCH FROM THE SOUTHFORK BRIDGE IN HUNGRY HORSE TO THE COUNTY LINE AT MARIAS PASS.

WE ALMOST IMMEDIATELY REALIZED OUR NEED FOR PROFESSIONAL GUIDANCE IN NOT ONLY DEALING WITH COUNTY GOVERNMENT, BUT THE IMPLEMENTATION OF OUR FINISHED PRODUCT. WE SOUGHT AND OBTAINED FUNDING, AND IN JUNE OF THIS YEAR (1993) WE HIRED A PLANNER.

WE ARE ENGAGED IN A DESPERATE BATTLE OF PRESERVATION-- FOR OUR COMMUNITIES AND OURSELVES.

SOME OF YOU MAY BE THINKING--GEE THAT CANYON REALLY IS A VALID COMMUNITY.
I'LL LET YOU IN ON A SECRET--WE ALWAYS HAVE BEEN!!

CCIZ PRESIDENT

THE CANYON PLAN

CHAPTER I
BACKGROUND

BACKGROUND

The concept of a "Canyon Area Neighborhood Plan" evolved in response to "Valley" issues on growth and development. Flathead County is experiencing rapid change brought about by the increasing influx of new residents. Land divisions were occurring at a record pace and many county residents feared the loss of community identity. Some residents responded by seeking "protection" of neighborhoods through the establishment of zoning districts. Other communities, such as Bigfork, pursued a neighborhood planning approach.

These different approaches to guiding growth and development in the County did not offer a comprehensive solution to the perceived problem. At best, these piecemeal approaches tended to complicate growth problems for those areas that remained "'unzoned." The county government took a wait-and-see attitude as many of these voluntary land use regulations were being pursued. The increasing interest by local residents in pursuing some form of land use "protection" eventually spiked the attention of the County Commissioners. On September 24, 1991, the Flathead County Board of Commissioners instructed the Flathead Regional Development Office (Planning Office) to pursue county-wide zoning. By default, the imposed zoning would have to be in conformance with the then-existing Flathead County Master Plan. This zoning decree became a local concern to many Canyon residents who had yet to experience the "Valley" problems with growth.

Several meetings were held by the Planning Office in the Canyon area to explain the zoning process and probable outcome. Local residents expressed considerable concern and discovered that the existing Master Plan had very little reference to the Canyon communities. One approach suggested early on by the Planning Office was to investigate the possibility of preparing a Neighborhood Plan for the Canyon. Initial community reaction ranged from "do it as soon as possible" to "let's have no regulations on development." However, most of those 1991 meeting participants agreed that additional information was needed, including a better understanding of community opinion. With the support of the Flathead Economic Development Corporation and the Flathead Regional Development Office, *The Future of the Canyon Survey, 1992* was sent to all property owners in the Canyon in February, 1992. This began a citizen-driven planning effort for the Canyon Communities.

CANYON AREA SURVEY (1992)

The Canyon Survey was completed by 22% of the land owners in the Canyon. A summary of the results is available from the Flathead Economic Development Corporation. Selective findings of the 1992 Survey include the following:

- "Controlling growth and development" was cited as the most important issue;
- "Clutter, dilapidation of structures, and unattractive development" was cited as the least liked aspect of living in the Canyon;
- Accelerated economic growth was not generally supported;
- Residents had specific location preferences for new development. New commercial uses should locate within existing downtowns and industrial uses in industrial parks;
- Residents felt that local services are inadequate or, at best, marginally adequate to support any substantial population growth;
- "Maintaining a pleasant living environment" was ranked as the most important future land use consideration;
- A strong 79.5% agreed that "a local planning effort is necessary to further define Canyon area goals before permanent land use guidelines go into effect."

CANYON CITIZEN INITIATED ZONING GROUP

In June, 1992, the Canyon Citizen Initiated Zoning Group (CCIZ) was formed to guide the planning process for the Canyon communities. Underlying the formation of the CCIZ was the belief that there must be a "buy-in" at the local level if zoning or other growth management tools are to be accepted in the Canyon. The CCIZ provided a mechanism to empower the local citizens to help decide their own future.

> ***County-wide zoning of some sort is inevitable. We can sit back and allow someone from County offices, who we rarely see, who knows less about us than we do of them, to plan future use of our land. But doesn't it make more sense for us to group together and do this planning amongst ourselves? [CCIZ Newsletter]***

The CCIZ began meeting regularly in June, 1992. One of the initial tasks of the group was to map all the existing land uses in the Canyon. Section maps were purchased from the County, and individuals from seven regions in the Canyon began to describe land use on a parcel-by-parcel basis. The maps were color-coded to identify the land use relationships of the Canyon.

The maps were presented for public review and comment at a meeting in December 1992.

After completion of this massive mapping effort, the CCIZ decided that professional assistance was needed to guide and facilitate the local effort. Such assistance, however, needed to be compatible with the original objective of having a community-driven process. The Flathead Economic Development Corporation and the Flathead Regional Development Office assisted the CCIZ in obtaining the necessary funding to secure a local planning professional. The scope of work stated, in part, that the selected planner would lead Canyon residents through a process that:

- identifies values to be preserved in the Canyon area;
- provides for public discussion of ideas, interests, and goals regarding the future of the Canyon;
- develops options and alternatives for residents to consider regarding how to achieve these goals; and
- concludes with the development of a plan and implementing mechanisms for the Flathead County Planning Board and County Commissioners to consider as the basis for growth management for the Canyon Area.

PLANNER

David Greer, of Montana Planning Consultants, was hired as the resident planner for the CCIZ. David had previously worked as a Senior Planner for the Flathead Regional Development Office and was currently serving as the Principal Planner for Montana Planning Consultants out of Kalispell. Serving in the role of the Canyon planner required maintaining a physical presence in the Canyon at least 2-3 days per week. The Hungry Horse Ranger District of the U.S. Forest Service provided a detached office house in Hungry Horse for this purpose. In this way, the planner achieved local identity with an in-Canyon office. The office provided an informal meeting location and a field office for preparing related work products.

COOPERATING AGENCIES

The planning process was supported directly and indirectly by a variety of agencies. Cooperating agencies included the U.S. Forest Service (USFS), Glacier National Park (GNP), Flathead Economic Development Corporation (FEDC), Flathead Regional Development Office (FRDO), Flathead County Clerk & Recorder's Office (C&RO), Montana Department of Fish, Wildlife & Parks (MDFW&P), and Montana Dept. of Transportation (MDOT). The World Wildlife Fund (WWF), Burlington Northern Railroad (BN), and the Glacier Natural History Association (GNHA) also assisted with the funding of this private effort as did numerous individuals and businesses in the Canyon. Primary roles played by these agencies are outlined below:

- ♦ USFS -- Office space & technical mapping/information support;
- ♦ GNP -- Technical mapping support;
- ♦ FEDC -- Financial support and record keeping;
- ♦ FRDO -- Financial support and technical assistance;
- ♦ C&RO -- Parcel based mapping support;
- ♦ GNHA -- Funding;
- ♦ BN -- Funding;
- ♦ WWF -- Funding;
- ♦ MDFW&P -- Technical mapping and information support; and
- ♦ MDOT -- Financial Support.

PLANNING PROCESS

The Planner outlined a one year program to accomplish the development of (1) a Neighborhood Plan and (2) implementing regulations. The process to complete these objectives began in July 1993.

PLANNING AREA BOUNDARIES

The perimeter boundaries of the planning area are not rigid but, instead, "float" beyond the private lands. The generalized boundaries were determined using a combination of factors, including natural landscape features, census boundaries, economic influence areas, and transportation patterns. The most westerly boundary occurs near the entrance to Badrock Canyon, in the vicinity of the "House of Mystery". The most easterly boundary corresponds to the Continental Divide at Marias Pass. All of the Hungry Horse Ranger District was included, as were portions of the Spotted Bear District. No detailed consideration was made of those private lands situated north of the Middle Fork of the Flathead River, including much of the Blankenship area and the headquarters area of Glacier National Park. The planning evaluation primarily focused on the private and public lands situated along and adjacent to the Middle Fork of the Flathead River and U.S. Highway 2. The private lands, which total less than 12,000 acres, tend to appear as "inholdings" to the much greater expanse of public lands in the Canyon. A **LOCATION MAP** of the Canyon Planning Area is included at the end of this chapter.

DATA COLLECTION

The collection of data on the Canyon communities was on-going throughout the planning process. The 1990 U.S. Census was a source for much of the socio-economic data. State employment statistics also contributed to this category of information. Public and quasi-public agencies assisted with information on the provision and/or availability of public services in the Canyon. Natural resource information was collected and generated from existing resource agency publications and through discussions with resource managers. Members of the CCIZ provided land use information and other informational insights on the

local communities.

PUBLIC AWARENESS/PARTICIPATION

Public participation and involvement was an essential element of the planning process. Efforts to maximize public awareness included mailing newsletters and holding monthly public meetings. The Hungry Horse field office also offered citizens access to the planner.

The newsletters provided an on-going update on the planning process and announced the locations and time of public meetings. The August mailing included a multi-page listing of all the identified community issues with check-off columns to rank the importance of each issue. Four rounds of public meetings, involving 14 separate meetings, were held throughout the Canyon between July 1993 and December 1993. Regional meeting locations included the communities of Essex, West Glacier, Lake Five (summer), and Hungry Horse. The focus of each round of meetings is presented below:

PUBLIC MEETING PROCESS AND FOCUS

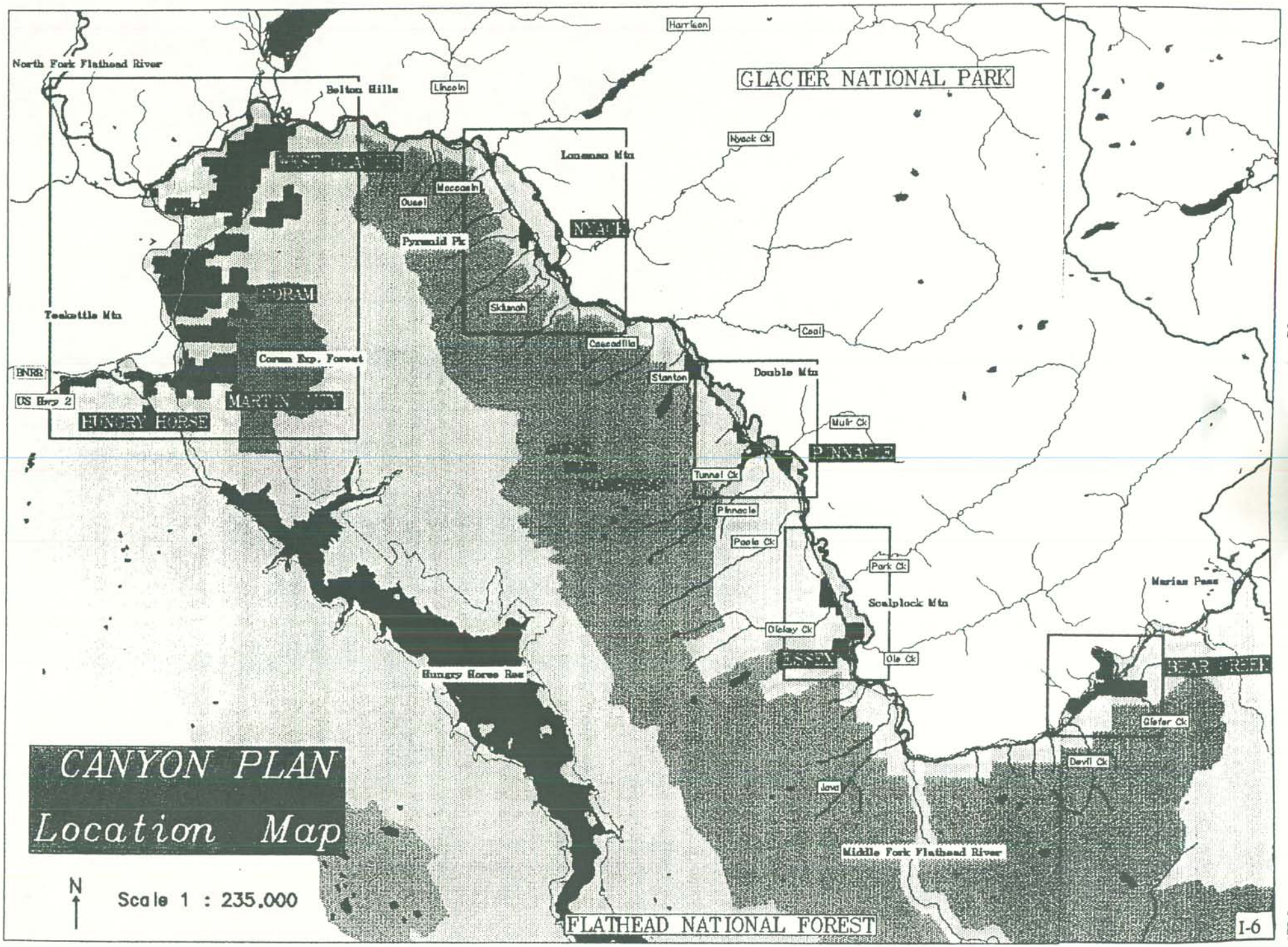
ROUND 1: Overview of planning process and identification of community issues.

ROUND 2: Evaluated appropriateness of particular land uses in Canyon communities through participant reactions to photos (slides) of various land uses; evaluated location preferences of listed land use types and the regulatory approach associated with each land use type.

ROUND 3: Presented an overview of the COMMUNITY ISSUE SURVEY that was sent to every household and land owner in the Canyon; identified community boundaries and growth centers; identified preferable density allowances and community growth rates; identified positive site plan features with the use of alternative slide scenarios of specific land uses.

ROUND 4: Slide presentation of socio-economic information and update on status of planning progress; presentation of resource mapping including wildlife habitat areas; list of all the proposed community goals and policies with tabular evaluation columns.

Results of the Issue Survey and the various forms used at the neighborhood meetings are available for review in the offices of the Flathead Regional Development Office.


North Fork Flathead River
Belton Hills
Lincoln
Harrison
GLACIER NATIONAL PARK
Nyack Ck
Lonesome Mtn
Moccasin
Ousel
Pyramid Pk
NYACK
Teakettle Mtn
Skiunah
Coal
Cascadilla
Corona Exp. Forest
BNRR
US Hwy 2
Stanton
Double Mtn
HUNGRY HORSE
Muir Ck
PINNACLE
Tunnel Ck
Pinnacle
Paola Ck
Park Ck
Scalplock Mtn
Marias Pass
Otelay Ck
Ole Ck
BEAR CREEK
Hungry Horse Res
Glefer Ck
Devil Ck
Java
Middle Fork Flathead River
FLATHEAD NATIONAL FOREST
CANYON PLAN
Location Map
N
Scale 1 : 235,000
I-6

THE CANYON PLAN

CHAPTER II
AGENCY INFLUENCES

Influencing the land use development pattern in the Canyon are a number of planning processes and regulations that often operate independently of each other. This type of incremental planning process fails to offer the affected communities a predictable outcome and can produce results that are contrary to citizen and community objectives. Planning is not foreign to the Canyon area, but the direct application of planning principles to private lands in the Canyon is a new concept to many area residents. In reality, however, planning has been active in the Canyon area and has been a tremendous influence on local development patterns. Existing regulations also play a significant role in the Canyon communities. Despite the absence of zoning or similar regulations in the Canyon, other state and local laws continue to influence local land use decisions.

AGENCY INFLUENCES

STATE & COUNTY INFLUENCES

Land uses in the Canyon are being directly and indirectly influenced by State laws, an existing County master plan, and by County subdivision regulations. These land use tools, however, are not capable of guiding growth in a goal-directed fashion without the framework of a community supported plan. Discussion of these existing regulatory influences follows.

MASTER PLAN

The Canyon area of Flathead County is under the umbrella of the Flathead County Master Plan 2000. This land use plan was most recently updated in March 1987. The Plan provides general policy guidelines for the future use and development of lands in Flathead County. Included in Chapter VI of the Plan are the 1978 community goals and objectives for two Canyon communities. The text of these objectives is listed below:

- HUNGRY HORSE: Provide for expansion of development patterns in the townsite and adjacent Forest Service land; expand commercial area south of Highway 2.

- MARTIN CITY: Encourage an agricultural emphasis and plan for major investment for improvement of major community facilities.

Other policies of the 1987 Plan that have application to the Canyon include the recognition of Hungry Horse, Martin City, Coram, and West Glacier as rural commercial service centers, with all the benefits related thereto. Other related policies address the issues of strip commercial development, solid waste disposal, and rural residential development. However, the context of the plan is county-wide and, as such, fails to adequately address the unique character and local issues of the Canyon communities.

FLATHEAD COUNTY OVERALL ECONOMIC DEVELOPMENT PLAN (1994)

This guide to economic growth in the County only has broad application to the Canyon communities, despite the listing of several Canyon communities as being "included." Most of the relevant discussion pertains to general topics of "Recreation" and "Tourism." Nothing is included in the Plan to address the unique water and sewer problems of the Canyon or the current issues pertaining to transportation or communication.

MONTANA SUBDIVISION & PLATTING ACT

This state statute is implemented locally through the Flathead County Subdivision Regulations. Subdivision regulations affect local development patterns by determining the manner, location, and density of land divisions. The rules also extend to the review of some land uses that do not create divisions of land, such as RV parks, mobile home parks, and condominium developments. Subdivision proposals should be in substantial conformance to the goals and policies of the Master Plan. The Flathead Regional Development Office administers the local subdivision regulations in Flathead County.

MONTANA SANITATION IN SUBDIVISIONS ACT

This state statute also has tremendous influence on land use and subdivision patterns. All newly created parcels under 20 acres must demonstrate the availability of a water supply source and treatment capabilities for sewage effluent. Lots must be adequately sized to handle not only the proposed use but also the area necessary for the water system and sewage treatment system. Some land divisions may not be possible if the property exhibits certain limitations, such as shallow depth to groundwater, poor soil conditions, excessive slope, etc. Generally, land divisions are reviewed concurrently under the two subdivision acts for compliance with the regulations. The local rules are administered by the Environmental Health Services Division of the Flathead City-County Health Department.

MONTANA DEPARTMENT OF TRANSPORTATION

U.S. Highway 2 is a principal arterial that serves as the primary east-west route across the north portion of Montana. The highway has recently been improved between the communities of Hungry Horse and Coram (1986) and Coram and West Glacier (1985). Reconstruction of the Highway is now being proposed along a 4.4 mile stretch between

Columbia Heights and Hungry Horse. Proposed improvements include the addition of two travel lanes and reconstruction of the South Fork bridge at the entrance to Hungry Horse. This is intended to improve travel safety through Badrock Canyon, in particular. Scenic, historical, and environmental issues highlight the discussions of the pending action. However, the proposed action will also have far-ranging impacts to land use throughout the Canyon. A statement alluding to this impact is included within the Draft Environmental Impact Statement (Project F1-2 (39) 138):

> *"Reconstruction of U.S. 2 would improve the safety and reduce the time required to travel between Columbia Heights, Hungry Horse, Glacier Park, and other Flathead County population centers. These improvements may increase the willingness of area residents and tourists to commute to the cities for jobs, shopping, entertainment and other purposes."* Page IV-38, paragraph 4.

This possibility stresses the need for the Canyon to plan for change. The ability of the Canyon communities to serve an expanded role as bedroom communities to the Valley cities is uncertain in terms of infrastructure capabilities, resident values, and acceptability.

MONTANA DEPARTMENT OF FISH, WILDLIFE & PARKS

This agency affects the Canyon communities through hunting and fishing regulations and management plans for selected wildlife species. Mitigation plans associated with the operation of Hungry Horse Dam will have tremendous influence on the operation of the dam and on water flows in the South Fork River. Wildlife objectives of the Agency can directly and indirectly affect land use decisions on private lands, especially when critical habitat for game or Threatened & Endangered (T&E) species are involved.

FEDERAL INFLUENCES

The Canyon communities represent private inholdings within a much broader expanse of public lands. The communities are virtually surrounded by lands administered by either the U.S. Forest Service or Glacier National Park. These agencies often have different management objectives, with one adhering to a philosophy of preservation and the other emphasizing multiple-use. Outside influences include those of other federal and state laws or management plans that are carried out by both the Park Service and Forest Service. Notable among these is legislation pertaining to Threatened & Endangered species and the Wild & Scenic Rivers Act. Intermixed with federal management activities are state management plans pertaining primarily to fish and wildlife management. The Bureau of Reclamation is another federal agency that has had tremendous influence on the Canyon's resources and people with the construction of Hungry Horse Dam. The Bonneville Power Administration continues to have influence on water outflows from the dam and maintains an overhead transmission corridor along the South Fork of the Flathead River and through Badrock Canyon. The land use decisions of these federal agencies have tremendous influence on the adjoining private lands. The relationship of public ownership and management to the

private sector in the Canyon is further explored, below, relative to the Forest Service and Glacier National Park.

U.S. FOREST SERVICE

The Forest Plan of the Flathead National Forest was adopted in December 1985. This plan provides general guidelines for the management of the resource base. Geographic Units are identified and used for describing the management direction for particular geographic areas. Eight Geographic Units comprise the Hungry Horse Ranger District. Access to each Unit in the Hungry Horse District is achieved via one or more of the Canyon communities. The Canyon - Teakettle Geographic Unit of the Glacier View Ranger District also has some relationship to the Canyon planning process, so is included for discussion purposes. The information presented is intended to provide a brief overview of the resources and management objectives associated with the various geographical locations in the District. However, the 1985 Plan will soon be updated, and the management focus for each of these areas may change.

West Side Geographic Unit: This Unit is located to the west of Hungry Horse Reservoir and includes a part of the Jewel Basin Hiking Area. Public recreational use of the area is relatively high. Trails provide access to the Swan Divide and the Jewel Basin Hiking Area. Seven developed recreation sites are located in this unit including a campground at Handkerchief Lake. The area is also important to such wildlife species as the grizzly bear, mule deer, bald eagles, and goats. Reservoir tributaries provide important spawning habitat for cutthroat trout. Access to this Unit is from Hungry Horse via the West Side Reservoir Road. Much of the Unit is designated as being suitable for timber harvest. That area around the Jewel Basin Hiking Area is proposed for wilderness designation.

Columbia Mountain Geographic Unit: This Unit includes the area of Badrock Canyon, Columbia Mountain extending southerly to the area of Lake Blaine, and the South Fork of the Flathead River to the dam. Recreation is the predominant management focus for this area. Columbia Mountain provides a visual backdrop to the lower Canyon communities and to those in the upper Flathead Valley. The west side of the Unit provides important habitat areas for mule deer and elk. Most of the area accessible through the Canyon is managed for various amenity values, which include offering security from human intrusions.

Lake Five - Desert Mountain Geographic Unit: This Unit is located between the town of West Glacier and Hungry Horse Dam. It is surrounded by the Middle Fork of the Flathead River on the northwest; the South Fork of the Flathead River on the southwest; Emery Ridge on the southeast; and the Great Bear Wilderness on the northeast. The towns of Hungry Horse, Martin City, Coram, and West Glacier are located within the Unit. Unique land features in the area include the Middle Fork, Coram Experimental Forest, Lake Five, and Hungry Horse Dam. The area provides suitable habitat for the grizzly bear, elk, and deer. The River provides a migratory corridor for bull trout and cutthroat trout. Future management objectives include opportunities for additional timber harvesting , maintenance of the Wild & Scenic River corridor, and maintenance of winter game ranges. *The Halfmoon Timber Sale, Final Environmental Impact Statement* (8/92) provides a detailed description of future management plans for the area, including mapped locations of important wildlife habitat areas.

Emery Creek Geographic Unit: This unit is surrounded by the Great Bear Wilderness on the east; Emery Ridge on the west; and Hungary Horse Reservoir north of Riverside Bay on the south. Major land use features in the area include Fire Fighter Mountain and Emery Bay. The area provides winter habitat for mule deer and elk and prime grizzly bear summer habitat. Streams in the area provide spawning habitat for westslope cutthroat trout. The area serves as an important recreational site for summer tourists and canyon residents. Developed recreation sites include a boat launch and a campground. The area is heavily roaded and future management plans anticipate

additional logging activities. Maintaining elk and deer winter habitat is also a management strategy for much of the area.

East Side Geographic Unit: This Unit is located on the east side of Hungry Horse Reservoir and surrounded by the Great Bear Wilderness on the east. The northerly extension is to Riverside Creek and the southerly extension to Hoke Creek. The area around Trout Lake is important elk summer habitat. The unit is also important as spring grizzly bear habitat. Streams in the area provide habitat for fish spawning and migration. Camping and water-based recreational activities are concentrated along the reservoir boundary. Future management objectives provide additional opportunities for timber production and maintenance of shore line qualities.

Bear Creek - Challenge Cabin Geographic Unit: This unit is surrounded by Glacier National Park on the North; the Great Bear Wilderness on the South; The Lewis and Clark National Forest on the East; and a short segment of the Middle Fork of the Flathead River on the North. Marias Pass is within this unit. Private lands are concentrated in the area of Bear Creek near US highway 2. The entire unit is summer habitat for elk that winter in the Spruce Park Area of the Middle Fork of the Flathead River. The area is also important as grizzly bear habitat, and a small mountain goat population is found in the Slippery Bill Mountain Area. The most important bull trout spawning area in the Middle Fork drainage is located in this unit. Use activities include hunting, fishing, firewood cutting and camping. A developed recreation site is the Devil Creek Campground. Excellent trail head access to the Great Bear Wilderness is available. Future management emphasis includes opportunities for continued timber production and for semi-primitive non-motorized recreation.

Middle Fork Geographic Unit: This unit is surrounded by the Great Bear Wilderness on the south and the Middle Fork of the Flathead River on the north. The east boundary is near Bear Creek and the west boundary is near West Glacier. Private in-holdings include the areas near Essex, Pinnacle, and Nyack. The Middle Fork of the Flathead River is the dominant land use feature. The low lying areas provide spring habitat for elk and grizzly bear. The middle fork is important for migrating bull trout and cutthroat trout. The Isaac Walton Inn at Essex has become an important stop-over area for cross country skiing. The Middle Fork is designated as a Wild and Scenic River. Five river access sites are located in this unit. Trails offer access to several area lakes and to the Great Bear Wilderness. Future management objectives include non-motorized recreational opportunities, public use of the river, and continued timber harvesting practices. A detailed description of the ecosystem and associated management alternatives for the area is presented in the *Middle Fork Ecosystem Management Project, Draft Environmental Impact Statement (1993).*

Canyon - Teakettle Geographic Unit: This unit is the southern most geographic unit on the Glacier View Ranger District. Boundaries include Glacier National Park, Hungry Horse Ranger District, and the North and Middle Forks of the Flathead River. The unit is "just across the river" from the communities of Hungry Horse, Martin City and Coram. Wildlife populations in the area include moose, elk, and grizzly bears. The North and Middle Forks of the Flathead River provide migratory corridors for cutthroat and bull trout. Fishing and hunting are important recreational activities. Nearly all the major drainages have been roaded. Future management objectives provide additional opportunities for timber production and public use of the Wild and Scenic River.

GLACIER NATIONAL PARK

The southerly boundary of Glacier National Park follows the entire length of the Middle Fork of the Flathead River to its intersection with the North Fork of the Flathead River. This boundary adjoins such Canyon communities as Lake Five, West Glacier, Nyack, Pinnacle, Essex, and Bear Creek. In addition to this direct influence, Glacier National Park serves as a destination point for nearly 2 million visitors annually. All the Canyon communities experience the impacts of that attraction.

The Park maintains an on--going planning process that is generating more than 36 separate planning documents. The Master Plan for the Park has not been updated since 1977. Some of other documents that guide the management of Glacier National Park include:

- Resource Management Plan
- Land Protection Plan
- Wolf Management Plan
- Backcountry Management Plan
- Concessions Management Plan
- Accessibility Plan
- Transportation Plan

Changes in management direction for the Park can have an immediate and direct impact on the Canyon communities. Examples of "not-so-subtle" changes would be the closure/expansion of tourist accommodation facilities, improvement/closure of entrance roads, etc. The *Park's Statement for Management (1990)* includes the following objective:

> "***To identify and develop mutually beneficial relationships with others who affect or are affected by the park and to strengthen our role as a positive force that contributes to the well-being of the region, the state, and the world.***"

Twenty issue statements are identified to assist in the implementation of that objective.

UTILITIES

Utility companies and/or districts anticipate utility extensions and service areas based on certain future land use scenarios. Often, these plans are formulated in-house based on company-generated land use projections and changing service needs and demands. In the absence of community plans that establish future visions for an area, independent decisions by utilities can greatly influence the growth and community character of an area, without the benefit of community participation or consent.

The Canyon has benefitted from the extension of electricity, telephone, and natural gas to the area. The ready and abundant availability of these services poses no artificial limitation to growth in the Canyon. It is apparent, however, that other factors may be playing a role in limiting the growth potential. Among these factors is the availability of domestic water supplies and sewage treatment capabilities. The ready availability of both of these services in combination with the other available services would leave few artificial limitations to unchecked growth and development in the Canyon. The infusion of one or both of these services into any portion of the Canyon without the foresight of community planning could

be likened to "the tail wagging the dog." Decisions on land use (location, type, density, and timing) could quickly become the purview of a special purpose group, as opposed to the broader community.

ISSUES

This Chapter has addressed the many outside influences that affect the future of the Canyon communities. The purpose of this Plan is to provide a more stable vision of the Canyon's future and to achieve that vision despite (or in collaboration with) those other outside influences.

The Canyon will need to maintain a political presence in the day-to-day application of this Plan. "Memorandums of Understanding" between agencies may be necessary to achieve certain planning objectives. A local voice in land use decision making, to represent the interests of the broader community, may be appropriate. Sanitation requirements will continue to have the most direct influence on future land use scenarios. Plan implementation should focus on the relationship between county subdivision regulations and solutions to the sanitation issues that face the Canyon. Just reacting to local federal land use decisions should be replaced with a proactive position towards federal planning efforts. All resource management plans should be reviewed in the context of how those plans may affect the implementation of the Canyon Plan.

GOALS AND POLICIES

The goals and policies applicable to the topic of this chapter are incorporated into other elements of this Plan so will not be listed separately in this section.

THE CANYON PLAN

CHAPTER III
DEMOGRAPHICS

Demographic information on the Canyon communities is based on the 1990 U.S. Census. The Canyon area is located within the South Fork Census Division of Flathead County. This is a large division that extends from the area of Spotted Bear to the Middle Fork corridor. A summary of the information is presented by both Division and Block Groups. Block Group information provides site specific data for the communities of Hungry Horse and Martin City. A third Block group combines the data for all the Canyon communities situated between Coram and Marias Pass.

POPULATION

The total Canyon population in 1990 was approximately 1,970 people. This number reflects the winter time population. The graph on the left indicates that the gender split is relatively equal. Nearly 88% of the winter population is located in the lower Canyon communities of Hungry Horse, Martin City, and Coram. Ninety-seven percent of the population is classified as "white."

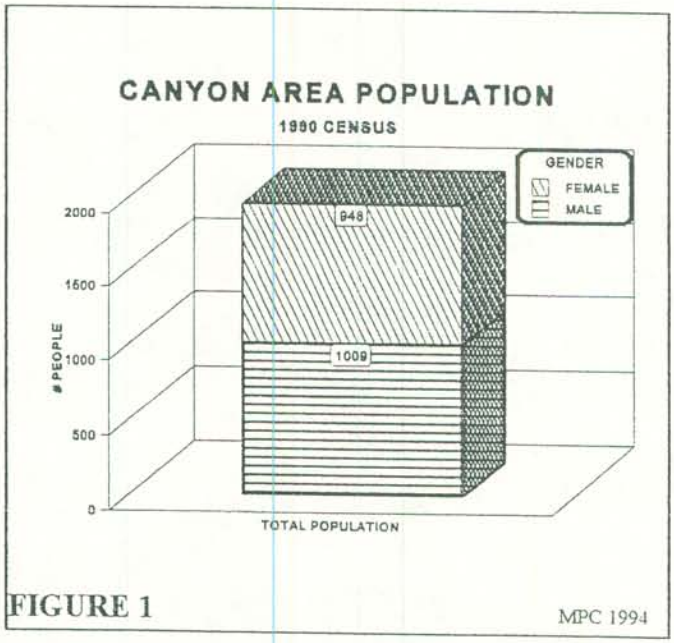


FIGURE 1 MPC 1994

The year-round resident population for the Canyon is misleading in many respects. The summer influx of seasonal residents increases the total Canyon population by nearly 77% as shown in the following graph. The added contribution of summertime tourists to the area is discussed elsewhere in this Plan.

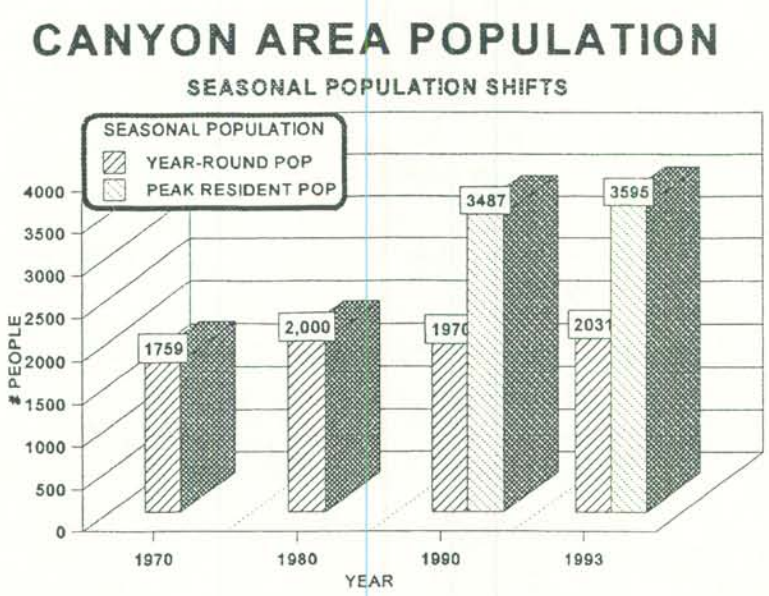


FIGURE 2

MPC 1994

The population of the Canyon did not appreciably change between 1980 and 1990. Since 1970, the population has experienced an annual growth rate of 0.6%. This annual growth rate can be used to project the population of the Canyon into the future. The accompanying graph compares the future County population with the Canyon population for the 1970 to 2024. That particular end-year was selected because an additional 400 residents can be expected in the Canyon by that date, assuming a constant annual growth rate of 0.6%. The 400 figure represents the number of additional people the Canyon can "reasonably support" according to the results of an independent survey conducted by the Cooperative Planning Coalition in 1993. For the purposes of comparison, the County population was projected into the future by assuming an annual average growth rate of approximately 1.8%. This is considered to be a conservative value since the annual growth rate of the County between the years 1970 and 1990 was approximately 2.5%. The 1.8% rate may be a more realistic expectation in the coming years due to the limited economic growth potential in the County and rapidly increasing housing costs. This growth rate would result in a county-wide population of more than 100,000 by the 2024 date, and approximately 2% of that total would be in the Canyon.

Of course, there are a number of unknowns that could affect the accuracy of these estimates. The reconstruction of the highway through Badrock Canyon could actually reduce the Canyon resident population during the years of construction. Completion of the highway

improvements is likely to increase the rate of growth due to improved commuting conditions. The most dramatic change in the growth rate would result from the addition of community sewer systems to any of the lower Canyon communities. The combination of an improved highway and public sewage collection and treatment would attract additional residents to the area.

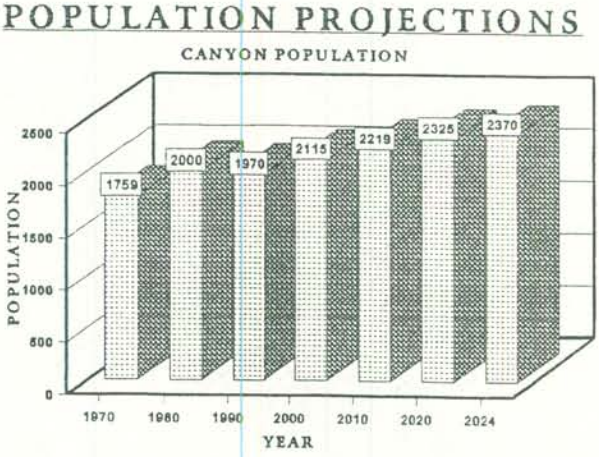


FIGURE 3

MPC 1994

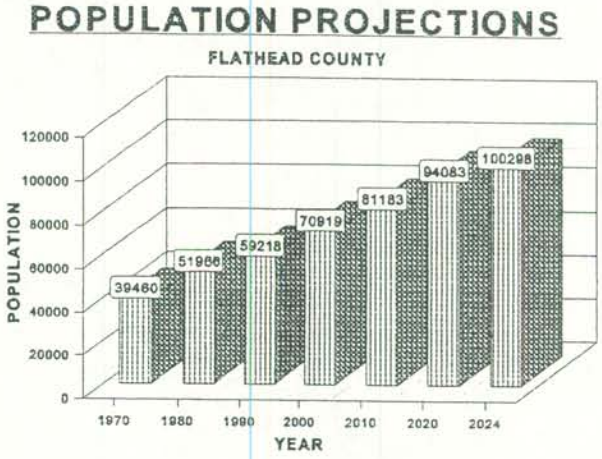


FIGURE 4

MPC 1994

The age distribution of the Canyon population is heavily skewed to the younger ages. Nearly 64% of the population is below the age of forty. Approximately 24% of the resident population is school-aged (5-18). This information tends to suggest that the year-round Canyon residents are primarily young family households. The availability of affordable housing draws many young families to the lower Canyon communities. The contribution of summer residents probably shifts the age distribution towards the older segment of the population.

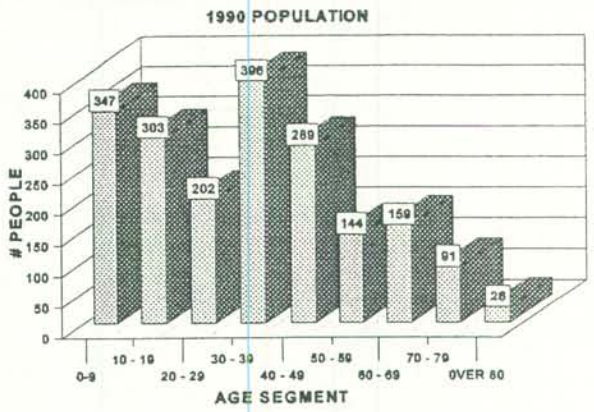


FIGURE 5 MPC 1994

HOUSEHOLD CHARACTERISTICS

A household is defined by the Census as "including all the persons who occupy a housing unit." The Canyon household is very similar to the greater County household. The average household size in the Canyon is 2.66 persons as compared to 2.56 for the County. The total number of households is 737, of which 71% (523) are considered to be "Family" households (related family members). Family households comprise 72% of the County households. The average size of the family household is 3.17 persons in the Canyon and 3.05 in the County. Married couple families comprise the largest segment of the family household category for both the Canyon (85%) and County (85%). Single parent households make-up the remaining portion (15%).

ISSUES

The existing rural character of the Canyon is a way of life that many Canyon residents would like to maintain. This desire translates to slow growth and low population density

based on the results from various Canyon surveys and from feedback received at the public meetings. There are a number of natural and artificial factors limiting growth at this time in the Canyon. Should any one or a combination of these growth constraining influences be eliminated, the potential for accelerated growth in the Canyon is likely. Growth-inducing changes would include:

- Transportation improvements:
- Water system improvements;
- Shift in land ownership from "public" to "private"; and
- Public sewage treatment systems.

The Plan must be used to anticipate and possibly accommodate these situations by providing the necessary policy guidance to mitigate the growth inducing impacts that could result. Changes that may induce greater interest in owning property in the Canyon may also serve to drive out existing residents. The convenience of having public sewer, for example, may create an artificial increase in property values and serve to expedite community change by facilitating the development of certain uses that may not have been practical without public sewage treatment.

GOALS AND POLICIES

The goals and policies that are appropriate to the topic of this Chapter are incorporated into other elements of this Plan, so no specific listing of goals and objectives is included in this Section.

THE CANYON PLAN

CHAPTER IV
LAND USE

"Rural Residential" describes the general land use character of the Canyon communities. This description recognizes the dominance of open space in the Canyon, low population density, and the general absence of strong commercial centers. Each of the present and former Canyon communities is a product of dramatic historical events. Only now are many of these local communities emerging beyond their ties to the past as local independence gives way to the more dominating regional and national economies and to the ease of modern day transportation. Dependence on natural resources as a way of life and for survival is still descriptive of the Canyon residents, only now that relationship has shifted more from one of "consumption" to "preservation". The natural resources of timber, water, and rock that were once exploited to build roads, rail lines, and reservoirs are now national attractions and the economic life line of the Canyon.

A static overview of the land use character of the Canyon communities would not do justice to the area's rich land use history. A glimpse of the past often provides a glimmer of the future.

LAND USE

EARLY LAND USE INFLUENCES

Several historical events opened the Canyon up to improved access and national focus. The following discussion includes excerpts from "DEVELOPMENT HISTORY OF THE CANYON", which will soon be available for purchase as part of the fund-raising effort for this Plan.

MARIAS PASS

The eventual "discovery" and navigation of Marias Pass as an accessible route through the Rocky Mountains became a catalyst to the settlement and development of the Canyon. While the Pass had always been there as a physical feature in the landscape, it was the early white explorers' desire of finding passage through these seemingly impenetrable mountains that prompted the eventual establishment of the Great Northern Railroad, which in turn encouraged further industry in the Canyon as well as the creation of Glacier National Park. Surveys sponsored by the St. Paul, Minneapolis and Manitoba Railroad to find a northerly transcontinental railroad route ultimately led to the identification of Marias Pass as the preferred passage through the mountains in 1889.

GREAT NORTHERN RAILROAD

Beginning in the spring of 1891, the railroad was built simultaneously on both sides of Marias Pass. Havre acted as supply center from the east and Demersville, in the Flathead Valley, furnished crews from the west. The Summit was reached by the fall of that year and on December 31, 1891, the route had reached Kalispell. Regular train service began soon after. The entire line was completed to the Pacific Coast by January of 1893, and the first transcontinental passenger train left St. Paul on June 18 of that year. Along the mountain route, small temporary communities, such as McCarthyville also developed as the first settlers began to move into this newly opened region.

U.S. HIGHWAY 2

The development of a road through the Canyon naturally coincided with the construction of the Great Northern Railroad. Known originally as the "tote" road, this route was used to transport materials to the railroad building sites.

The State began work in 1920 on a better road that would pass through the Canyon. By 1928, the highway was completed through Badrock Canyon. This initial road was so narrow and low that it flooded during high water, but it was later improved.

U.S. Highway 2 was completed in July of 1930, with the last barrier, a large outcropping of rock, removed about a mile west of the summit. Traffic was first allowed over the pass on July 20, 1930. The development of the Highway greatly increased traffic not only through the Canyon but also into Glacier National Park. While in 1925, 40,000 visitors a year came to Glacier, the number increased to 74,000 in 1930 as construction was nearing the end and climbed to 210,000 in 1936. With the completion of U.S. Highway 2 and the opening of the Going-to-the-Sun Road in 1933, this area of the country became a new national destination for transcontinental automobile travel.

PUBLIC LANDS

Much of the forested area in the Canyon was included within the Lewis and Clark Forest Reserve. In 1905, the U.S. Forest Service was created, and, by 1907, the Forest Reserves became known as National Forests. The following year, the existing Lewis and Clark National Forest was divided to establish the Flathead National Forest. In 1910, Glacier National Park was withdrawn from the Flathead National Forest.

Glacier National Park owes much of its origin and early tourist popularity to the Great Northern Railway. The railroad actively promoted rail passenger traffic to attract vacationers to the West and to Glacier National Park, in particular. The early luxury resorts at Belton and Lake McDonald were developed with the encouragement of the railroad. The national exposure that developed from this partnership of rails and nature led to the establishment of Glacier National Park.

RESOURCE INFLUENCES

Timber, water, minerals, and natural catastrophic events all shared roles in the settlement and development of the Canyon communities. A brief overview of each is described below.

TIMBER: During the building of the railroad in 1891, large volumes of timber were harvested from the lands adjacent to the railroad right-of-way for ties, bridges and other construction uses. An extensive logging boom occurred in the late 1940s. During that time much of the county's mill and logging activity shifted towards the Canyon. In conjunction with the massive clearing of the reservoir and the national need for lumber, significant activity was generated in the Canyon area. Employment estimates in the late 1940s for the Martin City-Coram district were between 400 and 500 workers. The Glacier-Coram Lumber Co. employed 30 men at its planer mill. Other companies involved in the logging industry during those boom years in the Martin City/Coram/Belton district included Martin City Lumber; Rex Brown; Foley, Kartheiser and Lindburg; Fordick and Turner; Hungry Horse Lumber; Birky Brothers; Vertz Lumber; Jerry Leffring and C.E. Johnson, and others.

Coram Working Circle was established during the 1950s as a Forest Service administrative area, located along U.S. Highway 2 and extending through the South and Middle Forks of the Flathead River drainage. The main intent for establishing the working circle was to encourage a sustainable timber yield in this area, and to support stabilization and better integration of the lumber industry in the Flathead Valley.

FOREST FIRES: Several fires had a strong effect on the development of the Canyon, most occurring in the first few decades of the century. Two occurrences that had devastating impacts on the Middle Fork basin were the 1910 and 1929 fires.

The 1910 fire was part of a series of fires that swept through much of the Northwestern United States during that summer. Greatly affected was the newly established Glacier National Park, with its first Superintendent, Major Logan, fighting the flames as his first responsibility in the month of August. Thirty companies of troops were also ordered by President Taft to help fight the fire and were transported by the railroad. Rain finally fell on the 24th of August, helping to put out the flames.

The 1929 fire season began with several small fires in the area, including ones in Coram, Java and the South Fork. Then a fire broke out around August 17 near the State Lumber Company mill, located west of Columbia Falls, and it grew out of control. By August 21, it reached Teakettle Mountain and was sweeping into Glacier National Park, leaving much of the Canyon smoldering in its wake. The fire raged throughout the month of August and was not brought under complete control until late that fall with the coming of rain and snow. The devastation managed to affect every single community in the Canyon and was considered a turning point in its settlement. An estimated fifty thousand acres of forest were burned, including the magnificent stand of western red cedar between Belton and Apgar.

This fire, along with the effects of the Great Depression, made the early 1930s a difficult time for Canyon residents. A federal program that was starting throughout the United States, the Civilian Conservation Corps, was organized in many of the country's national parks. In the early 1930s camps were established in several locations in Glacier National Park, including present-day West Glacier. Sixteen hundred men were shipped into the Glacier area and organized into eight camps. Many helped clear the damage created by the 1929 fire, sawing the remaining snags into logs or lumber. Almost 250 railroad cars of lumber were shipped out of the Park by 1936.

Mining: The lure of mining was a force that brought many settlers to western Montana. Only small traces of gold, copper, galena and coal have been spotted in the Canyon area, however. Several of the early Polk Directories for Flathead County indicate that miners were living in the vicinities of Coram, Belton (West Glacier) and farther into the Canyon.

Hungry Horse Dam: One of the other resources of the Canyon area has been the runoff of water from the many drainages into the Flathead River. For years, flood damage had been a constant concern for Canyon residents as well as for larger communities down stream. Eventually, plans were made to harness this resource, resulting in the planning and approval of the Hungry Horse Dam and Reservoir by the U.S. Congress in 1944.

The Hungry Horse Dam and Reservoir project was the boom development that many Canyon residents had been awaiting. It would not only provide needed jobs for returning veterans from World War II, but also furnish irrigation, flood control, water storage and electric power. The dam and reservoir were built by the Bureau of Reclamation during five years, from 1948 to 1953. Preparations and contracting began as early as 1946. This tremendous project not only provided jobs in the Canyon area for a steady five years or more, but established the communities of Hungry Horse and Martin City and further developed the community of Coram.

FLOODS: Flooding has been one of the worst disasters, along with fire, that the Canyon has had to endure. The huge build up of snow in the mountains melts unseasonably at times, sometimes as late as June and July. This, combined with wet months of extreme rain, can cause torrents of water to come down all three forks of the Flathead River. Under this type of situation, flooding occurs throughout the Canyon area, especially along the banks of the Middle Fork. As early as 1916, reports were made of Badrock Canyon being in impassable condition. Flooding has occurred in many years since then, and the development of the Hungry Horse Dam was partially intended to control the damage that occurred during these floods.

The 1964 flood was devastating to the Canyon, especially north of West Glacier. The bridge over the Middle Fork of the Flathead on the Park road was badly damaged, while the Walton Bridge was completely lost. Both the U.S. Highway 2 and the Great Northern tracks suffered extreme damage, with 15 miles of road washed out between Nyack and Essex. Not only were timber and livestock lost, but many homes suffered damage as well. The flood damage

stopped all road and rail traffic through the Canyon for some time.

COMMUNITY SETTLEMENTS

The majority of white settlers who first came to the Canyon area arrived in the wake of the Great Northern Railroad, either following the original wagon "tote roads" established by the railroad crews, or on the rails themselves. Many came at first to visit, and later returned to file homesteads. The building of the railroad established the seed for many of the communities that developed in the Canyon area. Stations or sidings were located along the track at present-day Coram (Citadel), Egan (Grizzly), West Glacier (Belton), Red Eagle (Nyack), Paola (Pinnacle), Walton (Essex), Java (Nimrod), Fielding and Summit. The names of many of these stations were changed by Great Northern railroad officials during the 1920s.

The early residents made a subsistence living. While there was some farming, most worked on timber harvesting for the railroad or, eventually were employed by the National Forest Service or Glacier National Park. Many settlers adapted to the rugged lifestyle and grew their own food, hunted, fished, and utilized local resources, such as timber for homes and heat, water, and huckleberries or other local plants for food.

HOMESTEADING

A practice encouraged by the Great Northern Railway helped populate the region. Immigrant trains, actually modified boxcars, could be rented by several families from the railway. Equipped with a stove for cooking and heat, these simple and uncomfortable means of travel provided an economical way to move west. Occasionally these "immigrants" would find a section of the Canyon appealing and would end their journeys there to begin a new life.

The homesteading process in the Canyon area permitted a person to make a 160-acre claim, with one-eighth to be cleared for farming. The homesteader would be required to build a home and then reside on the property at least six months out of the year for three to five years, at which point the claim could be patented.

After filing on a claim, the homesteader would proceed to build a home. As water was an important necessity, the building site would be located near running water, such as a creek or river. In this area where timber was plentiful, the home was usually built of logs, unlike the typical "sod shanties" popular in the plains areas. The log cabins often consisted of one room, had shake roofs and were made mostly of available materials. Some of the homesteads consisted of two facing cabins connected by breezeways. One cabin would provide sleeping quarters, while the other was used for cooking.

Many homesteads had been established before World War I in the Canyon area. The settlement pattern changed greatly after the 1929 fire, when many of the original homesteaders lost their homes. Many homesteaders left and others lost their properties

through tax foreclosures. The disastrous fire combined with the difficult economy of the 1930s greatly changed the former settlement pattern in the "Canyon."

HUNGRY HORSE

Hungry Horse can trace its beginnings to several small communities that came to life on the small plain located east of the South Fork of the Flathead river. With the massive work-force expected to build the dam and the difficulties of transportation into the Canyon area, new townsites in the Canyon became necessary.

As early as July 5, 1945, discussions regarding the creation of this modern town, with paved streets, concrete sidewalks, water and a sewage system, were printed in the Flathead Monitor. There were estimates of 3000 to 4000 persons to be employed at the dam site during the peak of construction.

The U.S. government began to organize some contracts to build a townsite area, located to the east of present-day Hungry Horse behind the administration offices of the Hungry Horse Ranger District. Various contractors were awarded jobs, and by November 1946, 50 prefabricated homes and 25 prefabricated duplexes were nearing completion, and bids were being accepted for a prefabricated garage and fire station. A volunteer fire department was organized, with the training of a fire chief, two captains and an eight-man crew. Work continued on the Hungry Horse government village into 1947, including the construction of sidewalks, curbs, streets, and sewer and water distribution systems. Soon after construction in the area had begun, an eight-classroom school was built in Hungry Horse.

Hungry Horse officially opened its post office in 1948. The name "Hungry Horse" has been attributed to Mike Berne, based on the story of two horses that became separated from their owners near the South Fork in the fall of 1900. These horses were located about a month later in the area of present-day Hungry Horse Creek in a starved condition. They were eventually brought into Columbia Falls, prompting a bystander to comment "That must be a hungry horse country up there."

After Hungry Horse Dam and Reservoir were completed and the construction force diminished, the Flathead National Forest secured many of the Department of the Interior buildings for administration and housing. Census figures for the twenty year period from 1940 to 1960 demonstrated the boom-bust cycle of this government town. While no population was listed in the area in 1940, by 1950 the population count came to 1335, while in 1960 it went back down to about 300. Apparently, many of the houses originally built were used as rentals until the early '60s, at which point most were moved to other locations.

MARTIN CITY

Martin City also owes its development to the building of Hungry Horse Dam and Reservoir. The name Martin comes from early homesteaders who eventually settled near

Abbot Creek in 1905, just north of present-day Martin City. Martin City appears to have been one of the most enthusiastic and fastest growing communities in the Canyon with the development of the Hungry Horse Dam. Established on part of the old Martin homestead, the community was the first impacted by construction of the dam. As early as 1946, population expectations were for 2,500 residents by the following year. By the summer of 1946, there were already a grocery store, several bars and restaurants, a barbershop, a filling station, repair shops and a pool room.

Early in 1947, a post office was established in the Martin City Variety store building. The 1947 population was 400 persons, with about 30 first and second grade students being taught in a makeshift store front. By the spring of 1947, the town had burgeoned with 53 establishments, including a town office, the Hungry Horse Planer Mill, the Glacier-Coram Lumber Company, a Texaco Oil station, a variety store, hardware store, cabins and apartments, a sporting goods store, a confectionery, several restaurants and of course, at least ten bars such as the Mint, the Monta Club, the Silver Dollar Bar, and the Deer Lick. The final bar count by old-timers wavers between 13 and 18. By September 1947, a 400-seat theater was built, known as the Royal. Owned by the Yellowstone Amusement Company, the log-facade theater premiered with "That's My Man," staring Don Ameche. A volunteer fire station had been established, as well as a church facility used by various denominations.

Like Hungry Horse, Martin City's population also diminished in the late 1950s and early 1960s.

CORAM

For more than fifty years, Coram was the first community encountered after Columbia Falls when a traveler crossed the South Fork of the Flathead River. While the village's name has always been Coram, the Great Northern Railway station was renamed Citadel for over 20 years. Coram itself was named apparently after James A. Coram, a Montana businessman originally from New Brunswick, Canada.

With Coram's role as a railroad station, a water tank was established that became an important landmark. This was used to refill the depleted steam engines for their trips in or out of the Canyon. While originally Coram was only used as a railway stop, a few homesteaders began to establish claims in the area. A post office was opened in Coram in 1914. The original post office and store burned down around 1920, but it was rebuilt facing the railroad tracks. The main street of Coram was located along the tracks at this time. Other businesses established in Coram during World War I included John Elliot's general store, Frank Campbell's pool hall, and Dinty McCarthy's hotel. Foldey Neitzling established the first blacksmith shop.

The Coram Lath Company was established in Coram in the early 1920s, with B.F. Fehlberg as manager. From the mid 1910s, wood-related industries, such as tie cutting, logging and the making of mine props were lucrative endeavors for Coram area residents. Some residents

also assisted with the outfitting of Forest Service pack mules that would be sent into the South Fork primitive area, sometimes with as many as 45 pack animals leaving Coram for the 50-mile trip.

By 1929, Coram boasted a hotel, three stores, two restaurants and two tie mills. By 1940, Coram had four stores, a garage, five service stations, three beer parlors, a lumber mill and two tie mills.

A one-room frame schoolhouse was erected in Coram in 1910 on an acre of land purchased from Barney Ward. This school burned down in 1933, and was replaced with a two-room school in 1934. A new school was built in Coram in 1948.

Coram's greatest increase in population occurred with the development of the Hungry Horse Dam project. Its location was advantageous for two reasons. First, it was the closest established community to the proposed dam site, and second, it had the closest railroad station and siding loading capabilities. Perhaps as a show of pride, the newly established Coram Booster Club managed to have the station's name changed back to Coram from Citadel in 1946. During the dam construction, Coram was not only important as a place of residence for many of the dam workers, but also as a busy depot for shipping out wood and pulp from the local Glacier-Coram and Martin City Lumber companies to many national locations, as well as for receiving steel and cement deliveries for the dam site throughout the late 1940s. While the population increase continued through the 1950s, again, much like the other towns associated with the dam construction, the community began to diminish in the 1960s. The station, sidings, and water tower were removed some time in the 1960s.

LAKE FIVE

Lake Five is well-known in the Canyon area for its scenic beauty. Named for its shape like a number five, the Lake had a siding known as Egan, located at the north end of the lake. The name "Egan" originated from a former railroad superintendent who was lost during a hunting party and died in the woods one fall. The town was organized around Egan station, and consisted of a box car depot, company store, housing for the workers, and a school house.

A sawmill was built next to the railroad, east of the siding, in order to load and unload the timber and supplies needed. At one time it was estimated that the mill employed about seventy-five men. A six-foot wide flume was dug between Half Moon Lake and Lake Five so that logs could easily be floated between the lakes to the mill. A post office was established on the hill above the railroad tracks in 1920. The post office operated until 1928, after which mail was forwarded to Belton. Several families homesteaded in the area, including the Swanbergs, the Briggs, the Gilchrists, the Hamiltons, and Jack Wise. Reportedly there are graves at Mud Lake, where some of these settlers are buried.

The mill went out of business around 1914, after which several small mills were run by local

residents. An ice-harvesting business opened at Lake Five in 1916 at the abandoned mill site. Before refrigerator cars were invented, a constant supply of ice was needed for the perishable products industry, and few lakes along the Great Northern Route were either accessible or clean enough for ice harvesting. For example, Whitefish Lake's ice was dirtied by the coal used as fuel in the train engines.

The Lake Five area was badly damaged by the 1929 fire, resulting in many of the local residents losing their homesteads and being forced to leave. One interesting establishment that also was badly damaged in this fire was a floating saloon operated on the lake by a Mr. Port Gregg.

Two local institutions that began in these early years were the Ridenour family's strawberry fields and cabin camps. James Ridenour came to Lake Five in 1915 and homesteaded. Around 1923, Ridenour began to plant strawberries in earnest, with the crop becoming a popular attraction for the area. His son, Harold Ridenour, continued the business until the early 1950s, producing 16,000 plants during the 1946 season.

The Ridenours also started the first cabin camps on the lake. Cabins that had been used previously by workers were converted into tourist cabins around the early 1920s, when more were built. People from east of the mountains came on the train and stayed for the summer. The cabins were very popular when Lake Five was located along the old Belton Stage Route. This development eventually became the present-day Lake Five Resort.

WEST GLACIER

The community of West Glacier, formerly known as Belton, owes its existence both to the extension of the Great Northern Railway through the Canyon and to the development and designation of Glacier National Park.

The railroad station, originally only an old boxcar, was established in 1891, the same year the railway was established. By 1898, a new store-saloon was operated near the station. The post office was established in 1900. Many of the residents receiving mail appeared to be rangers, guides and packers.

The 1911 Polk Directory listing for Belton reflects the change in status for Glacier Park, mentioning Belton as "the railroad station for Lake McDonald and the National Glacier Park." The new Hotel Belton is listed with E.E. Dow as proprietor. "Ed" Dow also owned the Belton Mercantile and the local saloon known as the Bucket of Blood. After tourists rested at his hotel, Dow would transport them to the foot of Lake McDonald.

The Belton Chalets under the ownership of the Great Northern Railway were opened in 1913, though construction on them first began in the summer of 1910. In 1911, the Belton Chalets were home temporarily to Glacier Park staff and for several years afterwards, the rangers and their families would alternate their lodgings between Apgar in the summer and Belton

Chalets in the winter. While the town of Belton received its water supply from a spring off one of the hills, the chalets had their own water tank filled with water from the river. The Belton Chalets, built in Swiss style, had one chalet featuring a large room with a skylight.

The resident population increased notably in 1915, and three hotels were listed for Belton. By 1917, most residents appeared to be Glacier National Park guides, Great Northern Railway employees and hotel employees of both the Belton Chalets and Glacier Hotel, Lake McDonald. During this period, the first car and bus transportation, Glacier Park Transportation Company, backed by the White Motor Company, began to transport visitors from Belton to Apgar and the Lake McDonald Hotel.

In 1922, the population increased to 100, with residents including farmers, ranchers, and park employees. The population increased to 200 by 1925, supporting several mercantiles including the Belton Mercantile Co., Lakeside Table Supply Store, and Scenic View Mercantile. In 1924, the Belton School, later known as the West Glacier School, was built at a cost of $1,950. Two additions were built later, the first in 1931, and the second in 1935, to make a three-room school. The Lundgren family arrived in 1946 and purchased many of the existing buildings in townsite. Today, most of the commercial uses in West Glacier townsite remain in the ownership of this family.

The Middle Fork bridge was vital both to the life of the community, and to the visitors who were heading into the park. Prior to 1897, when the first wooden bridge was built, visitors and residents from Belton would use rowboats to cross the Flathead River and then walk or ride horses, wagons or buckboards to the park. A concrete bridge was built in the present location in 1938, and was declared at the time as the most beautiful bridge of the year. This bridge survived until 1964, when it was badly damaged in the flood and had to be replaced.

In 1949, the name Belton changed to West Glacier, and the residents appeared to be mostly employees of the U.S. Forest Service, Glacier National Park and Civilian Conservation Corps. By 1951, the population had increased to 300, and it later declined slightly through the 1950s and early 1960s.

According to the State Historic Preservation Office, there are two sites of historic significance in West Glacier. One is the Belton Chalets and the other is the Belton Railway Depot, currently home to the Glacier Natural History Association. The Belton Chalets are listed on the National Register of Historic Places and the Belton Railway Depot was recently determined to be eligible for listing.

RED EAGLE/NYACK

Nyack was one of the original stations established by the Great Northern along this route. The name Nyack had been used in this area even before the establishment of Glacier National Park. The station name was changed from Nyack to Red Eagle at some point, possibly in the late 1920s.

From 1901 to 1911, a few Great Northern employees lived in Nyack. In 1912, the community got a post office. Nyack continued to grow with more Glacier Park employees and by World War I, had a depot, a store, and a large water tank.

In 1923, two lumber companies were organized in the region of Nyack Flats, the E.A. Findell Lumber Co., and the Nyack Ties and Timber Co. With more settlers and homesteaders becoming established in this area, a one-room school was founded in the same year. Apparently a bridge had been built between the little station and the Park across the river. Later on in the early 1930s, a pulley cable was installed to facilitate crossing. By 1925, Nyack had a population of about sixty people. This population remained constant until the early forties. The post office was closed in 1942, and mail was forwarded to Belton.

While the population of Nyack/Red Eagle continued to diminish, the area always had a good reputation for hunting. Some tourist cabins were run here in the early 1950s. A few older buildings still exist at the current station site.

ESSEX

Essex was originally known as Walton, established as the Great Northern station from which helper engines would be sent to assist the trains on their strenuous climb to the top of Marias Pass. As the highest point for the entire Great Northern line, this pass presented a major challenge for the maintenance of the route. The future developments in the Essex train yard reflect these changes. Another role for Essex was the housing of the many men needed to sustain the snow crews. During the long winters these crews would keep the tracks clear of snow by both plow and by hand, and track walkers would patrol their sections of track for various hazards to the trains. With this size of population to maintain, Essex grew quickly in its early years.

The first post office was established in 1898. As the railroad yard was expanded during the 1910s, "beaneries" or small restaurants were established in Essex to provide meals for the railroad workers.

The Kalispell Lumber Company relocated its sawmill to Essex in the summer of 1916, boasting that it would produce 50,000 board feet per day of lumber, and employ 80 men between its manufacturing and logging operations. Unfortunately, the mill burned down in 1917, but operations continued on Dickey Creek northwest of Essex until the 1930s. This indicates that timber was a lucrative business in the Essex area, as in many of the station areas along the Great Northern Railway.

As the community grew, a schoolhouse was built in 1913. An addition was made in 1921, turning the building into a two-room school. The fire losses left the community without an eating establishment or adequate hostelry by the early 1930s, prompting a long series of correspondence between the offices of the Great Northern Railway regarding the building of

a hotel. In 1937, a two and one-half story hotel with 29 rooms and 10 bathrooms was constructed.

As well as offering necessary railway employee housing, the inn was also intended to provide accommodations for a third entrance to Glacier National Park, opening the Park Lake area for additional tourism. This plan fell by the wayside during World War II and was never reconsidered. The name "Izaak Walton" was chosen to attract fishermen and sportsmen, as Izaak Walton had been the patron saint of fishermen since he wrote the book The Compleat Angler in the 1500s in England.

Essex continued to change through the years, adapting its train yard to new technologies such as diesel engines. According to the Polk Directories, the majority of residents in Essex continued to be Great Northern employees through the late 1950s. With the decline of the popularity of railroad travel and freighting, the population of Essex declined as well. While Essex is still providing helper engines for trains climbing the pass, the Izaak Walton Inn has become a popular tourist destination in both summer and winter. The Inn received National Register status in 1985.

HIDDEN LAKE, PINNACLE, AND NIMROD

Three sidings created by the Great Northern Railroad were known as Garry, Pinnacle and Java. Garry, later renamed Hidden Lake, is located between Nyack/Red Eagle and Pinnacle along the railroad route. Java, also known at various times as Nimrod, is located four miles southeast of Essex. Pinnacle is the only original siding with a current population.

Garry Station was listed in the Polk Directories from 1905 until the 1950's, and might be associated with the Garry Lookout Tower found on U.S.G.S. maps. Apparently this site had a post office from January to October of 1923. Mail was then forwarded to Nyack. The same source notes that Garry had a name change in 1926 to Hidden Lake, for "a hidden lake of great beauty and interest in Glacier National park." Apparently the original name was dropped when the Great Northern officials were seeking enticing names for the stops along its line.

The Great Northern Railway station of Paola eventually became present day Pinnacle. Mail was delivered to the Paola Post Office from 1914 to 1919, after which mail was forwarded to Essex until 1935. While only a Great Northern Railway section foreman was listed as an occupant from 1901 to 1904, there was an increase of population around 1915, when the Guthrie MacDougal Co. located there with sixteen employees. Great Northern Railway employees, teamsters, lumbermen and forest rangers also resided in the area. As well as a post office, the little town had a school and a general store. While the Guthrie MacDougal Co. was no longer located in Paola by 1922, the town continued to have a postmaster and retained a population of 35. A school house was built there in 1927, but later was moved to Nyack. Paola's name was changed in 1928 to Pinnacle, in keeping with the name changes occurring at that time. The population of Pinnacle remained consistent through the mid-1950s, when local businesses such as Denny's Underpass and Evergreen Camp were

established.

Java was one of the original stations established by the Great Northern, just four miles southeast of Essex. The station was consistently the residence of Great Northern Railway employees throughout the first half of this century. The 1951 directory lists Java as Nimrod. Other residents of Nimrod through the 1950s included the local dude ranch of Sam and Vera Border and the Wellman Bear Creek Dude Ranch. Throughout this time period, all mail has gone to Essex.

EXISTING LAND USE

The exploration and industrial age of the Canyon has given way to bedroom communities and tourism as an economic focus. Gone are the mills and massive construction activities associated with the building of the railroad, highway, and dam. Instead, the seasonal tourism industry and all the associated retail and service trappings are expanding. The myriad of communities that once existed have been reduced to a handful of population centers that, in many instances, have failed to live up to the early expectations of growth and development. The population centers in the Canyon include:

- → Hungry Horse
- → Martin City
- → Coram
- → Lake Five
- → West Glacier
- → Pinnacle
- → Essex

The three lower Canyon communities of Hungry Horse, Martin City, and Coram represent stable population centers and generally serve as the Canyon service or retail centers. The other communities tend to be more seasonal. Winter residential vacancy rates generally exceed 50%. West Glacier has a multitude of tourist services, but they are closed in the off (winter) season. The locations of these communities in the Canyon and the associated topographical features are shown on a map at the end of this chapter.

The relationship of public land management to the Canyon communities has been extensively discussed elsewhere in this Plan. For this reason, the following section emphasizes the existing land use character of the private lands in the Canyon.

HUNGRY HORSE

Hungry Horse is a community wedged in between the Middle and South Forks of the Flathead River. [See the Hungry Horse to West Glacier Map and the Hungry Horse Parcel Map

included at the end of this Chapter.] The 1990 population of the community was estimated to be 642. The summer time population probably increases to approximately 830 people. A majority of the residents have lived less than 13 years in the community.

Growth is constrained to the west, north, and south by the two rivers and on the east by topographical changes and Martin City. Public land ownership patterns also influence local growth opportunities. The land division pattern has remained relatively unchanged since the boom days of dam construction. Individual below-ground septic systems are the sole means for treating sewage effluent and, as a result, land use density patterns have generally been determined by sanitation standards. Adequate domestic water supplies are available to serve additional development.

U.S. Highway 2 bisects Hungry Horse and is flanked by various businesses that primarily cater to tourists. Interior properties extending from the highway to the respective rivers are mostly single family residential. Approximately 34 businesses currently operate in the community, all but a few dependent upon tourist trade. Many open-air tourist stands dot the highway corridor during the summer, selling everything from fruit to concrete ornaments. (Please refer to Chapter V for related discussions.)

There are approximately 327 residential dwelling units in the Hungry Horse area, with most (67%) being "traditional" single family homes. Manufactured homes contribute 28% to the housing stock. The mean value of the a residential dwelling (1990 dollars) in Hungry Horse is approximately $50,638.

"Clutter and dilapidated housing" was voiced as a community concern during the neighborhood meetings. Items of community pride include the two adjoining rivers, the school, and the undeveloped county park situated near the South Fork of the Flathead River. Some local residents expressed a need for a developed community park that provided playground equipment, picnic facilities, and other such improvements.

Hungry Horse is the headquarters of the Hungry Horse Ranger District. The Forest Service facilities occupy various buildings left by the Bureau of Reclamation following completion of the Dam. The old "government town" is still marked by the platted layout of the roads in the area of the offices. The roads include curb and gutter design. Located adjacent to the Forest Service complex is Canyon Elementary. This school serves children (k-6) living in the areas of Hungry Horse, Martin City, and Coram.

Another major activity center in Hungry Horse is Glacier Bible Camp. This is one of the largest bible camps in the Pacific Northwest. The facilities operate on a year-round basis but most of the use occurs between June and September. On an annual basis, up to 7,000 people utilize the facilities. Glacier Bible Camp is situated on approximately 45 acres, with substantial frontage along the Middle Fork of the Flathead River. Teakettle Lodge offers dining and kitchen facilities for up to 200 people. Boarding is provided in five dorms with more than 40 sleeping rooms. Other facilities include a main tabernacle, youth chapel, and

prayer chapel. Recreation facilities include three basketball courts and three volleyball courts. Also available on-site are 200 leased cabin sites and 40-50 RV spaces.

MARTIN CITY

Martin City is a platted lot and block community that developed during the construction of Hungry Horse Dam. The boundaries of the community are largely defined by the perimeter boundaries of the platted lots. In a general sense, Martin City is situated south of Spotted Bear Road, east of the Middle Fork, north of Lion Ridge, and east of Hungry Horse. The platted townsite lies east of U.S. Highway 2. [Refer to the Hungry Horse to West Glacier Map and the Martin City Parcel Map included at the end of this chapter.] The 1990 population of the Martin City area was 322 with an additional 506 residents in the larger surrounding area. The summer population in the greater Martin City area is estimated to be 1,000.

The 1986 realignment of the highway was west of the original route, and this has tended to isolate the commercial center of Martin City from highway traffic. Approximately 14 businesses are now associated with the community. Central Avenue serves as a major transportation link to Hungry Horse Reservoir and vicinity. In terms of retail businesses, only a small grocery remains along Central Avenue to serve residents and tourists. Highway oriented businesses tend to cater to the lodging needs of tourists.

Martin City is served with a modern public water supply system. The treatment of sewage remains the primary constraint to development. Sewage treatment is accomplished by individual below-ground treatment systems. The area requirements to maintain these individual systems establishes a low residential density by default. The Martin City County Water & Sewer District is interested in pursuing plans for a "public" sewage treatment facility.

There are approximately 379 dwelling units in Martin City and surrounding area according to the 1990 Census. The housing stock is primarily comprised of single family dwellings, of which 81% are conventional single family dwellings and 17% are manufactured housing. The average [1990] value of a single family dwelling in Martin City was estimated to be $39,302.

CORAM

Coram originally developed as a railroad community but experienced accelerated growth and development during the dam era. Business activity has slowed considerably since those years. Now business orientation is more towards the highway than towards the railroad. Highway 2 divides the community in much the same fashion as in Hungry Horse. [Refer to the Hungry Horse to West Glacier Map and the Coram Parcel Map included at the end of this chapter.]

The winter population of Coram cannot be accurately determined, but the count is expected to be less than that of either Hungry Horse or Martin City. The 1990 Census found that the

population for the area of Coram to Marias Pass is 500, despite the presence of more than 600 dwellings in that area. This (500) is less than the population of Hungry Horse or the larger Martin City area. *Once again. it must be emphasized that the Census count reflects winter time population estimates.* Nearly 70% of the housing stock in this geographical area is vacant in the winter. It is likely that the Coram and vicinity is responsible for the vast majority of that 500 count based on Post Office box counts and fire district records. A reasonable estimate for the number of dwellings in the Coram area is 200. Assuming a winter vacancy rate of 35% and a per household size of 2.66, the estimated population of Coram and vicinity would be around 346. The summer time population would increase to approximately 532.

Platted residential subdivisions in the Coram area include "Fehlberg", "Tangent", "Gladys Glen", "Citadel Heights", and "Glacier Lodge". Most of the residential parcels are "tracts", outside platted subdivisions. Those tracts on the easterly side of U.S. Highway are situated on gentle to steep hillsides.

Less than 20 businesses are associated with the Coram community. Several of these include tourist "amusement" businesses, campground facilities, and other tourist-dependent businesses. The "Glacier Center" is the most active business along this segment of the highway, providing gas, grocery, restaurant, and mail services. Trains no longer stop in Coram.

Sewage treatment is a problem in the Coram area. The Coram Water Users, Inc., reports increasing interest in connecting to the water system by those who have well contamination problems associated with septic tank failures. The lack of a community solution to sewage treatment will constrain additional development opportunities in the area. Water supply may also become a problem. The infrastructure of the current community system is antiquated and in need of repair and upgrading. The Coram Water Users, Inc. recently retained the services of an engineer to investigate the feasibility of creating a County Water & Sewer District. The use of individual wells in the area is frustrated by the general absence of a dependable below-ground source.

LAKE FIVE

Lake Five is a community that fits in between the communities of West Glacier and Coram. [Refer to the Hungry Horse to West Glacier Vicinity Map.] The physical boundaries generally correspond to the point of intersection of Belton Stage Road with U.S. Highway 2 on the east and near the Belton Stage/Blankenship road intersection on the west. Significant natural features in the area include Lake Five, Halfmoon Lake, and the Middle Fork River. The land use character tends to be "rural residential".

Residential dwellings dot the shorelines of both lakes. Approximately 75 residential dwellings are located in the area, of which nearly 50% are occupied on a seasonal basis. Retail commercial services are absent. However, three major campground/resort facilities are

established, and a new resort lodge is presently under construction near Halfmoon Lake.

Public access to the two lakes is extremely limited and not generally encouraged. Lake Five Resort offers exceptional lakeshore opportunities to those camping or lodging on its premises. A one day snowmobiling event (1992 & 1993) on the ice of Lake Five created considerable controversy among local residents. Popular recreational activities on the lake include boating and fishing. The Lake Five area also supports wintering herds of elk and deer. Grizzly bears utilize the area as a movement corridor.

WEST GLACIER

West Glacier is a small community adjacent to the Wild & Scenic Middle Fork of the Flathead River. The townsite provides various tourist services that front along the main entrance road to Glacier National Park. Residential dwellings radiate outward from the commercia core.

West Glacier serves as the gateway to the busiest entrance into Glacier National Park. [Refer to the Hungry Horse to West Glacier Vicinity Map.] The commercial businesses are busy with tourists in the summer but are mostly closed in the winter. More than 900,000 people entered the Park through West Glacier in 1992. "Constrained" best describes the land use pattern in the area. Development opportunities have been limited by a general lack of available [domestic] water, absence of public sewage treatment, and by voluntary constraint of major landowners in the area. The difficulty associated with water supplies is discussed in Chapter VI.

There are approximately 115 residential dwelling units in West Glacier, not including the residential dwellings in the Park headquarters area. More than 50% of the dwellings are used on a seasonal (summer) basis. Most are single family, but a townhouse development has been platted and partially constructed near the Glacier View Golf Course. The golf course is situated in a low lying area adjacent to the Middle Fork of the Flathead River and has been subject to periodic flooding. Many residential lots adjoining the golf course have been denied sanitation approval for septic systems due to this flooding problem.

Many of the commercial businesses of the West Glacier townsite are owned and operated by a family that came to the area around 1946. The townsite bears the color and architecture of the Park buildings and signage, with the exception of the recently constructed Alberta visitor center, and has changed little over the years. Considerable undeveloped private land lies adjacent to the townsite.

In recent years, development has leapfrogged away from the townsite to areas along the highway. These new businesses tend to market tourist recreational activities, such as rafting, trail rides, and helicopter tours. A clearcut (1990) to accommodate some of these uses was not viewed favorably by many local residents. See related discussion in Chapter V.

Wildlife frequents the area, especially in the winter. A significant population of elk winter there, as do populations of bald eagles and other species. See related discussion Chapter X.

NYACK

Nyack is a rural community between West Glacier and Pinnacle. [See Nyack Vicinity Map included at the end of this Chapter.] The area appears as river bottomland and has substantial amounts of open grassland and farmland. A single family group dominates ownership in the area. Farming and some some wood processing occur on those lands. An unusual land use in the area is a timeshare resort consisting of individual cabin dwellings. The resort operates year-round and promotes cross country skiing as a winter time activity. Another use in the area is a fixed-wing aerial tour business. Particularly noticeable is a State Highway maintenance facility that stores sand for winter road maintenance. Despite the presence of these uses, the area still has a rural agricultural character.

The Nyack area is one of the most important regions in the Canyon for wildlife. The open canopy habitat and abundance of grasses are important to wintering elk and to bears in the spring. Bald eagles utilize the river corridor. Refer to the resource maps and related discussion in Chapter X.

PINNACLE

Pinnacle is mostly used as a summer retreat for people living in rural communities of eastern Montana. Although there are numerous dwellings in the area (76±), only about six families are permanent residents. Platted lots are within subdivisions named "Paola," "Walker", and "Bain's." Most of the dwellings are small cabins. Denny's is the only commercial-type use in the area. [See Pinnacle Vicinity Map included at the end of this Chapter.] Near Tunnel Creek, on the south side of the highway, is a 100± acre tract of land known as the Tunnel Creek Undevelopment Corporation. There are approximately 30 shareholders who each have a designated cabin site. By-laws establish certain development conditions including that the cabins must be "dry" (no water) and be no larger than 900 square feet. To date, only 5 cabins have been built on the property.

Pinnacle is a receiving area for several major drainages that originate in Glacier National Park or the Great Bear Wilderness. Muir Creek, Pinnacle Creek, and Tunnel Creek establish natural travel corridors for large mammals, providing linkages between these two great ecosystems. The Middle Fork, together with these smaller tributaries, and associated habitat complexes also provide important spring and winter ranges for deer and elk and important habitat for bears in the spring and fall. See related map exhibits in Chapter X.

ESSEX

As with Pinnacle, Essex owes its origin to the railroad. But unlike Pinnacle, the railroad still serves a useful function to the local community in Essex. Amtrak provides passenger service

to Essex and, in particular, to the Izaak Walton Inn. Winter travelers are attracted by the cross country skiing opportunities offered there. The Halfway House, located adjacent to the highway, also provides accommodations.

Most residential dwellings in the Essex area are used on a seasonal basis. Of the 50± homes in the area of Essex, only seven are used year-round. Most residences are concentrated along the river in the area of the "Hawkes Nest" subdivision, Parma Addition, and in the Mountain Acres subdivision. A majority of the residential lots in the area are vacant, including those lots within Snow Country Tracts. [See Essex Vicinity Map at the end of this Chapter.]

Essex is also an important area for wildlife. Spring and winter habitat is available in the area of Ole Creek for large game animals. The entire area is important grizzly bear spring range. Ole Creek and Park Creek, as well as the Middle Fork, are critical wildlife movement corridors and linkage pathways between Glacier National Park and the Great Bear Wilderness.

The area beyond Essex towards Marias Pass has another concentration of private land in the area of Bear Creek where summer residential homesites are concentrated in the subdivisions of "Slippery Bill Mountain" and "Bear Creek Summer Homes." Forty-eight lots, ranging in size from 2-15 acres, are associated with the Slippery Bill subdivision. Only 15 cabins currently (1993) exist in this subdivision, although more construction is pending. The County Road (Giefer Creek) that provides general access to the lots is not maintained by the County, and local landowners are concerned with maintenance responsibilities. This road is a source of access to the Great Bear Wilderness. Bear Creek Guest Ranch is a major outfitter in the area, offering overnight accommodations and guided trips into the Great Bear Wilderness. Near Marias Pass is the Summit Station, which has dining and lounge services. Campgrounds in the area include Devil Creek (U.S. Forest Service) and the Three Forks Campground (private). It is in this area of the Canyon that grain spills from train derailments have caused the attraction of grizzly bears from as far away as the west side of Hungry Horse Reservoir. All of this region is important spring grizzly bear range, and the drainage of Giefer Creek provides spring and winter habitat for elk and deer.

ISSUES

"Why do we need planning? We like it [Canyon] the way it is." That was the most frequently stated position during the early rounds of public meetings in the Canyon. Yet, it is easy to see that the Canyon has experienced a lot of "history" and change over a short period of time. And it is also easy to see that change will continue to affect the Canyon. The purpose of the Plan is to anticipate change by guiding land use decisions in the Canyon to achieve the future conditions that residents and landowners desire. This all must be accomplished in the context of multiple voices that are often aligned to local community allegiances. For this reason, the Canyon Plan attempts to recognize the special attributes of each community center in the Canyon in relationship to the greater Canyon community. Those mutual ties binding together the Canyon communities include common:

- River
- Highway
- Rail line
- Resource base
- Economy
- History

Land use issues that can, are, or will be affecting change in the Canyon are many. The Highway improvement through Badrock Canyon will increase the bedroom role of all the Canyon communities. New sanitation standards and even local community desire for improved sewage treatment will increase pressure on local communities to provide this service, which in turn may increase development pressures and even initiate change in community character. What balance must be maintained to protect the resource base and other community values?

Quality of life in the Canyon is a measure of a multiple of variables. Too much development may eliminate a rural lifestyle or harm unique natural resources. Tradeoffs must be considered relative to acceptable changes in water quality, air quality, traffic, wildlife abundance, etc. "Keeping it the way it is" will not be possible without land use constraint.

New development must be accommodated in a manner that serves the gamut of local interests. In general, the community surveys indicated acceptance of a small business climate, but were less willing to embrace large commercial uses and most forms of industrial uses (factories, etc.). Acceptable rules or standards must be applied to minimize impacts to the values held in common by the community. This application of rules will vary throughout the Canyon to reflect local community desires and values. In some locations, the focus of consideration may be on resource protection and scenic quality. In other areas, the focus may be on clustering of uses to encourage maximum efficiency in the provision of services.

Elimination of residential and commercial "clutter" is an important issue to many residents. This includes controlling the spread of commercial uses. Most people wanted to contain commercial uses inside the established commercial centers to avoid a strip commercial appearance along the highway. Meeting attendees appeared to applaud efforts to improve community appearance, but some feared that cleaning up and beautifying would translate to higher taxes. Affordable housing is viewed as a necessity to many and too much "improvement" is a threat to the availability of low cost housing. Without exception, residents were concerned about how regulations might translate to higher taxes. A goal of this Plan is to minimize the threat from higher taxes by regulating the location, scale and density of new growth in the Canyon. New development must "pay its own way" and be located within convenient proximity to local utilities and services.

GOALS AND POLICIES

The list of Goals and Policies was derived from the ranking of issues by landowners within the Canyon and from a "test" ranking of the preliminary goals and policies conducted during the December 1993 round of public meetings. Some of the listed objectives may have application to other elements of the Plan.

LAND USE

GOALS:

TO MAINTAIN THE RURAL LAND USE CHARACTER OF THE CANYON
TO RECOGNIZE THE UNIQUE NATURAL FEATURES OF THE CANYON
TO PROVIDE OPPORTUNITIES FOR QUALITY RESIDENTIAL AND COMMERCIAL DEVELOPMENT

POLICIES

COMMERCIAL

- MAINTAIN A SMALL BUSINESS ATMOSPHERE IN THE COMMERCIAL CENTERS OF THE CANYON COMMUNITIES
- PROVIDE FLEXIBLE OPPORTUNITIES FOR HOME-BASED BUSINESSES
- PROVIDE OPPORTUNITIES FOR APPROPRIATE TOURIST-DEPENDENT RETAIL BUSINESSES
- DISCOURAGE EXPANSION OF STRIP COMMERCIAL DEVELOPMENT OUTSIDE ESTABLISHED COMMUNITY CENTERS
- ENCOURAGE NEW COMMERCIAL BUSINESSES TO LOCATE IN COMMUNITY CENTERS HAVING ADEQUATE INFRASTRUCTURE (ROADS, WATER, ELECTRICITY, TELEPHONE, GAS, SEWAGE TREATMENT, FIRE PROTECTION)
- PROVIDE LIMITED OPPORTUNITIES FOR DEVELOPMENT OF TOURIST RESORT FACILITIES IN RURAL LOCATIONS WHEN SUCH FACILITIES ARE RESOURCE-COMPATIBLE
- DISCOURAGE THE DEVELOPMENT OF ADDITIONAL TOURIST AMUSEMENT FACILITIES (WATER SLIDES, GO-KART TRACKS, BUNGEE JUMPS, ETC.)

- PROHIBIT THE EXPANSION AND ESTABLISHMENT OF HELICOPTER BUSINESSES
- DISCOURAGE COMMERCIAL GAMBLING BUSINESSES
- RECOGNIZE A "GRANDFATHERED" STATUS FOR EXISTING USES
- ENCOURAGE THE USE OF PERFORMANCE REGULATIONS TO PROMOTE EFFECTIVE SITE PLANNING FOR NEW USES

RESIDENTIAL

- ENCOURAGE CONCENTRATION OF RESIDENTIAL USES IN ESTABLISHED COMMUNITY CENTERS
- ENCOURAGE OPPORTUNITIES FOR DEVELOPMENT OF AFFORDABLE HOUSING, SUCH AS APARTMENTS, IN THE LOWER CANYON COMMUNITIES
- RESIDENTIAL DEVELOPMENT IN RURAL AREAS, OUTSIDE OF ESTABLISHED COMMUNITY CENTERS, SHOULD BE "LOW DENSITY" , HAVE MINIMAL IMPACTS ON WILDLIFE, AND COMPLY WITH WILDFIRE SAFETY PRACTICES
- DISCOURAGE TRANSIENT TENT AND SHANTY ESTABLISHMENTS
- RESIDENTIAL AND COMMERCIAL USES SITUATED IN BEAR ACTIVITY AREAS SHALL COMPLY WITH RECOGNIZED BEAR SAFETY PRACTICES

INDUSTRIAL

- PERMIT LIGHT INDUSTRIAL USES WHEN SAID USES ARE COMPATIBLE TO OBJECTIVES FOR WATER QUALITY, AIR QUALITY, AND TOURISM
- SCREEN GRAVEL STORAGE AREAS AND GRAVEL EXTRACTION SITES FROM PUBLIC VIEW
- COORDINATE EFFORTS WITH BURLINGTON NORTHERN RAILROAD TO ACHIEVE THE DESIRED LAND USE, EMERGENCY SERVICES, AND NATURAL RESOURCE OBJECTIVES OF THIS PLAN RELATIVE TO THE OPERATION OF THE RAILROAD IN THE CANYON, INCLUDING THE PREPARATION OF A MEMORANDUM OF UNDERSTANDING BETWEEN THE COUNTY AND RAILROAD

- DISCOURAGE THE SITING OF NEW HEAVY INDUSTRIAL-TYPE USES IN THE CANYON
- EVALUATE OPPORTUNITIES TO MITIGATE ANY ADVERSE IMPACTS OF EXISTING INDUSTRIAL USES
- RECOGNIZE THE NEED FOR HEAVY EQUIPMENT STORAGE AREAS INCLUDING THOSE OF GOVERNMENT AGENCIES

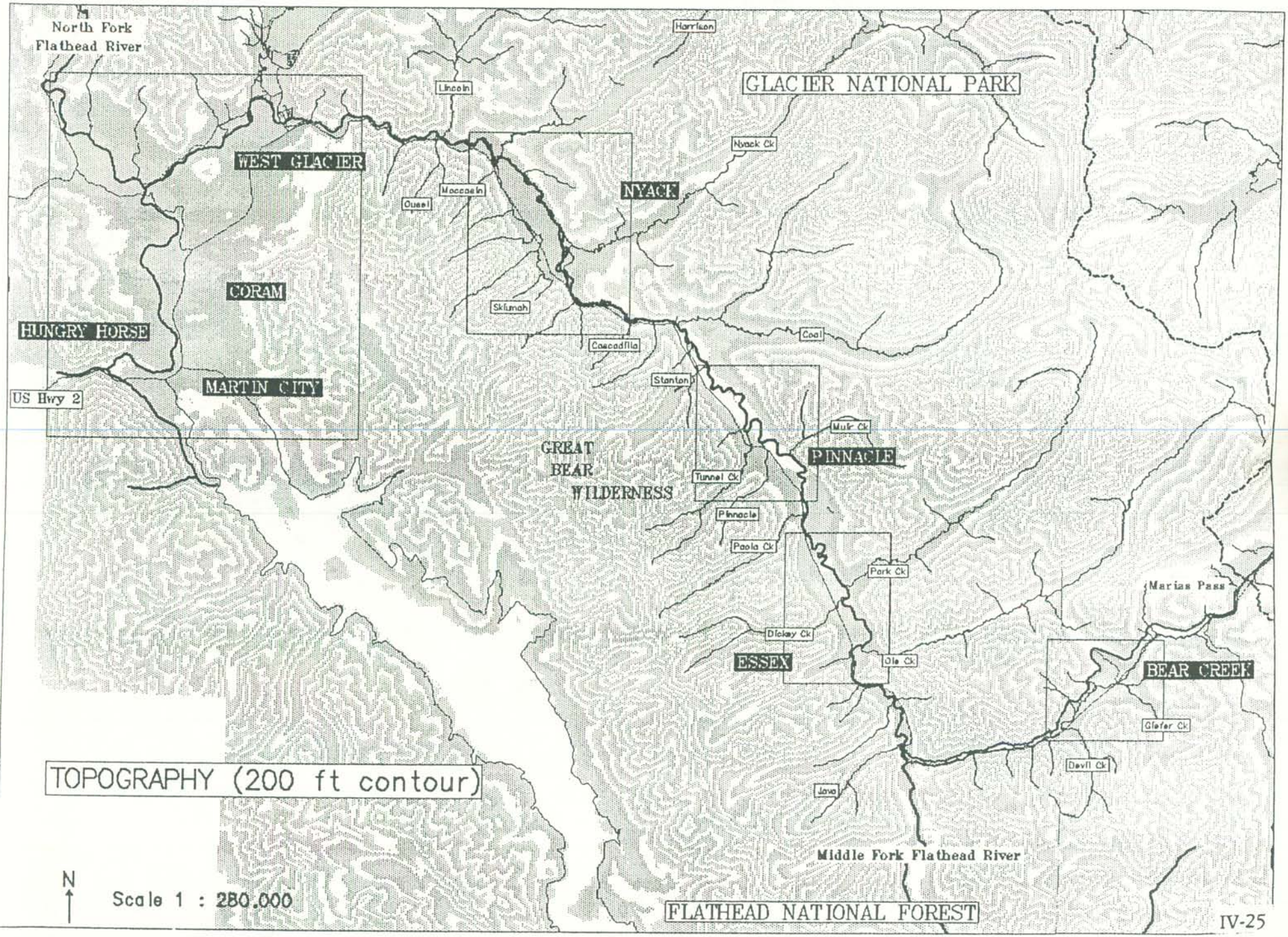
AGRICULTURE/FORESTRY

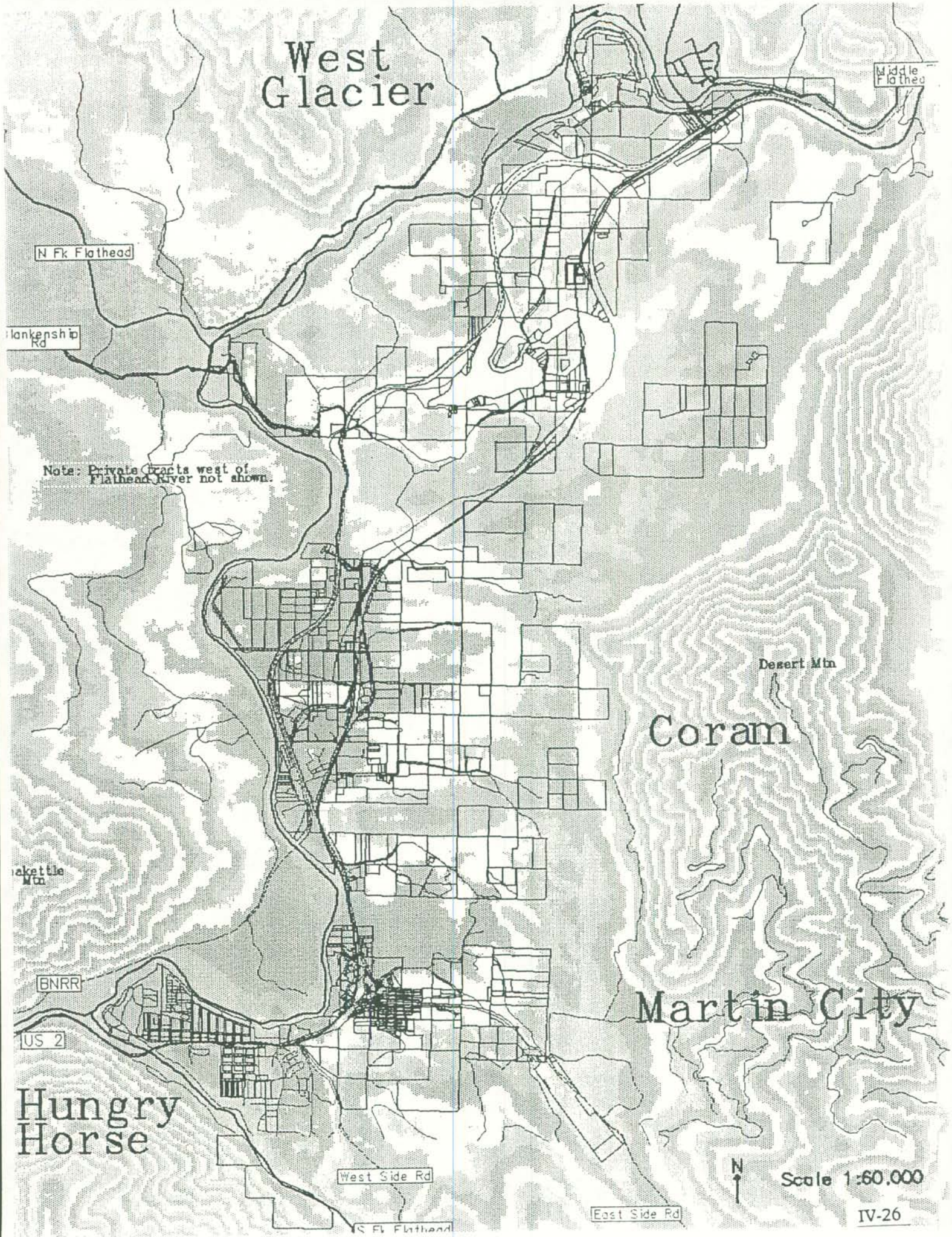
- PROVIDE FLEXIBLE OPPORTUNITIES FOR THE BOARDING OF LIVESTOCK IN AREAS OF LOW DENSITY HOUSING
- ALLOW OPPORTUNITIES FOR THE COLLECTION, PROCESSING, AND DISTRIBUTION OF LOCALLY GROWN OR COLLECTED PRODUCE
- ENCOURAGE FOREST PRACTICES ON PRIVATE LANDS THAT REDUCE THE RISK OF WILDFIRE WHEN CONSISTENT WITH OTHER OBJECTIVES PERTAINING TO WILDLIFE, VISUAL QUALITY, AND WATER QUALITY
- RESTRICT GRAZING OF DOMESTIC ANIMALS ADJACENT TO STREAM AND RIPARIAN CORRIDORS CONSISTENT WITH STREAMSIDE MANAGEMENT ACT GUIDELINES
- ENHANCE EFFORTS TO ELIMINATE NOXIOUS WEEDS, INCLUDING USING A MEMORANDUM OF UNDERSTANDING BETWEEN THE COUNTY AND FOREST SERVICE TO IDENTIFY RESPONSIBILITIES AND STRATEGIES FOR ACCOMPLISHING STATED OBJECTIVES

PARKS/OPEN SPACE/DESIGN

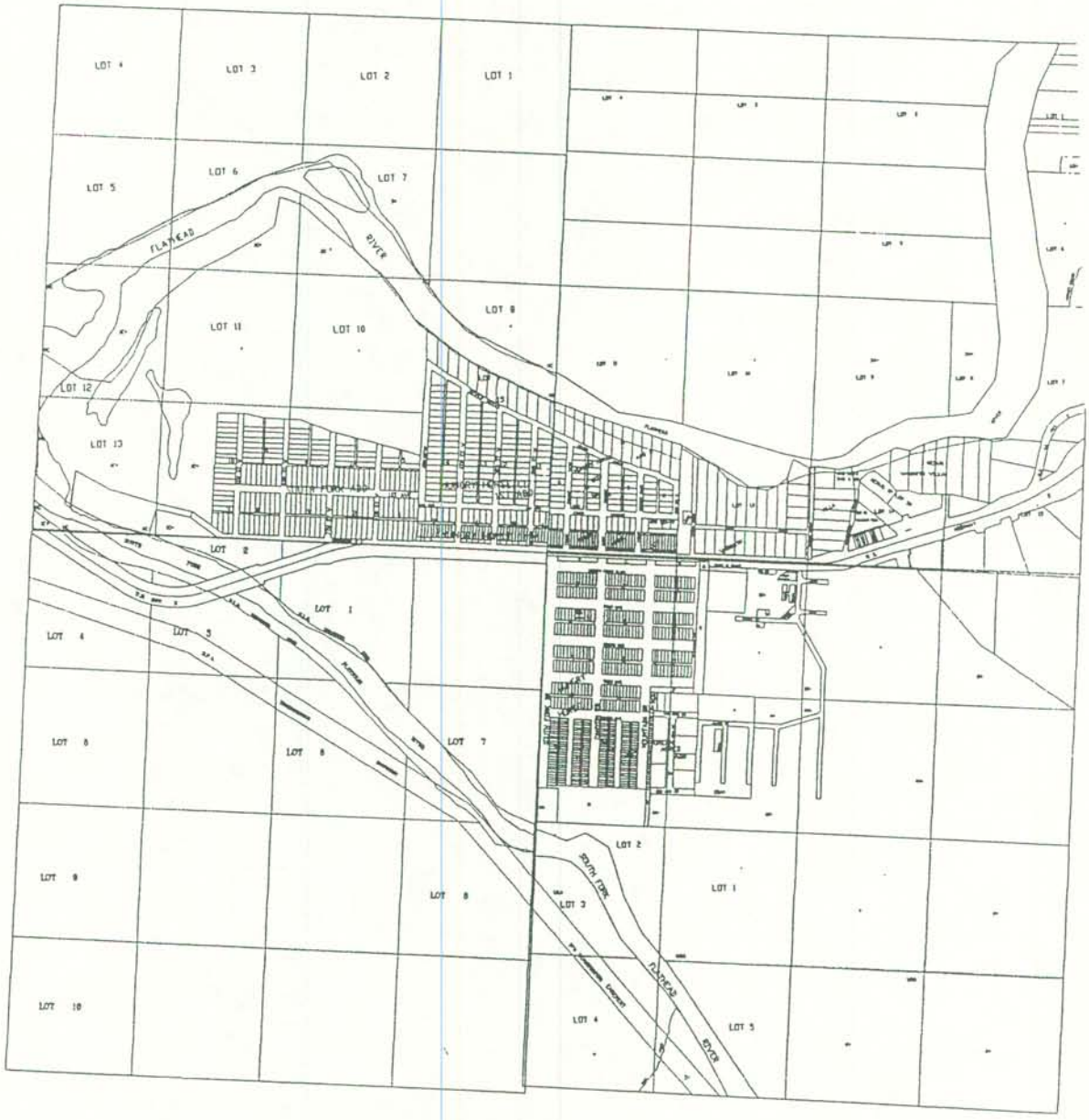
- ENCOURAGE NEW DEVELOPMENT TO INCORPORATE OPEN SPACE INTO PROJECT DESIGN
- REQUIRE SUBSTANTIAL SETBACKS AND LANDSCAPING/SCREENING FOR NEW USES LOCATED ADJACENT TO THE HIGHWAY , OUTSIDE COMMUNITY CENTERS
- RETAIN EXISTING NEIGHBORHOOD PARKS, AND DEVELOP PARK MANAGEMENT STRATEGIES TO SATISFY THE INTERESTS OF INDIVIDUAL COMMUNITIES

- UTILIZE COUNTY DEAD-END ROAD SEGMENTS, WHERE APPROPRIATE, TO INCREASE OPPORTUNITIES FOR NEIGHBORHOOD ACCESS TO THE RIVERS AND OTHER RESOURCE ATTRACTIONS
- RETAIN THE "OLD HUNGRY HORSE CAMPGROUND" IN PUBLIC OWNERSHIP FOR LOCAL RECREATIONAL USE

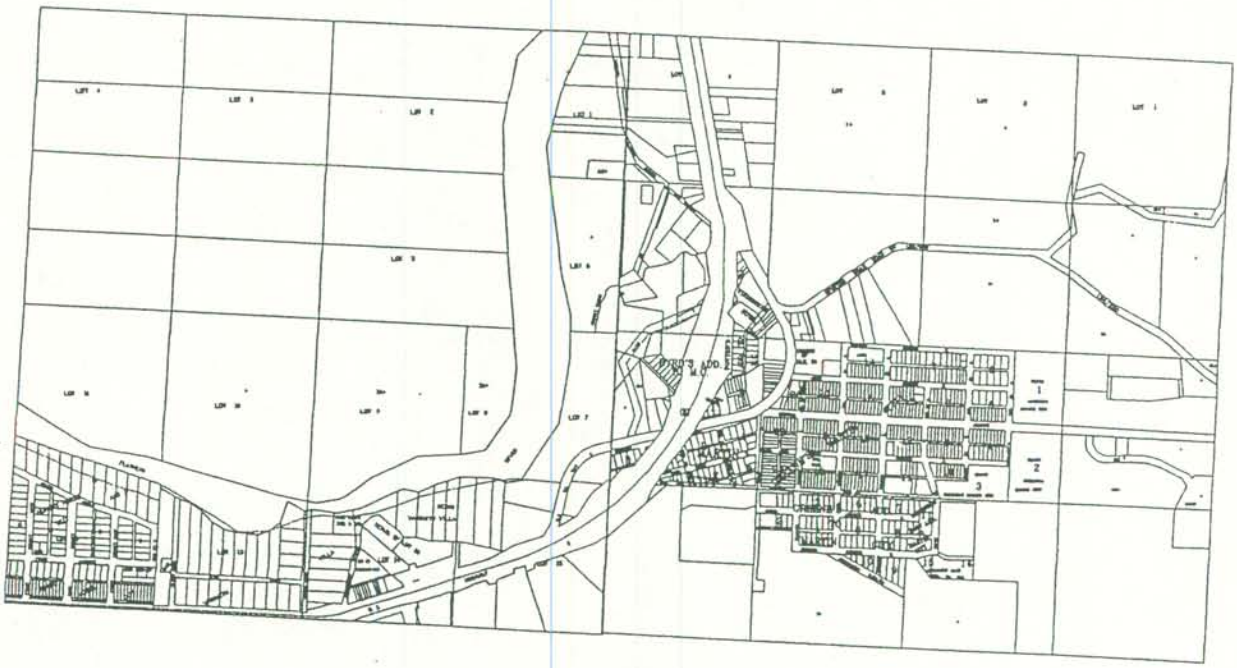

North Fork
Flathead River
Harrison
GLACIER NATIONAL PARK
Lincoln
Nyack Ck
WEST GLACIER
Moccasin
NYACK
Quael
CORAM
Skiumah
HUNGRY HORSE
Cascadilla
Coal
Stanton
US Hwy 2
MARTIN CITY
Muir Ck
GREAT
BEAR
WILDERNESS
PINNACLE
Tunnel Ck
Pinnacle
Paola Ck
Park Ck
Marias Pass
Dickey Ck
ESSEX
Ole Ck
BEAR CREEK
Glefer Ck
Devil Ck
Java
Middle Fork Flathead River
TOPOGRAPHY (200 ft contour)
N
Scale 1 : 280,000
FLATHEAD NATIONAL FOREST


West Glacier
Middle Flathead
N Fk Flathead
Note: Private tracts west of Flathead River not shown.
Desert Mtn
Coram
BNRR
US 2
Martin City
Hungry Horse
West Side Rd
East Side Rd
N
Scale 1:60,000

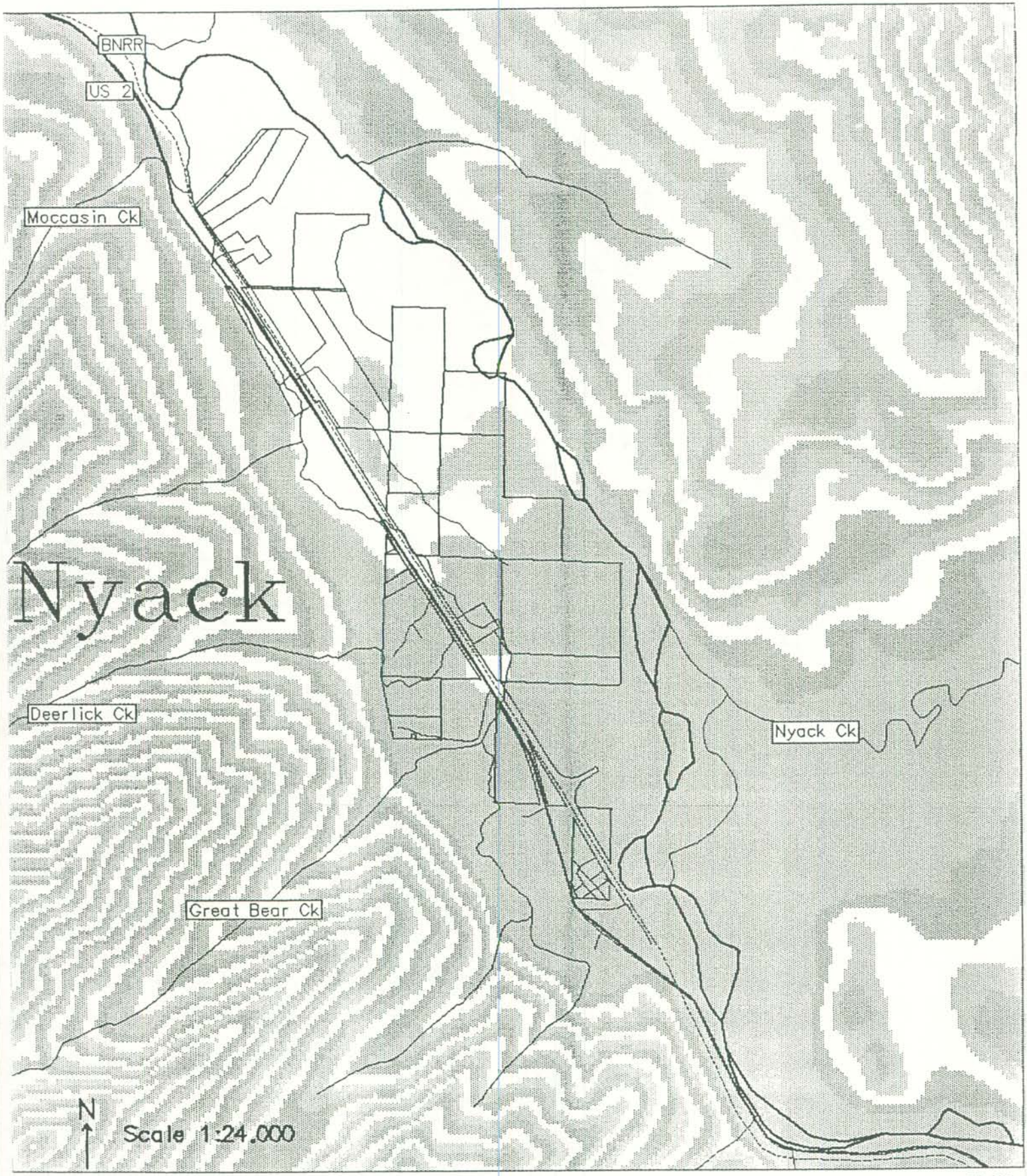
HUNGRY HORSE and Vicinity

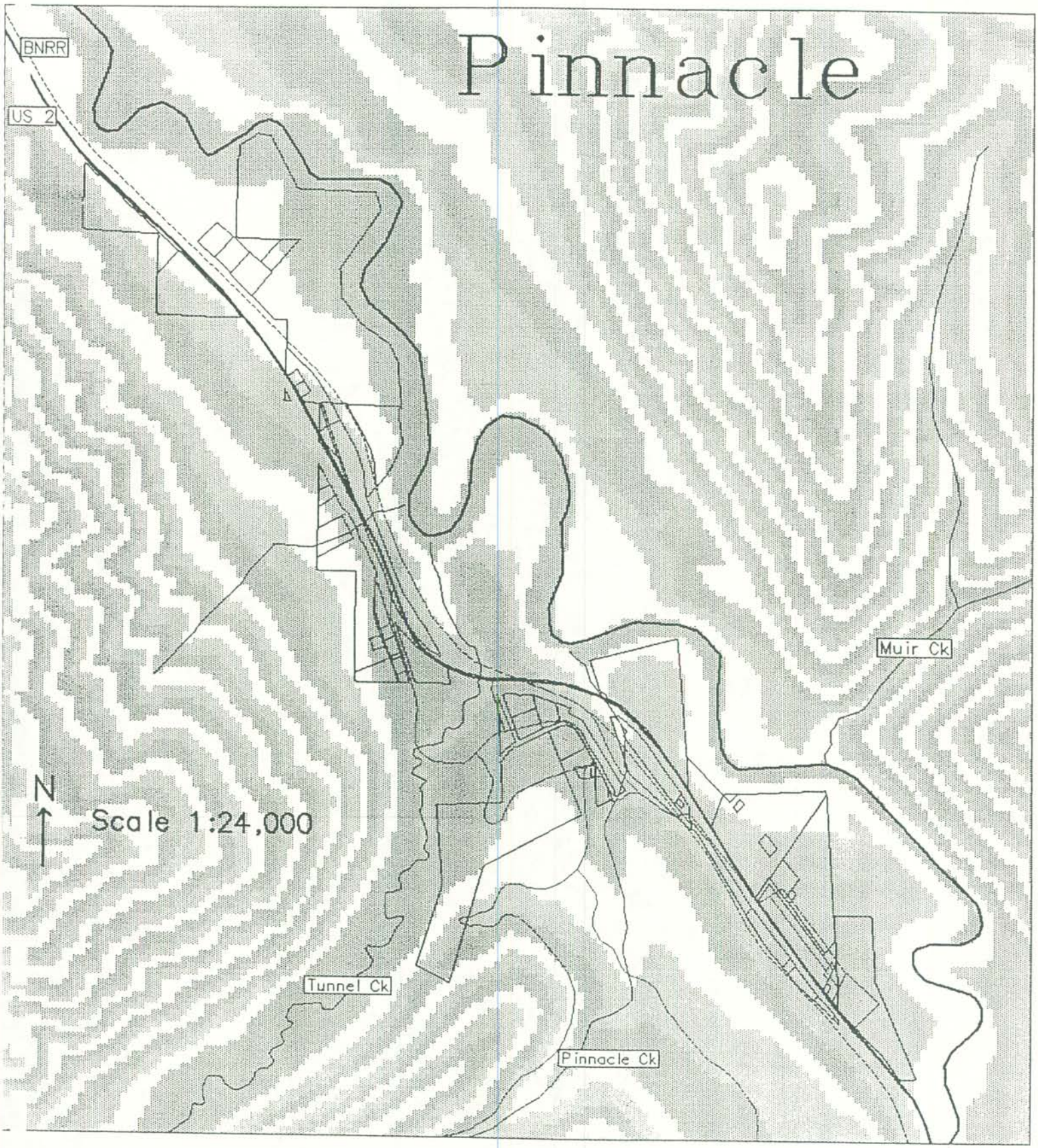


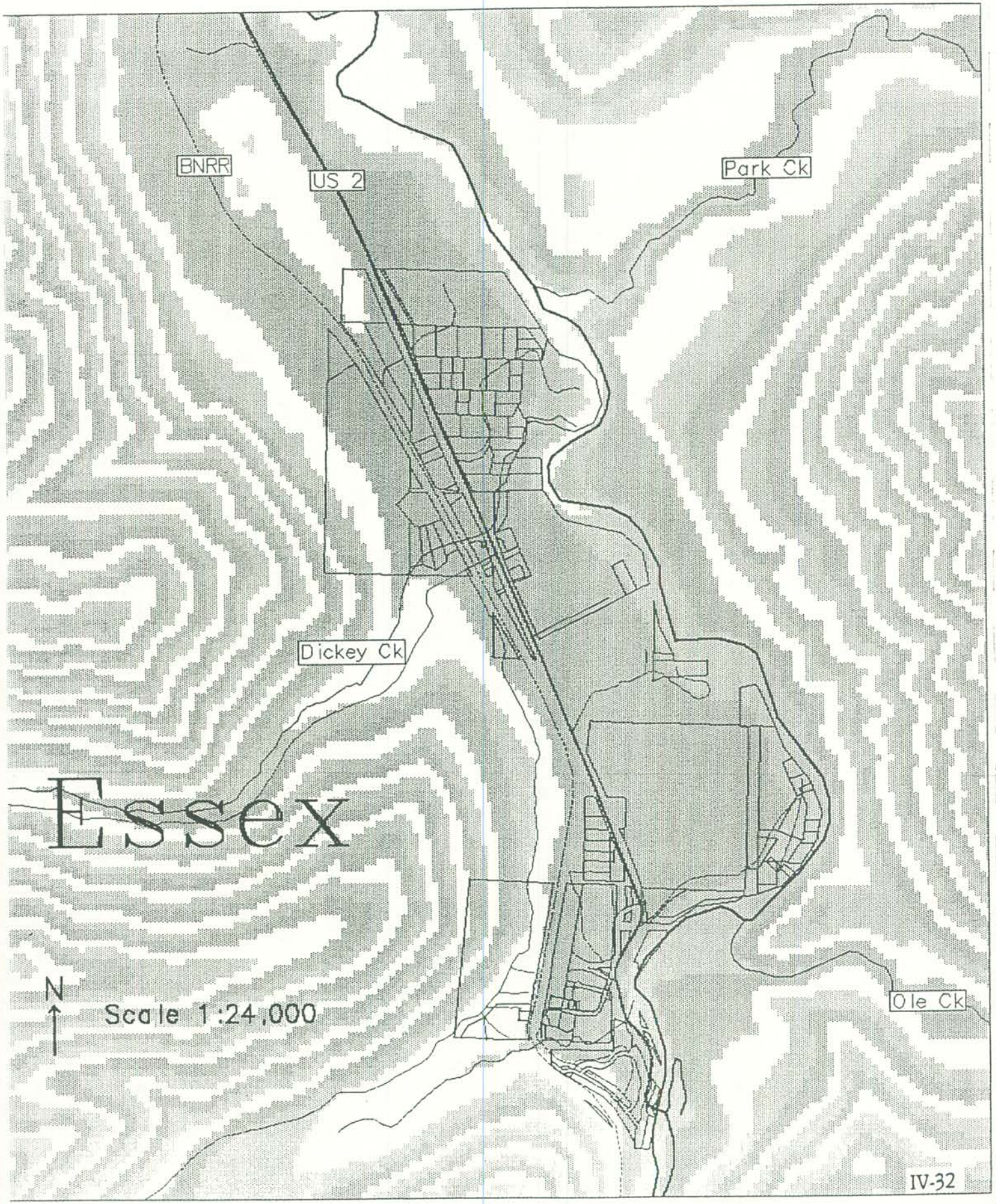
MARTIN CITY and Vicinity

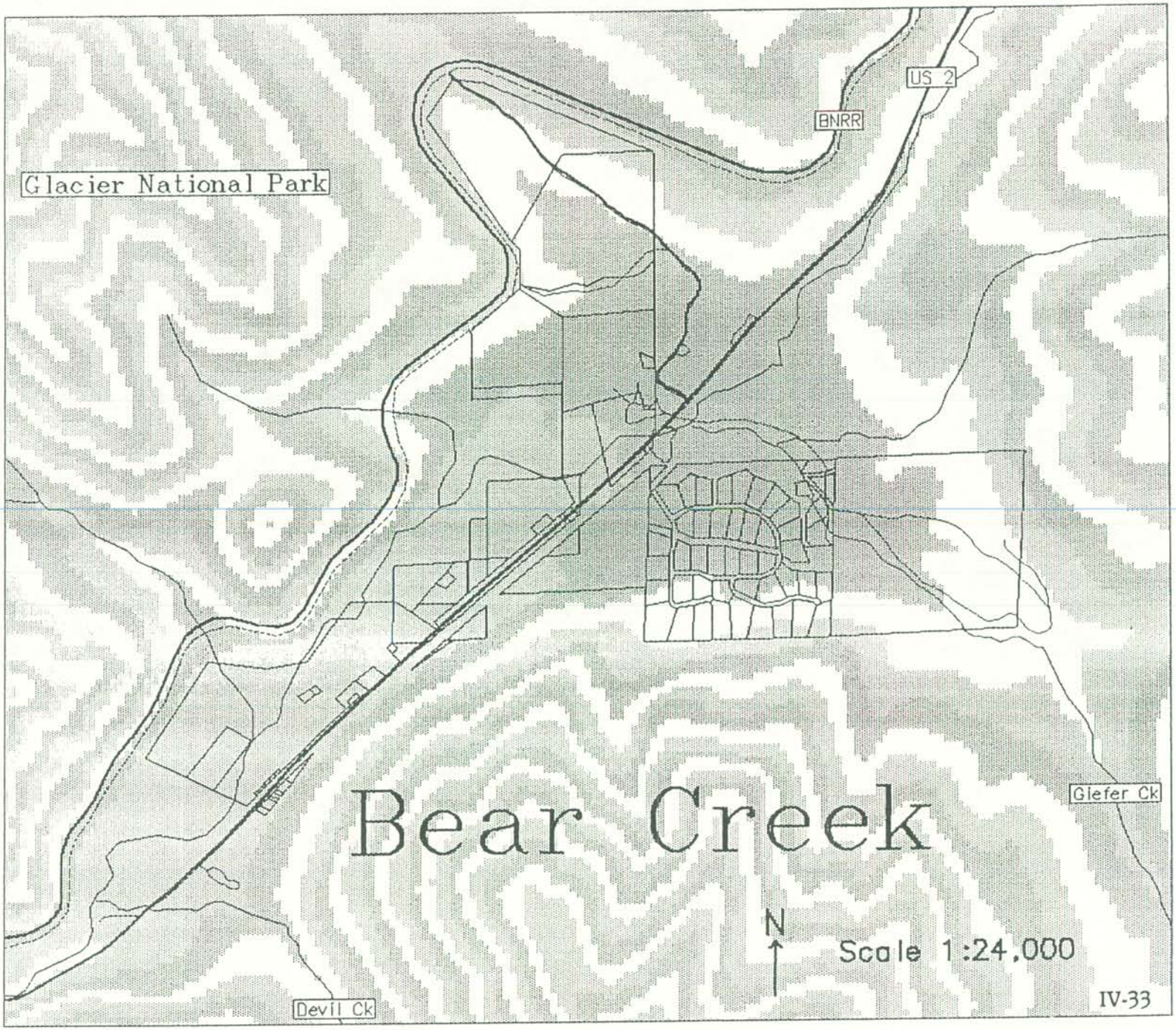


CORAM and Vicinity


BNRR
US 2
Moccasin Ck
Nyack
Deerlick Ck
Nyack Ck
Great Bear Ck
N
Scale 1:24,000


Pinnacle
BNRR
US 2
Muir Ck
N
Scale 1:24,000
Tunnel Ck
Pinnacle Ck


BNRR
US 2
Park Ck
Dickey Ck
Essex
N
Scale 1:24,000
Ole Ck


US 2
BNRR
Glacier National Park
Bear Creek
Glefer Ck
Devil Ck
N
Scale 1:24,000
IV-33

THE CANYON PLAN

CHAPTER V
ECONOMY

The economic life-line of the Canyon flows with the seasons. The attraction and competition for tourist dollars among Canyon businesses begins in late spring and concludes in early fall. With few exceptions, most Canyon businesses survive solely on this summertime window of opportunity. But not all Canyon residents seek or depend on the tourist dollar for household income. The communities of Hungry Horse, Martin City, and Coram also serve, to some extent, as bedroom communities for residents who work elsewhere in the County.

EMPLOYMENT

It is difficult to accurately describe the employment characteristics of the Canyon population. The primary reason for this difficulty is the seasonal nature of the local economy. The best source of employment statistics is the U.S. Census but, in the case of the Canyon, nearly 43% of the resident population is not considered in the economic tabulations since the census data largely reflects only the winter time populations. However, the seasonal importance of tourism to the Canyon economy can be inferred through other sources of information.

ECONOMY

CENSUS DATA

The 1990 Census indicated that the Canyon area work force [in the winter] was approximately 650 individuals. Greater than 81% of that total work force lived in the communities of Hungry Horse and Martin City. It would be reasonable to assume that the largest segment of the remaining working population is located in the area of Coram or West Glacier. The communities further east of West Glacier have fewer local employment opportunities and travel distances to other employment regions would be too distant for winter travel.

Nearly 10% of the year-round [working] residents are self-employed. The largest segment of the working population is employed in the private sector (70%). Government employees amount to approximately 17% of the Canyon work force. Primary employment sectors include: manufacturing (31.4%), services (29.3%), and retail trade (24.2%). It is assumed from the "travel time to work" information of the Census that many jobs are located outside the Canyon, such as in Columbia Falls. For example, of the workers in Hungry Horse that were employed outside the home, more than 70% had travel distances longer than 10 minutes. Given the winter date of the Census, it is likely that the direction of travel was towards Columbia Falls or other "Valley"

Hungry Horse-West Glacier Final Environmental Impact Statement for improvements to HWY 2 (FHWA-MT-EIS-81-02-D) indicated that up to 130 individuals traveled from the Canyon to manufacturing jobs in Columbia Falls.

An additional 465± people from the summer resident segment of the population probably enter the work force in the summer. Most of these people probably find work within the Canyon. Employment increases dramatically in the summer at all Canyon locations as tourists return to visit the local attractions. For example, one employer in West Glacier increases the number of employees by nearly 140 during the summer. The total number of people employed in Canyon businesses in the summer is unknown but it easily surpasses the number of jobs held by the winter residents.

COUNTY TRENDS

The Flathead County economy is rapidly growing relative to employment statistics. But the growth is occurring in the retail and service sectors that tend to be at the low end of the pay scale. Much of the success in growth of these sectors can be attributed to increasing numbers of tourists and retail trade from the Canadian visitor. The Canyon contributes to this economy through its resource attractions, including the Great Bear Wilderness, Hungry Horse Reservoir, and

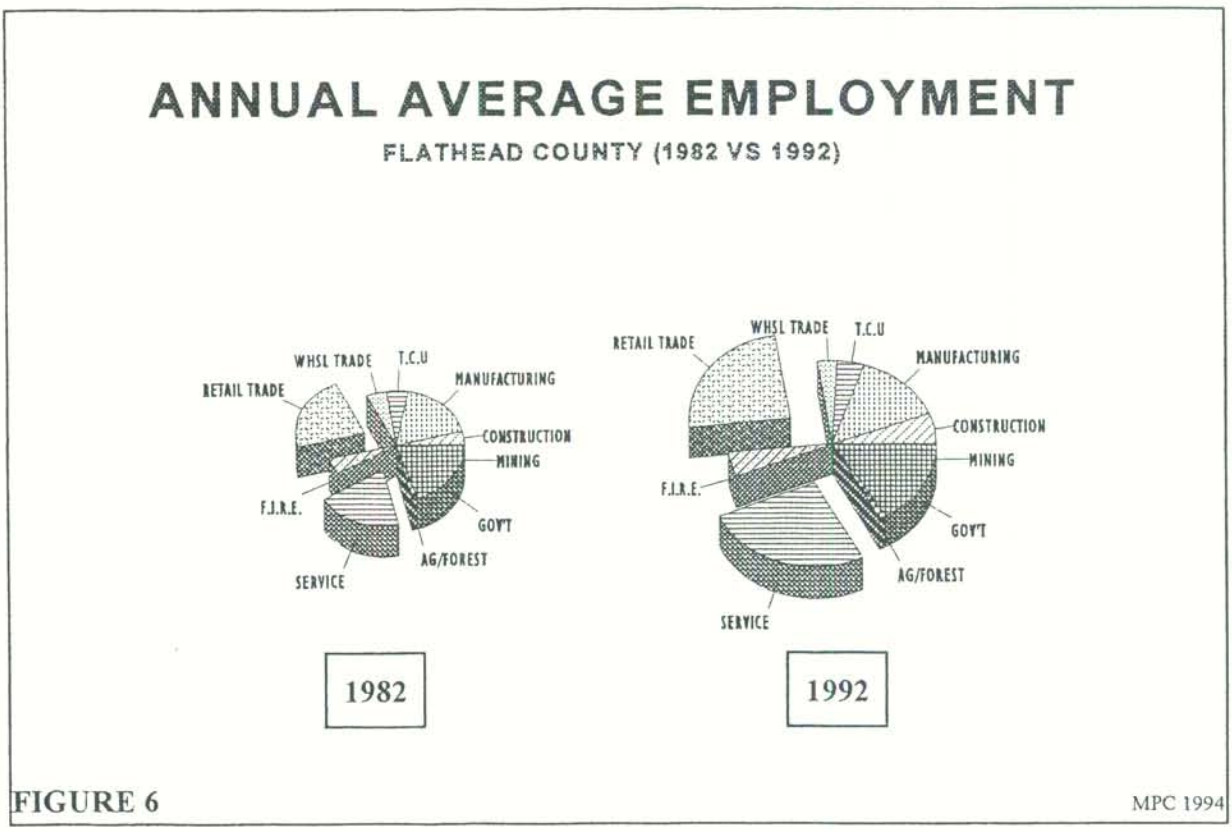


FIGURE 6 MPC 1994

Glacier National Park. The Canyon is the entryway to these national attractions. However, the

small population base, winter weather conditions, and general lack of certain critical services combine to limit the opportunities to support year-round retail and service businesses in the Canyon.

The seasonality of the County-wide employment base is also apparent. The summer tourist season creates a greater demand for support services related to motels, restaurants, and tourist amusement attractions. This relationship between tourist demands for services is even more apparent when poor summer weather affects the number of visitors as demonstrated by the graph on the right. The employment dip in the summer of 1993 is partially related to wet weather conditions that reduced the number of visitors to the county. The result is a down turn in employment and income to local businesses.

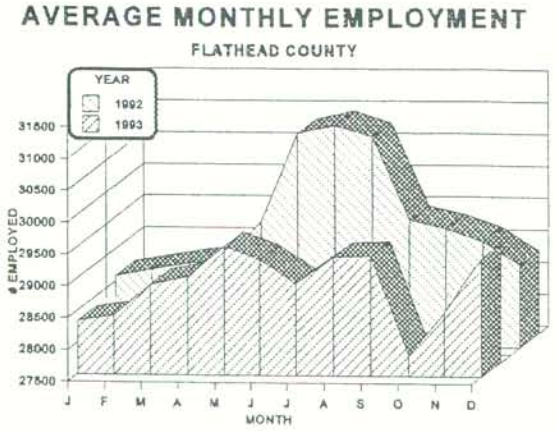


FIGURE 7 MPC 1994

LOCAL BUSINESSES

The local businesses in the Canyon have always responded to a ready need, whether it be for railroad ties in the 1890s or wildlife souvenirs for todays tourists. This independent and entrepreneurial spirit has been demonstrated by the residents of the Canyon throughout its history. A large percentage of the local residents continue to be involved with various home-based businesses and hobbies that generate additional household income. Examples of these type of businesses range from pie making in Pinnacle to the manufacturing of wood heated hot tubs in Martin City. To many, "huckleberry" is synonymous with the Canyon. The spring and summer seasons attract both recreational and commercial berry pickers. Temporary fruit stands emerge along the highway corridor to capture the tourist's interest in this local product.

Sources of permanent employment opportunities are mainly in the Valley communities where the employment base is more stable. This opportunity for employment outside the Canyon becomes more feasible with each improvement to U.S. HWY 2. A pending project to improve the highway corridor through Badrock Canyon may significantly increase the number of working commuters between the Canyon and the greater Flathead Valley.

With the approach of the summer season, area businesses begin preparation for a new onslaught of tourists. Stores, restaurants, recreation facilities, and tourist accommodation facilities that have been closed all winter begin to open for business. Associated with this new business activity is the arrival of summer residents and hundreds of seasonal employees.

Listed below are the various Canyon businesses as described by Name, Location, and Type of Use. Not listed are numerous home-based businesses. An attempt was made to indicate the relative reliance of each business on tourism.

NAME OF BUSINESS	TYPE OF USE
HUNGRY HORSE	
CROOKED TREE MOTEL & RV[2]	LODGING
GRANDPA'S ATTIC[2]	SECOND HAND RETAIL
HONEY BERRY FARM/FRUIT STAND[1]	TOURIST RETAIL
MINI STORAGE	STORAGE
CAMERON LEE[1]	OUTFITTER
HUNGRY HORSE MOTEL[2]	LODGING
HUCKLEBERRY PATCH CENTER[2]	GAS/MINI MART
HUCKLEBERRY PATCH/CANNERY[2]	GIFT SHOP
EMPORIUM[1]	GIFT SHOP
SUPER MARKET[2]	GROCERIES
LOG CABIN BAR & CAFE	BAR/CAFE
GLACIER BED & BREAKFAST[2]	LODGING
MOUNTAIN VIEW MOTEL[2]	LODGING
BOB'S GENERAL STORE & CAFE[2]	GAS/RETAIL STORE/CAFE
HUNGRY HORSE CORRAL, INC.[2]	GIFT SHOP
LIQUOR STORE	LIQUOR SALES
SILVERTIP TAXIDERMY & GALLERY[2]	TOURIST RETAIL
SILVER BASIN SUPPER CLUB[2]	DINING/BAR
MINI GOLDEN INNS[2]	LODGING
OLD TIMERS AUCTION	AUCTION
CANYON SPORTS[2]	RETAIL SPORTING GOODS
CRAFTERS MALL[1]	RETAIL CRAFT SUPPLIES

NAME OF BUSINESS	TYPE OF USE
ROCKY MT. NATURE CO.[1]	GIFT SHOP
HUCKLEBERRY HAVEN[1]	GIFT SHOP
HUCKLEBERRY HAVEN CANNERY[1]	CANNERY
CAROL'S YARN BASKET	CRAFT SUPPLIES
DAM TOWN BAR	BAR
BILLS BARBER SHOP	BARBER SHOP
CURLY'S AUTO BODY	AUTO REPAIR
LARRY SEUER HAULING	TRUCK HAULING
RESOURCES IN TIMBER T-SHIRT SHOP	HOME-BASED RETAIL
TOM BRAKE PAINTING SERVICE	COMMERCIAL PAINTING
S&S HAULING - SHOP	EQUIPMENT SHOP
GLACIER BIBLE CAMP[2]	BIBLE CAMP/RETREAT
MARTIN CITY	
MOSER J D & SONS CABINETS	CABINET MANUFACTURE
MONTANA FUR TRADER[1]	GIFT SHOP
DUVALL'S BIKE & RV[1]	CAMPING
TAMARACK LODGE MOTEL[2]	LODGING
MIDDLE FORK MOTEL[2]	LODGING
GLACIER CABINS[2]	LODGING
DEERLICK SALOON	BAR
SOUTHFORK SALOON	BAR
SPOTTED BEAR GROCERY[2]	RETAIL FOOD/SUPPLIES
CANYON RV & CAMPGROUND[1]	CAMPING
MOUNTAIN MEADOW RV[1]	CAMPING
CANYON ENQUIRER	TABLOID

NAME OF BUSINESS	TYPE OF USE
GREG JONES LOGGING	LOGGING CONTRACTOR
GRANITE PEAK STONEWORKS	ROCK PROCESSING
JUDY'S ALL BREED DOG GROOMING	PET GROOMING
UP THE LINE HAIR DESIGN	BEAUTY SALON
CORAM	
PACKER'S ROOST	BAR
GLACIER RIVER RANCH[2]	BED & BREAKFAST
GLACIER CENTER/ SPRUCE PARK CAFE[2]	GAS/MINI MART/DINING
HAIR TECH	BEAUTY SALON
SPRUCE PARK CENTER	MINI STORAGE
EVERGREEN MOTEL[2]	LODGING
JOHN'S AUTO SERVICE	AUTO REPAIR
CORAM RV PARK[1]	CAMPING
GLACIER MAZE[1]	TOURIST AMUSEMENT
NOMMENSION RENTALS	STORAGE
RAY FISHER LOGGING	LOGGING
CIRCLE 7 CABINS[2]	RENTAL UNITS
STONER'S INN TAVERN	BAR
BAD ROCK REALTY & B&B[2]	REALTY & B&B
SUNDANCE CAMPGROUND[1]	CAMPGROUND
GREAT BEAR ADVENTURE[1]	WILDLIFE VIEWING
DEW DROP INN	BAR
N. AMERICAN WILDLIFE MUSEUM[1]	GIFT SHOP, WILDLIFE MUSEUM
HIGH ADVENTURE GUEST RANCH/DESERT MOUNTAIN[1]	LODGING

NAME OF BUSINESS	TYPE OF USE
LAKE FIVE	
SAN SUZ ED RV PARK[1]	CAMPING
LAKE FIVE RESORT[1]	CAMPING/LODGING
KING'S HATCHERY	FISH HATCHERY
KOA CAMPGROUND[1]	CAMPING
MURPHY'S ON THE LAKE[1]	LODGE/RESORT
WEST GLACIER	
RIVER BEND MOTEL[1]	LODGING
GLACIER VIEW GOLF COURSE[1]	GOLFING
WEST GLACIER RESTAURANT[1]	DINING
WEST GLACIER BAR[1]	BAR
GLACIER PHOTO[1]	PHOTO PROCESSING
WEST GLACIER EXXON[1]	GAS SALES
WEST GLACIER MERCHANTILE[1]	RETAIL TOURIST
WEST GLACIER GIFT SHOP[1]	GIFT SHOP
GLACIER RAFT COMPANY[1]	RAFTING
COIN LAUNDRY[1]	LAUNDRY
AMTRAK[2]	TRAIN STATION
GLACIER NATURAL HISTORY ASSOC.	NON-PROFIT
THOMPSON REALTY[2]	REAL ESTATE
GLACIER HIGHLAND MOTEL[2]	LODGING
BELTON CHALETS[1]	LODGING
GLACIER WILDERNESS GUIDES[1]	RAFTING, GUIDED CAMPING
VISTA MOTEL[2]	LODGING

NAME OF BUSINESS	TYPE OF USE
GREAT NORTHERN[1]	LODGING, HELICOPTER TOURS, RAFTING
GLACIER CAMPGROUND[1]	CAMPGROUND/DINING
WILD RIVER ADVENTURES[1]	RAFTING
KRUGER HELICOPTER[1]	HELICOPTER TOURS
EAGLE AVIATION[1]	HELICOPTER TOURS
ALBERTA VISITOR'S CENTER[1]	VISITOR CENTER
NYACK	
GLACIER WILDERNESS RESORT[2]	LODGING (TIMESHARE)
DALIMATA'S LUMBER MILL	LOG PROCESSING
PINNACLE/ESSEX	
SNOW SLIP INN[2]	LODGING
BEAR CREEK RANCH[2]	OUTFITTER
IZAAK WALTON INN[2]	LODGING
HALFWAY HOUSE[2]	CAMPGROUND
DENNY'S[2]	LODGING
GREAT BEAR WILDERNESS (KATHY'S STANTON CREEK LODGE)[2]	CAFE/BAR/CAMPGROUND
SUMMIT STATION[2]	DINING
AMTRAK[2]	TRAIN STATION
THREE FORKS CAMPGROUND[1]	CAMPGROUND

[1]INDICATES NEAR TOTAL TOURIST DEPENDENCY
[2]INDICATES MODERATE TO STRONG TOURIST DEPENDENCY

It becomes obvious from the list of Canyon businesses that an effort is being made to capture the tourist dollar. This is especially apparent in the area of Lake Five and West Glacier where almost all the businesses remain open only during the summer tourist season. Many of those businesses labeled as having "strong tourist dependency" would probably not survive on an annual basis without the summer infusion of tourist money. An exception to this statement would be such

businesses as the Isaac Walton Inn and Glacier Wilderness Resort, which emphasize winter recreation activities. Noticeably absent from the list are businesses that provide basic household retail products. The nearest shopping source for those needs is Columbia Falls but Kalispell probably remains the principal destination for major retail purchases.

The future role of the timber industry in the Canyon is uncertain. It is likely that many Canyon residents will continue to seek employment at the timber processing mills in Columbia Falls, but it is relatively certain that the quantity of trees harvested from the Canyon area will decline in coming years. For example, approximately 6.9 million board feet was offered for sale by the U.S. Forest Service in the Hungry Horse and Spotted Bear Districts in 1993 but less than 400,000 board feet were actually sold and harvested in that year. In 1994, approximately 10.5 million board feet are expected to be offered for sale in these districts, including 6.3 million from the Middle Fork and 3.2 million from the Spotted Bear area. Whether these sales will actually be awarded in 1994 depends on several factors. The single most important factor pertains to the issue of how road densities (open & closed) affect grizzly bears. Another variable is the new *Ecosystem* approach to resource management. The understanding and/or clarification of these two variables will decide the outcome of the '94' sales and future sales.

TOURISM

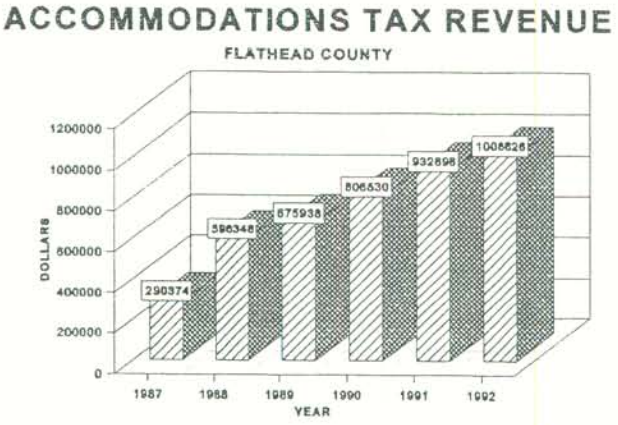


FIGURE 8 MPC 1994

Tourism is considered a basic industry in Flathead County. Visitor expenditures in Flathead County in 1991 was estimated to be almost 140 million dollars. Lodging revenue, alone, amounted to almost 24 million dollars in that year. The growth in bed tax revenue (left) since its inception several years ago accurately reflects the growing economic influence of tourism in Flathead County. A 1991 survey by the Flathead Convention and Visitors Association found that nearly 70% of the summer vacationers in Flathead County were attracted to the area by "Scenery/Landscape". Major vacation attractions in the county include Flathead Lake, Bigfork, Big Mountain ski area, Flathead National Forest, and Glacier National Park. The latter area is probably ranks as the number 1 tourist attraction.

VISITOR ATTRACTIONS

The Canyon serves as the gateway to many tourist attractions and destinations. It is through the Canyon that access is gained to such Flathead National Forest attractions as Hungry Horse

Reservoir, Great Bear Wilderness, Bob Marshall Wilderness, and the South and Middle Forks of the Flathead River. West Glacier provides the primary entry to Glacier National Park.

The private sector has attempted to create tourist appeal on a smaller scale. Local recreation businesses include commercial rafting, guided fishing and hunting, helicopter tours, outfitting, trail rides, snowmobiling, and cross country skiing. Tourist amusement attractions include a diverse range of activities such as water bumper cars and the viewing of bears within a compound enclosure.

VISITOR TRIPS TO THE CANYON

The numbers of visitors traveling though the Canyon communities on their way to vacation destinations is phenomenal. The chart on the right indicates the tremendous increase in traffic near the entrance to the Canyon during the summer months.

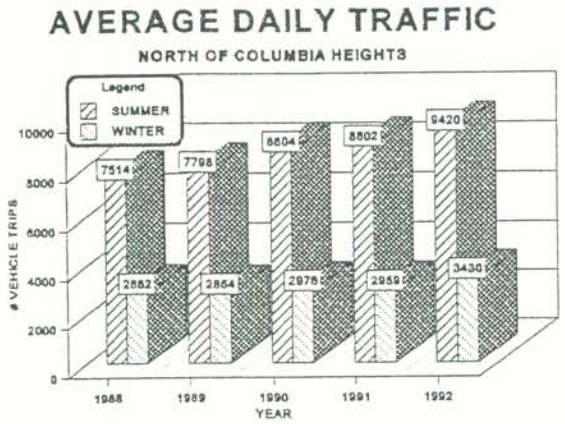


FIGURE 9 MPC 1994

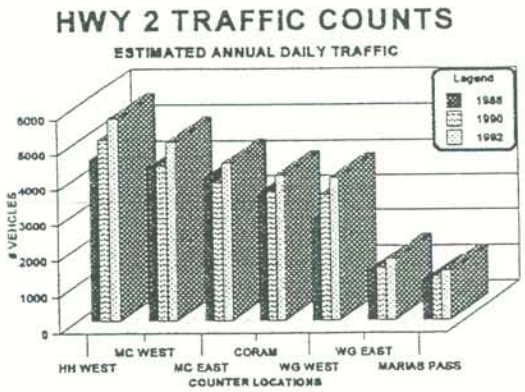


FIGURE 10 MPC 1994

The destination of many of these summer trips can be discerned by examining the change in vehicle trip numbers at counting stations along the Hwy 2 corridor. The number of trips on an annual basis along the corridor dwindles considerably as distance increases from Badrock Canyon. This information suggests that much of the summer traffic is travelling to the West Glacier entrance of Glacier National Park. It also helps to confirm the "bedroom" role of the lower Canyon communities.

The seasonal attraction of Hungry Horse Reservoir and vicinity can also be demonstrated by examining the annual traffic counts around the Reservoir. The lake offers boating and fishing opportunities. Campgrounds are located near the shores of the lake, and hiking trails offer access to wilderness areas. Picking huckleberries is a popular summer activity. The fall season generates traffic from hunters in search of elk and deer.

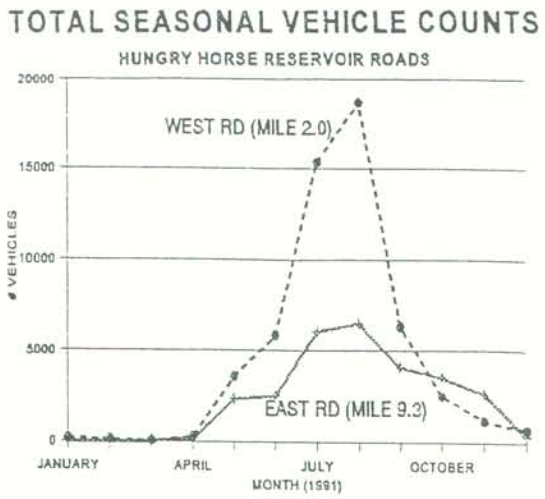


FIGURE 11 MPC 1994

The dramatic indication of the popularity of the Canyon area for tourists is the number of visitors to Glacier National Park. Once again, the counts reflect a strong summer attraction. The visitation total for 1992 was 2,199,767, up by more than 100,000 from the 1991 count. A rainy summer contributed to a slight downturn in the number of visitors in 1993. More than 900,000 visitors use the west entrance to the Park, which is substantially more than any of the other 8 entrances.

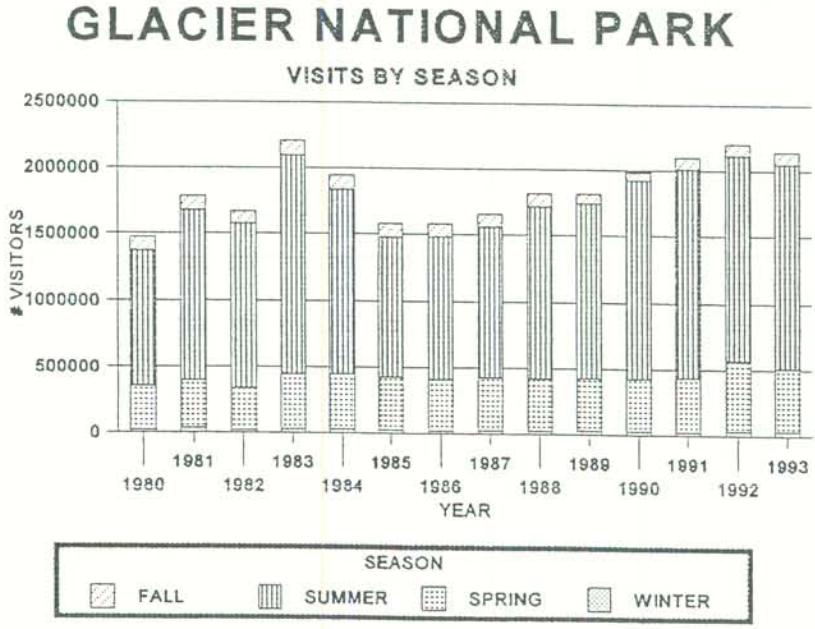


FIGURE 12 MPC 1994

The contribution of visitors to the Canyon attractions is not provided solely by highway transportation. Amtrak service is available to the communities of East Glacier, Essex, and Belton (West Glacier). East Glacier is outside the scope of this Plan but is included to demonstrate the attraction of train passengers to Glacier National Park. Essex experiences most of its train traffic in the fall and winter months. The other two locations primarily receive spring and summer passengers.

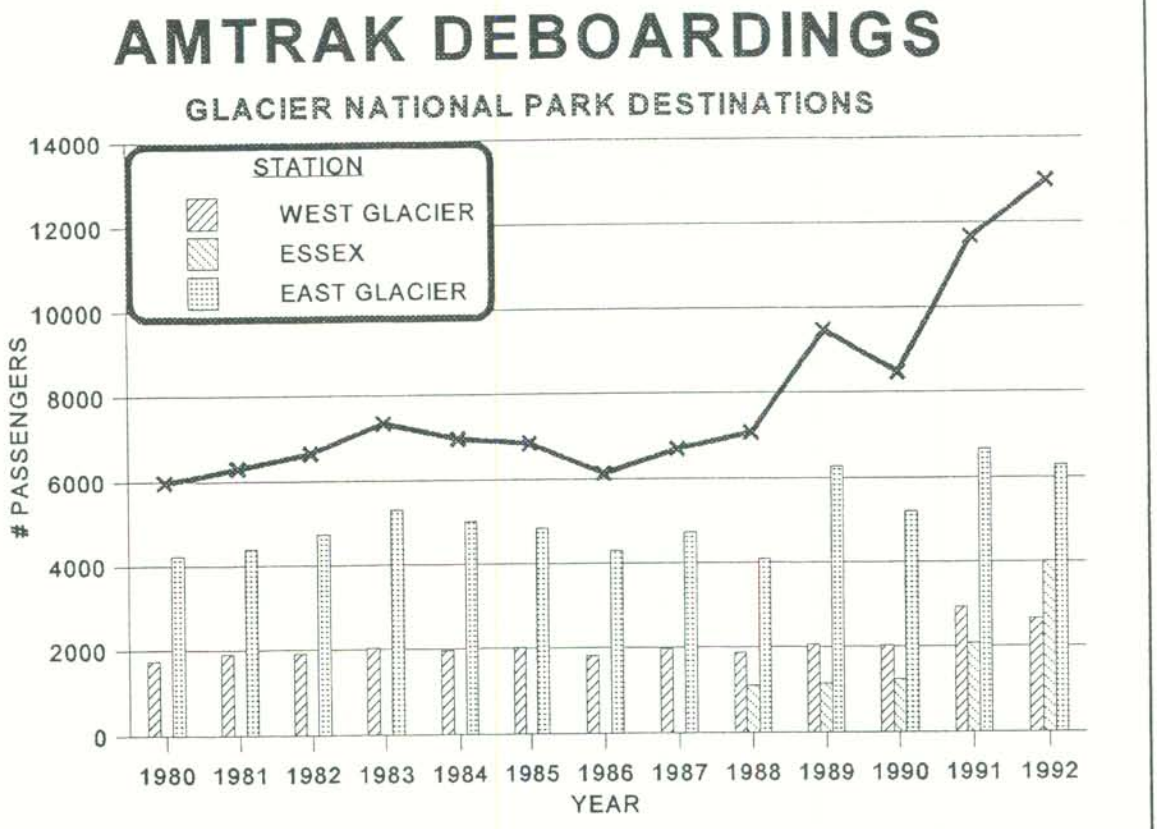


FIGURE 13 MPC 1994

VISITOR ACCOMMODATIONS

Overnight accommodations for the visitor in the Canyon are available in a variety of fashions. Camping opportunities exist in the form of public and private developed campgrounds that generally offer both tent and RV sites. Lodging is also available in "dude" ranch and resort settings. More traditional lodging includes lodges, motels, cabins, and bed & breakfast facilities.

PUBLIC CAMPGROUNDS

Developed camping and picnic sites can be found in both the National Forest and National Park jurisdictions. Glacier National Park offers 11 developed campgrounds. Those facilities likely to be accessed from the West Glacier entrance include:

- Apgar
- Avalanche
- Bowman Lake
- Fish Creek
- Sprague Creek

In 1992, these facilities, together, accommodated over 121,000 people either camping by tent or RV. No additional camping facilities in the Park are anticipated or desired by current Park policies.

Developed campgrounds on Flathead National Forest lands are primarily concentrated in the vicinity of Hungry Horse Reservoir with the exception of Devil Creek, which is located off U.S. Hwy 2 beyond Essex. A map showing the locations of the various developed recreation facilities on U.S. Forest Service lands is included at the end of this chapter. Campgrounds accessible through the Canyon planning area are:

- Emery Bay
- Murray Bay
- Devil's Corkscrew
- Lost Johnny Camp
- Lost Johnny Point
- Lid Creek
- Lakeview
- Handkerchief
- Graves Creek
- Elk Island
- Fire Island
- Spotted Bear
- Peters Creek
- Devil Creek

It is estimated that these facilities accommodated more than 150,000 people during the summer of 1992. This does not include the visitors at developed picnic sites, boat launches, or river accesses.

PRIVATE CAMPGROUNDS

The development of new campground facilities is one of the fastest growing segments of the local economy. Since 1991, over 330 new camping spaces have been approved in the Canyon to

bring the total number of licensed or approved camping sites to 1,011. These camping spaces can accommodate almost 250,000 people during a 90 day season. However, the actual length of the season and/or demand for camping spaces is probably less than 90 days.

The names of the various campground businesses have been previously listed in this Chapter. Summarized below is how the private campground spaces (including approved but not built) are distributed through the Canyon communities.

LOCATION	NO. SPACES
▸ HUNGRY HORSE	45
▸ MARTIN CITY	231
▸ CORAM	198
▸ WEST GLACIER/LAKE FIVE	476
▸ ESSEX & VICINITY	64

MOTELS/RESORTS/RANCHES

The names and locations of these type of tourist accommodations have been previously listed in this Chapter. Not listed are the motel/lodge facilities of Glacier National Park -- Apgar Village Lodge, Glacier Park Lodge, Lake McDonald Lodge, Many Glacier Hotel, Rising Sun Motor Inn, Swiftcurrent Motor Inn, and Village Inn. In 1992, the Park "motel" facilities served more than 111,000 people during the brief summer season. Lost in the 1993 season was the use of the Granite Park and Sperry Chalets, which serve up to 4,500 people.

All of the motels in Glacier National Park are closed during the winter season, as are all but approximately 13 rooms in the West Glacier area. Occupancy of most Canyon motels suffers during the winter season, with the exception of the Izaak Walton Inn in Essex. Motels and/or cabins that remain open in the winter generally offer some long term winter rentals in units that have kitchen facilities. However, an inventory for the 1993 season indicated that only 10% of the total motel units in the Canyon are available for winter occupancy. Motel room counts by region in the Canyon are presented below:

MOTEL ACCOMMODATIONS

LOCATION	STRUCTURES	UNITS
HUNGRY HORSE	7	52
MARTIN CITY	4	23
CORAM	3	15
WEST GLACIER & PARK FACILITIES	(5) (3)	(99) (187)
ESSEX & VICINITY	3	48
TOTAL	**25**	**424**

ECONOMIC SIGNIFICANCE

The economic spinoff from the tourist business is difficult to quantify. Some attempt has been made on a county-wide basis to assess the value of tourism by the Institute for Tourism and Recreation Research, University of Montana and by the Flathead Convention and Visitors Association. The latter organization suggested that the visitor expenditures in Flathead County for the year 1990 approached $113,000,000. The breakout of expenditures included lodging (17%), gasoline (14%), transportation (5%), retail sales (29%), food (28%), and "other" (7%). The Canyon's share of that revenue is unknown.

A 1991 "Visitor Services Project" for Glacier National Park briefly addressed tourist expenditures associated with visits to Glacier National Park. That report evaluated 457 visitor "groups" and made the following findings:

- Average visitor group expenditure per visit was $253 for a 5 day average length of stay;
- Per capita expenditure was $82;
- Category of expenditures (average values) by visitor group:
  - $95 for lodging
  - $79 for food
  - $42 for travel
  - $62 for "other" (recreation, tours, etc)

The results from this overly simplified analysis might suggest that each visitor group spent an average of $51 per day while visiting Glacier National Park. This daily expenditure might be representative of a typical tourist in the Canyon and, if multiplied by the number of private motel and campground units in the Canyon, the result would amount to approximately $76,000. This "guestimate" of total daily tourist expenditures in the Canyon is underestimated, since the estimate

does not consider the number of tourists utilizing public accommodations nor does it reflect the increased retail opportunities available outside the Park.

ISSUES

Almost all economic activity tends to shut-down in the Canyon during the winter months. The communities from Nyack to Marias Pass have generally evolved into seasonal residential communities with few local services. Winter isolation and sparse populations hinder any type of economic development that would help sustain the needs or desires of the local residents. Yet, it is this isolation and closeness to the natural environment that draws interest to the communities in that area of the Canyon. Anything more than what is there now would possibly effect negative change, as perceived by the local residents.

The economy of Lake Five and West Glacier runs with the tourist season. The summer homeowners return and all the campgrounds, tour businesses, and stores of West Glacier open for the hundreds of thousands of tourists that pass on their way to Glacier National Park. The success of any business in this area depends on this short summer tourist season. Opportunities for additional commercial and residential development primarily depend on the availability of water and sewer services and the willingness to operate a business on a seasonal basis. Wintering populations of wildlife benefit from the sparse human population and low activity levels of the winter off-season. New development proposals will have to consider impacts to the abundant and unique wildlife populations and to the natural beauty of the area. Clustering of new uses in close proximity to the existing commercial center of West Glacier is preferred over other alternatives that may expand new uses beyond available services and into areas of critical wildlife habitat.

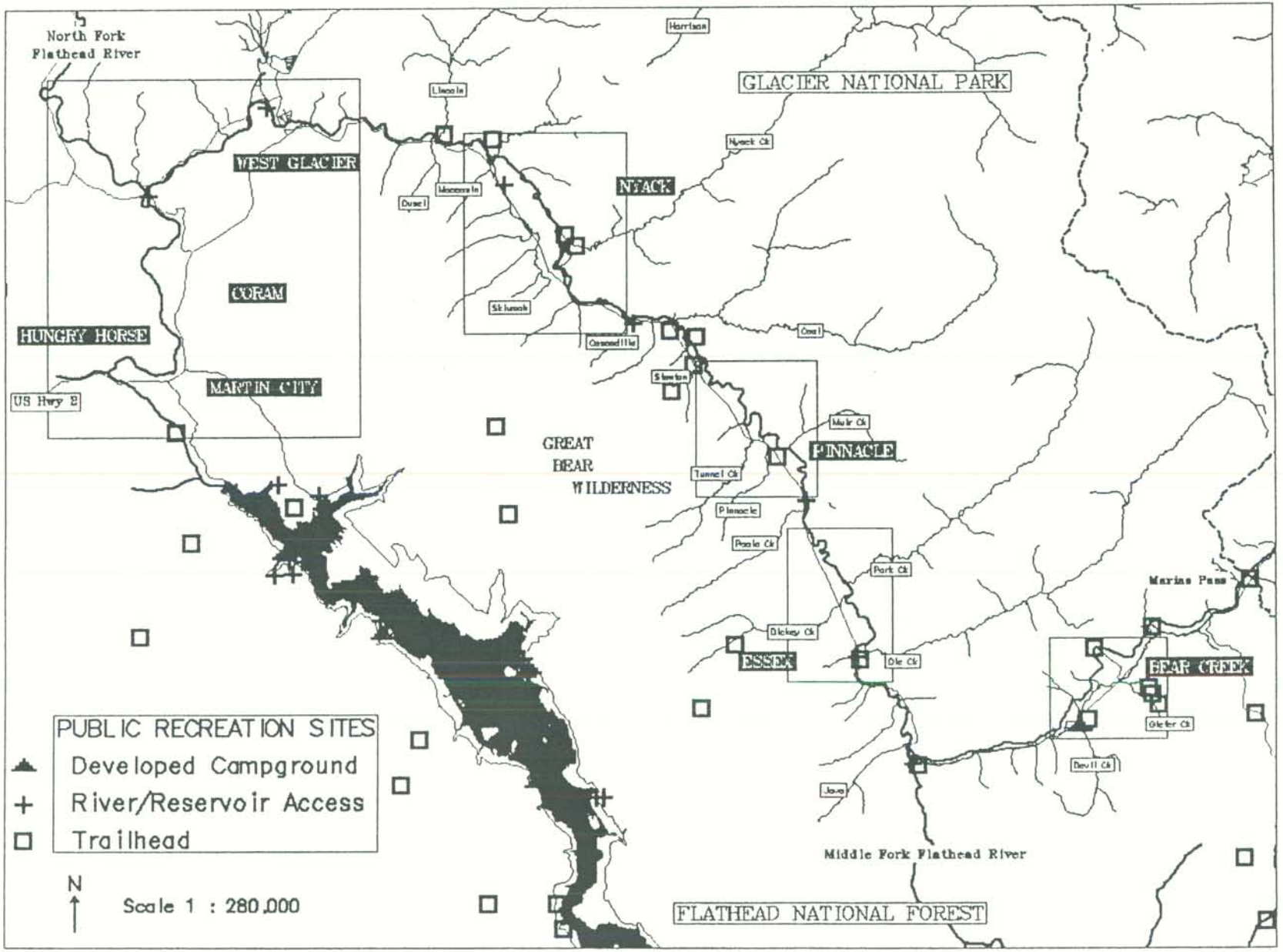
The lower Canyon communities of Hungry Horse, Martin City, and Coram offer the most logical opportunities for new development in the Canyon. This is where the population of the Canyon is most concentrated on an annual basis and where the most infrastructure is available to provide the necessary services. In-fill of these communities is desired prior to expansion into more rural areas.

All land use alternatives and economic objectives must consider the balance of providing "urban" services in a rural environment. The tourist dollar can be captured efficiently without sacrificing the splendor of the Canyon. Valley communities should appropriately serve the larger commercial retail needs of the Canyon residents, while the lower Canyon communities should focus on capturing the tourist retail trade. Such retail uses should be concentrated in the existing community centers and be architecturally compatible with the greater community. Setbacks, landscaping, and signage control would help achieve community objectives.

GOALS AND POLICIES

The goals and policies applicable to the topic of this chapter have been incorporated into other elements of this Plan and so are not specifically listed under this section. Policies to be stressed include those that encourage a small business emphasis, avoidance of commercial strip

expansion, signage control, and concentration of new commercial uses in existing community centers.


North Fork
Flathead River
GLACIER NATIONAL PARK
WEST GLACIER
NYACK
CORAM
HUNGRY HORSE
MARTIN CITY
US Hwy 2
GREAT
BEAR
WILDERNESS
PINNACLE
ESSEX
BEAR CREEK
Marias Pass
Middle Fork Flathead River
FLATHEAD NATIONAL FOREST
PUBLIC RECREATION SITES
Developed Campground
River/Reservoir Access
Trailhead
N
Scale 1 : 280,000

THE CANYON PLAN

CHAPTER VI
WATER/SEWER

Drinking water and sewage treatment play significant roles in regulating the type, rate, density, and location of new uses and land divisions in the Canyon. Public water systems are available in some Canyon communities but public sewage treatment systems are absent all together. This situation has created an artificial limitation to growth in the area.

WATER

The source of domestic water supplies in the Canyon varies among communities. Flathead County Water & Sewer Districts provide dependable supplies of water to the communities of Hungry Horse and Martin City. Coram has a community water system that has a spring source. West Glacier depends on the water system of Glacier National Park. Essex and Pinnacle utilize several community water supply systems. Some residents haul spring water, out of necessity, from Berne Memorial Park to supply their domestic water supply needs. Ground water sources of domestic water are often difficult to locate in the Canyon, especially in those areas east of Coram.

CORAM

The present community water system operated by the Coram Water Users, Inc,. is a private, member-owned entity established in 1969 as a successor to the Coram Water Users Association. The previous Association had been informally organized to provide domestic water to approximately twenty residences, which were originally served with water by the Great Northern Railroad.

The Great Northern Railroad (GN) held a water right on the Blue Lake Spring to supply its old Coram water tower during the steam locomotive era. The Great Northern was successor right holder from the St. Paul, Minneapolis and Minnesota RR, which patented a water appropriation right in 1892. County records show that the Great Northern in 1941 formalized a pumphouse and water pipe easement across land owned by Ray and Sadie Ward Wedge. During the early development of Coram, several residences along the highway (now Coram Stage Road) and West of the GN were connected to the Great Northern system, many of these homes being owned by GN employees.

When the conversion of the GN system to diesel locomotives made the old wooden water tower obsolete, the Great Northern informally gave operation of its pump over to an association of residents. The same pumphouse and spring also were used to house equipment to separately provide water to the Rex Brown Lbr Co. mill and to the Coram Private Water System, which included residences and dwellings on both sides of the present highway.

In 1961, the Great Northern transferred its water facilities to Flathead County. With the old tank in disrepair, Coram Water Users, Inc. was established in 1969 according to Farmer's Home Administration guidelines, and funding was applied for and received to construct a new 100,000 gallon steel storage tank and to modernize much of the distribution piping with new transit pipe. Earl Page was the first president, and Charles Tustin served as the first Secretary. Members of the Coram Private Water System whose properties were east of the highway, switched to the new CWU system, which then served some 35 consumers west of the tracks, along the Stage Road, the school, and east of the highway along Corbett Lane and the first two blocks of Seville Lane, as well as along the west side of the highway from the Evergreen Motel north. Flathead County transferred its interest in the old Great Northern system to this new corporation.

The transition was not without controversy. To this day, there exists a dispute between the Coram Water Users system and the heirs of Rex Brown, who bought the old Wedge property, over the ownership of the water appropriation system and the volume of water to which each party is entitled.

In succeeding years, most of the expansion in Coram was to the east of the highway. In 1975, a lift station was installed along Seville Lane to boost pressure to the higher ground east of the central community. This was financed with a second FmHA loan. As the system expanded to a network of some 90 users, a larger pump was required. It was purchased by means of community fund raising, including bake sales. Martha Buzzell acted as secretary, treasurer and bill collector for the town for a decade. In a fire in the home of then-President Dick Rosenbaum in 1979, most of the engineering records of the CWU were destroyed.

In 1980, the old main line from the pump house to the Coram Stage Road was replaced with new 4 inch PVC pipe, and several large leaks were repaired. Monthly water fees were raised from $5 to $12 and later $15 as the system was put on a self-supporting basis with funds for capital improvements as well as debt retirement. A float-operated control system was installed and the corporation built a storage building on land leased from Burlington Northern lying west of the tracks. Modest expansion has occurred since, with the Seville Lane line brought north from Fossler's corner to serve the Joe Rogers residence, the present terminus of the distribution system.

As the system grew, its ability to maintain itself on an all-volunteer basis sagged. Today, with

the basic residential rate at $20/mo. and business services at higher fees, the system is tended by a paid employee certified for community water system users. Its officers continue to serve voluntarily. With the exception of four private wells, and the eight residences still hooked to the Coram Private Water system, it provides domestic water to all of the core community, 94-104 users. It also provides tanker recharge capacity for the Coram-West Glacier VFD.

Future needs of the system are likely to include an alternative ground water source and meters at each service to track water use and loss. Many residents along Seville Lane are not connected to the community water supply and haul water from other locations. Maintenance funds are inadequate to pay for any major repairs. The Coram Water Users have recently retained an engineering firm to investigate the feasibility of establishing a County Water & Sewer District.

HUNGRY HORSE

The first water systems in the town of Hungry Horse were two small systems; the Combined Hungry Horse Water Co., Inc., on the north side of Highway 2 and the Dan Mangan Company on the south side of the highway. Both systems were in place during the time of the dam construction. After the completion of the Bureau of Reclamation housing complex, the Bureau installed its own system. The original systems had wooden mains which did not have a very long service expectancy.

In the 60's, there were about 200 users in town. The Combined Hungry Horse Water Co., Inc. purchased the south side system from Dan Mangan to tie the two systems together. When this was done, they obtained a loan to install a new tank on the hill above the Silver Basin, and put in a new well and a new main to serve the new accounts on the River Road. Until then, much of the water from the Sand Creek Reservoir on the side of Columbia Mt. flowed into the system. At times, the reservoir screens would clog, and some one would have to go on the trail up the side of the mountain and 'rake' the leaves and debris from the reservoir. There was a pump and well on the Flathead River, but when the pump was out of service the Sand Creek Reservoir was the only source. The effectiveness of the new tank was diminished due to leaky wooden mains leading to the tank. During this time, there were only 30 meters on the system. The billing rate was $5.00 per month and a lot of water was being wasted.

In the early 80's, the system hadsuch bad leaks that the power bill was around $1,700.00 a month. The water was off much of the time, and the old system was $115,000.00 in debt.

Jim Willows, one of the owners, formed the Hungry Horse Booster Club to encourage residents to form a tax water/sewer district, take over the debt, and obtain a grant for new lines. In turn, he would donate his shares of the company. Meanwhile, a $12,000.00 power bill was delinquent, and Flathead Electric Co-op threatened to pull the pump and shut off the

power. At this time, Jim Willows personally purchased the well and pump house from the Flathead River site and, with that money, the Company was able to pay the delinquent bill. The new well was in use, but the old one on the river could no longer be used because it was located in the flood plain. In 1983, the H.H. Booster Club was successful in forming the Hungry Horse Water & Sewer District. Trustees were elected and applications for loans were submitted to FmHA.

In June of 1988 the new system was completed. The District is now paying off the loan assumed from the Willows, a loan from FmHA, and a $77,000 loan that provided additional fire hydrants and associated 6 inch lines. The current water source is two wells. Approximately 281 users are connected to the system.

MARTIN CITY

The Martin City water system was developed in the mid 1940's to support the growth associated with the dam era. Used wood pipe from Columbia Falls and war surplus "invasion pipe" was installed for the system. An open reservoir was constructed southeast of town for supply and to meet pressure requirements. Two additional wells have been added since construction of the original system. The open reservoir became contaminated and was removed from service. The existing wood mains and invasion pipe had deteriorated so badly by the late 1960's and early 1970's that two more wells had to be added to the system.

The water system was sold in 1977 to Wes Johnson, who initiated a program to reconstruct it. Prior to 1976 the existing system had fire hydrants, Reconstruction of the system reportedly entailed "sliplining" four inch mains inside the deteriorated six inch wood mains, removing fire hydrants, reconnecting and replacing services, and replacing burnt out pumps. By 1979, reconstruction was nearly complete.

In 1979, frustrated by the mismanagement, system dilapidation, and impending health issues, the Martin Sewer Water and Sewer District was formed and incorporated in October of that year. With the help of several community members and Merle and Eva Shupe, the District was able to purchase the privately owned system from Wes Johnson and assumed operations on August 1, 1981.

The District received funding from FmHA to construct a new system, which went on line November 10, 1986. Infrastructure improvements included PVC piping, a 150,000 gallon storage tank, metered services, and full fire flow construction. The four wells associated with the old system were abandoned and replaced with a new well. Funding is now being sought to complete a new well house for a second well. The system provides service to 80-90 individual water users plus two RV campgrounds.

The District retained an engineering firm in early 1994 to investigate the feasibility of

constructing a sewage treatment system for the Martin City area.

WEST GLACIER

The source of domestic water for the townsite of West Glacier is Glacier National Park. The actual beneficiary of the water is the West Glacier Water Users, Inc, a non-profit corporation. Water users include the properties (including lands leased to other parties) of West Glacier Mercantile, Inc., residents of Glacier Avenue, West Glacier Elementary, and Flathead Electric Co-op. Two smaller public water systems serve the Highland Restaurant area and Glacier View Estates and golf course.

Prior to 1968, the water source for these uses was the Middle Fork of the Flathead River. Water was distributed via a 2-inch galvanized pipe from a pumping system. This distribution system was originally established around 1936 (water right priority date of 1912), but the River was not a satisfactory water supply due to seasonal changes in water quality and maintenance problems with the pumping system. A well located in the river's floodplain (water right priority date of 6/10/'50) also failed due to siltation. New state and federal drinking water standards discouraged the continued use of this source of water. A ground water source outside the flood plain was not feasible or available, however.

In 1968, Glacier National Park offered to share the Park's water with the townsite of West Glacier. According to local residents, this invitation was apparently offered not only to help West Glacier in their time of need, but also to serve the interests of Glacier National Park. At that time, National Park philosophy was encouraging development outside Park boundaries to reduce development pressures within Park boundaries. Providing water to the West Glacier Townsite would help to achieve that objective. The West Glacier Water Users, Inc., also have a claim to the source of water being used by West Glacier (claim priority date 12/31/'51). However, it is the State of Montana's position that this claim is not being utilized by the Park's practice of transporting water to West Glacier.

Rubideau Springs is the source for the water supply system in the Park Headquarters area. The spring qualifies as a "groundwater" source due to favorable water quality characteristics, and state and federal laws require chlorination of the water. Water lines extend to Apgar and Park Headquarters. Some water from the spring is diverted to a 100,000 gallon storage tank near Park Headquarters that serves no purpose other than to provide a source of temporary water in the event of a line break. Overflow from the tank is dechlorinated prior to its return to the Middle Fork.

Initially, the water supply to West Glacier from the Park originated from the overflow of the Park's 100,000 gallon storage tank. Some modifications were later made to the system to ensure a continuous supply of water, should the overflow cease. A 1986-'87 improvement switched the water diversion from the overflow source to a direct connection with the water

main that serves the Park Headquarters. A 6 inch main was installed, extending from the new school to the Post Office. Fire hydrants were installed with the new main.

The Special Use Permit that authorized the 1968 diversion of water to West Glacier expired in 1979. Annual permits have been utilized since that date to authorize the continued use of the Park's water system. The Water Users have been advised by the Park to seek an alternative source of water as a condition of the permit.

ESSEX, PINNACLE,& VICINITY

Community sources of water in this area of the Canyon include a number of different and innovative systems. In Essex, four community systems are in operation. Lots 1-55 in the Original Parma Addition are served by the old BN water system, which utilizes a surface source from Essex Creek. The Izaak Walton Inn is also on this system. Lots 56-90 of the Addition to Parma are served by a homeowners well near lot 74. The 17 lots of the Mountain Acres Addition utilize a common well that is located at lot 2AE. A second well at that location serves the 20 lots of Snow Country Tracts Addition.

West of Snowslip, a group of cabins located on the south side of the Highway utilize a spring for water. Twenty-five dwellings in Pinnacle are connected to five "non-community" water systems. Water is collected and distributed from sand point systems that have been developed into the adjoining hillsides.

SEWAGE TREATMENT

There are no public or community sewage collection or treatment systems in the Canyon. The absence of public or community sewage treatment facilities effectively limits the growth potential of the Canyon communities. This limitation is magnified by the difficulty of locating adequate supplies of drinking water in some of the communities. The ability to utilize a conventional septic system in many regions of the Canyon is greatly constrained by poor soil conditions. A new state "Nondegradation" law will further limit the possibilities for use of conventional septic systems in the Canyon. The tradeoff for having publicly treated sewage may be increased development and more people.

ISSUES

The foregoing discussion adequately identified the land use implications of "water" and "sewer" in the Canyon. In general, drinking water is difficult to obtain, and where it is absent, development is limited. The absence of public sewage treatment services in the Canyon has also been growth limiting. The availability of both of these services to single or multiple communities would open up considerable opportunities for additional development.

Maintenance of a rural land use character without strong controls in place would be difficult to achieve with the lifting of these constraints. Often times, the service provider of either service solicits hook-ups to help offset the costs of the system(s). This gets back to the issue of the tail wagging the dog. Change is more easily accommodated by allowing higher density developments that may shift local land use character from single family dwellings to condominiums, and from cabin accommodations to large motel structures.

A community solution to sewage treatment is warranted if necessary to achieve other community objectives, such as maintenance of water quality or treating the sanitation problems of existing structures. Redevelopment objectives can also be achieved more effectively with the availability of both utility services. As sanitation restrictions become more stringent, it may be wise to look at regional solutions for answers, including the transport of sewage to the Columbia Falls treatment plant. However, the current practice of accepting sludge by the Columbia Falls treatment plant from Canyon septic tanks is being reassessed by the City of Columbia Falls. An in-Canyon solution would probably need to be linked to the combined communities of Hungry Horse, Martin City, and Coram.

In any circumstance, the addition of community sewage treatment facilities should be used to assist existing uses and to facilitate the in-fill of community centers and not to stimulate additional growth that would be contrary to other community goals and objectives in the Canyon.

GOALS AND POLICIES

The following Goals and Policies were derived from the ranking of issues by landowners within the Canyon and from a "test" ranking of the preliminary goals and policies conducted during the December 1993 round of public meetings. Some of the listed objectives may have application to other elements of this Plan.

WATER/SEWER

GOALS:

TO SEEK SOLUTIONS TO PROVIDING ADEQUATE SUPPLIES OF WATER TO ESTABLISHED CANYON COMMUNITIES

TO SEEK SOLUTIONS TO TREAT SEWAGE IN CONCENTRATED POPULATION CENTERS AND AT THOSE LOCATIONS SUITABLE FOR ADDITIONAL GROWTH AND DEVELOPMENT

WATER SUPPLY

- MAXIMIZE SEPARATION DISTANCES BETWEEN COMMUNITY WELLS AND BELOW GROUND SEWAGE TREATMENT SYSTEMS
- NEGOTIATE FUTURE SERVICE AREA BOUNDARIES FOR EACH WATER AND SEWER DISTRICT
- WORK TOWARDS UPGRADING THE COMMUNITY WATER SYSTEM IN CORAM BY IMPROVING THE INFRASTRUCTURE AND BY SECURING A BELOW-GROUND SOURCE OF WATER, IF REQUIRED FOR COMPLIANCE WITH PUBLIC HEALTH REQUIREMENTS
- WORK TOWARDS ESTABLISHING AN INDEPENDENT [OTHER THAN GLACIER NATIONAL PARK] SOURCE OF COMMUNITY WATER FOR WEST GLACIER
- COORDINATE ALL NEW DEVELOPMENT PROPOSALS WITH THE APPLICABLE COMMUNITY WATER PROVIDER
- DISCOURAGE THE USE OF PRIVATE WELLS FOR NEW DEVELOPMENT IF A COMMUNITY WATER SOURCE IS AVAILABLE
- PROVIDE AN ONGOING MAINTENANCE AND IMPROVEMENT PROGRAM FOR ALL WATER DISTRICTS AND COMMUNITY SYSTEMS

SEWAGE TREATMENT

- DISCOURAGE THE USE OF CONVENTIONAL BELOW GROUND SEPTIC SYSTEMS IN CLOSE PROXIMITY TO SURFACE OR GROUND WATERS
- CONSIDER THE USE OF PRIVATE COMMUNITY TREATMENT SYSTEMS WHENEVER MULTIPLE LOTS ARE PROPOSED FOR DEVELOPMENT
- DETERMINE THE FEASIBILITY/DESIRABILITY OF SERVING THE HUNGRY HORSE, MARTIN CITY, AND CORAM COMMUNITIES WITH A PUBLIC SEWAGE COLLECTION AND TREATMENT SYSTEM

THE CANYON PLAN

CHAPTER VII
OTHER SERVICES

This chapter will primarily focus on the public service provisions of "transportation", "solid waste", and "utility services". The emergency services and water/sewer components of Public Services are the subjects of other chapters in this Plan.

TRANSPORTATION

The search for transportation linkages across the Rocky Mountains led to the discovery and early development of the Canyon. The railroad established a transcontinental route through the Canyon and played a significant role in the establishment of Glacier National Park. The "tote" roads associated with the construction of the rail lines were the forerunners of U.S. Highway 2. These two transportation networks continue to have tremendous influence on the growth and development of the Canyon communities.

BURLINGTON NORTHERN RAILROAD

The present role of the railroad in the Canyon is not as dominant as it was during the early days of exploration and construction. However, the railroad remains a significant land use feature and influence on the area.

The Burlington Northern (BN) main line enters the Canyon planning area at the continental divide on Marias Pass. The tracks parallel Highway 2 and mark the southeasterly boundary of Glacier National Park until its intersection with Java Creek and the highway. From there, the tracks continue to follow the Middle Fork of the Flathead River for approximately 45 miles through the communities of Essex, West Glacier, and Coram. At Coram, the tracks once again cross the Middle Fork and travel along the base of Teakettle Mountain to Conkelley.

BN employs approximately 35 individuals on a year-round basis for Canyon duties. More crews are added for summer maintenance. All BN employees in this area are involved with track or signal maintenance, with all train service personnel headquartered at Whitefish.

Freight traffic on this line segment consists mainly of grain, cars, boxcars, and containerized freight. The average number of daily trains is 28. Amtrak also uses the BN line but has no

local employees. Flag stops are only made at Essex and West Glacier, which together accounted for approximately 13,000 deboardings in 1992.

Train safety is a local concern. Derailments could create a number of emergency situations involving toxic spills, fire, structural damages, and death & injury. A recent derailment near the West Glacier Elementary helped to focus the significance of this issue. Grain spills have also created management problems with bears.

U.S. HIGHWAY 2:

The Development History of the Canyon describes the history and development of U.S. Highway 2 up to the "dam" era. Since that time, considerable improvements have been made in the corridor extending from Hungry Horse to West Glacier. The improvements, however, did not happen without controversy. A 66-foot wide four-lane highway through Hungry Horse and a 64-foot wide four-lane from Hungry Horse to Coram were built in 1986. A widened two-lane road with truck climbing lanes was constructed between Coram and West Glacier in 1985. These projects replaced a narrow highway segment (approximately 22- foot-wide pavement surface) that was originally built in 1931. The highway extending beyond West Glacier to Marias Pass remains a narrow two-lane road.

HISTORY: The highway reconstruction for the Hungry Horse/West Glacier segment was originally under consideration by the Montana Department of Highways in 1962. The nearly 25 year delay was partially the result of litigation, which is summarized in the April 1982 FEIS on the proposed project:

> "The Department of Highways had formal plans for a four-lane highway from Hungry Horse to just east of Martin City and a widened two-lane highway for the remaining distance to West Glacier by 1968. This concept was later changed to a four-lane facility for the entire length of highway, with final authorization for a continuous four-lane highway received from the Federal Highway Administration in April, 1975.
>
> A final Environmental Impact/4(f) Statement dated February 20, 1974 was prepared for the project by the Montana Department of Highways and the Federal Highway Administration. Advance acquisition of right-of-way was approved by the Federal Highway Administration in March of 1975. Approval to acquire all of the right-of-way was received on May 15th, 1978. A timber sale contract to remove timber from Forest Service parcels on the right-of-way from Coram to West Glacier was let on October 20, 1978 and timber was removed by the middle of November. A clearing contract on the Coram - West Glacier section was let on June 28, 1979 and completed by April, 1980. During this period, utilities were also relocated on this section.
>
> In the spring of 1976, opposition to the four-lane facility surfaced, with some area residents supporting an improved and widened two-lane roadway instead of a four-lane highway. A non-profit corporation called the Coalition for Canyon Preservation was formed in November, 1978 to oppose the four-lane facility. This organization filed suit on January 5, 1979 against the Secretary of Transportation, Administrator of the Federal Highway Administration, Director of the Montana Department of Highways, and members of the Montana Highway Commission to prevent further actions on the project on the basis that the EIS prepared for the project was inadequate".

The District Court denied relief and dismissed the action on November 14, 1979. An appeal to the Ninth Circuit Court of Appeals was applied for by the Coalition on December 18, 1979. The Court of Appeals granted injunctive relief and expedited the appeal. On October 9, 1980, the Court of Appeals reversed the judgment of the District Court. Pursuant to the mandate of the Court of Appeals, the District Court enjoined construction of any improved highway in the Hungry Horse - West Glacier corridor on November 7, 1980.

Following the decision by the Court of Appeals, the Montana Department of Highways initiated the process of redoing the EIS.

The adequacy of the new EIS was once again challenged, and agreement between the two parties was not achieved until 1984. The result was a design change that permitted a Level of Service 'C' instead of LOS 'B' and 6.1 miles of special design from Coram to West Glacier. A primary issue in the litigation dealt with the relationship of highway design to wildlife movement.

BADROCK CANYON: Improvement to the final highway segment between Columbia Heights and West Glacier was recently detailed in a Draft Environmental Impact Statement for the Columbia Heights to Hungry Horse Project F1-2 (39) 138. Project design began in 1988. The proposed action is to improve the existing 24-foot-wide, two lane route from Columbia Heights to Hungry Horse. The existing road was built in the early 1930's. The South Fork bridge was built in 1938 with a 26-foot wide deck. Berne Park is an historical feature associated with the Badrock Canyon portion of the project.

The preferred design identified in the DEIS is a four-lane design. The Department believes this design is necessary to achieve the preferred Level Of Service 'B'. A capacity analysis suggests that the highway segment is currently operating at LOS 'E' during peak travel times in July and August. A permanent counter in the area of the House of Mystery recorded annual average daily traffic (AADT) at 4270 in 1986 and 5720 in 1992, an annual increase of almost 5%. The count at this station is estimated to increase to an average of 8,850 per day by the year 2010.

Once again, the Coalition for Canyon Preservation has expressed concern with the proposed project design. It is their opinion that the DEIS failed to adequately disclose or address various consequences that the proposed action might have on the river, Berne Park, wildlife movement, and cultural values. The Coalition is also supporting a lower LOS design and utilization of a special design approach. The Final Impact Statement and response to these issues were not available at the time of this writing.

COUNTY ROADS: Most of the County roads in the Canyon are local roads serving individual dwellings. Roads that serve a broader region and might serve as "collectors", include Blankenship Road, Belton Road, and, possibly, Central Avenue in Martin City. The County Road & Bridge Department maintains a 3-person crew for the Canyon. Equipment includes a sander, grader, and dump truck. The crew's range of responsibility extends from Columbia Heights to the area of West Glacier.

The Road Department is currently attempting to inventory all of its roads into a data base. Each road will be categorized by functional classification, such as "local", or "minor arterial". Included with this new road inventory and classification system will be the application of a "Pavement Management System". Decisions on road maintenance priorities in the future will be based on definable criteria associated with this information base. Current County policies anticipate no additional paving of roads in the near future (3-5 years). In the Canyon, only Blankenship Road is currently being considered for improvement.

The County maintains most of the 60-70 roads in Hungry Horse, Martin City, Coram, and West Glacier. The U.S. Forest Service maintains its own roads. No roads are maintained by the County beyond West Glacier. In Essex, The Izaac Walton Inn Road [or the Essex Loop] is a county road, but the county contracts with the State Highway Department for winter maintenance.

SOLID WASTE

The county land fill is located off U.S. Highway 93, between Kalispell and Whitefish. All solid waste in the County is deposited at that location. The manner of collection varies by location in the Canyon. A private company (Wee Haul Garbage Service) provides weekly curb stop service in Hungry Horse, Martin City, and Coram. Commercial service includes up to three pick-ups per week during the summer.

County "green-box" sites are located near the Dew Drop Inn, Nyack, and Essex. These open container sites provide local depositories for trash. The containers are emptied once a week in the winter and twice weekly in the summer by the County. Several issues have emerged concerning this method of garbage collection. Unless properly managed, the bins can be attractants to bears. New state and federal laws will soon require closer scrutiny of the type of waste. Hazardous materials will need to be separated and disposed of in different fashions. Non-compliance with these laws will either cause the closure of these collection sites or require manned operation to ensure proper separation of materials. Personnel are now contracted by the County to provide routine site maintenance (litter control and snow removal).

The Summit Station near Marias Pass receives garbage collection from Browning.

UTILITY SERVICES

The Canyon is an important corridor not only for transportation but also for various utilities. Electricity, telephone, and natural gas have no inherent transmission difficulties other than the limitations posed by such physical barriers as mountains. The barrier of the Rocky Mountains was overcome with the construction of the railroad and highway. The same over-the-mountain route through the Canyon now serves as an important transmission corridor for all three of these utilities.

Utilities and their influence on land use were discussed earlier in this Plan. The independent plans of a particular utility can greatly influence the location, type, and density of particular land uses. Most of the land use influences of utilities in the Canyon have been "played-out". All existing uses and those anticipated in the near future can be adequately served with the existing infrastructure. However, the corridor continues to be examined as a route to provide regional services to communities outside the Canyon. For example, the transmission of electricity from future wind generated sources near Cut Bank to the west side of the mountains is a current topic of discussion. The Canyon may have no direct need for the electricity, but the preferred route of transmission may be through the Canyon.

Fiber optics is the technology expected to link the world and a new underground cable installation is proposed through the Canyon corridor. This will serve the broader needs of the Valley and regions beyond.

The fiber optics line is expected to parallel the underground natural gas main that already passes through the Canyon. The Montana Power Company maintains a 10-inch natural gas transmission line along the full length of the Canyon corridor. This is the source of natural gas for the Canyon communities and for the Flathead Valley.

Flathead Electric Cooperative, Inc. provides electrical service to all but the most easterly area of the Canyon. Substations are located in Badrock Canyon and West Glacier. The latter substation serves the region extending from north Coram to Essex. The Badrock substation serves the lower end of the Canyon. Most of the area is served with three phase overhead lines. Glacier Electric serves the area east of the Walton Ranger Station. The Bonneville Power Administration (BPA) operates a transmission line corridor from Hungry Horse Dam, along the South Fork of the Flathead River, and through Badrock Canyon, including 230 and 115 kilovolt transmission lines.

PTI Communications provides telephone service to the Badrock Canyon, Hungry Horse, Martin City, Coram, Lake Five, and Blankenship areas. U.S. West provides this service to the West Glacier area and beyond to Marias Pass. The difficulty with this arrangement is that all U.S. West telephone prefixes are long distance from the greater Flathead valley communities and from the lower Canyon communities, as well.

ISSUES

The Canyon is a transcontinental transportation corridor for the railroad and automobiles. The existing communities owe much of their existence to the building of these transportation facilities. Today, the River also serves as a recreation corridor for boaters. The railroad and highway transportation systems continue to shape and influence local communities. The 1980 improvements to Highway 2 facilitated easier traveling commutes for residents traveling to Valley job sites. The proposed improvement to the Badrock Canyon section of Highway 2 will have the same result. The railroad offers security to communities such as Essex, where Amtrak brings winter time transportation assurance. Many local

residents are present or past employees of the railroad.

County roads in the Canyon are few, and few issues were raised concerning maintenance or construction. However, a county promise to prepare a road maintenance and improvement plan for all county roads should benefit the Canyon. U.S. Highway 2 continues to serve as the major transportation route, and this facility is adequately maintained by the State Highway Department.

Issues pertaining to solid waste revolve around local concerns for maintaining the existing refuse disposal sites, and state and national issues of hazardous waste. Due to the extreme travel distances in the Canyon, the existing refuse container locations in the Canyon are extremely important to the local residents. Safe and convenient disposal of waste will help achieve community objectives for maintenance of the natural beauty of the area and for minimizing conflicts with bears.

Utility issues are less defined, but many residents indicated a strong desire to eliminate and/or discourage overhead utility wires in the Canyon. This desire appears to be linked to concerns about visual quality and impacts on adjacent properties.

GOALS AND POLICIES

The Goals and Policies were derived from the ranking of issues by landowners within the Canyon and from a "test" ranking of preliminary goals and policies conducted during the December 1993 round of public meetings. Some of the listed objectives may be applicable to other elements of this Plan.

PUBLIC SERVICES

GOAL:

TO PROVIDE PUBLIC SERVICES CONSISTENT WITH THE LEVEL OF SERVICES DEMANDED OR AS SAFETY STANDARDS APPLY AND AS ANTICIPATED BY THIS PLAN

POLICIES

GAS/ELECTRICITY/TELEPHONE

- ATTEMPT TO SHARE UNDERGROUND UTILITY EASEMENTS WHEN LOCATING NEW OR ADDITIONAL SERVICES

- DISCOURAGE THE SITING OF ANY NEW OVERHEAD ELECTRICAL TRANSMISSION LINES THROUGH THE CANYON CORRIDOR
- REQUIRE UNDERGROUNDING OF ALL UTILITIES SERVING NEW DEVELOPMENTS WHENEVER PRACTICAL
- ATTEMPT TO ESTABLISH A COMMON LONG DISTANCE TELEPHONE POLICY FOR ALL CANYON COMMUNITIES

TRANSPORTATION

- COORDINATE EFFORTS WITH THE FLATHEAD COUNTY ROAD DEPARTMENT TO ESTABLISH A MAINTENANCE AND IMPROVEMENT SCHEDULE FOR COUNTY ROADS IN THE AREA
- ESTABLISH A DUST ABATEMENT PROGRAM FOR AREA ROADS
- MAINTAIN EXISTING AMTRAK SERVICES IN THE CANYON
- IMPROVE TRAFFIC SAFETY THROUGH THE BADROCK CANYON AREA ALONG U.S. HIGHWAY 2
- CONSIDER IMPACTS TO WILDLIFE WHEN DESIGNING AND/OR IMPROVING ROADS IN THE CANYON
- PROVIDE FOR A CONNECTING BIKE PATH SYSTEM BETWEEN COLUMBIA HEIGHTS AND WEST GLACIER

SOLID WASTE

- MAINTAIN THE EXISTING SOLID WASTE COLLECTION SITES IN THE CANYON
- CREATE GREATER PUBLIC AWARENESS OF HOW TO STORE SOLID WASTE IN BEAR ACTIVITY REGIONS
- PROVIDE OPPORTUNITIES FOR RECYCLING COLLECTION CENTERS IN THE CANYON AREA

THE CANYON PLAN

CHAPTER VIII
SCHOOLS

School numbers and enrollment have changed dramatically over the past 90+ years in the Canyon. The locations and enrollment trends of schools closely paralleled such historical events as the building of the railroad, highway, and Hungry Horse Dam.

Early schools (pre 1930) in the Canyon included Coram, Lake Five, Belton, Apgar, Nyack, Paola, Essex, and Summit. Many of these neighborhood schools sprung up and closed in a typical boom town fashion. The neighborhood focus of the schools was necessary due to the long and difficult travel distances between Canyon communities. Schools in Hungry Horse and Martin City emerged in the '40s to coincide with the development of Hungry Horse Reservoir. The longest lived school is Belton/West Glacier (1924 to present), which probably reflects a constant employment base related to Glacier National Park.

Today, three school facilities are located in the planning area – two elementary schools and a high school. Until 1986, the entire Canyon area was part of Columbia Falls School District #6. After a 1986 fire destroyed the West Glacier School, District #6 discussed building one facility to serve the entire Canyon area. This was unacceptable to the residents of West Glacier who ultimately decided to form a new elementary school district.

SCHOOLS

HISTORY

From the "dam" days until the early 1980's, the Canyon communities of Hungry Horse, Martin City, and Coram each had their own small school. These schools were very community oriented. Multiple grades were often combined into a single classroom setting.

In the early 1980's, the District #6 School Board decided to close the Coram school and consolidate it with Martin City (grades K-2) and Hungry Horse (grades 3-6). The Board's decision was based on its belief that it could save the District tax dollars, while providing a better education to students by eliminating split classes. The Coram community was very reluctant to lose its school.

The school buildings in the Canyon were in violation of many state laws, The Hungry Horse School was not built with a full foundation, and the floor had actually rotted away in spots.

The wiring was not up to code, and the state fire marshall was looking into condemning it. (There had actually been an electrical fire in one of the walls which left charred timbers). There were also dozens of other violations, including instructing students in storerooms, and not being able to offer many of the same services which were available to students in Columbia Falls.

Plans for a new Canyon Elementary School were put to District #6 voters twice, in 1972 and in 1984. The proposal was soundly defeated both times, and many Canyon residents felt it was because the Building Reserve vote was always linked to a new junior high school in Columbia Falls.

The negative votes were always driven by those unwilling to accept higher taxes. However, that thinking changed dramatically in January, 1986, when another District #6 school in West Glacier burned to the ground. The District Board proposed a building program to consolidate the burned down West Glacier School with the hopelessly antiquated and dangerous schools of Martin City and Hungry Horse. The majority of the residents from Coram, Martin City, and Hungry Horse supported the plan, but the residents of West Glacier wanted their school rebuilt in West Glacier. After the District #6 Board voted to consolidate all schools in a central Canyon location in the summer of 1986, the West Glacier residents seceded from District #6 to form School District #8. They then passed their own levy and rebuilt their school in 1987. The boundaries of the two school districts are shown the map included at the end of this Chapter.

District #6 retained the $350,000 insurance money from the West Glacier fire, and used it as an incentive to pass a Building Reserve to build a consolidated Canyon Elementary School in Hungry Horse to serve the communities of Hungry Horse, Martin City and Coram. A well organized grass roots campaign was formed by Canyon residents, and a $1.09 million reserve was passed by the voters (840 - 263) in December, 1986.

The new 22,000 square foot school opened in September, 1988, with approximately 160 students. It has 11 classrooms, a library, a resource room, office, kitchen, and multipurpose room. It was designed so that three more classrooms could be added on the west end in the future. In 1993, a temporary classroom was added behind the school to meet growing enrollment. The school has now nearly reached its maximum designed enrollment of 250 students. The district plans to look into another building reserve once the last one for Columbia Falls is paid off in 1995.

As viewed from the perspective of one Canyon resident, "the new school has benefited from an exceptional staff and principals and an active parent/teacher organization (whose roots go back to the dam days). Community support for Christmas programs, carnivals, plays and other programs has been exceptional through the years. The consolidation has allowed members of the community to think of themselves as residents of the Canyon, rather than as residents of the individual communities".

Issues facing the community in the future will be needed classroom expansion. District #6 administrators brought up the idea of bussing Canyon 6th graders to Columbia Falls in 1991, but parents were very opposed to having their 6th graders placed in the same environment with 7th and 8th graders. [Some limited bussing of 6th grade students to Columbia Falls is already (1993/94) occurring] "They felt that this forced their kids to face junior high school pressures a year earlier than they would if they could continue to go to school in the Canyon". Canyon residents expressed their support for the neighborhood school concept that is currently in place in the Canyon, and this resistance forced administrators to back off from the bussing idea. As administrators look at alternatives to deal with increasing enrollment, this issue will likely present itself again in the near future.

CANYON ELEMENTARY

Canyon Elementary opened its doors in 1988 and represents a student consolidation of the Martin City, Coram, and Hungry Horse communities. It is part of the Columbia Falls School District #6. The elementary school is located in Hungry Horse and serves grades K-6. School enrollment has been increasing steadily since opening day.

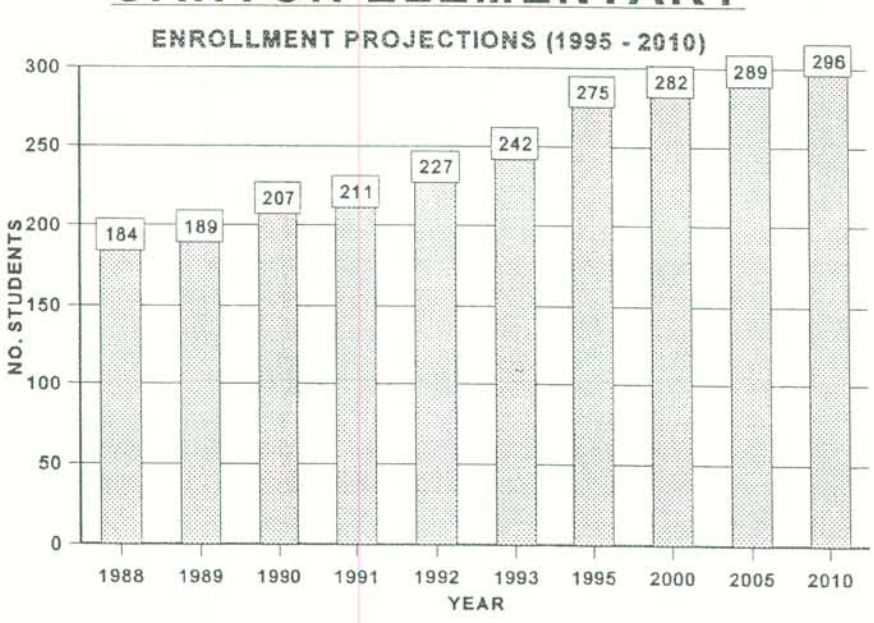


FIGURE 14

MPC 1994

The school may exceed design capacity before the '94'-95 school year. School-aged children (under 18 years old) represent approximately 31% of the total Canyon population.

Approximately 43% of the school-aged population is ages 5-11. Factoring a constant Canyon growth rate of 0.6% per year, the 1995 Canyon Elementary enrollment may approach 275± students. This estimate does not consider the influence of West Glacier Elementary, so the projections may err toward the high end.

Since opening in 1988, the School has grown at an annual rate of 5.3%. At that rate, the school would add 13 students in '94'-95 and have a total school enrollment of more than 332 students by the year 2000. A much lower school population would be anticipated if a growth rate of 0.6% were used to correspond to the general growth rate of the Canyon population. Dramatic enrollment increases could be expected if sanitation limitations in the Canyon are eliminated with the building of public sewage treatment systems.

WEST GLACIER ELEMENTARY

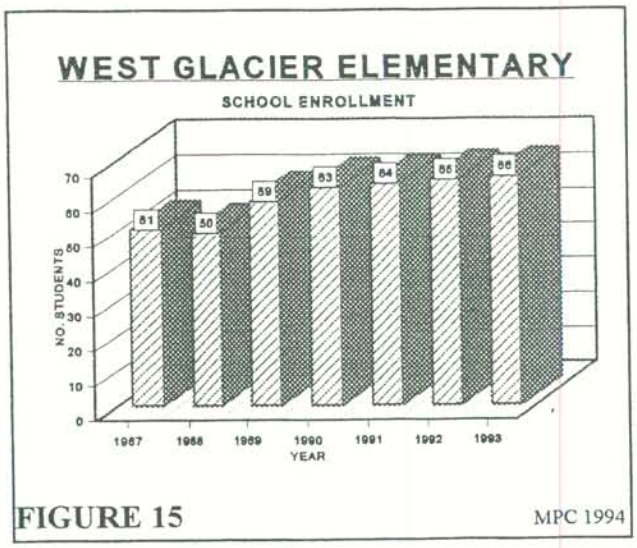


FIGURE 15 MPC 1994

West Glacier Elementary opened its facility in 1987 as the only school in the new District #8. The school consists of four classrooms, a small library, a multi-purpose room, and special education facilities. School enrollment has remained steady. This is due, in part, to the seasonal employment characteristics and small size of the community. Improved winter employment opportunities or increased Park employment could increase the school population in the future. Approximately 28 (42%) students have parents associated in some fashion with federal employment.

EAGLE HIGH SCHOOL

The Eagle [Alternative] High School is located in the former Coram grade school. Eagle High School is one of two high schools in the district and serves the role of providing high school education to students who have not been able to adjust or function in the traditional high school setting. The school has been operating for 3 years but the long term status of maintaining the school is uncertain. Enrollment hovers around 45 students.

TRANSPORTATION

Transportation of students to schools is complicated by the winter weather and long distances. West Glacier District #8 extends eastward from the area of Lake Five to Marias Pass. Bussing is provided to the West Glacier School by District #8 and to Columbia Falls for its seventh and eighth grade students. All students in the upper grades are bussed to schools in Columbia Falls by School District #6 as are the seventh and eighth grade students within the Canyon Elementary service area.

School District #8 operated one bus that transported approximately 89 students on a daily basis in the '93-'94 school year. Approximately 57 of those riders were junior high and high school-aged, requiring bussing to Columbia Falls. This travel from as far away as Essex could easily translate to 1.5 hours each way on the bus. Canyon Elementary operated two busses to transport K-6 students to the school from locations as far away as the Dew Drop Inn. It is estimated that approximately 50% of the student population of Canyon Elementary was bussed. Two additional busses were operated out of Columbia Falls in '93-'94 to pick-up junior and high school-aged children from the Hungry Horse to Coram region. Altogether, approximately 150 students of that age group were transported by bus to schools in Columbia Falls.

ISSUES

Nothing seems to cause more community controversy than disagreements over school issues. Bad feelings still persist over the split of school districts in the late 1980s. Recently, train safety became more of a local concern when a train derailed near West Glacier Elementary. Long distance bus travel for young students will always be a concern. And increasing school enrollment at Canyon Elementary will once again raise the issue of taxes and bussing alternatives.

GOALS AND POLICIES

The Goals and Policies were derived from the ranking of issues by landowners within the Canyon and from a "test" ranking of the preliminary goals and policies conducted during the December 1993 round of public meetings. Some of the listed objectives may have application to other elements of this Plan.

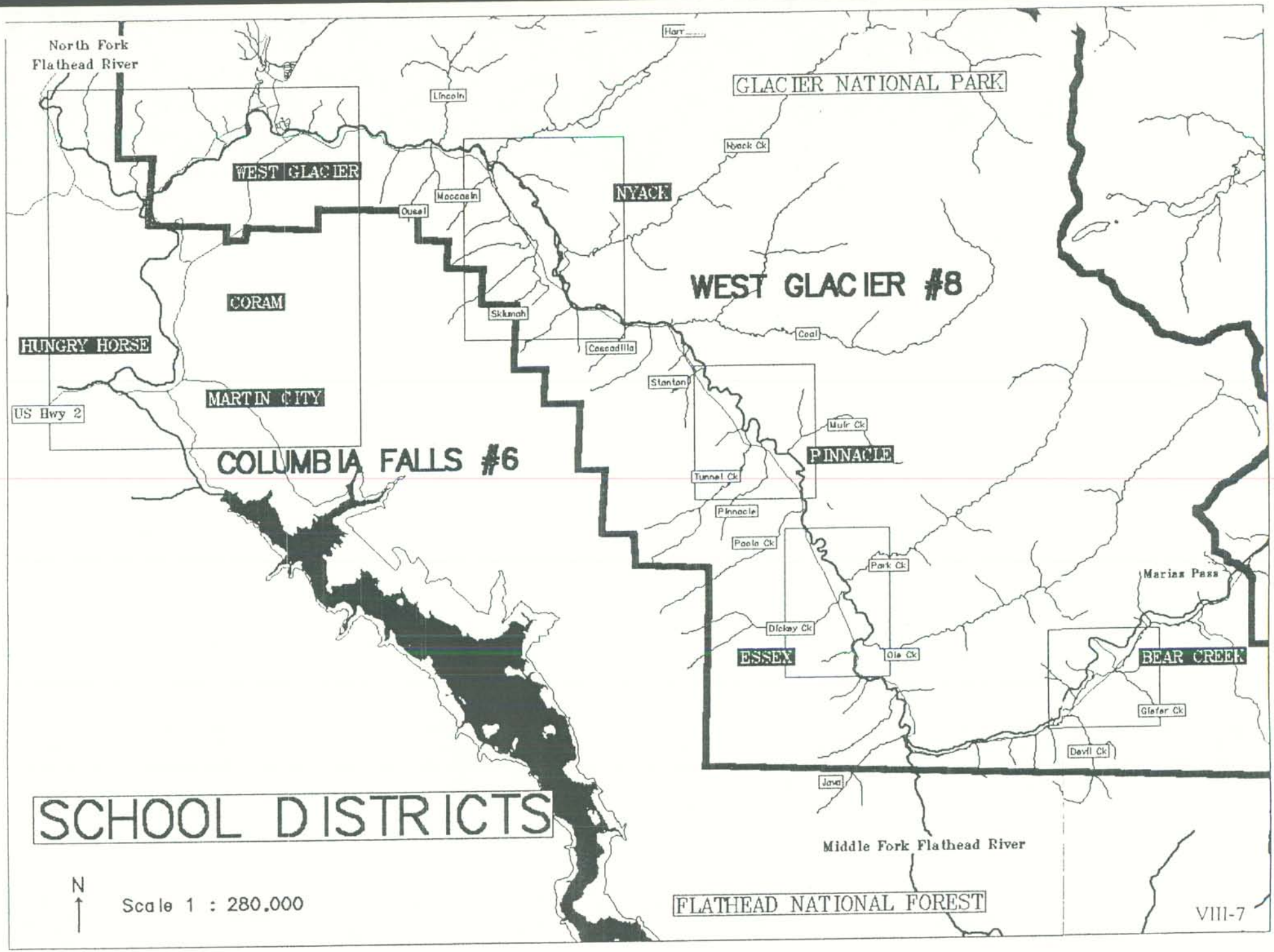
SCHOOLS

GOAL:

TO PROVIDE QUALITY EDUCATIONAL SERVICES AND FACILITIES TO THE CHILDREN OF THE CANYON COMMUNITIES

POLICIES

- ANTICIPATE THE NEED TO EXPAND THE PHYSICAL FACILITIES OF CANYON ELEMENTARY SCHOOL TO ACCOMMODATE INCREASED ENROLLMENT
- SUPPORT CONTINUED ACCEPTANCE OF SEVENTH AND EIGHTH GRADE STUDENTS BY SCHOOL DISTRICT # 6 IN COLUMBIA FALLS
- EVALUATE THE NEED FOR OR BENEFITS OF RETAINING THE EAGLE SCHOOL AS A SEPARATE AND DISTINCT HIGH SCHOOL
- PROVIDE ADDITIONAL VO-TECH OPPORTUNITIES FOR STUDENTS AT EAGLE HIGH SCHOOL
- IMPROVE RAIL SAFETY IN THE AREA OF WEST GLACIER ELEMENTARY


North Fork
Flathead River
GLACIER NATIONAL PARK
Harr
Lincoln
Nyack Ck
WEST GLACIER
NYACK
Moccasin
Ousel
WEST GLACIER #8
CORAM
Sklumah
Cascadilla
Coal
HUNGRY HORSE
Stanton
MARTIN CITY
US Hwy 2
Muir Ck
COLUMBIA FALLS #6
PINNACLE
Tunnel Ck
Pinnacle
Paola Ck
Park Ck
Marias Pass
Dickey Ck
ESSEX
Ole Ck
BEAR CREEK
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Java
SCHOOL DISTRICTS
Middle Fork Flathead River
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THE CANYON PLAN

CHAPTER IX
EMERGENCY SERVICES

Emergency services in the Canyon are provided by numerous organizations and in a variety of fashions. Some of the many factors that affect the provision of emergency services include the following:

- Relative isolation from large community centers;
- Strong individual community identities;
- Sparse population base;
- Remote community locations;
- Distance to county seat;
- Seasonal population shifts; and
- Reluctance to increased taxes.

POLICE PROTECTION

Police protection in the Canyon area is provided by the Flathead County Sheriff's Department, which is stationed in Kalispell. The capability of this Department to provide adequate services to the Canyon communities is greatly constrained by a lack of personnel. Currently, one officer is assigned on a 24-hour basis to cover an area that extends from north of Glacier Park International Airport to the Canadian border and from the Lincoln County Line to the Glacier County line. This area is too large to be effectively served by one officer. Back-up deputies must respond from Kalispell.

The Sheriff indicates that at least seven additional deputies are needed today to adequately serve the needs of the County, and that up to 17 additional patrol deputies may be needed in the near future due to the increasing population of the county. The general reluctance of county residents to support additional taxes will probably prevent the attainment of that goal.

FIRE PROTECTION

The threat from fire is particularly pronounced in the Canyon area due to a combination of factors. The Canyon is an area characterized by steep topography and dense

forest canopies. Local development is dispersed over a large rural area. The main line of the Burlington Northern Railroad passes the full length of the Canyon planning area. Issues of fire protection must be broad-based to consider not only structural fire control and prevention, but also wildfire and hazardous spills.

Rural fire districts have been established on private lands in the lower portion of the Canyon planning area. The general boundaries of these districts are shown in a map at the end of the chapter. A large area extending between West Glacier and Marias Pass is outside any rural fire district. This lack of structural fire protection affects the communities of Nyack, Pinnacle, Essex, and Bear Creek. The lead agency on public lands for wildfire prevention and control is the U.S. Forest Service. Glacier National Park also provides fire fighting services within the Park boundaries.

Mutual aid agreements and a preattack plan assist local fire fighting agencies with fire suppression. The preattack plan identifies and coordinates the roles of all the fire fighting agencies in the Canyon. This plan should be updated on an annual or semi-annual basis, as appropriate. The Canyon is also included within the County Emergency Operations Plan, which is administered by the Disaster & Emergency Services office of Flathead County.

HUNGRY HORSE

The Hungry Horse Fire District encompasses most of the built community within Hungry Horse. The Hungry Horse Volunteer Fire Department provides structural fire protection for the District. Fire fighting equipment includes a 1981 attack vehicle, 1954 fire engine (pumper), and a 1968 water tender (2500 gallons). The 1993 budget for the District is less than $14,000 so the possibilities for equipment upgrades are slim. A large proportion of the annual budget is currently allocated to water fees associated with the hydrants.

MARTIN CITY

The Martin City Fire District encompasses the community of Martin City and surrounding rural areas. The Martin City Rural Fire Department is the lead agency for structural and wildfire situations within the District. Fire fighting equipment includes a 1966 fire engine, a 1962 fast attack vehicle, and a 3500 gallon water tender. A utility van is being assembled at this time. The 1993 annual budget was approximately $7000. A priority need of the Department is additional air packs.

CORAM/WEST GLACIER

The Coram/West Glacier Fire District includes the area from Coram to West Glacier. This district represents a consolidation of the Coram and West Glacier Fire Districts. The Volunteer Fire Department can utilize hydrants in the respective communities. Equipment includes three engines (1951, '53, '56), a 1963 water tender, and a 1977 attack truck. This Department often offers assistance to the railroad in fire emergency situations. The annual

budget of the District is around $14,000. Again, this does not provide a lot of opportunities to purchase new equipment. A current Department need is for a new station in Coram that has running water.

U.S. FOREST SERVICE

The fire fighting personnel of the U.S. Forest Service are charged with the implementation of state "Fire Protection Guidelines for Wildland Residential Interface Development" in the Canyon area. The three Rural Fire Districts and the U.S. Forest Service have joint and overlapping responsibility for fire suppression on private lands. In addition, the Forest Service has suppression responsibility on its own land in the Canyon.

EMERGENCY MEDICAL

There are no medical clinics, doctor's offices, or treatment centers in the Canyon. Routine medical care is available in Columbia Falls, Whitefish, and Kalispell. However, response and treatment of emergency situations is adequately provided to the Canyon area via a variety of sources.

COLUMBIA FALLS AMBULANCE

Ground transport of medical emergency victims is provided by the Columbia Falls ambulance. Transport time to Hungry Horse from Columbia Falls is approximately 10-15 minutes, and is longer to the other Canyon communities.

ALERT HELICOPTER

Air ambulance services are available from the A.L.E.R.T. Helicopter of Kalispell Regional Hospital. This service is especially valuable when emergency victims are at remote locations or when quick response is necessary for advanced medical treatment.

CANYON QRU

The Canyon Quick Response Unit is based in Coram and responds to all medical emergencies in the area from Berne Park to Nyack Flats. It was been in existence for approximately 3.5 years. The QRU team consists of 14 members with various levels of medical training. The primary role of the QRU is to stabilize and prepare the patient for transport. Personnel qualifications include First Responder, First Responder Ambulance, and EMT. The Canyon QRU has no "unit" vehicles and is a non-transporting unit. Needs of the unit include a vehicle, radios with more channels, and additional medical equipment.

MIDDLE FORK QRU

The Middle Fork QRU is stationed out of Essex. This unit became established in 1985 and presently consists of seven individuals. Of those, three are EMTs and four are First Responders. Their jurisdiction extends from the Nyack area to Marias Pass. Equipment includes an ambulance that is used for equipment transport and for sheltering victims from the weather. Again, this unit does not transport patients. The Middle Fork QRU survives on a $5,000 ± annual budget, which is raised by private fund raising events. A basic need of the QRU is improved communication capabilities, which would be facilitated by the repair of the "Repeater" on Scalplock Mountain and by upgraded radios. The low population density in the area creates a severe recruitment problem.

NORTH VALLEY SEARCH & RESCUE

This organization is based out of Columbia Falls and is primarily used in situations involving lost or missing individuals. Jurisdictional boundaries include all of the Canyon and the area in and around Hungry Horse Reservoir. Present membership is 65-70 people, including some with specialized training and/or experience in the operation or use of equipment or animals (horses) for land and water searches. Equipment includes a base station, two jet boats, rubber boats, 25 person camp, nine passenger van, utility truck, repelling equipment, scuba tank, 16 pagers, 10 radios, computer, and various privately owned equipment. The Flathead County Sheriff's budget includes an annual funding allotment for this organization, which helps to pay for such expenses as helicopter rental fees.

ISSUES

The Canyon has always felt left out or ignored by county officials based at the county seat in Kalispell. It is the general belief that the level of county services in the Canyon is inadequate or unfairly distributed relative to other Valley locations. Yet, a certain segment of the population enjoys living in the Canyon because it is an island of relative isolation and is the beneficiary of less government. The resulting independent spirit carries through to the independent provision of emergency services in the Canyon. The three local volunteer fire districts take great pride in their capabilities to adequately serve their respective communities, as do the two quick response units. Each of these organizations has met a local need through volunteer response. Some solution will have to be sought for structural fire protection in the area east of West Glacier. A small population base in that area makes it difficult to adequately staff a volunteer force for both a Quick Response Unit and a fire department. Police protection is likely to suffer county-wide until more funding becomes available to hire additional staff. Lack of funding also plagues the volunteer organizations due to the unwillingness of local residents to pay increased taxes.

GOALS AND POLICIES

The Goals and Policies were derived from the ranking of issues by landowners within the Canyon and from a "test" ranking of the preliminary goals and policies conducted during the December 1993 round of public meetings. Some of the objectives may have application to other elements of this Plan.

EMERGENCY SERVICES

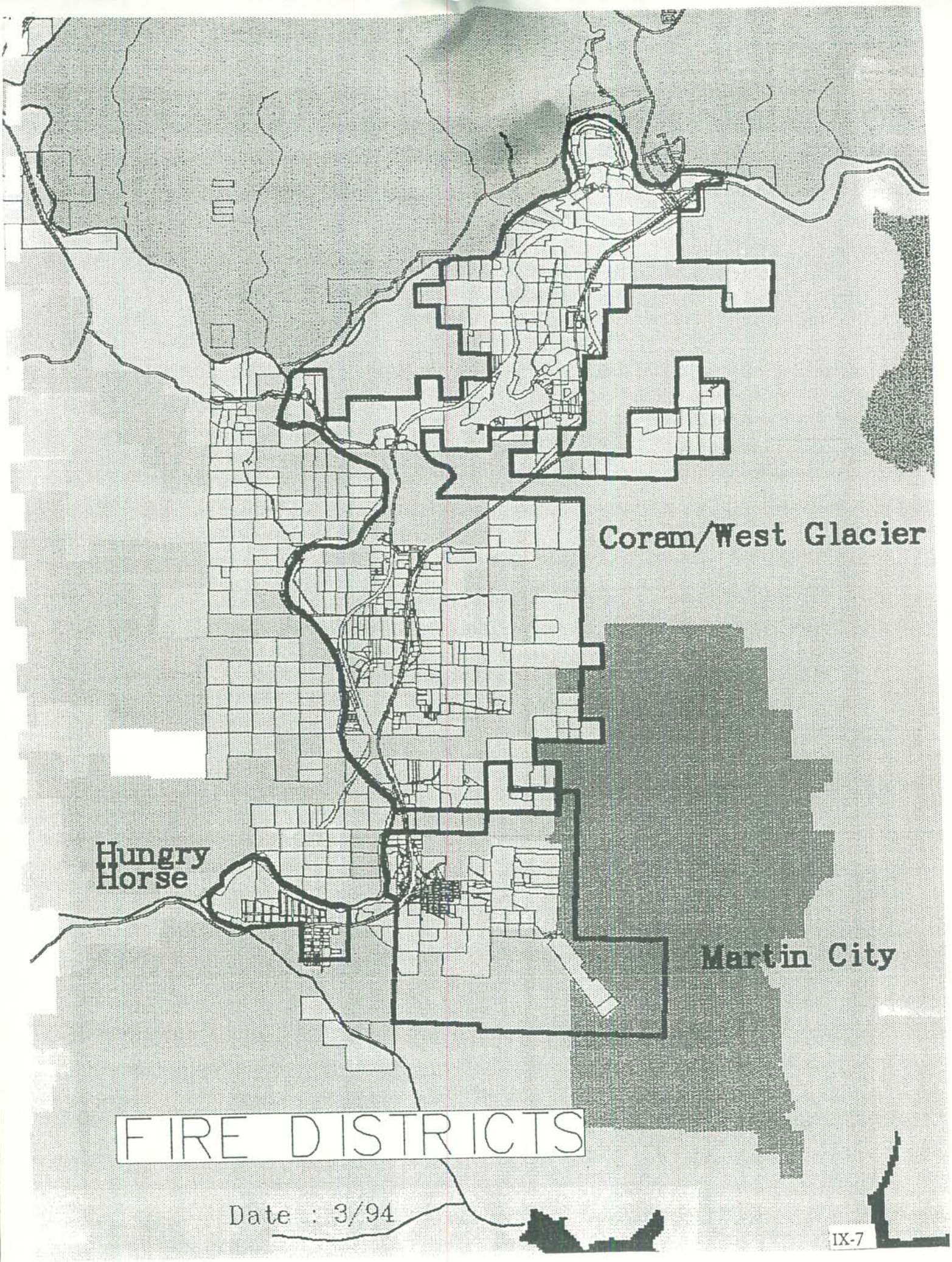
GOAL:

PROVIDE QUALITY EMERGENCY SERVICES TO THE CANYON COMMUNITIES

POLICIES:

- PURSUE THE ESTABLISHMENT OF AN ESSEX AREA RURAL FIRE DISTRICT OR OTHER ACCEPTABLE SOLUTION TO FIRE EMERGENCY PROBLEMS OF THE AREA
- DEFINE OR IDENTIFY HIGH HAZARD FIRE AREAS IN THE CANYON, AND UTILIZE STATE WILDFIRE PREVENTION GUIDELINES TO ESTABLISH VEGETATION TREATMENT PRACTICES ADJACENT TO EXISTING AND NEW DEVELOPMENT
- MAINTAIN AN UPDATED PRE-ATTACK PLAN FOR FIRE SUPPRESSION WHICH IDENTIFIES THE ROLES OF THE FOREST SERVICE, GLACIER NATIONAL PARK, BURLINGTON NORTHERN RAILROAD, AND THE RURAL FIRE DISTRICTS
- PROVIDE DEPENDABLE YEAR-ROUND SOURCES OF WATER FOR TANKER RECHARGE PURPOSES AT LOCATIONS THROUGHOUT THE CANYON
- COORDINATE DOMESTIC WATER SUPPLY IMPROVEMENTS TO ADDRESS THE NEEDS OF LOCAL FIRE DISTRICTS
- EVALUATE THE FEASIBLITY, PRACTICALITY, AND BENEFIT OF CONSOLIDATING THE THREE RURAL FIRE DISTRICTS
- COORDINATE WITH THE BURLINGTON NORTHERN RAILROAD, STATE HIGHWAY DEPARTMENT, LOCAL EMERGENCY SERVICE PROVIDERS, AND THE FLATHEAD COUNTY DISASTER AND EMERGENCY SERVICES OFFICE TO DEVELOP SPILL CONTINGENCY PLANS FOR TRAIN DERAILMENTS AND TRUCK SPILLS OF TOXIC MATERIALS

- COORDINATE THE UPDATE OF THE COUNTY EMERGENCY OPERATIONS PLAN WITH THE CANYON FIRE FIGHTING AGENCIES
- SITE PLANS FOR NEW DEVELOPMENT SHOULD CONSIDER TURN-AROUND CAPABILITIES FOR FIRE EQUIPMENT, SNOW STORAGE, AND SECONDARY EGRESS/INGRESS ROUTES
- ASSESS THE FEASIBILITY OF PROVIDING A CANYON-BASED EMERGENCY AMBULANCE SERVICE AND/ OR EMERGENCY MEDICAL CLINIC IN THE CANYON
- ESTABLISH SHERIFF DEPARTMENT PERSONNEL NEEDS BASED UPON SEASONAL POPULATION SHIFTS AND THE NUMBER OF TOURISTS IN THE CANYON
- ENFORCE ALL APPLICABLE RULES, REGULATIONS, AND CODES PERTAINING TO SANITATION, JUNK VEHICLES, COMMUNITY DECAY, BUILDING, LAND USE, NOXIOUS WEEDS, AND WILD & SCENIC RIVERS
- ESTABLISH "NEIGHBORHOOD WATCH" PROGRAMS IN LOCAL COMMUNITIES


Coram/West Glacier
Hungry Horse
Martin City
FIRE DISTRICTS
Date : 3/94

THE CANYON PLAN

CHAPTER X
NATURAL RESOURCES

The Canyon area of Flathead County offers one of the most diverse and ecologically significant ecosystems in the United States. The Canyon is a "mixing" area between the vast natural resources of the Great Bear Wilderness and Glacier National Park. Within this narrow band of transition between these two great ecosystems is a canyon that offers low elevation features in association with a major river drainage. The combination of these two attributes creates a diverse assemblage of habitat-types, resulting in exceptional opportunities for support and maintenance of diverse and abundant wildlife populations. Constraining these natural opportunities in the Canyon are various man-induced influences, including the physical presence of a major rail line, highway, residential/commercial developments, and Hungry Horse dam and reservoir.

FISHERY RESOURCES

Water is a major land use feature in the Canyon. Surface waters that dominate the region include the North, Middle, and South Forks of the Flathead River and Hungry Horse Reservoir. The fishery resource aspects of those water bodies contribute to the tourist and recreation attractiveness of the Canyon.

MIDDLE FORK FLATHEAD RIVER

The major gamefish in this drainage are westslope cutthroat trout, bull trout, rainbow trout, lake trout, brook trout, mountain whitefish and lake whitefish. The Middle Fork supports all three life history patterns for westslope cutthroat and bull trout: adfluvial (mature in Flathead Lake and spawn in tributaries), fluvial (mature in the main river and spawn in tributaries) and resident (mature and spawn in tributaries). The proportion of fluvial and resident fish of both species increases towards the upper end of both the main drainage and major tributaries. Rainbow trout are main stem residents with highest abundance near Blankenship Bridge and immediately downstream. Mountain whitefish are abundant throughout the drainage. Lake trout and lake whitefish migrate from Flathead Lake and are seasonally abundant spring through fall up to West Glacier. Brook trout reside in several tributary streams. Kokanee salmon once used the Middle Fork for a migratory corridor and for spawning, but the fishery has collapsed

has collapsed and no salmon were observed in 1993. A recovery program is underway.

Nongame fish present include longnose and coarsescale suckers, northern squawfish, slimy sculpins and possibly shorthead sculpins.

Westslope cutthroat and bull trout are listed by Montana as "Species of Special Concern" because of declines in abundance and distribution. Bull trout have been petitioned for listing under the Endangered Species Act. Factors affecting the status of these trout species include the construction and operation of Hungry Horse Dam, land management (primarily timber harvest and associated road building which can produce sediments, nutrients and temperature increases), angler harvest, climatic variations (drought, ice scouring) and the introduction of non-native species in the system such as brook trout, lake trout and Mysis shrimp. Non-native species interactions include competition for food and space, predation and hybridization.

The most important tributaries for bull trout spawning and rearing are Granite, Lodgepole, Long and Morrison Creeks and Ole, Park, Nyack and Muir Creeks in Glacier National Park. All these streams are closed to angling. The most important streams for westslope cutthroat trout spawning and rearing include Granite, Challenge, Dodge, Twenty-five Mile, Skyland, Cox, Gateway, Essex and Basin Creeks and Ole Creek in Glacier National Park.

SOUTH FORK FLATHEAD RIVER

The construction of Hungry Horse Dam in 1953 proved to be a mixed blessing. It cut off nearly half the spawning habitat available to fish from Flathead Lake. And reservoir fluctuations have impacted fisheries above the dam. At the same time, the dam has provided a barrier that has protected the native fish (westslope cutthroat, bull trout, mountain whitefish and northern squawfish, longnose and coarsescale suckers) from impacts with non-native species introduced to Flathead Lake.

The seven miles of stream downstream from Hungry Horse Dam to the mouth support only a remnant fish population. Flow extremes from 140 cubic feet per second (cfs) to 12,000 cfs and discharge of 39° F. water from the bottom of the reservoir have eliminated most fish. A selective withdrawal system now being retrofitted to the dam will provide temperature controls, but flow extremes will still limit the fishery.

Upstream from the dam, there are 85 foot draw-down limits on the reservoir. That limit can be and has been exceeded in recent dry years. Efforts are underway to mitigate the effect of dam construction and operation with experimental programs in habitat improvement, fish passage enhancement and fish supplementation. The guidelines for Hungry Horse mitigation call for mitigation on-site with native fish. Mitigation activities in Flathead Lake will also place emphasis on Kokanee recovery. Fisheries outside of the contiguous Flathead Drainage will be enhanced to compensate for impacts that can't be recovered on-site.

MANAGEMENT PLANS

Fisheries management in the Flathead Drainage is shared with the Confederated Salish and Kootenai Tribes (CSKT). MDFWP and CSKT produced the "Upper Flathead System Fisheries Management Plan, 1989-1994." MDFWP produced a "Fisheries Management Plan for the South Fork Flathead River Drainage." MDFWP and CSKT also provided the "Hungry Horse Dam Fisheries Mitigation Implementation Plan," which was adopted by the Northwest Power Planning Council in March, 1993. The implementation plan dovetails with the goals and strategies in the above two management plans.

WILDLIFE

The abundance, variety, and distribution of wildlife is largely influenced by the quality, variety, quantity, and availability of habitat. These variables differ throughout the Canyon. In some instances, wildlife habitat is occupied by conflicting uses. In many situations, the habitats of the Canyon serve specialized seasonal needs or may provide important travel linkages between other regional destinations. The presence of several Threatened & Endangered species in the region greatly influences local land use and resource management decisions.

Included at the end of this Chapter are various resource maps pertaining to wildlife and vegetation. Please refer to the maps during discussion of the ensuing topics.

UNGULATE WINTER & SPRING RANGES

Habitat in the Canyon is capable of supporting such big game species as elk, mule deer, white-tail deer, moose, mountain goat, and black bear. Generally, elk and mule deer summer in the upper elevations of major drainages and use mid-slope cover to seek security and thermal relief. White-tail deer and moose select the lower elevations associated with riparian habitat. Refer to the mapped locations of "Ungulate Spring and Winter Range". This map is a relatively accurate depiction of general geographical areas in which deer, elk, and moose may be found during the winter and spring seasons. In general, south to west facing slopes are favored as wintering sites for a variety of reasons.

Spring ungulate ranges can vary widely depending on the amount of snowfall during the winter as well as the amount of warm, sunny weather during the early spring. The spring ranges tend to include at least some portion of the winter range as well as those drainage bottoms that contain grass/forb openings. It is the "green-up" areas that will attract ungulate animals in the early spring. As ungulates begin changing their diet primarily from a woody diet of shrubs/trees to grass/forbs, ungulates will generally go for the low elevation, snow-free, grass/forb abundant habitats.

Spring ranges also can and do function as calving/fawning habitat for ungulates. There has been considerably less scientific investigation into calving/fawning habitat, but it is generally

believed that these habitats vary widely with regard to elevational location from year to year. For some herd groups, there are traditional sites, for others young may be born on sites that are "on the way" to summer ranges. So what has been attempted for this planning effort is to combine the winter range with the spring range for purposes of showing the relationship between the two. The idea is to avoid impacting these considerably overlapping habitats. In other words, it's not a matter of only impacting one range or the other; unplanned development can/will impact both winter and spring ranges.

Travel corridors and linkage zones (see map) are based on the assumption that large mammals use drainages as natural movement zones. Not only bears, but mammals such as mountain lions, wolves, wolverines, and lynx, make use of drainages for travel routes. Blocks of mature and old growth forest provide linkages across the Middle Fork Valley for a host of species that achieve higher densities and productivity levels in those forest age classes.

ELK: Elk primarily use the Canyon area in the fall, winter and spring. Approximately 40 - 60 elk reside in the area of Coram/West Glacier in the winter. The herd primarily uses the valley bottom on the southeast to southwest facing ridges on both sides of the highway. The concentrated winter movement of elk in this area is near the base of Desert Mountain and Strawberry Mountain. Movement across Highway 2 generally occurs north of the Dew Drop Inn to Halfmoon Lake.

Summer elk populations between West Glacier and Marias Pass tend to be located in the upper head waters of the various drainages. Suitable summer habitat is found in the area of Tunnel Creek, Pinnacle, and Dickey Creek. A few small wintering bands utilize Grant and Paola Ridges.

DEER: White-tail deer use is concentrated along the riparian zones in the Canyon. The area north and south of Blankenship Bridge, along the Middle Fork of the Flathead River is considered to be winter range for White-tail deer. White-tail deer use of the area extending from West Glacier to Marias Pass is primarily limited to late spring, summer and fall. Mule deer utilize much the same habitat as elk during the fall, winter and spring.

MOOSE: Moose occur throughout the low lying areas of the Canyon. Populations tend to key in on scattered areas of willow and maple and in wetland areas. Highway crossing areas for moose are similar to those of elk.

MOUNTAIN GOATS: Populations of Mountain Goats occur in the area of Strawberry Mountain and in the upper elevations of the major drainages beyond Essex. A mountain goat viewing area has been developed along the Middle Fork where tourists can view Mountain Goats as they search along the steep river banks for salt.

SPECIAL INTEREST SPECIES

There are a number of T&E species in the planning area as well as species identified by the U.S. Forest Service as being "Sensitive". The latter category includes such species as the boreal owl, common loon, harlequin duck, western big-eared bat, fisher, lynx, flammulated owl, and the black-backed woodpecker. Some of theses species occur in the Canyon. Species associated with "old growth" by the U.S. Forest Service include the pine martin, pileated woodpecker, and barred owl. Discussion focuses on the T&E species.

GRIZZLY BEAR: The Federal Lands within the Canyon are within the Northern Continental Divide (NCD), Grizzly Bear Recovery Zone and are identified in the NCD Grizzly Bear Recovery Plan. The Plan provides recovery goal and objectives for the grizzly bear. Grizzly bear habitat is divided into five different management situations based on the habitat value and the applicable management direction. The planning area contains three different management situations. Management Situation One (MS-1) areas contain key habitat components needed for the survival and recovery of the species. Management Situation Two (MS-2) areas contain some grizzly habitat components and grizzlies may be present occasionally. Grizzly presence is possible but infrequent in MS-3 areas due to human encroachment.

Several maps pertaining to the grizzly bear are included at the end of this chapter with the following titles:

- LARGE MAMMAL MOVEMENT CORRIDORS;
- GRIZZLY BEAR SPRING RANGE;
- GRIZZLY BEAR SIGHTINGS; and
- BLACK BEAR SIGHTINGS.

The map of grizzly bear spring range is based on the assumption that bears use primarily lower elevation areas (below 5500 feet) during spring. However, use is also made of avalanche chutes and natural meadows on southwest aspects, some of which may be above 5500 feet elevation. Use varies with snow conditions and plant phenology. The bear sighting maps are useful only to indicate that bears have been observed in the area. The data has limited value for making any conclusions as to bear abundance or habitat preferences since the data only reflects information from one resource agency (Glacier National Park) and sightings are biased due to an artificial concentration of bears resulting from grain spills and former dump sites.

According to the Halfmoon Timber Sale EIS, the valley bottom between Coram and West Glacier provides a natural crossing area for bears to move between the South Fork Drainage and Glacier National Park. Lake Five is considered to be a logical movement corridor. The nearby developed communities of Hungry Horse, Martin City, Coram, and West Glacier may actually serve to funnel bears to the area of Lake Five. An important crossing area is between Halfmoon Lake and West Glacier. The public lands around Lake Five are primarily MS areas 2 and 3 with some MS-1 areas located along the river corridor. Much of the area

between Desert Mountain and West Glacier, and extending along Strawberry Mountain is MS-1. Bear abundance and movement in this area of the Canyon, has been affected by the decline in kokanee salmon, closure of the West Glacier dump, and elimination of a local dumpster site. Future development opportunities in the Lake Five area should be regulated to minimize impacts to the wildlife travel corridors and to the ungulate winter range. Protection of key habitat areas should be secured by public purchase or through conservation easements.

The entire region between West Glacier and Marias Pass is designated as MS-1. The following is an excerpt from the Middle Fork Ecosystem Management Project (DEIS):

> Upon den emergence, grizzlies within the project area likely key into avalanche chutes, natural ridgeline openings with S/SW aspects, and creek bottom riparian habitats. As snow levels recede and green-up begins within mesic sites (such as avalanche chutes), grizzly bears dig bulbs of glacier lily and forage on succulent forbs, such as cow parsnip, and grasses. During the summer season grizzlies forage on huckleberry located in previous wildfire areas, old cutting units, and/or high elevation basins. Post-berry activity is likely spent foraging again within mesic sites and along ridgelines (whitebark pine nut food source), as well as searching out ungulate gut piles left by big game hunters.
>
> Habitat within the project area is likely utilized by grizzlies throughout the non-denning period. The Paola Creek BMA provides high value spring and early summer forage for the grizzly bear. Spring grizzly habitat (succulent forbs and grasses) is provided by avalanche chutes, natural openings with south/west aspects, and riparian zones associated with the main Middle Fork River and Tunnel, Paola, Dickey, and Essex Creeks.
>
> The Tunnel Creek drainage contains lush meadow habitat providing excellent spring forage for the grizzly bear. Above the meadow complex to the north lies an open shrubfield supporting a small band of elk through the winter months, This area may also provide a possible spring food source (carrion) for the grizzly bear. Serviceberry and mountain ash are found within the shrubfield and their berries are potential summer food sources to the grizzly.
>
> South aspect avalanche chutes and natural openings provide spring and summer forage opportunities for the grizzly bear in the Paola, Dickey, and Essex Creek drainages. In addition, these forested drainage bottoms provide secure riparian forage opportunities in late spring to early summer and in the fall.
>
> High value spring and fall mesic habitats exist within the project area, consequently, grizzly bears may travel within the project area during the spring and fall seasons or when making elevational movements to explore high elevation summer habitats. Most documented grizzly bear observations within the Paola Creek BMA have occurred in late spring and early summer.
>
> The proposed project area also contains suitable denning habitat. Denning habitat, as elevationally defined by Mace and Manley (1990), makes up approximately 23% of the Paola Creek BMA. Approximately 3900 acres are found above 5,600 feet in the BMA.

GRAY WOLF: The Canyon is within the Northwest Montana Recovery Area for gray wolf. That portion of the Canyon west of West Glacier is within Management Zone 2 (MZ-2) and that area east from West Glacier to Marias Pass is within Management Zone 1. MZ-2 identifies those areas that provide key habitat components for the dispersal of wolves. MZ-1

describes an area that has habitat capable of supporting a viable wolf population.

The nearest confirmed wolf pack activity is in the upper portion of the North Fork drainage, outside the planning area. However, it is likely wolves utilize the Middle Fork drainage as a movement and dispersal corridor. Wolf activity would logically concentrate in association with the prey base (deer, elk, etc).

BALD EAGLE: The bald eagle is listed as an endangered species in Montana. Much of the Middle Fork of the Flathead River is considered as Essential Bald Eagle Habitat (EBEH) by the U.S. Forest Service. Nesting sites in proximity to the planning area include Hungry Horse Reservoir, Lake McDonald, and in the area of Nyack. The Middle Fork is a spring and fall migration route for eagles. Fall use has significantly declined with the collapse of the kokanee fishery. There are approximately 10 wintering eagles in the area of West Glacier and Lake Five. Suitable nesting habitat is found along the entire Middle Fork drainage except in areas of human encroachment.

This map on "Bald Eagle Habitat" provides a description of habitat that is important to eagles. Potential nesting, roosting, perching (resting), and foraging habitats are provided by major drainage systems like the Middle Fork of the Flathead. Bald eagle habitat, as depicted by the map, was grossly defined as river-adjacent habitat that is one quarter mile in width. For the Middle Fork, eagle habitat encompasses one half mile [in width] of habitat from the confluence of the South Fork with the Middle Fork, upstream to Bear Creek. The map is not intended to suggest that every acre is equally important for the eagle, but until better information is available, it serves as a useful planning tool in evaluating project proposals.

WATER AND AIR QUALITY

The quality of air and water is generally a product of how the land is treated. "Pristine" is the general perception of air and water quality in the Canyon. The Middle Fork and South Fork of the Flathead River have their sources from undeveloped mountain water sheds. The water is crystal clear and nutrient poor. The Middle Fork has national recognition as a Wild & Scenic River. Active public purchases and conservation easements along the River are being sought to protect this value. Also scattered throughout the Canyon area are numerous mountain lakes that provide various forms of recreation. In the area of the highway corridor, only Lake Five and Halfmoon Lake are directly impacted by development and influences from nearby septic systems. Hungry Horse Reservoir is fed by clean, high mountain streams and is buffered from growth pressures by public ownership of the adjoining lands.

Air quality in the Canyon is not significantly affected by any in-Canyon point or nonpoint sources. Wood smoke and dust from area roads are the most obvious local sources. However, it is possible that nearby industries in Columbia Falls, including the wood products and aluminum industries are contributing pollutants to the lower Canyon communities. The lower Canyon community of Hungry Horse may be particularly susceptible to temperature

inversions, which could concentrate both the local and regional air emissions over the community. Recent pollution improvements to the Columbia Falls industries should benefit the local air quality in the Canyon. Some air emission standards may eventually need to be established in the Hungry Horse area to minimize air pollution problems during times of inversions.

VEGETATION

Coniferous forests dominate the vegetative land cover of the Canyon. The composition of the forest communities varies by location and elevation. Successional stages have been dramatically affected by past fires. A map of "Generalized Landcover" is included at the end of this chapter. General descriptions of the plant communities are more fully described in the following publications:

- MIDDLE FORK ECOSYSTEM MANAGEMENT PROJECT (DEIS)
- HALFMOON TIMBER SALE (FEIS)
- FOREST PLAN, FLATHEAD NATIONAL FOREST (1985)

The primary tree species in the Hungry Horse/West Glacier region is lodgepole pine. The Coram Experimental Forest was missed by the 1929 fire and retains mature stands of western larch, Douglas-fir, Engelmann spruce, and lodgepole pine. [The Intermountain Forest & Range Experiment Station maintains an active forest research program in the Coram Experimental Forest.] Other species mixed through the lower portion of the Canyon include western white pine, cedar, hemlock, ponderosa pine, and whitebark pine. Riparian areas include such species as maple, black cottonwood, alder, and willow. A riparian area of particular importance to wildlife in this area of the Canyon is Mud Lake.

Predominant tree species in the region from West Glacier to Marias Pass include Englemann spruce, subalpine fir, western larch, Douglas-fir, and lodgepole pine. Shrub species include Rocky Mountain maple, serviceberry, Pacific yew, blue huckleberry, devils club, Pachistima, rusty menziesia, Sitka alder, willow, and thimbleberry.

Noxious weeds are becoming established in the disturbed soils of the developed communities and along roadways. Spotted knapweed and Canada thistle are particularly common.

ISSUES

The combination of forests, water, and wildlife create a "wildness" that draws millions of tourists each summer to the Canyon. The response to various surveys and public meeting questionnaires indicated solid support for the protection, preservation, or maintenance of the Canyon's natural resources. The best approach for accomplishing that objective is to minimize intrusion into or alteration of critical resource components. Various land use objectives are proposed to guide development and certain activities away from critical wildlife habitat areas and from other locations where a particular resource may be impacted. Priority areas for protection of critical habitat on private lands are in the winter range and

wildlife travel corridors of Lake Five and Nyack and along most major drainages. Once again, a balance must be achieved between those policies that encourage additional growth and those that encourage protection of the natural resource base.

GOALS AND POLICIES

The Goals and Policies were derived from the ranking of issues by landowners within the Canyon and from a "test" ranking of the preliminary goals and policies conducted during the December 1993 round of public meetings. Some of the listed objectives may be applicable to other elements of this Plan.

NATURAL RESOURCES

GOALS:

TO RECOGNIZE AND PROTECT THE NATURAL BEAUTY OF THE CANYON AREA

TO MITIGATE NEGATIVE IMPACTS TO THE NATURAL ENVIRONMENT FROM DEVELOPMENT ACTIVITIES

TO ENHANCE THE LONG-TERM SECURITY OF WILDLIFE POPULATIONS

TO MAINTAIN THE EXCEPTIONAL QUALITY OF WATER AND AIR IN THE CANYON

POLICIES

WILDLIFE

- MAINTAIN THE UNIQUE WILDLIFE SPECIES RICHNESS OF THE CANYON
- IDENTIFY AND PROTECT SIGNIFICANT WINTER RANGES FOR ELK AND OTHER UNGULATE SPECIES
- MINIMIZE INTRUSION OF NONCOMPATIBLE USES INTO CRITICAL WILDLIFE HABITATS
- UTILIZE A VARIETY OF TECHNIQUES FOR THE LONG TERM PROTECTION AND MAINTENANCE OF CRITICAL WILDLIFE HABITATS, INCLUDING THE USE OF CONSERVATION EASEMENTS AND PUBLIC PURCHASE OF PRIVATE LANDS

- COLLABORATE WITH NATURAL RESOURCE MANAGEMENT AGENCIES TO AID IN THE CONSERVATION AND MANAGEMENT OF LOCAL WILDLIFE POPULATIONS
- SUPPORT EFFORTS TO ENHANCE BULL TROUT AND KOKANEE SALMON POPULATIONS
- IDENTIFY AND PROTECT WILDLIFE MOVEMENT CORRIDORS AND LINKAGE ZONES EXTENDING AMONG NATIONAL FOREST LANDS, PRIVATE LANDS, AND GLACIER NATIONAL PARK
- IDENTIFY AND IMPLEMENT STRATEGIES TO MITIGATE IMPACTS TO WILDLIFE FROM DEVELOPMENT ACTIVITIES
- DEVELOP WILDLIFE VIEWING OPPORTUNITIES, WHERE APPROPRIATE, TO ALLOW FOR ENJOYMENT AND INTERPRETATION/APPRECIATION OF WILDLIFE & WILDLIFE ECOLOGY

VISUAL QUALITY

- ENHANCE/IMPROVE THE SCENIC QUALITY OF THE "URBAN" HIGHWAY CORRIDOR IN THE AREAS OF HUNGRY HORSE, MARTIN CITY, AND CORAM
- PURSUE THE DESIGNATION OF U.S. HWY 2 AS A SCENIC HIGHWAY , WHERE POSSIBLE
- AVOID SKYLINE EXPOSURES WITH NEW DEVELOPMENT
- ENCOURAGE SETBACKS, BERMING, LANDSCAPING, RETENTION OF NATURAL VEGETATION AND OTHER STRATEGIES FOR SCREENING NEW DEVELOPMENT ADJACENT TO THE HIGHWAY CORRIDOR
- ENCOURAGE THE USE OF BUILDING MATERIALS THAT MINIMIZE REFLECTION AND GLARE
- DISCOURAGE FOREST PRACTICES THAT CREATE ABRUPT CHANGES IN THE NATURAL LANDSCAPE
- ENCOURAGE CLUSTERING OF NEW DEVELOPMENT AS A STRATEGY TO MAXIMIZE UNDEVELOPED OPEN SPACE, WHICH BENEFITS WILDLIFE AND OTHER NATURAL RESOURCES
- AVOID EXPANSION OF STRIP COMMERCIAL DEVELOPMENT BEYOND COMMUNITY

CENTERS

- IDENTIFY AND PROTECT UNIQUE VISUAL RESOURCES HAVING LOCAL, REGIONAL, OR NATIONAL SIGNIFICANCE
- ADOPT REGULATIONS TO RESTRICT THE SIZE, NUMBER, HEIGHT, AND LOCATION OF COMMERCIAL SIGNS, AND PROHIBIT BILLBOARDS
- ENCOURAGE THE UNDERGROUNDING OF UTILITIES WHENEVER PRACTICAL
- PROVIDE OPPORTUNITIES FOR LOCAL COMMUNITIES TO ESTABLISH ARCHITECTURAL GUIDELINES
- ENCOURAGE THE USE OF LANDSCAPING FOR BOTH EXISTING AND NEW DEVELOPMENT WHEN APPROPRIATE

WATER QUALITY

- MEET STATE REQUIREMENTS FOR ROUTINE MONITORING OF WATER QUALITY
- MINIMIZE USE OF CHEMICAL SPRAYS AND FERTILIZERS
- SECURE CONSERVATION EASEMENTS OR OTHER PROTECTION STRATEGIES FOR PRIVATE LAND ADJOINING THE MIDDLE FORK OF THE FLATHEAD RIVER TO SATISFY OBJECTIVES OF THE FLATHEAD WILD & SCENIC RIVER MANAGEMENT PLAN
- ESTABLISH BUFFER ZONES ADJACENT TO AQUIFER RECHARGE AREAS, SURFACE WATERS, AND COMMUNITY WELL/SPRING SITES
- EVALUATE THE USE OF ALTERNATIVE SEWAGE TREATMENT PROCESSES INCLUDING COMPOSTING TOILETS AND THE POSSIBLE USE OF PUBLIC SEWAGE TREATMENT PLANTS
- PROTECT STREAMSIDE BANKS FROM EROSION/SLUMPING

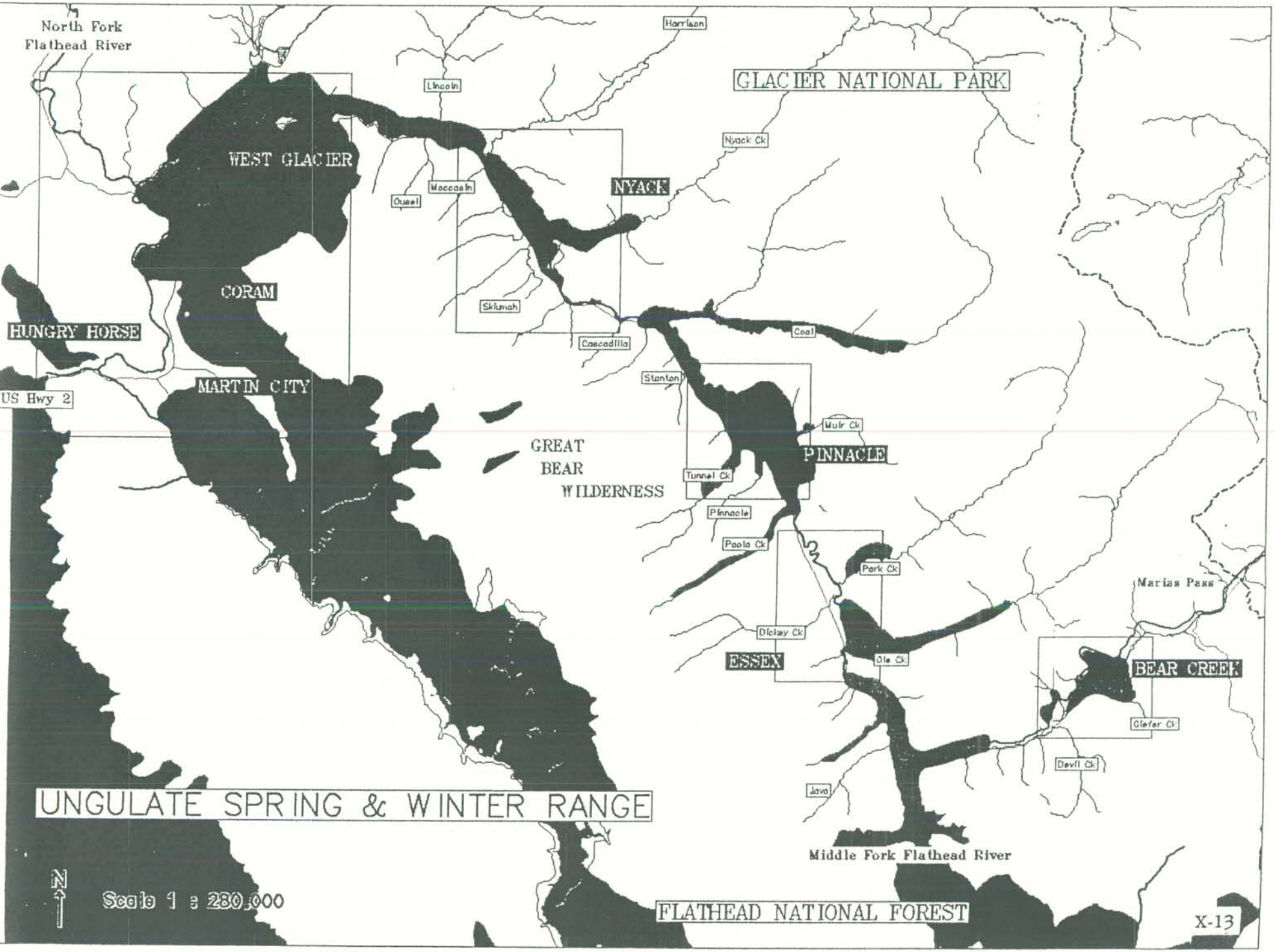
AIR QUALITY

- WORK TO MINIMIZE WOOD SMOKE EMISSIONS, ESPECIALLY IN THE AREA OF HUNGRY HORSE
- DISCOURAGE USES THAT GENERATE SMOKE EMISSIONS
- DEVELOP AND IMPLEMENT A DUST ABATEMENT PROGRAM FOR AREA ROADS
- EVALUATE THE INFLUENCE OF INDUSTRIAL USE EMISSIONS IN THE CANYON FROM SOURCES OUTSIDE THE CANYON

- INVESTIGATE THE MERITS OF ESTABLISHING AN AIR QUALITY DISTRICT FOR A PORTION OF THE LOWER CANYON

NATURAL VEGETATION

- MAINTAIN THE NATIVE FLORA
- ELIMINATE NOXIOUS WEEDS
- PROTECT RIPARIAN VEGETATION AND WETLAND PLANT COMMUNITIES
- PERMIT FOREST MANAGEMENT PRACTICES THAT REDUCE FUEL LOADING
- IDENTIFY PLANTS AND PLANT COMMUNITIES OF LOCAL, REGIONAL, OR NATIONAL SIGNIFICANCE FOR PRESERVATION
- UTILIZE BEST MANAGEMENT PRACTICES DURING TIMBER HARVEST ACTIVITIES TO REDUCE IMPACTS OF SOIL EROSION AND WATER QUALITY DEGRADATION
- MAINTAIN DEAD TREES AS WILDLIFE HABITAT, WHENEVER/WHEREVER POSSIBLE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Flathead River
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GLACIER NATIONAL PARK
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Nyack Ck
WEST GLACIER
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HUNGRY HORSE
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Stanton
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BEAR
WILDERNESS
PINNACLE
Tunnel Ck
Pinnacle
Poola Ck
Park Ck
Marias Pass
Dickey Ck
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FLATHEAD NATIONAL FOREST
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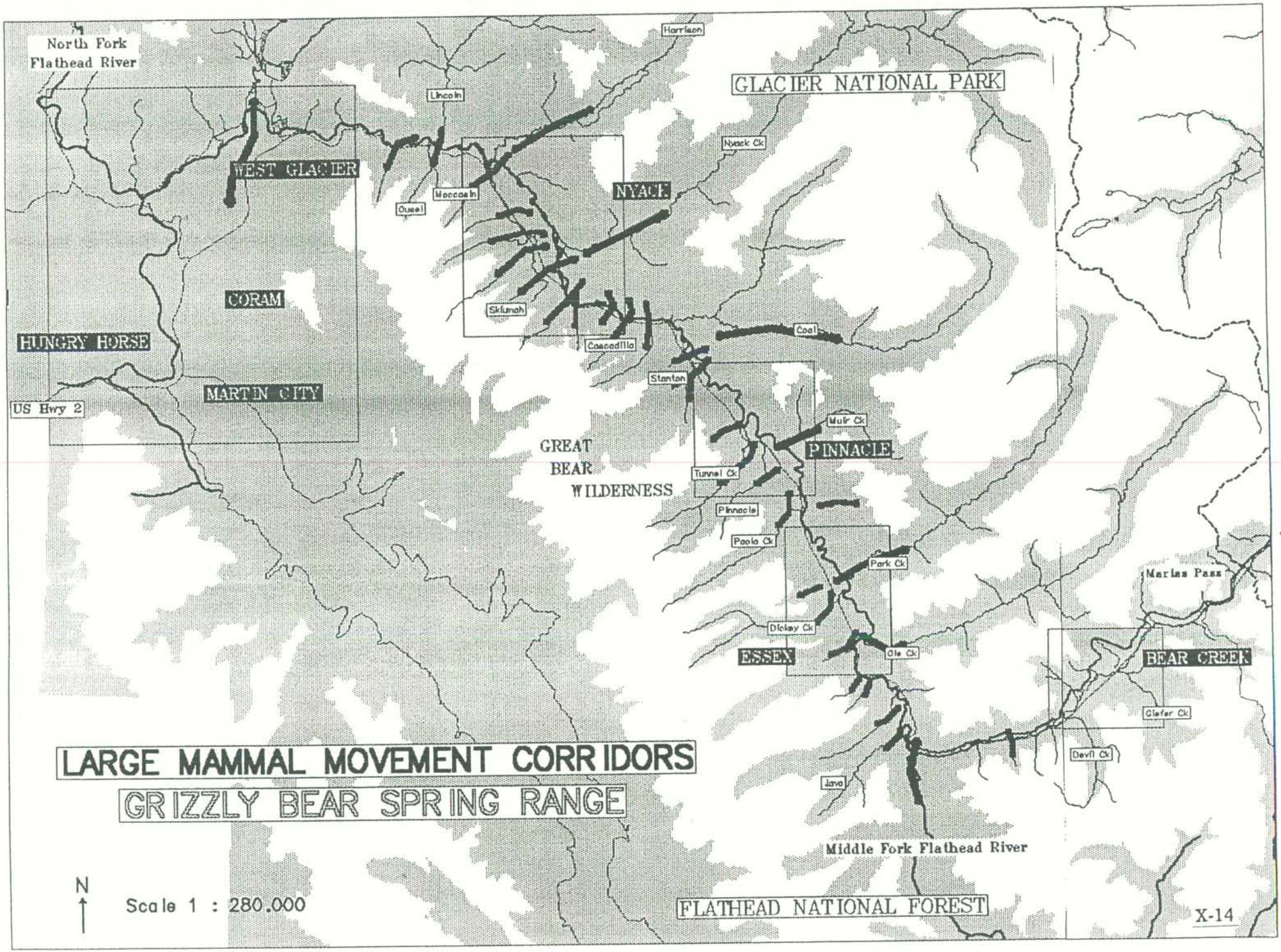
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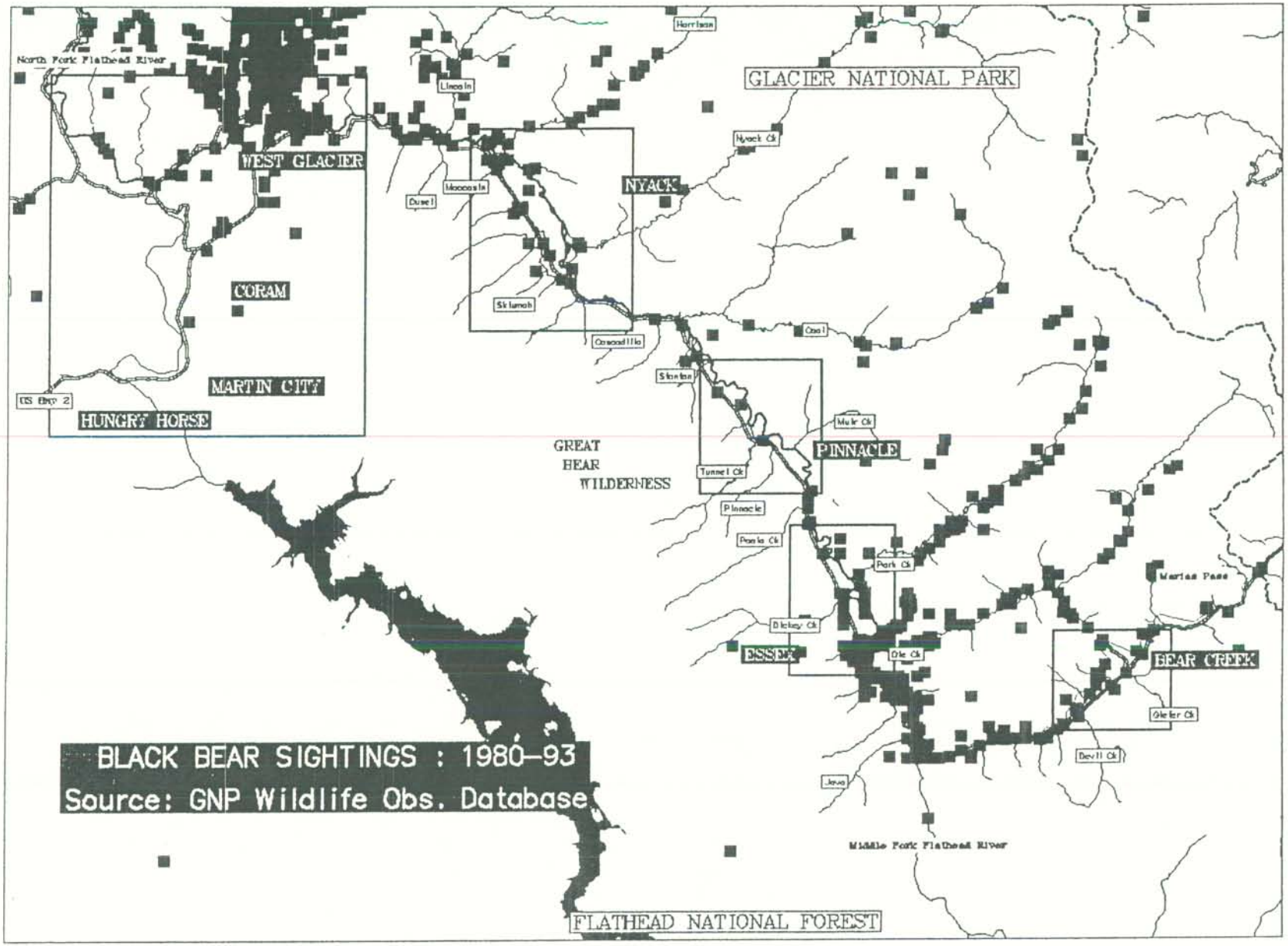

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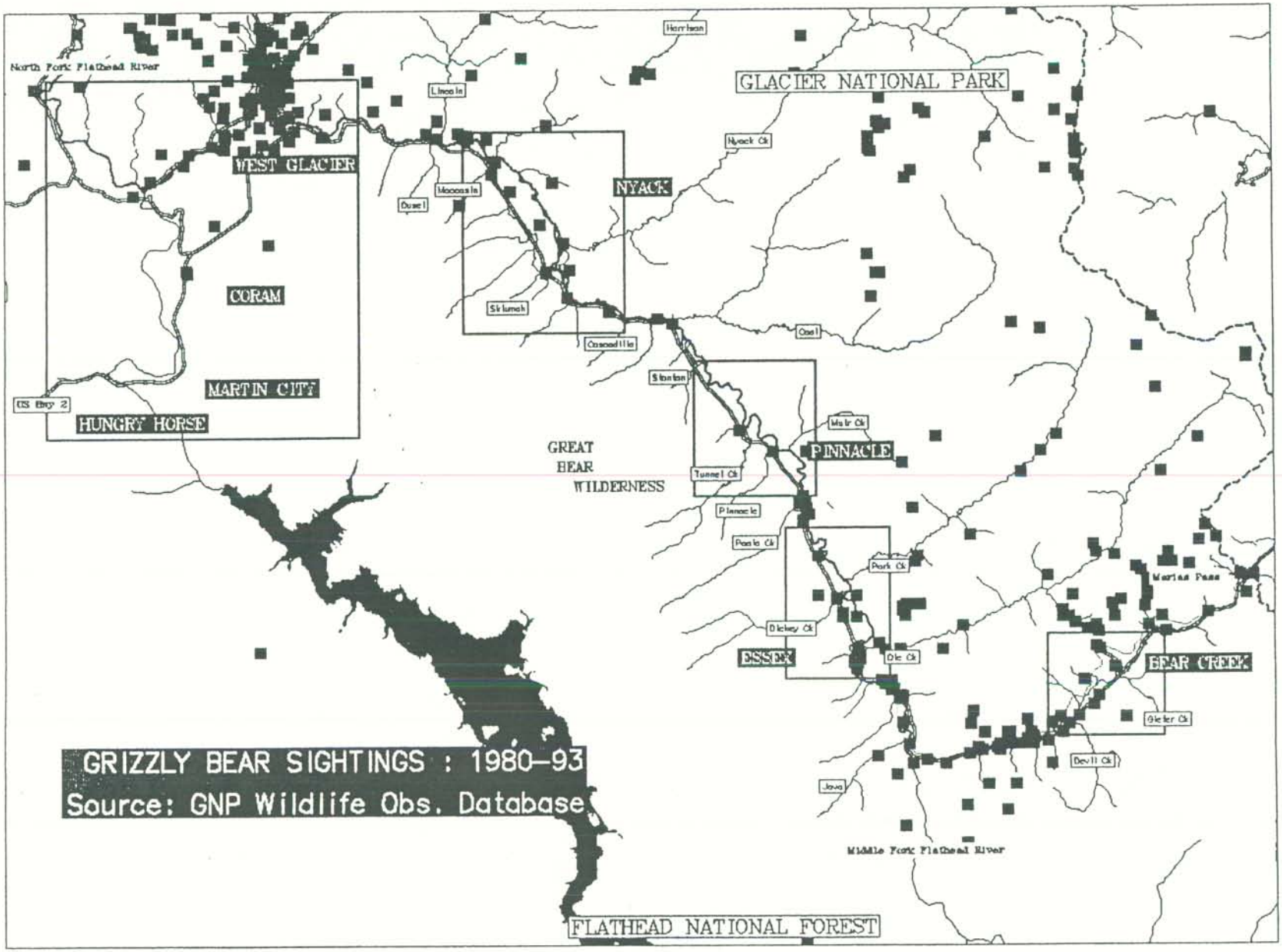

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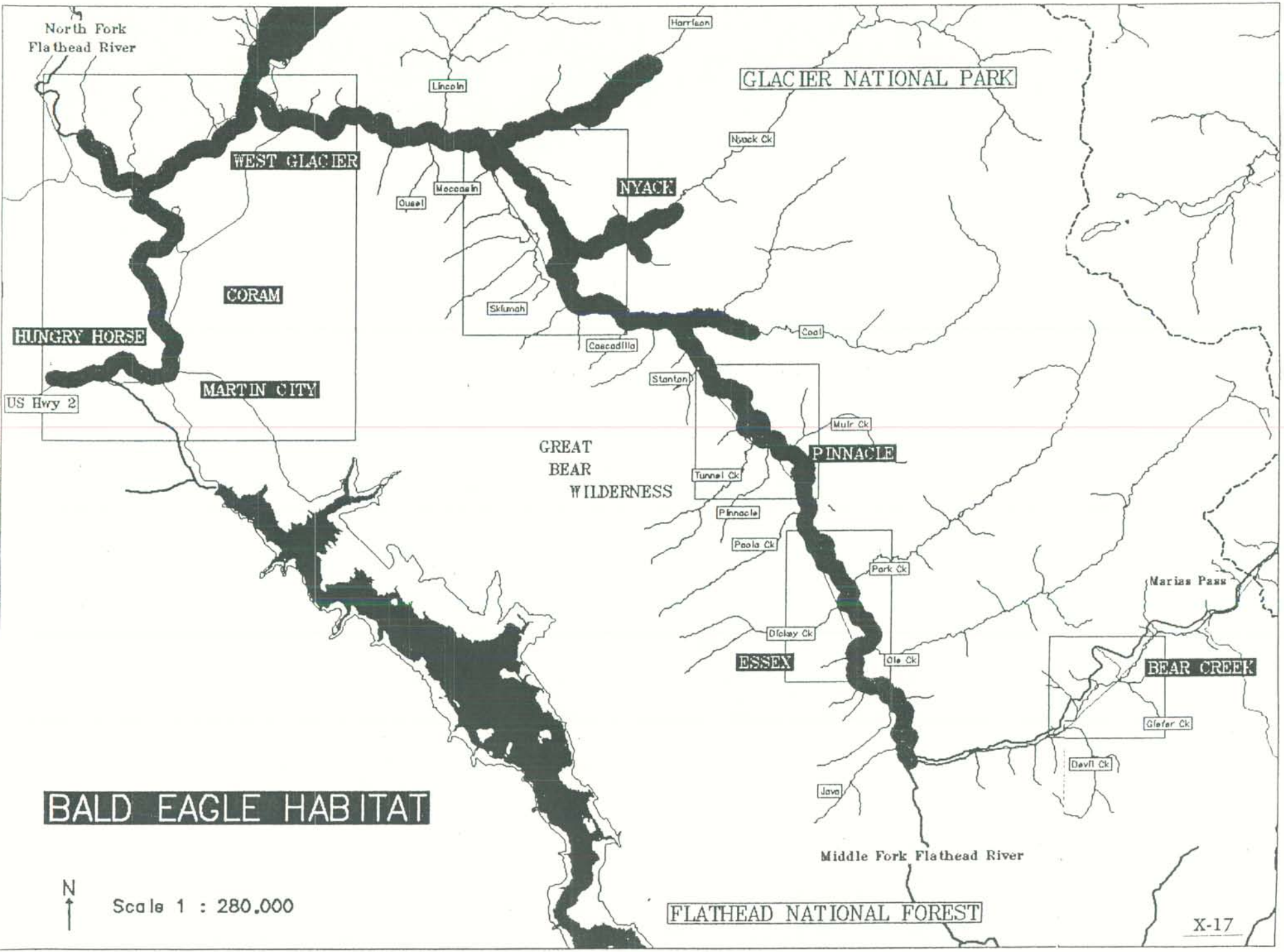
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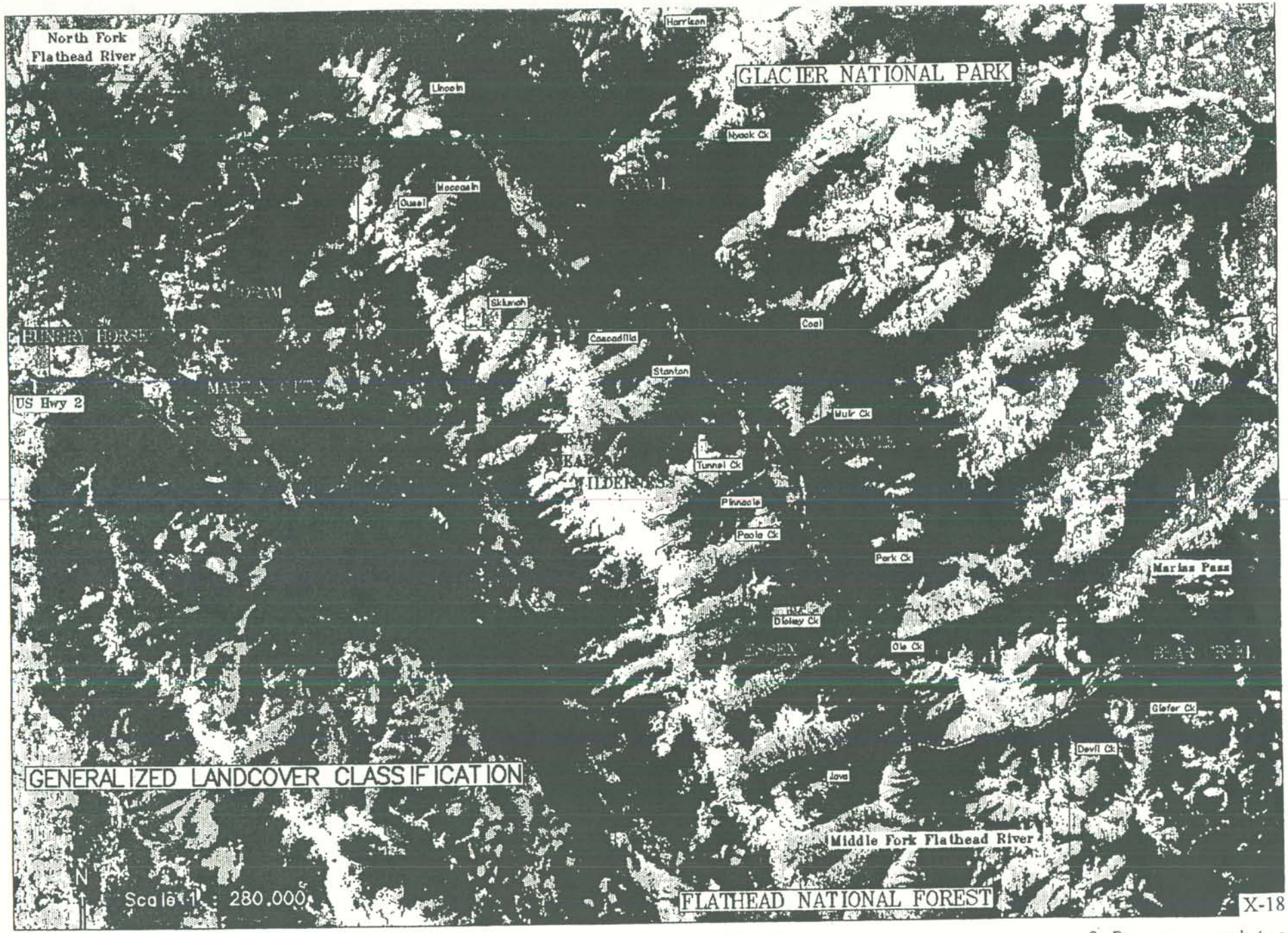

1 Dry Herbaceous
2 Mesic Herbaceous
3 Deciduous tree/shrub
4 Coniferous forest/dense mesic
5 Water
6 Barren rock/soil
7 Snow
8 Shadow
9 Coniferous forest open dry

THE CANYON PLAN

CHAPTER XI
IMPLEMENTATION

Implementation describes the strategies used in achieving the goals and objectives of this Plan. Traditional focus on Plan implementation has been the use of subdivision and zoning regulations. The Plan can and should also guide the day-to-day decisions of county government and the various emergency and service providers; but without land use controls, the best intentions of voluntarly adherence can result in havoc when someone chooses to ignore essential elements of the Plan.

The residents of the Canyon have repeatably voiced concern about the use of traditional zoning. As mentioned throughout the text of this Plan, the Canyon "is not like" the Valley communities. Regulating rural communities with "use" districts may not be appropriate to most areas in the Canyon. The other frequently mentioned phrase was "flexibility."

IMPLEMENTATION

However, responses to the surveys and opinions voiced at the public meetings indicated that some sort of regulation would be appropriate to either "keep the Canyon the way it is" or "fix" some of the land use situations that are beginning to affect the Canyon way of life. That "way of life" has different meanings to most who attempt to describe it. To some, it may translate to "rural seclusion" and to others it may be interpreted as "not being like the Valley." Most residents recognize the uniqueness of the natural resources found in the region and assign great importance to those natural amenities as contributing to "quality of life."

Residents were generally supportive of efforts that would concentrate new commercial uses in existing commercial centers, such as in Hungry Horse, Martin City, and Coram. Extending strip commercial development along the highway was not a popular idea. Clustering of developments and the use of setbacks, controlled access, and landscaping received broad-based support. The use of performance-based standards, as opposed to traditional zoning, appears to be a popular approach for the more rural areas of the Canyon.

Another approach to Plan implementation must involve collaboration with other land and/or resource management agencies. It would be counter-productive to seek independent application of this plan without some level of support and cooperation from such agencies

as the U.S. Forest Service and Glacier National Park. These and other agencies need to be aware of the Plan and enter into written formal agreements with Flathead County, if necessary, to help ensure that all parties are moving in a common and productive direction that is consistent with the Plan.

GOALS AND POLICIES

Listed below are the proposed goals and objectives for implementation of the Plan as determined by public response to surveys and meeting questionnaires. Adoption of this Plan by Flathead County is the first step towards implementation.

IMPLEMENTATION

GOALS

TO USE THE CANYON AREA PLAN AS AN EFFECTIVE TOOL FOR THE WISE USE, MANAGEMENT, AND DEVELOPMENT OF THE CANYON COMMUNITIES

TO ADOPT REGULATIONS TO IMPLEMENT THIS PLAN

POLICIES

- REGULATE THE LOCATION, TYPE, AND DENSITY OF LAND USES
- UTILIZE A COMBINATION OF TRADITIONAL AND INNOVATIVE ZONING TECHNIQUES TO PROVIDE FLEXIBILITY IN THE APPLICATION OF LAND USE REGULATIONS
- RECOGNIZE INDIVIDUAL COMMUNITY DISTINCTIONS WHEN CHOOSING REGULATORY STRATEGIES
- SEEK COOPERATION [THROUGH MEMORANDUMS OF AGREEMENT] FROM OTHER GOVERNMENT AGENCIES IN THE IMPLEMENTATION OF THIS PLAN
- IMPLEMENT GROWTH MANAGEMENT STRATEGIES, IF NECESSARY, TO CONTROL THE RATE, LOCATION, AND TIMING OF NEW DEVELOPMENT
- DEFINE URBAN GROWTH BOUNDARIES TO DISTINGUISH THE TRANSITION TO THE RURAL LANDS
- ESTABLISH A CANYON CITIZEN'S ADVISORY COMMITTEE TO PRESENT LOCAL VIEWS

TO THE FLATHEAD COUNTY PLANNING BOARD OR BOARD OF ADJUSTMENT ON LAND USE PROPOSALS AFFECTING THE CANYON