MASTER PLAN
SALT LAKE COUNTY
WASATCH CANYONS MASTER PLAN

Approved by the Salt Lake County Planning Commission May 30, 1989

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Utah State Department of Community and Economic Development
David W. Adams, Executive Director
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CHAPTER 1. INTRODUCTION

County Plan Objectives, Role

The purpose of the Salt Lake County Wasatch Canyons Master Plan is to more clearly guide and coordinate the allocation of future uses in accordance with the present and future needs and resources within the seven major Wasatch canyons through the year 2010, particularly the use of privately owned land in the canyons (which comprises 20 percent of the area). When completed and adopted, the plan will become part of the Salt Lake County Master Plan and will be utilized by Salt Lake County to guide future land-use decisions within the Wasatch Canyons.

The Salt Lake County Wasatch Canyons Master Plan goal is to provide diverse opportunities for public enjoyment of the Wasatch Canyons within the constraints of a limited geographic setting and the capacities of the natural environment to accommodate uses without significantly diminishing either the quality of the canyon resources or the quality of the canyon experience.

Through the twenty-year intended life of the Plan, it is recommended that reviews be conducted each five years and that the Plan be updated after the first ten years. Major canyon proposals or other changing circumstances may cause additional plan reviews. Plan amendments will be considered consistent with the process established in Utah statutes. The amendment process under Utah statute is identical to the formal plan adoption process including notice and public participation through hearings before the Planning Commission and County Commission. (For pertinent excerpts from Utah statutes on the plan adoption and amendment process, see Appendix 1.)

Specific jurisdiction and management responsibilities within the canyons are shared by Salt Lake County, the U.S. Forest Service, the Salt Lake City-County Board of Health, the Town of Alta and Salt Lake City. Therefore, a County Wasatch Canyons Master Plan will not only guide county canyon land-use policy, but also will be applicable to County interaction with the other agencies involved in canyon resource management. For Plan area lands managed by the U.S. Forest Service, this Plan serves as County land-use recommendations to the Forest Service. It is anticipated that if an amendment is proposed to the Forest Service Plan not consistent with this Plan, a parallel amendment would be proposed to the Salt Lake County Wasatch Canyons Master Plan.

The Wasatch Canyons Master Plan is the official statement of Salt Lake County public policy on the future use of the seven major Wasatch Canyons in Salt Lake County. It provides continuity of direction against which a broad range of programs will be judged as they are presented for implementation and approval.
The canyons of the Wasatch Mountains have historically provided diverse benefits to the Salt Lake Valley. Their abundance supplied water, timber, minerals, and a mountain retreat to the earliest settlers. The quality of life in the Valley continues to be enriched by the proximity of these towering mountains and their canyons. Their beauty and recreational opportunities are easily accessible and the local economy benefits from the canyon amenities, tourism and the ski industry. The continued enjoyment of the canyons into the next century can only be assured by the adoption and implementation of policies which will sustain their resources.

The Wasatch Canyons are utilized for a broad range of both public and private purposes. Their watersheds and streams provide much of the water supply for the Salt Lake Valley. They host primary and secondary residences, scientific research, restaurants and lodging, ski resorts, backcountry and Alpine skiing, snowmobiling, snowplay activities, big and small game hunting, fishing, picnicking, camping, transportation corridors, sightseeing, bicycling, utility corridors, jogging, hiking, mining (historical), and livestock grazing. Each of the canyons is unique in its physical and environmental characteristics, management and uses. Each of the canyons is environmentally sensitive and has limits on the levels of utilization it can sustain. In addition, not all uses are compatible with one another resulting in potential use conflicts.

Plan Area

The plan area encompasses the seven major canyons of the Wasatch Front in Salt Lake County: City Creek, Red Butte, Emigration, Parleys, Mill Creek, Big Cottonwood, and Little Cottonwood. Emigration and Parleys Canyons were migration corridors for early settlers and all of the canyons provided them with building materials, water for irrigation and culinary use, minerals, livestock grazing range and recreational opportunities. Through the 1940's the canyons were used primarily for watershed, grazing, recreation, and mining. Mining and grazing uses have been replaced by a wide variety of recreational activities which will be the dominant uses into the next century.

Several smaller canyons, including, Neffs, Tolcats, Heughs, Dry Hollow, Ferguson, North Fork, Deaf Smith, Bells, Willow Creek, and Little Willow Canyons, that face the Salt Lake Valley, are not included in the Plan area for this Plan. However, it is believed that many of the Plan policies for the seven major Wasatch Canyons are pertinent to these canyons, and should provide helpful direction to the County for issues arising in them.
Canyon Descriptions

City Creek Canyon provides an average of 8,000 acre feet of culinary water per year and is a popular hiking, picnicking, hunting, and bicycling area. Salt Lake City owns 56 percent of the land and manages the Canyon as a nature preserve, watershed, and City park.

Red Butte Canyon has been closed to general public use since 1910. As a result, it is one of the most pristine areas in the plan area. The Federal Government owns over 80 percent of the land area and since 1970 has managed it as a Research Natural Area, where scientific research in a relatively pristine environment is conducted. General public access is still prohibited, though the U.S. Forest Service has initiated experimental, short-term public access.

Emigration Canyon with the largest percentage of private land ownership is primarily used as a year-round residential area with limited commercial development. Jogging, hiking, and biking also occur in the Canyon, but there are no developed recreational facilities.

Parleys Canyon is a major interstate transportation corridor. Mountain Dell Reservoir and the Parleys Canyon treatment plant store and process culinary water from the large drainage area. Summer homes, camping, picnicking, target shooting, golf, and opportunities for a variety of dispersed recreational activities occur in the canyon. With the completion of Little Dell Reservoir in 1992, additional recreational opportunities will be available.

Mill Creek Canyon is a popular picnic area and is heavily used in the summer and fall months. Winter dispersed recreation is less intensive. Some seasonal cabins exist on Forest Service leases. The Federal Government is the dominant landowner. Livestock grazing under Forest Service permit and horseback riding occur in the upper Canyon.

Big Cottonwood Canyon contains a wide variety of uses including Solitude and Brighton ski resorts, year-round homes, summer cabins, developed camping and picnicking, fishing, hunting, and dispersed summer and winter sports. The dominant landowner is the Federal Government, but significant private land ownership exists in the Canyon.

Little Cottonwood Canyon silver mines once dominated canyon use. Today the canyon is largely a recreation area, heavily used for hiking, rock climbing, camping, picnicking, resort activities and sightseeing in summer months and downhill and backcountry skiing in the winter. It has two developed ski resorts, Snowbird and Alta, with associated lodges, hotels, restaurants, and user
facilities. Ownership is predominantly by the Federal Government with National Forest Service management. The Town of Alta is located in the upper Canyon with responsibility for its own land-use management decisions.

Additional information on the individual Canyons is provided under Canyon Plans in Chapter 6.
NOTE:
Maps are for planning purposes only, and are not a substitute for site-specific evaluation.

SOURCE INFORMATION:

Surface Ownership from:
U.S. Forest Service - Wasatch-Cache National Forest, Salt Lake Ranger District, Status and Encumbrance Map, Updated 1987, 1:24,000 scale

City Boundaries from:
Salt Lake County Public Works, Revised 1987, 1:24,000 scale.
NOTE: Information entered from 1924/25 photo-revised blue line prints. Salt Lake City Engineering, Revised 1987, 1:12,500 scale.

City Creek Nature Preserve from:
Salt Lake City Planning Division,
City Creek Master Plan, 1986.

Red Butte Research Natural Area from:
USGS - Wasatch-Cache National Forest,
Salt Lake Ranger District,
Update January 1987, 1:24,000 scale.

Roads and Hydrology from:
USGS, 7 1/2 minute quad maps,
1:24,000 scale.

LEGEND

- Roads
- Streams / Drainages
- Lakes
- Springs
- Study/Watershed Boundary
- City Boundary
- Private Ownership
- City Creek Nature Preserve
- Red Butte Research Natural Area
- Mine Locations

JURISDICTION/OWNERSHIP

CITY CREEK, RED BUTTE, EMIGRATION and PARLEYS CANYONS
PREPARED BY SALT LAKE COUNTY PUBLIC WORKS DEPARTMENT PLANNING DIVISION
DATA COMPILLED BY UTAH STATE AUTOMATED GEOGRAPHIC REFERENCE
MARCH 1989
WASATCH CANYON MASTER PLAN

SOURCE INFORMATION
Surface Ownership from:

City Boundaries from:
Salt Lake County Public Works. Revised 1987. 1:24,000 scale.
NOTE: Information altered from 1:24,000 photo-enlarged blueprints.
Salt Lake City Engineering. Revised 1987. 1"=1500" scale.

Wilderness Areas from:

Roads and Hydrology from:
U.S.G.S. 7 1/2 minute quad maps. 1:24,000 scale.

LEGEND
- Roads
- Streams / Drainages
- Lakes
- Springs
- Study/Watershed Boundary
- City Boundary
- Private Ownership
- Wilderness Area
- Mine Locations

NOTE:
Maps are for planning purposes only and are not a substitute for site-specific evaluation.

JURISDICTION/ OWNERSHIP
MILL CREEK, NEFFS, BIG and LITTLE COTTONWOOD CANYONS

PREPARED BY SALT LAKE COUNTY PUBLIC WORKS DEPARTMENT PLANNING DIVISION
DATA COMPILED BY UTAH STATE AUTOMATED GEOGRAPHIC REFERENCE
MARCH 1989
Existing Plans and Policies

Prior to development of this Master Plan, plans and policies affecting management and uses of the canyons were already in place and being implemented by the various entities with canyon jurisdiction. Some existing plans or policies are applicable to all of the canyons, while others are specific to only certain canyons.

Salt Lake County

Salt Lake County has primary private land-use jurisdiction within the Canyons. The Canyons were first zoned in 1972. The Alta/Little Cottonwood Canyon Plan was adopted in 1974 and included the Alta-Snowbird area. The Emigration Canyon Plan was adopted in 1985.

This Master Plan will guide county canyon management policies and plans for all Wasatch Canyons. It is intended to supercede the Alta/Little Cottonwood Canyon Plan of 1974. However, it does not substantially review, nor does it replace, the recently adopted Emigration Canyon Plan. Salt Lake County has a history of cooperative land-use decisionmaking with the U.S. Forest Service, Salt Lake City, and other jurisdictions. In the development and implementation of this Plan, Salt Lake County looks forward to cooperation with all other Canyon jurisdictions.

The County Planning Division prepares Master Plans to guide public and private development, prepares amendments to zoning ordinances, and prepares and maintains development standards. The Development Services Division processes zoning and conditional use applications, building permits, and is responsible for ordinance enforcement. Proposed developments must comply with building codes, Board of Health standards, and the county zoning ordinance.

U.S. Forest Service

The U.S. Forest Service manages the majority of lands within the Canyons and in 1985 adopted the Wasatch-Cache National Forest Land and Resource Management Plan for its canyon management responsibilities. The Forest Service, a major direct provider of dispersed and developed recreation, manages three wilderness areas in the Plan area (Lone Peak, Twin Peaks, and Mt. Olympus), and authorizes permits for others to provide recreational opportunities on National Forest lands.
Salt Lake City

Salt Lake City holds the majority of the water rights in the canyons and under Federal and State statute, exercises policies to protect the watersheds from which the water sources are derived. Since 1981 Salt Lake City has had in place a moratorium on any new contracts for in-Canyon use of its surplus Canyons water supply. In April 1988, the city adopted a Watershed Management Plan to enhance protection of the watersheds. Acts of Congress in 1914 and 1934 established Federal protection of the valley's water supply.

Board of Health

The Salt Lake City-County Health Department maintains water quality and waste water treatment standards within the Canyons. A 208 Water Quality Plan was completed in 1977 and was scheduled for update in 1988 regarding waste water treatment, development controls, and prevention of future water pollution.

Salt Lake County Council of Governments

The Salt Lake County Council of Governments' Canyon Advisory Committee developed goals and recommendations for canyon management in 1983, focusing on Big and Little Cottonwood Canyons.

Town of Alta

The Town of Alta maintains zoning and master planning within its boundaries.

Existing Permit Approval Status

Several development proposals have received varying phases of approvals from Salt Lake County, the U.S. Forest Service, and Salt Lake City. Projects with governmental approvals are pre-established for purposes of the Salt Lake County Wasatch Canyons Master Plan. Approved projects and activities as reflected in Appendix 2 are established.

Plan Process and Public Involvement

Development of this Master Plan significantly expanded upon the minimum public participation required under State statute. It was assisted by a twenty-five member citizens advisory committee and a seventeen-member technical committee (appointed by the Salt Lake County Board of Commissioners), the Bear West Consultant Team, and the County Planning Division staff.
The Citizens Advisory Committee met regularly to review the plan and actively participated in making recommendations. Subcommittees were appointed from this Committee to more fully explore specific issue areas and concerns.

The Technical Advisory Committee served as a coordinating body for the public entities having jurisdiction in the plan area and as a technical review team. Individual members contributed data and personal knowledge to the development of the plan.

Early in the planning process and as part of the overall goal of maximizing public participation, two well-attended public meetings were held to help identify canyon issues. Twenty major issues, with many sub-issues, were identified in hundreds of written and oral comments presented during the first round of public meetings and comment period.

Following accumulation and analysis of background data and extensive deliberations by the Citizens Advisory Committee, Scenarios and Policy Options for Salt Lake County Wasatch Canyons Master Plan was published in July 1988. The document solicited public comment on policy options and five different hypothetical scenarios representing various levels of possible future Canyon uses. The scenarios were not designed or intended to be plans.

Maps displayed how lands might be devoted to new uses to meet the objectives of each hypothetical scenario. (Existing and approved uses were assumed to remain in place in the scenarios.) The scenarios were built on a foundation of base data, suitability analyses, user data and demand projections, and carrying capacities. A baseline scenario illustrated canyon land-use allocations assuming current user trends continued into the future. The other four scenarios illustrated variations of levels of uses that could occur. In addition to the scenarios, alternative options were presented for public comment on a variety of issues and policies applicable to the canyons' planning process.

Public meetings were conducted on July 27 and August 1, 1988, to receive oral comments on Scenarios and Policy Options for Salt Lake County Wasatch Canyons Master Plan. A "response form" was prepared and distributed to assist the public in providing comments on the July options and scenarios document. Tabulations of the response forms and a synopsis of oral and written comments are available in a separate document at the County Planning Division.

Following the public comment period on Plan options, the Consultant Team, County Planning Division staff, and a group including representatives from the U.S. Forest Service, the Utah
Transit Authority, and Salt Lake City met to consider background data and information, public comments, and implications for other canyon jurisdictions. After extensive deliberations additional consultation with the citizens advisory committee a Preliminary Wasatch Canyons Master Plan was published November 10, 1988.

The Salt Lake County Planning Commission provided public notice and presided over a well-attended public hearing of approximately 1,000 persons on the Preliminary Plan on November 22, 1988. The Planning Commission also received over 250 written comments on the document. Comments and comment summaries are available for public review at the County Planning Division.

This Final Plan represents action by the Planning Commission in considering public comments and exercising its own judgment on modifications to the Preliminary Plan. The Planning Commission conducted a hearing, under the process provided in statute, on this Final Plan, made such changes it deemed appropriate, decided by resolution to adopt the Plan, and made recommendations to the Board of County Commissioners for hearing and adoption.

Documents prepared in the Plan process, and available for review at the Salt Lake County Planning Division include:

Wasatch Canyons Preliminary Master Plan -- prepared for public comment and County Planning Commission consideration prior to preparation of a final Master Plan.

Scenarios and Policy Options for Salt Lake County Wasatch Canyons Master Plan -- scenarios and policy options for public comment, synopsis of data and information used in scenario development. No preferences were suggested or recommended.

Wasatch Canyon Characteristics, Data, and Analysis -- additional background information on Canyon environmental and jurisdictional characteristics, suitability analysis, and carrying capacity analysis;

Analysis of Demand for Recreation Uses in the Wasatch Front Canyons -- a statistical review of current recreational use in the Canyons, and projections of future Canyons recreational use levels with an explanation of the methodology for arriving at those projections;

Salt Lake County Canyons Master Plan Analysis of Transportation Facilities for the Cottonwood Canyons -- additional information and analysis of transportation issues in the Canyons;
Detailed Color Maps (for review only) -- display a broad array of environmental data, use information, suitability of the Canyons for various uses, and scenarios; and

Public Comments on Scenarios and Policy Options for Salt Lake County Wasatch Canyons Master Plan -- tabulations of public comments as indicated on "response forms" and a synopsis of oral and written comments received on the July 1988 document.
CHAPTER 2. BACKGROUND INFORMATION

Environmental data, current use levels, projections for future Canyon use levels, carrying capacities, and suitability analysis provided a foundation for this planning process. This information is briefly summarized in this chapter. More detailed information is compiled in documents listed on page 12 and available at the County Planning Division.

ENVIRONMENTAL INFORMATION

The following basic canyon environmental characteristics are displayed on maps available for inspection at the Salt Lake County Planning Division. These characteristics affect the suitability of terrain for different uses.

HYDROLOGY AND WATER QUALITY - The Wasatch mountains serve as a high quality, dependable water source for the Salt Lake Valley, thus establishing water quality as a dominant planning consideration. A Canyon hydrologic data map delineates all drainages in the plan area, water bodies, and springs. Water quality in the Wasatch canyons, with the exception of Emigration Canyon is excellent, well above State and Federal standards. Coliform bacteria is often used for a broad water quality parameter for planning purposes. In general, coliform levels have undergone notable year-to-year fluctuations making the establishment of a trend difficult. Recent changes in the Federal Clean Water Act and Safe Drinking Water Act, and their implementation at the local level, may bring additional controls over sources of water quality degradation.

All segments of streams in the Plan area have been designated by the State under the Clean Water Act for antidegradation, which means Canyon policies must prevent any water quality degradation.

SOIL DATA - Soil is a restrictive physical element in determining land-use potential from an engineering standpoint and in achieving watershed protection. Soil conditions considered for use suitability included: water table, rock outcrop, bedrock depths, soil shrink and swell, erosion potential, salt or alkali affect, soil permeability, water runoff potential, and susceptibility to hillside slippage.

SLOPE DATA - Slope is an important consideration in canyon planning for both mitigation of erosion from development and determining suitability for recreation uses. A canyons slope map delineates slope categories at 10 percent intervals, correlating to development restrictions and avalanche considerations. Under the provisions of the Salt Lake County Hillside Protection Zone and Forestry Zones, only areas with slopes less than 30 percent are considered as having development potential.
LANDSLIDE DATA - Due to the steepness of terrain, distribution of sensitive soils and relatively high rates of precipitation, the Wasatch Canyons experience landslide events including rock falls, slides, slips, and debris flows. The Landslide Data map delineates known paths of historic slides and best estimated run-out paths.

SEISMIC SLOPE STABILITY - Most of the Plan area is east of the active fault lines of the Wasatch Fault system. Because seismic slope stability data is not available for about 70 percent of the plan area, this factor was not included in planning suitability analysis.

AVALANCHE DATA - Avalanches in the Wasatch Canyons pose a great threat to life and property, and are an important Canyon planning consideration. Avalanches affect day-to-day winter road operations and restrict areas suitable for backcountry winter recreation. The Avalanche Data map delineates known avalanche paths. Although factors other than those reflected on the map play a part in avalanche forecasting, it was beyond the scope of this plan to implement a more complex avalanche model.

CLIMATIC DATA - Utah's climate is determined by its distance from the equator, its elevation above sea level, the location of the state with respect to the average air flow paths from the principal moisture sources of the area, namely, the Pacific Ocean and the Gulf of Mexico, and the mountain ranges in the western United States, particularly the Sierra Nevada, Cascades and the Rocky Mountains. As moist air is forced to rise over these high mountains, a large portion of the original moisture falls as precipitation. Thus the prevailing westerly air currents reaching Utah are dry, resulting in light precipitation over most of the state. The Great Salt Lake has a modifying effect on Wasatch storms, increasing precipitation intensity. Annual precipitation ranges from 14 inches annually in the valley up to 42 inches in the high mountains.

VEGETATION DATA - Vegetation distribution in the Wasatch Canyons follows belts or life zones which correlate to slope, elevation and soil types. A number of studies have been completed for individual canyons within the study area.

The Wasatch Canyons Characteristics document briefly describes vegetation distributions for the individual zone communities.

WILDLIFE DATA - Effects of human encroachment on wildlife habitat through development and recreation use is an important consideration in the planning process. The Utah Division of Wildlife Resources provided data on critical wildlife habitats in the Wasatch Canyons. Wildlife habitats for mammals are generally based on seasonal climate, range conditions for browse production, and areas suitable for protecting new born of the various species.
Habitat for birds is constrained mostly by the availability of nesting areas. The Wildlife Data map delineates wildlife habitats for elk, mule deer, moose, mountain goat, mink, marten, California quail, chukar, waterfowl, blue grouse, ruffed grouse, beaver, muskrat, raptors, and Utah cutthroat trout.

USER DATA AND PROJECTIONS

Current Canyon Use Data

Because of the variety of recreational opportunities which the Canyons afford and their proximity to a major urban area, canyon recreational use is high. To appropriately analyze canyon recreation use, a historical data base of available user data was developed for the time period 1970-1987. For alpine skiing and dwelling units, data was used for the tri-canyon area of Mill Creek, Big Cottonwood and Little Cottonwood Canyons. Other use data reflects the area within the Salt Lake District of the Wasatch-Cache National Forest. (Data for some uses is available for a longer period and for other uses it is shorter and nonexistent for even others.) The data is summarized in Appendices 3 and 4.

This user data base indicates that alpine skiing is the largest use of the canyons with 1.3 million skier visits in the 1986-1987 ski season. This translates to 650,000 recreation visitor days (RVD's). (A recreation visitor day - RVD - is the Forest Service's unit of measurement and consists of one 12-hour visit or twelve one-hour visits or any combination thereof.) The next highest use is picnicking with approximately 160,000 RVD's in 1987. Following picnicking are hiking (140,000 RVDs), camping (125,000 RVDs), cross-country skiing (60,000 RVDs), snowmobiling (15,000 RVDs) and hunting (13,000 RVDs).1

Also shown in the tables are the number of dwelling units in the tri-canyon area: 680 units currently. An additional 305 dwelling units are located in Emigration Canyon, and 90 dwelling units are located in Parleys Canyon.

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1 U.S. Forest Service Recreation Information Management System data. Cross-country skiing figures include nordic track. See Analysis of Demand document for more complete discussion.
Projections of User Data

As Salt Lake County's population continues to grow and for a number of other reasons, the demand for canyon recreational resources increases. To make wise public decisions about the future of the Wasatch Front Canyons, decisionmakers need projections of the future demand for recreational activities in the Canyons. The following is a summary of the demand analysis and accompanying demand projections for recreational uses in the Wasatch Front Canyons. A complete analysis of these demand projections is available in the technical report, Analysis of Demand for Recreation Uses in the Wasatch Front Canyons.

Despite the importance of projections, they are only informed guesses about the future based on current and past trends. Since the future is inherently uncertain, projections cannot reflect precisely what the future will entail. Instead, projections provide a sketch of what is possible and, perhaps, most likely to occur.

Many times, and in the case of this Plan, projections come in the form of a "baseline" projection. In this context, the term "baseline" refers to the future based on the existing economic and demographic trends of Salt Lake County, the Wasatch Canyons, and Utah. The baseline is not a prediction or forecast of the future but rather an attempt to depict the direction current trends are likely to take without major changes. The baseline takes into account normal economic and population growth nationally, in Utah and primarily along the Wasatch Front. These economic and demographic projections are utilized, along with other factors, to make projections of growth in Canyon uses. Critical to the development of a baseline future is the analysis of the long-term history of Wasatch Front growth and Canyon use.

Although the baseline projections may be viewed as the most likely future because they are based on current and past trends, they are not the only reasonable projections which can be made. For example, depending on the successes of Utah's ski marketing campaigns, the accuracy of assumptions about changes at ski resorts, snow conditions, the public's preferences, and external variables such as air transportation costs and other recreation opportunities outside the canyons, these baseline projections may deviate significantly.

These user demand projections were made using linear regression modeling techniques. Many different models were tested for validity and fit, and the best models were selected. A review of past projections of recreational activities which used similar techniques showed acceptable results over time.
Alpine Skiing Baseline Projections

In analysis for this Plan, Skier visits in the canyons are projected to increase more rapidly than in the state as a whole. Skier visits for Big Cottonwood Canyon are projected to increase by 2.6 percent per year from 1987 to 2000 and 1.7 percent per year from 1987 to 2010. Little Cottonwood Canyon skier visits are projected to increase by an average 1.8 percent per year from 1987 to 2000 and 1.4 percent per year from 1987 to 2010. The higher rate of growth in the canyons occurs because of the close accessibility and popularity of the canyon resorts. These projections would indicate that an additional 5.4 million vertical transport feet per hour (VTF/hr.) will be installed in Big Cottonwood Canyon, and 3.8 million VTF/hr. in Little Cottonwood Canyon over the next two decades. This expansion is consistent with the development limits established in the Wasatch-Cache National Forest Land and Resources Management Plan. Appendix 4 shows these projections.

These baseline projections assume: constant relationships between the independent variables (snow conditions, ski age population, income, prices, and capacity) and skier visits; average snow conditions in the future; constant "real" lift ticket prices; and no dramatic changes from the past in relative levels of external variables (all variables not included in the model such as relative levels of ski advertising, air transport costs, lodging prices).

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![Utah Total Skier Visits Actual and Projected](chart)

Source: Ut Office of Planning & Budget and Utah Ski Association

19
Big Cottonwood Skier Visits
Actual and Projected

Skier Visits (Thousands)


- Actual
- Projected

Sources: U.S. Forest Service
and Ut Office of Planning and Budget

Little Cottonwood Skier Visits
Actual and Projected

Skier Visits (Thousands)


- Actual
- Projected

Sources: U.S. Forest Service
and Ut Office of Planning and Budget
Dispersed Recreation-Baseline Projections

For dispersed recreation in the Canyons, the consultant team utilized two modeling approaches: a linear regression and a participation rate method. The linear regression approach utilized the Wasatch Front population and weather conditions as explanatory variables. The participation rate method used the entire Wasatch Front multi-county district's current and projected population as a base for establishing projections. Projections were made for recreational visitor days (RVDs) for cross-country skiing, hiking, picnicking, camping, hunting and snowmobiling.

The projections indicate that all dispersed recreation uses will experience healthy rates of growth in RVDs. Cross-country skiing projections show an average annual increase of 3.3 percent from 1987 to the year 2000. (This is a projection of total cross-country ski RVDs. It was impossible to make independent projections for the various components of cross-country skiing such as nordic track skiing.) For the period of 1987-2000, hiking is projected to grow at 1.5 percent per year, camping 1.2 percent, picnicking 1.5 percent, hunting 1.5 percent, and snowmobiling 1.5 percent. For the years 1987 to 2010, cross-country skiing is projected to increase by an average of 2.2 percent, hiking 1.5 percent, camping 1.2 percent, picnicking 1.5 percent, hunting 1.5 percent, and snowmobiling 1.5 percent. Appendix 3 provides the dispersed recreation projections.

![Hunting RVDs Actual and Projected](chart.png)

Source: U.S. Forest Service and the Utah Office of Planning and Budget

21
Cross-Country Skiing RVDs
Actual and Projected

Recreation Visitor Days (Thousands)


- Actual
- Projected

Source: U.S. Forest Service
and Utah Office of Planning and Budget

Hiking RVDs
Actual and Projected

Recreation Visitor Days (Thousands)


- Actual
- Projected

Source: U.S. Forest Service and
the Utah Office of Planning and Budget
Snowmobiling RVDs
Actual and Projected

Recreation Visitor Days (Thousands)


Source: U.S. Forest Service and Utah Office of Planning and Budget
Conversions to Land Use Allocations

Once projections of future use were developed, they were converted to allocations of additional land use for the various uses. This information was then incorporated into computer mapping. The Analysis of Demand document provides more detail on methodology used in converting the projection data to acres needed to accommodate a projected future use level.

CARRYING CAPACITY OF CANYONS

Carrying capacity analysis was conducted to understand how existing canyons facilities and features are accommodating use, and where future user demands may be affected. Additional information is provided in separate documents available at the County Planning Division. Transportation carrying capacities in Big and Little Cottonwood Canyons are summarized in Salt Lake County Canyons Master Plan Analysis of Transportation Facilities for the Cottonwood Canyons. Other carrying capacity analysis is discussed in Wasatch Canyon Characteristics, Data, and Analysis.

A carrying capacity analysis rests on the relationship between human activity and the assimilative capacity of physical, cultural and environmental systems. A carrying capacity identifies system limitations and the amount of human activity that can be sustained without exceeding limitations. The consultant team established a list of "systems" which would require carrying capacity analysis. Initially, from the summary of public comments, topics and resources requiring carrying capacity analysis were defined. Many of these "systems" have established thresholds based on either an implicit system capacity or an official policy such as a public law, ordinance, or plan. The responsible agency or source for the established threshold was referenced in the analysis.

Some carrying capacity thresholds are quantitative, and others are qualitative. Quantitative thresholds express physical limits of a tangible measurement such as Average Daily Traffic (ADT) on a highway. Qualitative thresholds explain those elements which rest on human emotions and social values.

The carrying capacity analysis found that thresholds for four systems would be absolute for certain future use levels: National Forest Lands Visual Quality Objectives; water quality constraints; soil erosion potential; and limitations on water availability. For other systems, there can be more flexibility in environmental or institutional restraints.
SUITABILITY ANALYSIS

To establish parameters for the canyons' ability to absorb additional use, an evaluation of canyon terrain was made to determine where major existing canyon uses could be reasonably accommodated in the future. Through this rough determination of canyons' suitability for different uses, general areas were identified that are potentially acceptable for new uses.

Data analysis and on-site inspections were conducted to determine which areas in the Canyons may be suitable for various canyon uses including alpine skiing, nordic track skiing, backcountry skiing, residential and commercial development, developed picnic and camp sites, and parking for dispersed recreational use.

For each category of use, the kinds of factors which need to be considered to determine the suitability of a site were determined. Factors varied for different uses. Some factors absolutely control suitability; for example, elevations of less than 6,500 feet are not suitable for alpine skiing. Descriptive factors may influence the degree of suitability, but are not absolute; for example, road location is an important influence in potential future nordic track development, so roads are displayed on nordic track suitability maps.

These factors for each use were then plotted on computerized maps to graphically display which areas within the canyons were highly suitable or suitable for that use. Geographic Information System (GIS) technology, a computer information system, was used to input, manipulate and analyze geographically referenced data. For example, GIS was used to determine areas suitable for picnicking based on the suitability criteria information fed into the system and the environmental and carrying capacity data previously discussed. The acreage was calculated and use densities were determined based on established policies.

Inevitably, the scale of information addressed in these computer mapping exercises may result in site-specific errors. However, on balance, the process of overlaying factors that affect the suitability of an area for a use provides a general understanding of where and how much terrain may be suitable.

Appendix 5 provides an example (residential/commercial development) of how factors were considered in the suitability analysis. Descriptions of the suitability analysis for each major use are available for review at the Salt Lake County Planning Division.
CHAPTER 3. PLAN AREA GENERAL POLICIES

This Chapter presents general Salt Lake County policies applicable to the entire Plan area.

Highlighted text summarizes policies. The order of issues addressed is not intended to reflect their relative importance or policy priorities. Application of certain policies to specific Canyons is discussed in Chapter 6. Recommendations for the implementation of several of the policies are provided in Chapter 7.

WATERSHED AND WATER QUALITY PROTECTION

SALT LAKE COUNTY WILL CONTINUE TO COOPERATE WITH SALT LAKE CITY-COUNTY BOARD OF HEALTH, THE U.S. FOREST SERVICE, AND SALT LAKE CITY TO IMPLEMENT ANTIDEGRADATION STANDARDS, STREAM SET-BACK AND ENVIRONMENT ZONES, MONITORING PROGRAMS, ENFORCEMENT ACTIVITIES, AND OTHER CANYON WATERSHED POLICIES TO MAINTAIN EXCELLENT WATER QUALITY IN THE CANYONS.

ALL STREAM SEGMENTS IN THE PLAN AREA HAVE BEEN DESIGNATED BY THE STATE UNDER THE CLEAN WATER ACT FOR ANTIDEGRADATION, WHICH MEANS CANYON POLICIES MUST PREVENT ANY WATER QUALITY DEGRADATION.

The Salt Lake Valley has enjoyed excellent quality water from the Wasatch Canyons since settlement of the Valley. The proximity of these water supplies coupled with their relative purity allows Salt Lake Valley residents an inexpensive, plentiful source of water.

Consistent with federal and state law, one of the primary uses of the canyons is as a watershed for the Salt Lake Valley. All uses will be carefully reviewed by Salt Lake County with an initial determination of whether the activity after mitigation measures would adversely impact the watershed.

Plan policies could lead to further temporary or long-term restrictions in high-use areas in the canyons. For example, in some high-use recreation areas where watershed degradation is determined to occur, restrictions could be imposed including fire restrictions, additional camping and picnic area limitations, Off-Highway Vehicle restrictions, and use by permit only.

Maintenance of instream flows has aesthetic, wildlife, fish, vegetative, and channel preservation benefits. Salt Lake County supports the provision for maintenance of water flows in Canyon streams in future decisions affecting canyon water use. However, the County recognizes that this goal is complicated by the full ownership (appropriation) of Canyon streams and the nature of
western water law requiring the diversion of water from water courses as a criteria for establishing beneficial use. Salt Lake County recommends that owners of water rights review the potential for committing water rights to instream flows on a canyon-by-canyon and case-by-case basis and consider retention of minimum flows in the streams to maintain aquatic and riparian habitat.

**INTERGOVERNMENTAL COORDINATION**

*A Wasatch Canyons Coordinating Committee should be established and composed of professional staff from entities with canyon management jurisdiction to improve coordination, cooperation, distribution of information, and public involvement in and awareness of canyon policies and issues. The Canyons Coordinating Committee should not be a decisionmaking body nor should it have regulatory authority.*

Multiple jurisdictions share management responsibilities in the Canyons. Coordination among them has occurred informally and on a case-by-case basis. Well-established working relationships have generally provided opportunities for governmental entities to consider one another's activities and to share information. Occasionally, however, activities or projects do not receive consistent attention and in most Canyon matters, decisions or policies of one entity affect the others.

Many of the policies established by this Plan will require effective intergovernmental cooperation and communication in order to be realized. The ad-hoc, informal relationships which have afforded cooperation to date do not provide the forum necessary to effectively address the issues in this Plan or future issues.

The Wasatch Canyons Coordinating Committee is intended to improve coordination and communication among entities. Committee members would keep their respective agency policymakers apprised of committee agendas and activities. County policy decisions would remain with the Salt Lake County Planning Commission and County Commission and other organizations the County Commission authorizes to study the future of the canyon areas. Other member entities would retain their respective responsibilities and authorities.

**PRIVATE LAND ACQUISITION**

*Salt Lake County, the Town of Alta, Salt Lake City, and the U.S. Forest Service should jointly develop criteria for land acquisition setting forth purposes, priorities, and funding options for land purchases.*
THE ENTITIES SHOULD ACQUIRE SELECTED, PRIMARILY UNDEVELOPED, PRIVATE LANDS TO ASSURE ACCESS TO EXISTING PUBLIC LAND, TO PROVIDE ADDITIONAL AREAS FOR PUBLIC USE, TO PROTECT PARTICULARLY SCENIC OR SENSITIVE AREAS FROM DEVELOPMENT, OR TO PROTECT THE WATERSHED. SALT LAKE COUNTY SHOULD ESTABLISH A PROGRAM FOR ACQUISITION OF PRIVATE PROPERTY AND INVESTIGATE POTENTIAL PROGRAM FUNDING SOURCES.

The Canyons cannot sustain projected growth in demand for uses without stressing the Canyon environment and increasing conflicts among users. While only twenty percent of the land within the Wasatch Canyons is privately owned, the public often unknowingly uses it without landowner consent for recreation or access to public lands.

While there are natural limits to the levels of use which can be sustained in the Canyons, selective acquisition of private property can increase the areas available for public use, assure continued access to existing public lands, and reduce the potential for conflict between private property owners and the user public.

Limited funding is currently available for such acquisitions. The U.S. Forest Service has a modest fund available through the Wasatch Receipts Act. The U.S. Land and Water Conservation Fund has historically been a source for funding acquisition of particularly sensitive or desirable lands for public use, but in recent years has had constrained funding. In 1988, Salt Lake City established a Watershed Protection Fund to purchase private lands critical to protecting the Valley water supply. The Trust for Public Lands and the Nature Conservancy are private organizations which can assist in land purchase transactions if sufficient public funds will eventually be available for the purchase.

Cooperation in establishing acquisition criteria will reduce duplication among the entities, will help assure that priority acquisitions are pursued first, and will assure that the appropriate entities have a mutual understanding of their individual and collective potential for success in an acquisition program. Cooperation can also be effective in identifying alternative funding sources and imaginative purchase strategies, including the use of third party public interest groups.

The criteria should provide for acquisition of private lands currently used for access to trailheads or other public land recreational opportunities, or which are critical for protection of water quality and the watersheds.
AESTHETIC STANDARDS

SALT LAKE COUNTY WILL PREPARE AND IMPLEMENT ARCHITECTURAL STANDARDS TO GUIDE BUILDING DESIGN, MASS AND PLACEMENT OF STRUCTURES IN THE PLAN AREA TO ENSURE A MORE HARMONIOUS RELATIONSHIP BETWEEN MAN-MADE STRUCTURES AND THE CANYON SETTING. DEVELOPMENT OF THE STANDARDS WILL BE REVIEWED WITH DESIGN PROFESSIONALS, OTHER CANYON JURISDICTIONS, THE U.S. FOREST SERVICE AND CANYON ASSOCIATIONS.

In a sensitive environment such as the Wasatch Canyons, aesthetic and development guidelines provide assurances that development will be compatible to the natural landscape, and consistent with the public welfare and enjoyment of the setting.

Aesthetic concerns are now addressed in the County Zoning ordinance and the forest plan. Under County Zoning designations building materials must preserve the natural beauty and blend harmoniously into the environment. These provisions establish a foundation for aesthetic control, but fall short of providing comprehensive guidelines on the aesthetic design of structures to minimize their visual distraction from the Canyon environment.

Architectural standards will significantly and beneficially supplement existing aesthetic guidelines for Canyon structures and will provide a clear indication to builders and developers of the nature and appearance of structures which would be most acceptable within the Canyons.

PUBLIC SAFETY

THE WASATCH CANYONS COORDINATING COMMITTEE SHOULD SERVE AS A CATALYST TO WORK WITH THE APPROPRIATE ENTITIES TO DEVELOP A COMPREHENSIVE CANYON SAFETY PROGRAM.

Increased Canyon use exposes more and more people to natural hazards inherent in mountainous areas, and increases the risk of fire and human caused public safety problems.

The winding canyon roads, steep grades, often dry vegetation, avalanche paths, rock fall areas, landslides, other natural hazards, and quickly changing weather all have the potential of inflicting serious injury or damage to people and property.

The Wasatch Canyons Coordinating Committee should work with the appropriate entities toward the development of more comprehensive fire safety standards, improved fire fighting capability, more effective avalanche danger awareness, avalanche control and rescue coordination, earth movement danger awareness and mitigation, flood hazard awareness and mitigation, earthquake
hazard mitigation plans including post-earthquake evacuation plans and restoration of essential lifeline services (roads, utilities, sewers, communications) across active faults at the canyon mouths, a permanent program for safety inspection of commercial buses and vans used within the canyons, and appropriate user guidelines for snowplay activities.

**HANDICAPPED ACCESS/OPPORTUNITIES**

NEW FACILITIES IN THE CANYONS AND EXISTING FACILITIES, UPON RENOVATION, ARE REQUIRED TO BE BARRIER-FREE. JURISDICTIONS SHOULD MAKE PROGRESS TOWARD MAKING ALL PUBLIC STRUCTURES ACCESSIBLE TO THE HANDICAPPED AND WORK WITH THE COMMUNITY TO IDENTIFY AND ADDRESS SPECIFIC NEEDS OF INDIVIDUALS WITH PHYSICAL DISABILITIES.

Persons with physical disabilities should not be denied opportunities for solitude and outdoor recreation available to the general populace because of outdated facilities.

**HUNTING**

HUNTING IS AN EFFICIENT BIG-GAME MANAGEMENT TOOL AND POPULAR SPORT WITHIN THE PLAN AREA.

Hunting is an enduring Canyon activity and key wildlife management tool. It can be used to effectively and selectively control herd size and limit wildlife to a level which can be reasonably sustained in good health by the Canyon habitat.

A Salt Lake County/State Division of Wildlife Resources agreement on hunting requires a special hunting permit in the Canyons and appears to resolve Canyon user conflicts.

The agreement reduces conflict between property owners and hunters, and reduces the possibility for hunting-related accidents by prohibiting discharge of rifles within one mile and shotguns within 200 yards of any occupied structure. As a control measure and to provide hunters Canyon specific regulations, a Salt Lake County Canyons big-game hunting permit is required as well as a State hunting license for hunting in the Canyons. Other site specific regulations also apply: by Town Ordinance, no discharge of firearms and no hunting of any kind is allowed within the boundaries of the Town of Alta; and, U.S. Forest Service regulations prohibit the discharge of firearms within 150 yards of established campgrounds or picnic areas.
POSSIBLE NATIONAL RECREATION AREA DESIGNATION

Congressional enactment of legislation to include the plan area in a national recreation area must provide funds to mitigate effects of potential increased user levels, to improve existing Forest Service recreation and sanitation facilities, and to acquire lands for watershed protection and trailhead and public land access.

Legislation was introduced in the 100th Congress to designate portions of the Wasatch-Cache National Forest, including the Wasatch Canyons, as a National Recreation Area (NRA). While no action was taken on the bill in 1988, its sponsor, Congressman Wayne Owens, intends to reintroduce the bill in the 101st Congress and pursue its active consideration.

Federal policy regarding National Recreation Areas is flexible so that specific circumstances of an area so designated can be addressed. Designation as a NRA does, though, mean a greater emphasis on the recreational aspects of multiple use Forest Service management principles.

A NRA designation for the Wasatch Canyons could lead to substantial increases in visitors to the Canyons. In the past, over-use of the Canyons without adequate controls led to watershed deterioration. Certain areas within the Canyons currently show visible effects of sustained heavy use and there is a need to upgrade some visitor facilities for even the existing user population.

It may be possible to include the Canyons in a NRA, and make the Canyons a model area for high-recreation use while maintaining watershed protection, but such an objective would need to be explicitly stated in the creation of the NRA with specific measures outlined and funded.

LAND EXCHANGES

Land exchanges should be studied as a means of consolidating land ownership patterns and of improving land management opportunities. The proposed Salt Lake City and Forest Service land exchange in the Northern Wasatch Canyons is endorsed.

Land exchanges can be an effective means of adjusting land ownership configurations to consolidate lands and improve land management opportunities under the respective jurisdictions.
Public land ownership in the Northern Wasatch Canyons (City Creek, Red Butte, Emigration, and Parleys) is in a checkerboard configuration of mixed Forest Service and City lands. Although these two jurisdictions have enjoyed a cooperative relationship in the management of their respective lands, they have agreed that land management opportunities for both the Forest Service and the City would be improved if land ownership could be consolidated. Salt Lake City and the Forest Service are actively considering a land exchange proposal for this purpose.

**CANON USER EDUCATION**

**AFFECTED GOVERNMENTAL JURISDICTIONS SHOULD COOPERATE TO EDUCATE CANON USERS TO PRESERVE THE CANON ENVIRONMENT.**

Improved canyon user education programs could help preserve environmental quality. A coordinated program should be instituted to inform users about trail courtesy, pack-in/pack-out, respect for private property, fire safety and dangers, natural hazards including avalanche dangers, hunting regulations, pet, stream, wilderness, and off road vehicle restrictions and general protection of the natural environment.
CHAPTER 4. LAND USE POLICIES

Policies in this Chapter apply to land uses in the Plan area generally and are the official position of Salt Lake County on major Canyon issues.

SKI AREA EXPANSION

SALT LAKE COUNTY SKI RESORT BOUNDARIES SHOULD BE RETAINED WITHIN EXISTING U.S. FOREST SERVICE PERMIT AREAS AS APPROVED IN THE 1985 WASATCH-CACHE NATIONAL FOREST LAND AND RESOURCE MANAGEMENT PLAN WITH THE EXCEPTION LISTED BELOW. RESORTS MAY EXPAND CAPACITIES ON PRIVATE AND PUBLIC LANDS WITHIN THE PERMIT AREAS UP TO THE LEVEL PROVIDED FOR IN THE 1985 NATIONAL FOREST PLAN.

CONSISTENT WITH THIS POLICY, SKI AREA BOUNDARY EXPANSION BEYOND U.S. FOREST PERMIT AREA BOUNDARIES ON ADJACENT PRIVATE LAND WOULD NOT BE ALLOWED WITHOUT AMENDMENT TO THIS PLAN. SALT LAKE COUNTY MAY CONSIDER PROPOSALS FOR DEVELOPMENT INVOLVING EXPANSION ONTO PRIVATE LANDS OUTSIDE THE 1985 FOREST SERVICE PERMIT BOUNDARIES PROVIDED THE FOLLOWING CONDITIONS ARE MET:

1. ALL REASONABLE OPPORTUNITIES FOR EFFICIENT SKI AREA EXPANSION WITHIN THE EXISTING FOREST SERVICE PERMIT AREA HAVE BEEN UTILIZED.

2. STATE OF THE ART STUDIES SHOW THAT WATER QUALITY WILL NOT BE DEGRADED.

3. OTHER LAND USERS, AFFECTED LANDOWNERS AND THE WASATCH CANYONS COORDINATING COMMITTEE HAVE BEEN CONSULTED.

4. AN ENVIRONMENTAL ANALYSIS IS PREPARED INCLUDING BUT NOT LIMITED TO ANALYSIS OF TRANSPORTATION, VISUAL EFFECTS, SAFETY, SERVICE, RESOURCE, LAND USE CONSTRAINTS AND CUMULATIVE EFFECTS.

5. FULL PUBLIC INVOLVEMENT HAS BEEN ACHIEVED THROUGH THE CONDITIONAL USE PERMITTING PROCESS.

6. EXPANSION WILL OCCUR ONLY ON SUITABLE TERRAIN.

7. THIS MASTER PLAN IS AMENDED.

ADDITIONAL PARKING LOTS ARE NOT ALLOWED AT SKI AREAS ON PRIVATE LANDS UNLESS THEY CONTRIBUTE TO SOLVING TRANSPORTATION PROBLEMS AND IMPROVE THE PHYSICAL ENVIRONMENT.

Deep powder snow, the scenic beauty of the Wasatch Range, and easy access from a major airport and the Salt Lake Valley combine in the canyons to afford some of the finest and most convenient
downhill skiing opportunities in the United States. The canyon ski areas serve more people than any other canyon use and are important components of the local economy.

The ski resorts must be able to adapt to changes in market size and composition and to innovations in equipment and physical facilities in order to compete in the national market. The Forest management plan provides for reasonable increases in skier capacities within the present permit areas for the duration of this Plan.

Under the Forest Service Plan, ski resort expansion within existing resort permit boundaries could amount to up to an additional 4,100 Skiers At One Time (SAOT) in Little Cottonwood Canyon and 2,900 SAOT in Big Cottonwood Canyon for a potential total increase of 7,000 SAOT, or a 46 percent increase over current canyon ski resort total skiing capacities. The Forest Plan anticipates the development of approximately 10 new ski lifts at resort in Big Cottonwood Canyon and Little Cottonwood Canyon that would open up new downhill skiing terrain and expand access to existing terrain within ski area boundaries. The Forest Plan ski area permit boundaries encompass considerable terrain that is not presently utilized by ski areas.

Ski area expansion beyond U.S. Forest Service permit boundaries, except for minor technical adjustments (for administrative or environmental reasons), would be inconsistent with this plan, except for limited instances where lifts access private land. The Forest Service Plan boundary was not necessarily prepared with full consideration of an appropriate final boundary for ski resort expansion onto adjacent private land. Salt Lake County would consider expansion beyond the Forest Service boundary on private lands only under the conditions outlined on page 33. The applicant for potential expansion onto private land should consult the Wasatch Canyons Coordinating Committee (see p. 28 for a discussion of that Committee) early in the planning process to insure that all agency concerns are addressed in the environmental analysis. Proposals must have full public review. Final decisions will be the responsibility of the jurisdictions having regulatory authority.

Ski demand projections completed for this planning process showed a future average annual skier visit growth rate of 2 percent in the Cottonwood Canyons, slightly lower than the 3 percent growth rate identified in the 1985 Forest Service Plan. The Plan's additional research demonstrated no clear need to deviate from the Forest Service established policies on future ski area expansion in the Canyons. This research was based on historical use and trends. Ski industry marketing, snow conditions or other factors could affect the real rate of growth. Growth in skier use should
be monitored, and reviewed by the Wasatch Canyons Coordinating Committee (see p. 28 for a discussion of that Committee). By effecting ski area expansion within existing permit area boundaries, alpine skiing can meet substantial growth in demand in the coming years without affecting uses on other terrain. It is anticipated that if an amendment is proposed to the Forest Service Plan, that parallel amendments would be proposed to this Plan.

Under the 1985 Forest Service Plan, additional skier parking lots are not allowed on National Forest lands. The limitation on additional parking lots at ski areas is consistent with that policy and with the transportation goals of this Plan. Ski resorts are affected by transportation policies of this Plan (see Page 51).

**OLYMPICS**

**APPROVALS OF THE HOLDING OF OLYMPIC EVENTS WITHIN THE CANYONS SHOULD BE CONTINGENT UPON THE SPECIFIC EVENT, ITS IMMEDIATE AND LONG-TERM IMPACTS, THE PROVISION FOR SUCCESSFUL MITIGATION STRATEGIES, AND SPECIFIC CRITERIA.**

This Plan limits potential Canyon Olympics competitive events to nordic track in Parleys Canyon which could be conducted without long-term impacts on canyon resources. This is consistent with the present Olympics proposal.

Because of widespread public interest it is recommended that a referendum on the Olympics be conducted by the sponsoring entity.

**SALT LAKE COUNTY APPROVALS FOR CONDUCTING OLYMPIC EVENTS IN PARLEYS CANYON WILL BE CONTINGENT UPON THE FOLLOWING CRITERIA:**

1. **CONSTRUCTION OF PERMANENT FACILITIES MUST BE CONSISTENT WITH THIS PLAN** (including, but not limited to, lodging, snowsheds, road improvements, parking, restaurants, sanitation facilities, event apparatus, and other visitor and participant facilities that benefit long-term management of the canyon);

2. **REMOVAL AND MITIGATION OF EFFECTS OF TEMPORARY FACILITIES.**

3. **A VIABLE TRANSPORTATION SYSTEM** to accommodate Olympic use which is tied to and consistent with a Mountain Transportation System.

4. **A FAVORABLE ENVIRONMENTAL ASSESSMENT OR ENVIRONMENTAL IMPACT STATEMENT, INCLUDING ANALYSIS OF SUITABILITY OF ALTERNATIVE SITES, PREPARED WITH COUNTY PARTICIPATION; RESOLUTION OF IDENTIFIED ENVIRONMENTAL CONCERNS.**
5. ISSUANCE OF NECESSARY FOREST SERVICE PERMITS.

6. ISSUANCE OF NECESSARY SALT LAKE COUNTY CONDITIONAL USE PERMITS.

NORDIC TRACK

THE EXISTING BIG COTTONWOOD CANYON FACILITY AND THE EXPANDED PARLEYS CANYON TRACK ARE ANTICIPATED TO PROVIDE ADEQUATE NORDIC TRACK FACILITIES.

Nordic track skiing is growing in popularity, but the rate of growth in demand is uncertain. The existing Big Cottonwood Canyon track, coupled with the doubling of the Mountain Dell Track in Parleys Canyon, should satisfy demand through the plan period. If warranted by demand, further track development is possible depending upon site suitability and potential affects on other canyon uses.

Future improvements at the Big Cottonwood Track, cited in the 1985 Forest Service Plan, including lighting of the Silver Lake Flat Loop, winter use of the Evergreen Summer Home access road, and a potential new base facility on Silver Lake Flat are consistent with the Plan.

It is also considered important to maintain the traditional access to the Big Cottonwood Track from Brighton Village to afford use by patrons of both downhill ski areas in the Canyon and by people using the Brighton Loop/Silver Lake areas.

BACKCOUNTRY SKIING

NECESSARY PROGRAMS SHOULD BE IMPLEMENTED TO MAINTAIN THE EXISTING BACKCOUNTRY SKI AREAS INDICATED ON THE BACKCOUNTRY/TOURING SKI USE MAP AND TO PROVIDE CONTINUED OR IMPROVED ACCESS TO TRAILS AND TRAILHEADS. A FUTURE CORRIDOR FOR A MOUNTAIN TRANSPORTATION SYSTEM MAY AFFECT BACKCOUNTRY SKIING TERRAIN.

Backcountry skiing utilizes the same general areas as many other dispersed recreation activities addressed in the plan. The activity has only minor impacts on canyon terrain and provides a quality recreational experience for a growing number of people.

Refinements in equipment, technique, and skill have introduced this use to terrain which was previously inaccessible in the winter. Its popularity in the Canyons is in part attributable to Wasatch deep powder snow, the opportunity to have a serene, quiet experience with nature, and the test of stamina and skill involved in skiing up, and down, steep mountain slopes. During plan
hearings it was emphasized that a primary attraction of the canyons was being able to ski undisturbed, powder slopes; that intrusion of other uses or overuse, would substantially detract from the experience and diminish the rewards of trudging to the top of a high mountain slope. There are canyon terrain limits to this kind of experience and some enthusiasts may have to seek alternative opportunities outside of the Wasatch Canyons.

The popularity of backcountry skiing and improved equipment, coupled with competition from helicopter skiing, have led to increasing conflicts in the Tri-Canyon area. It is recommended to the U.S. Forest Service that the issue of backcountry skiing safety and quality of experience be monitored to preserve this use in the Wasatch.

This plan supports consideration and evaluation of a mountain transportation system to link Salt Lake Valley, ski resorts in Big and Little Cottonwood Canyons, Park City and the Heber Valley. If such a system were developed, it may be necessary to provide a transportation corridor through existing backcountry ski terrain. Such a corridor could be consistent with this Plan, as long as the criteria listed for such a system (page 52) are met.

Backcountry skiing occurs on suitable terrain, whether private or public ownership exists. In some cases backcountry skiers trespass on private lands; the issue of trespass by backcountry skiers and other dispersed recreation users may ultimately have to be resolved through acquisition of rights to use private ground.

Additional benefits of this backcountry skiing policy are that these same areas will largely be preserved in their natural state for summer hiking and their scenic beauty.

HELIICOPTER SKIING

HELIICOPTER SKIING AS CURRENTLY OPERATED UNDER U.S. FOREST SERVICE PERMIT SHOULD BE CONTINUED AS A DISPERSED RECREATION USE.

Helicopter skiing provides quick access to backcountry ski terrain. When properly managed conflicts with other users can be reduced and long-term environmental impacts can be minimized.

Permit holders should continue to be sensitive to other backcountry users and should consider establishing an information center where other users could learn which part of the permit area is going to be used on a specific day and could choose to avoid that area and perceived user conflicts.

Through their rescue capabilities, helicopter skiing permit holders provide a vital life-safety service.
Salt Lake County recommends that the Forest Service further assess avalanche hazards in steep terrain and monitor helicopter and backcountry high use ski areas for conflict. Avalanche hazard awareness training and education should continue to increase.

Existing Forest Service management policy for helicopter skiing within the Plan area includes continuing the one current special use permit; restricting helicopter skiing to the runs identified in that permit; excluding helicopter skiing from certain high use areas (north side of Big Cottonwood to the Mill Creek divide from Butler Fork east to Mill F Canyon, Catherine's Pass, and Twin Lakes Area); identifying use areas and landing points on maps for public use so other users can avoid potential conflicts; and monitoring use in popular areas for possible health or safety conflicts.

SINGLE-FAMILY RESIDENTIAL DEVELOPMENT

SALT LAKE COUNTY WILL LIMIT NEW RESIDENTIAL LOTS, SUBDIVISIONS, AND PERMITS TO THE MOST SUITABLE SITES, SUBJECT TO COMPLIANCE WITH ESTABLISHED SUITABILITY STANDARDS.

PLANNED UNIT DEVELOPMENT (PUD'S) ARE ENCOURAGED FOR ANY SUBDIVISION OVER ONE ACRE.

EXISTING LARGE-LOT ZONING WILL BE RETAINED AND CONSOLIDATION OF SUBSTANDARD (SMALL) LOTS INTO LARGER PARCELS WILL BE ENCOURAGED TO CREATE MORE VIABLE BUILDING SITES.

COUNTY ORDINANCES WILL BE IMPLEMENTED TO ACQUIRE EASEMENTS OR ACCESS TO TRAILHEADS/PUBLIC LANDS FOR NEW SUBDIVISIONS AND AS A CONDITION TO LAND-USE APPROVALS AS WARRANTED.

Year-round residences and seasonal cabins have been located in the Canyons since the early days of Salt Lake Valley settlement and are appropriate canyon uses today. Only City Creek and Red Butte Canyons have no residential use.

It is important to be sensitive to the rights of private landowners in the canyons. The Plan policies seek to balance protection of landowners' rights with protection of the scenic beauty, general public use of the canyons, and watershed protection needs. Previously approved lots and subdivisions within the canyons will largely be unaffected by this Plan. (For a summary of Salt Lake County's development regulations in the Canyons, see page 100, and Appendix 8,9,10 and 11.)
Twenty percent of the land within the Canyons is privately owned. Residential development on private lands may proceed if it is on a lot of record, complies with zoning requirements and standards, verifies its water supply, and has acceptable wastewater treatment.

Existing regulations guide location, nature, and density of residential development on private property. County zoning applicable to all the Canyons addresses mitigation of natural hazards, Board of Health approval (including drinking water, water storage for fire protection, and adequate wastewater systems), use of appropriate building materials, grading and revegetation to eliminate erosion, parking, and placement of utilities. Zoning also specifies minimum lot sizes from 0.5 to 20 acres and prohibits development of new lots on slopes exceeding 30 percent.

For National Forest lands, the 1985 Wasatch-Cache National Forest Plan policy is to retain existing recreation residence special-use permit areas, but to issue no new additional permits.

There are about 1,100 single family dwelling units in the Canyons with over 850 of them in Emigration and Big Cottonwood Canyons. There are nearly 2,000 unoccupied, previously recorded residential lots, 1200 in Emigration Canyon, 680 in Big Cottonwood, and the remainder in Parleys and Little Cottonwood. All of these lots of record may not qualify for a building permit because of an inadequate water supply or for other reasons.

Salt Lake City, the holder of most Canyon water rights, has outstanding contracts for water connections to 267 lots not including Emigration Canyon. Its 1981 moratorium halted additional surplus water sales. The Salt Lake City Department of Public Utilities has notified the County that a lifting of the City's moratorium would be accompanied by the following policies:

1. Available water within the canyons is a constraining factor in development in the canyons. Surplus sales will be limited to springs which meet acceptable standards in regard to protection zones, water quality and quantity.

2. Drilling of wells, construction of surface water treatment facilities, importation of water from outside the canyons and the transfer of water rights from the valley up stream into the canyons will be opposed.

3. Existing surplus sales contracts will only be honored from the source identified in the contracts. These cannot be transferred or another source used.
Salt Lake County has approved (either finally or preliminarily) Emigration Oaks, Criterion Solar, and Perkins Hollow developments for a total of 217 residential lots in Emigration Canyon. Salt Lake County receives an average of twenty applications a year for canyon single family residential development.

By directing new development toward larger lots, negotiating public access through new subdivisions, encouraging consolidation of existing small lots, and seeking planned unit development, the visual intrusions of new development will be reduced. By acquiring trailhead access where needed as a condition for new land-use approvals, rights-of-way can be established to reduce user/landowner conflicts. Acquisitions of specific parcels prior to possible development will reduce the potential for future conflicts among developed use, public recreation, and environmental protection and may reduce public trespass on private property.

Limiting new lots and subdivisions to the most suitable sites would direct development toward areas which meet residential suitability criteria including analysis of such factors as water availability, utility service, road access, natural hazards, zoning, environmental and critical wildlife habitat protection, and other uses.

LOCATION AND DEVELOPMENT OF COMMERCIAL ENTERPRISES

FOR BIG AND LITTLE COTTONWOOD CANYONS, FUTURE DEVELOPMENT OF ALL COMMERCIAL ENTERPRISES, LODGING, AND CONDOMINIUMS SHOULD BE CONSOLIDATED AT EXISTING COMMERCIAL AREAS HAVING SUITABLE TERRAIN IN THE IMMEDIATE VICINITY OF THE SKI RESORTS TO PRESERVE THE NATURAL APPEARANCE AND AVOID THE PROLIFERATION OF COMMERCIAL AREAS IN THE CANYONS. FOR OTHER CANYONS, COMMERCIAL DEVELOPMENT WILL BE LIMITED TO EXISTING COMMERCIAL ZONED AREAS.

At ski resort areas in Big and Little Cottonwood Canyons, including Brighton Village and Alta, there are numerous ski-related business activities including lodging, shops, restaurants, multi-family residential units, and other retail/service businesses. The Town of Alta manages commercial development within its own jurisdiction. Outside of the ski resort areas, there are only a few commercial enterprises within the Canyons.

Salt Lake County zoning and other management restrictions limit areas within the Canyons where commercial enterprises may be located. The FM zone permits high density residential, limited commercial and other uses on private lands. Commercial visitor (CV) also exists in some canyons. These zoning classifications require environmental protection measures addressing natural hazards, Board of Health approval, building materials, grading, natural vegetation, parking requirements, and utilities.
The 1985 Forest Service Plan does not allow the location of any new commercial overnight lodging facilities on National Forest Lands, but from prior approvals would allow third floor expansion of the Mt. Majestic Lodge at Brighton since it was part of the original Forest Service-approved design.

A major objective of this Plan is to preserve the natural beauty of the Canyons. The addition of new, free standing stores, gas stations, restaurants or multi-family housing outside of the existing resort areas would not be appropriate to the canyon setting and would offer services already available only a short distance from any portion of the canyons.

Due to limited suitable terrain, other canyon uses, traffic considerations and the proximity to commercial services in the Valley, future non-ski resort commercial enterprises should be located outside of the canyons in the Salt Lake Valley.

Several existing commercial establishments are fixtures in the canyons which the public accepts and enjoys and which are intended to remain. Existing commercial structures should comply with new standards when permits are issued for building changes. Outside of the Cottonwood Canyons, there are existing commercially zoned areas in Emigration and Mill Creek Canyons. New commercial enterprises would be limited to existing commercial zones in those Canyons.

For ski-related commercial development, other than proposed modifications to existing downhill ski facilities, the only commercial development currently in the approval process is for 280 condominium units at Solitude contingent upon construction of a sewer line in Big Cottonwood Canyon. An additional parking terrace was previously approved for Snowbird.

Any proposals for additional Canyon lodging are subject to existing building and zoning requirements, suitability reviews, water availability, aesthetic guidelines, and sewer connections.

**Camping and Picnicking**

Camping and Picnicking facility shortages will become more severe as demand increases in the Canyons. Existing Canyon sites should be rehabilitated, connected to sewer service when and where feasible, and be subject to user fees and group reservations. Additional facilities should be constructed on the limited suitable terrain which is available. Sites should be developed out of the plan area to accommodate demand.
In 1987, Forest Service Canyon campgrounds and picnic areas supported 307,000 visitor days. There was also heavy visitor use of canyon facilities operated by Salt Lake City. Demand projections for camping and picnicking facilities indicate an average annual 1.5 percent growth over the next 20 years. Given current levels of use, facility shortages, and limited suitable terrain for additional facilities, the canyons cannot accommodate the projected demand for this use. Even today, many camp and picnic sites show deterioration from overuse.

The most suitable camping and picnicking terrain is largely already used for this purpose. Suitability analysis conducted as part of this Plan, reveals that particularly in the tri-canyon area, there is a critical lack of suitable picnicking and camping terrain. Suitable sites are available in Emigration and Parleys Canyons, and Salt Lake City intends to make minor additions to its facilities in Parleys Canyon. These additional sites and possibly increased capacity at some Forest Service camp and picnic sites in Big Cottonwood and Little Cottonwood Canyons will be helpful, but will not go far in relieving pressure on popular existing sites in Mill Creek, Big Cottonwood, and Little Cottonwood Canyons.

Instead of relying on expansion of canyon facilities to meet demand, Salt Lake County Parks and Recreation Department should develop alternative camping and picnicking sites outside the Canyons. A public information program to acquaint the user public with these new sites can help to shift demand to them.

This shortage means existing sites will need to be managed better and there will be more competition among users. Implementation of user fees and of reservations for groups beyond existing requirements should be phased in based on the levels of site use, need to control overcrowding, and administrative efficiencies.

Current heavy use has contributed to deterioration of some sites. Existing sites should be rehabilitated, including the hardening (paving) of camp and picnic surfaces so they may better withstand the use pressure they now experience. Where feasible, stream access should be controlled to reduce contamination, parking should be improved, and sanitation facilities should be connected to existing or future sewers. As facilities are updated or replaced, site and facility design should be barrier free to accommodate the handicapped.
HIKING AND BACKPACKING

QUALITY HIKING OPPORTUNITIES SHOULD BE PRESERVED BY MONITORING AND MAINTAINING THE EXISTING TRAIL SYSTEM, ASSURING ACCESS TO TRAILS, PROVIDING BETTER USER INFORMATION ON TRAILS AND TRAIL COURTESY, AND CONSTRUCTING SPECIFIED NEW TRAILS.

Hiking is a popular, dispersed, and in most cases, non-intensive use of the canyons which affords recreational opportunities for a broad range of the public.

Three new trails are recommended for construction: a trail in Little Cottonwood Canyon from Alta to Tanners Flat; a trail in Big Cottonwood Canyon from Brighton to the Spruces; and a special trail for people with physical disabilities. The two Cottonwood trails, for year-round use, should be designed and have public use rights-of-way to provide for hiking, cross country skiing, and accommodating snowcats to evacuate the upper canyons in the event of winter highway closure or avalanche hazard.

The trail for people with disabilities would afford them a new Canyon recreational opportunity. It should be planned in consultation with handicapped groups, the Forest Service, and with reviews of similar facilities elsewhere. An appropriate location may be at Silver Lake in Big Cottonwood Canyon.

Access to trailheads has become a priority concern as developments near the canyons and within the canyons have in some cases jeopardized access. Purchase of easements, selective acquisition of private property, and provision for trail access as a condition of land-use approvals should be pursued where appropriate to protect access to trailheads or to provide trailhead parking.

Some trails have or may experience overuse and may require more intensive maintenance and/or temporary closure or restrictions on use on a case-by-case basis.

Improved user education programs could help preserve a quality hiking experience and reduce conflicts. A program to inform canyon users about trail courtesy, pack-in/pack-out, respect for private property, fire safety and dangers, pet, stream, and wilderness restrictions, and general protection of the natural environment will become increasingly important as trail use increases. Trails should be marked where they enter and leave private lands and where they enter a wilderness.
OFF-HIGHWAY VEHICLE USE

The Wasatch Canyons Coordinating Committee should conduct a review of off-highway vehicle uses and management practices in the use areas; identify immediate and long-term problems associated with such use; and recommend future management and/or closure of off-highway vehicle areas on a case-by-case basis.

For the immediate future, more intensive management of off-highway vehicle use areas and more stringent enforcement in prohibiting off-highway use in non-designated areas is essential.

Lands outside of the canyons should be identified for these recreational pursuits and a public information program conducted to acquaint the public with them.

Guardsman Pass and Cardiff Fork roads have been available for Off-Highway Vehicle (OHV) use. Mineral Fork has been available for trail bike use. These uses and activities within the canyons are appropriate, but only if they are adequately managed and if the user public observes existing restrictions and regulations for such use. Off-road use (leaving established paved or dirt roads) is prohibited anywhere in the canyons.

There are some areas where users have left roadways and where degradation has occurred. Further efforts must be made to erect barriers and signs where people are tempted to drive off roads or parking areas, and to have more vigorous enforcement of OHV restrictions by the appropriate authorities.

Preparation of the U.S. Forest Service Travel Plan may provide opportunities for Coordinating Committee review and County policy recommendations.

MOUNTAIN BIKING

A limited number of trails or routes should be designated for off-road mountain bike use. With the exception of these trails, bikes should be restricted to road use within the canyons.

Mountain Biking has enjoyed a rapid increase in popularity in the canyons and should be provided for when not in conflict with other users or with other goals of this Plan.

Mountain biking usually occurs on paved and unpaved roads, but there is some trail use, usually on gentler-sloped trails. In some cases trail degradation may be accelerated with mountain bike use and there are conflicts with foot traffic on trails. On the other hand, some trails are too steep or rough for most mountain bike access. By designating some trails for mountain bike use, hikers would be aware that the trail is also used by mountain bikes,
mountain bikers should be directed to the most suitable trails for that use, and trail maintenance could be intensified if necessary. Mountain bike use is not allowed in the wilderness areas.

Anticipated amendment to the Forest Service Travel Plan may further address canyon mountain biking issues.

**ROCK CLIMBING**

**ACCESS AND PARKING FOR ROCK CLIMBING SHOULD BE PROVIDED.**

Currently, rock climbers park where they can, often risking citation and jeopardizing public safety, and then find restricted access to some of the most popular, challenging rock climbing areas near the mouth of the Canyons. Rock climbing is an appropriate canyon activity which will occur whether or not it is provided for and efforts should be made to accommodate these users and to provide public access to popular rock climbing areas. As discussed for dispersed parking, heavy-use areas should have sanitation and trash collection facilities provided.

**GRAZING OF DOMESTIC LIVESTOCK**

**EXISTING FOREST SERVICE GRAZING PERMITS SHOULD BE ALLOWED TO CONTINUE THROUGH THEIR TERMS. IT IS RECOMMENDED TO THE FOREST SERVICE THAT EXISTING GRAZING BE PHASED OUT OVER TIME AS PERMITS EXPIRE, PARTICULARLY IN CANYONS USED FOR WATER SUPPLY, TO ELIMINATE CONFLICTS WITH RECREATIONAL USERS AND TO FURTHER PROTECT THE WATERSHED.**

Grazing has been a historical use in the canyons since pioneer days. However, with ever-increasing recreational use and water quality concerns, grazing of domestic livestock is not an appropriate long-term future use of the Canyons.

The U.S. Forest Service continues to allow limited grazing operations in the canyons for existing permits, but does not issue new permits. A Forest Service grazing permit is issued for a term of ten years and is renewable unless there is some substantial reason to deny its continuance.

**MINING RIGHTS**

**RIGHTS TO MINERALS UNDER MINING CLAIMS OR THROUGH OWNERSHIP OF PRIVATE PROPERTY SHOULD BE RESPECTED. CONDITIONS TO MINING USE APPROVALS SHOULD FOLLOW THE SAME STANDARDS FOR WATERSHED PROTECTION, ACCESS TO PUBLIC LANDS, AND ENVIRONMENTAL CONTROLS AS REQUIRED OF OTHER PRIVATE PROPERTY INTERESTS.**

The canyons, particularly Big and Little Cottonwood Canyons, served as major mining districts for gold and silver in the latter
part of the nineteenth and early twentieth centuries. A colorful part of the history of the Wasatch Mountains and the State of Utah is reflected in this rich mining area. Today, there are no mining activities in the canyons, but much of the private lands are mining claims that were patented, and thereby became private property. The potential exists for mining operations to resume on unpatented mining claims and on private land in the future.

Salt Lake County requires a conditional use permit for mineral extraction and processing within FR zones of the canyons. The permit stipulates requirements for mine activity before, during, and after the mining operation. Miners on unpatented mining claims in the canyons are subject to regulation by the U.S. Forest Service and state and local governments for surface protection. Miners on private lands are subject to state and local government regulation.

Because mining is not actively pursued at this time in the canyons, it does not conflict with other uses. However, Salt Lake County will evaluate any proposals to re-open mining operations in the Canyons assuring protection of the watersheds, and considering implications for transportation, public safety, and the full realm of local governmental concerns.

Continued reclamation of abandoned mine sites, including tailings and the closure of abandoned mine shafts, is supported for purposes of aesthetics, stabilization of tailings, water quality, and public safety.

HORSEBACK RIDING

PRIOR TO ANY FUTURE POLICY DECISIONS WHICH MAY AFFECT EQUESTRIAN USE IN THE CANYONS, USERS SHOULD BE PROVIDED A FORUM FOR EXPLORING WITH POLICYMAKERS OPTIONS REGARDING SUCH USE.

Horseback riding is a long-established and traditional use in the canyons, predating many other recreational pursuits of the 20th Century. Today, use of horses is only permitted in Emigration and Mill Creek Canyons. Water quality concerns primarily have led to the prohibition of horses in the other plan area canyons. Relatively few open, unfenced, trail areas remain in the immediate vicinity of the Salt Lake Valley for horseback riding.

As preparations are made for culinary utilization of Mill Creek water, domestic animal policies for that canyon will be reviewed by Salt Lake City and the City/County Board of Health. It is recommended that these entities provide an opportunity for horseback riding enthusiasts to participate in policy decisions on future use in Mill Creek Canyon and in suggesting alternative management policies.
CHAPTER 5.
HIGHWAYS AND TRANSPORTATION

Policies in this Chapter affect immediate and long-term Canyon transportation and traffic issues.

HIGHWAYS

HIGHWAY IMPROVEMENTS SHOULD BE WITHIN EXISTING RIGHTS-OF-WAY, BLEND WITH THE NATURAL ENVIRONMENT, MAXIMIZE PUBLIC SAFETY, COMPLY WITH BEST MANAGEMENT PRACTICES FOR WATER QUALITY PROTECTION, AND BE CONSISTENT WITH THIS PLAN.

SMALL PARKING AREAS SHOULD BE DEVELOPED FOR DISPERSED RECREATION USE.

SANITATION AND TRASH FACILITIES SHOULD BE PROVIDED AT HEAVY USE AREAS ALONG HIGHWAYS INCLUDING SANITATION FACILITIES AT SKI AREA PARKING LOTS.

JOGGING AND BIKING LAKES SHOULD BE ADDED WHERE FEASIBLE AND SAFE AS A MATTER OF PUBLIC SAFETY IN CONJUNCTION WITH ROAD MAINTENANCE, IMPROVEMENT AND RECONSTRUCTION. ADDITIONAL CANYON OPPORTUNITIES FOR THESE RECREATIONAL PURSUITS SHOULD BE EXPLORED, BUT INCREASED USE SHOULD NOT BE ENCOURAGED IN AREAS WHERE IT IS NOT FEASIBLE TO ADDRESS TRAFFIC/USER SAFETY CONCERNS.

PULL-OFFS SHOULD BE PROVIDED FOR BUS STOPS.

Canyon highway improvements should be for general maintenance and public safety considerations, not for increasing traffic volume capacities. Improvements should be within existing rights-of-way. Any widening of thoroughfares should be limited to site-specific circumstances or for providing widened shoulder areas for maintenance, snowplowing, or emergency use.

Dispersed recreation users often use highway shoulders for parking, both in summer and winter seasons. To improve user and public safety as well as to accommodate snowplowing in winter, it would be preferable to provide small, unobtrusive parking areas for dispersed recreation users. Construction of such lots should be based on dispersed recreation use by area, terrain suitability, and Canyon-by-Canyon vehicle capacities.

Areas should be constructed in the Cottonwood Canyons to provide safe waiting/loading/unloading areas for non-resort bus stops for winter dispersed recreation use. They should be designed to afford snowplowing and with the potential for possible future summer bus service.
Construction of parking areas, bus stops, and sanitation and trash facilities should be done in a manner which minimizes their visual intrusion and blends with the natural environment.

Heavy-use areas along highways, i.e., trailheads and parking areas, should have sanitation and trash facilities provided. Sanitation services and trash facilities should be provided by cooperation among appropriate jurisdictions. Provision of these services should be an agenda item for the Wasatch Canyons Coordinating Committee.

As feasible and where they can be safely accommodated, jogging and biking lanes should be added to canyon highways. Joggers and bikers often must contend with heavy weekend and rush-hour traffic which jeopardizes their safety, and the safety of others on the road. Failure to implement this measure is an invitation to increased public safety problems on the canyon roads. Where no additional lane is available for joggers/bicyclists, increases in this use should not be encouraged.

While not foreclosing the paving of Guardsman's Pass for summer recreational use, there are significant considerations which warrant further study. Much of the existing road is on private land, is on a steep grade, and is narrow. Over the top of the Pass (in Summit and Wasatch Counties), substantial reworking of the road would be required before paving.

Use of the Guardsman's Pass road on an all-weather basis would present additional problems. Its winter use may contribute to existing winter traffic and parking problems in Big Cottonwood Canyon, avalanche hazards would be significant, snowplowing would be difficult, and travel could be dangerous. Winter use could also conflict with area backcountry ski and snowmobile use.

By itself, Guardsman's Pass Road would not be a viable Mountain Transportation System. However, the Wasatch Canyons Coordinating Committee should further study options for Guardsman's Pass paving and summer use and for possible use by snowcats during the ski season to connect Big Cottonwood Canyon with Park City and Wasatch County. Consideration of these options should be in conjunction with a Canyon transportation plan and a comprehensive Mountain Transportation System.
HIGHWAY TRANSPORTATION

THE HIGHWAY TRANSPORTATION GOAL OF THE PLAN IS TO REDUCE PRIVATE VEHICULAR TRAFFIC IN THE COTTONWOOD CANYONS DURING PEAK PERIODS.

TO ACHIEVE THIS GOAL, MEASURES SHOULD BE IMPLEMENTED TO DISCOURAGE PRIVATE AUTOMOBILE USE AND TO ENCOURAGE USE OF MASS TRANSIT IN THE SHORT TERM. FOR THE LONGER TERM, A MOUNTAIN TRANSPORTATION SYSTEM SHOULD BE DESIGNED AND PURSUED.

SUCCESS OF THESE MEASURES DEPENDS UPON PUBLIC/PRIVATE SECTOR COOPERATION, INTERGOVERNMENTAL COORDINATION, AND PUBLIC ACCEPTANCE.

ESTABLISHMENT OF PARK-AND-RIDE FACILITIES TO SERVE BIG AND LITTLE COTTONWOOD CANYONS SHOULD OCCUR IMMEDIATELY.

As documented in the report Salt Lake County Canyons Master Plan Analysis of Transportation Facilities for the Cottonwood Canyons, both Big and Little Cottonwood Canyons are currently at, or have already exceeded, their highway and parking design capacities during peak winter weekends and holidays. Highway carrying capacity exceedance inconveniences users and increases their exposure to public safety risks from winter road conditions and potential avalanches. The transportation problem persists in these canyons despite the provision of mass transit and cooperation by the ski resorts to reduce auto use.

Additional measures are necessary to reduce private automobile traffic in the Cottonwood Canyons during the peak 10-to-12 winter weekends when congestion is most severe. The majority of peak winter car traffic is associated with the ski resorts. Some of the most effective vehicle reduction opportunities would rely upon resort cooperation and action.

Resorts and affected governments should cooperate in implementation of strategies to elicit a voluntary public response in reducing winter private car use, particularly during peak traffic periods. Options are suggested for affected governments and the resorts to discourage private car use and to encourage mass transit use.

Among options governmental jurisdictions should consider to reduce car use are more aggressive enforcement of parking regulations along highways and seasonal parking fees or parking permits for public parking areas within the canyons.
Affected jurisdictions should also pursue measures to enhance mass transit use. Park-and-ride/kiss-and-ride facilities to serve canyon mass transit are clearly needed immediately. This may mean a number of small lots or a centralized, efficient location. The location and sizes of the lot(s) should be based on transit efficiencies and community acceptance. Salt Lake County should aggressively pursue a solution to this need. Establishment of multiple bus stops within the canyons and a shuttle service geared to dispersed recreation would help alleviate congestion from that use.

In addition to governmental actions, each ski resort should develop, annually update and monitor a plan for the reduction of private automobiles specifically at that resort. Some resort options for mass transit incentives could have coincidental canyonwide benefits.

Approval of any additional skiers at one time (SAOT) at a resort would require a resort evaluation and mitigation plan for projected traffic affects on the existing or future transportation system resulting from the ski use expansion.

Among options available to the resorts for automobile use disincentives are preferred parking, lift ticket discounts and free or discounted parking for car-poolers and high-occupancy vehicles; parking permits or fees for private automobiles; parking restrictions during peak traffic/use periods; and less convenient parking for low-occupancy vehicles.

Options to provide incentives for mass transit use in conjunction with the resorts include improved mass transit loading and unloading facilities and convenience at resorts (a terminal could include heated waiting area, rest rooms, lockers, and food service); provision of park-and-ride areas in the valley; resort owned mass transit or additional resort subsidies to public mass transit; ticket and other discounts to mass transit users; season mass transit ticket packages; employee mass transit packages; and use of resort mini-buses for destination guest transport. It may be desirable to offer a combined ticket for ski lifts and bus transport at centralized valley locations.

For the longer term and future valley and mountain transportation systems, consolidation of parking facilities, terminals, and multiple, linkable systems should be considered. If a valley light rail system is realized, commuter parking lots associated with it could be utilized on weekends and holidays for canyon mass transit.
Mass transit systems within the canyons may need to be further publicly subsidized to reduce prices as a further user incentive. In addition, the implementation of these measures will require additional special mass transit busses which are equipped to safely service the canyons.

A more vigorous public information program by both the resorts and all affected agencies including Salt Lake County, Utah Department of Transportation, and the Utah Transit Authority could increase mass transit use.

A Canyons Transportation Committee including Salt Lake County, the Utah Transit Authority, the U.S. Forest Service, the Town of Alta, Salt Lake City, and Utah Department of Transportation should meet annually and cooperate in reviewing and coordinating the monitoring of traffic and parking, planning and implementation of short-term transportation measures, and consideration of a long-term mountain transportation system under this Plan. An annual review should be conducted with the resorts as to the effectiveness of measures implemented by them, possible additional options, and any additional measures which would be required for approval of area modifications increasing ski area capacities. Activities of the Canyons Transportation Committee will be noticed and open to the public.

Should the above options not be effectively implemented or fail to decrease winter traffic volumes, additional measures should be considered by Salt Lake County, in cooperation with other jurisdictions, including such options as canyon-wide auto permitting, tolls at the mouths of the canyons, mandatory resort guidelines for parking and/or mass transit use, and possible eventual winter conversion of the Cottonwood highways to sole mass transit use with canyon property owner permitted use.

Salt Lake County and the affected jurisdictions should establish a transportation safety evaluation and improvement program. Among areas for investigation and/or implementation are: establish and enforce minimum safety, braking, and performance regulations for Canyon busses; restrict service and truck traffic during peak periods; establish and enforce maximum automobile traffic levels; and avalanche control and safety measures.

Avalanche control and mitigation measures are critical for protecting the public in the Cottonwood Canyons. A comprehensive analysis of avalanche control, potential avalanche mitigation measures, funding sources, and opportunities for cooperation in protecting public safety from avalanche danger should be undertaken and policies should be implemented based on the findings.
In addition to these Cottonwood Canyon measures, future transportation options to reduce traffic congestion in Mill Creek Canyon should be considered for summer peak use periods. One long-term option is to close the canyon to car traffic during peak-use weekends, establish a park-and-ride facility at the mouth of the Canyon, and provide low-cost bus service.

MOUNTAIN TRANSPORTATION SYSTEM/SKI INTERCONNECT

FURTHER CONSIDERATION AND EVALUATION OF SKI INTERCONNECT EXPANSION BY SALT LAKE COUNTY WILL BE AS A MOUNTAIN TRANSPORTATION SYSTEM SERVING SALT LAKE COUNTY INCLUDING DOWNTOWN SALT LAKE CITY AND THE INTERNATIONAL AIRPORT, WASATCH, AND SUMMIT COUNTIES AND THE COTTONWOOD CANYONS AND PARK CITY SKI RESORTS. CONSIDERATION OF A SYSTEM SHOULD BE VIGOROUSLY PURSUED AND INCLUDE PARTICIPATION BY AFFECTED GOVERNMENTAL AND NON-GOVERNMENTAL ENTITIES, ADDRESSING TRANSPORTATION PROBLEMS IN THE COTTONWOOD CANYONS, AVOIDING SKI TERRAIN EXPANSION WITHIN THE PLAN AREA, ADDRESSING OTHER EXISTING TERRAIN USES, AND ASSESSING ENVIRONMENTAL IMPACTS AND THEIR MITIGATION. NO SPECIFIC TRANSPORTATION MODE IS RECOMMENDED AT THIS STAGE. (SEE THE GLOSSARY IN APPENDIX 6 FOR AN EXPLANATION OF TERMS.)

SKI INTERCONNECT IN ITS PRESENT FORM SHOULD BE MAINTAINED, IMPROVED AND FULLY MARKETED AS GUIDED SKI TOURS AMONG THE CANYON SKI RESORTS AND PARK CITY.

PROPOSALS TO EXPAND INTERCONNECT BEYOND GUIDED GROUND TOURS SHOULD BE CONSIDERED WITHIN THE CONTEXT OF THE BROADER TRANSPORTATION AND SKI RESORT EXPANSION POLICIES OF THE PLAN.

THE PROPOSED INTERCONNECT CHAIRLIFT/SKI TERRAIN SYSTEM CONNECTING THE CANYON RESORTS AND PARK CITY BY ITSELF DOES NOT MEET THE GOALS OF THE PLAN.

IMPLEMENTATION OF A MOUNTAIN TRANSPORTATION SYSTEM WILL REQUIRE AMENDMENT TO THIS PLAN.

AMONG CRITERIA FOR FURTHER CONSIDERATION OF MOUNTAIN TRANSPORTATION SYSTEM OPTIONS ARE THE FOLLOWING:

1. FOUR-SEASON USE
2. VISUAL AND NOISE IMPACTS
3. MINIMUM (OR NO) IMPACTS TO OTHER EXISTING USES
4. ABILITY TO PERFORM UNDER ADVERSE WEATHER CONDITIONS
5. PROVEN PERFORMANCE RECORD OF TECHNOLOGY AND PUBLIC SAFETY OR COMPLIANCE WITH ESTABLISHED PUBLIC SAFETY CODES OR REGULATIONS

6. WATERSHED IMPACTS - construction and operational phases

7. WILDLIFE IMPACTS

8. EFFECTS ON TOURISM

9. MULTI-JURISDICTIONAL INVOLVEMENT IN PLANNING AND DECISION-MAKING PROCESSES

10. LIFE-CYCLE COSTS (full costs of construction, operation and maintenance for the life of the transportation mode)

11. PUBLIC AND PRIVATE FINANCING OPPORTUNITIES

12. MITIGATION OPPORTUNITIES FOR IMPACTED TERRAIN OR OTHER USES

13. LONG-TERM RAMIFICATIONS FROM POTENTIAL ASSOCIATED DEVELOPMENT -- ski terrain, resort development, commercial enterprises


15. COMPATIBILITY WITH CANYON AND AFFECTED AREA-WIDE TRANSPORTATION SYSTEMS

Authority to make decisions on a potential mountain transportation system is shared by multiple governmental entities and current analysis is fragmented among them. Cooperation is necessary among the U.S. Forest Service, the affected counties and local governments, other governmental entities and the ski resorts to coordinate analysis and share information relative to independent but cohesive decisions leading to planning, design, construction, and operation of a Mountain Transportation System.

No particular transportation mode (tram, roads, cog rail, "super tunnel", cable systems, etc.) should be the focus of consideration until the full range of alternatives are comprehensively analyzed for environmental impacts, watershed implications, engineering feasibility, costs and benefits, socio-economic impacts, and public and private financing options. Modes of transportation for a Mountain Transportation System should be
fully addressed before any option is approved by Salt Lake County or other governmental entities with approval authority.

A Mountain Transportation System would not, by itself, offer the most attractive ski terrain additions for ski resorts, and has as its highest potential an opportunity to efficiently move people between Cottonwood Canyon ski resorts, the Salt Lake Valley, and other ski areas (with potential for Heber Valley).

A Mountain Transportation System must be compatible with this Plan, particularly by recognizing use areas and levels, and by proposing transportation modes that support and perpetuate them. A System could be constructed and operated in phases, but would be subject to amendment of this Plan to recognize the provisions of a Mountain Transportation System.

The present guided tour interconnect affords skiers the opportunity to ski cross country between resorts and ski at more than one resort area in a single day. The program adds another dimension to the Wasatch ski experience.

Proposals have been considered to expand ski interconnect by building conventional chairlifts and opening new ski terrain among the canyon resorts and Park City. This concept, addressed in the Governor's Task Force on Interconnect, identified specific corridors, and by itself would be inconsistent with the policies of the Plan. If new ski terrain were incorporated with the proposed chairlift interconnect, as would be likely, it would conflict with the Plan's policies regarding downhill ski area expansion and protection of existing backcountry ski areas. Alta's Town Council has established a policy opposing any ski lifts in Grizzly Gulch due to public safety concerns. The proposal may have adverse implications for the Salt Lake Valley in terms of infrastructure capacities and economic benefits. A chairlift system could contribute to transportation problems in Big and Little Cottonwood Canyons. The attractiveness of riding in an open chair from Jupiter Bowl to Snowbird is questionable and not satisfactory for four-season use. Finally, a chairlift "interconnect" would not satisfy criteria outlined in this Plan for a Mountain Transportation System.

The chairlift interconnect system concept by itself should only be further considered as a component of an overall transportation system that links the Salt Lake Valley with the ski resorts of Big and Little Cottonwood Canyons, Park City, and possibly the Heber Valley. For the long-term benefit of the Wasatch Mountain region, a mountain transportation system should be comprehensively evaluated before portions of a system are put in place that could be inconsistent with a wise use of our finite Canyon resources.
It would be premature to endorse any one inter-canyon/resort transportation system. Likewise, it would be inappropriate to advocate construction of any system without the analysis, coordination and criteria reviews called for in this Plan. The Inter-Resort Transportation System study underway through the Mountainlands Association of Governments offers an opportunity to perform such analysis.
CHAPTER 6. CANYON PLANS

Each of the canyons is unique and uses have evolved differently in each of them. The character and uses of each canyon will determine canyon-specific application of plan policies. In addition, individual Canyons have exceptional circumstances for which site-specific policies are needed. This Chapter provides canyon specific policies, notes the application of area-wide policies to individual canyons, and provides more detailed background information canyon-by-canyon.

Several minor canyons on the west flank of the Wasatch Mountains in Salt Lake County are not included in the Plan area. For those canyons not specifically covered by the Plan (Tolcats, Neugh's, Dry Hollow, Ferguson, Neffs, North Fork, Deaf Smith, Bells, Little Willow, and Willow Creek), it is recommended that the general principles and policies of the Plan be applicable to lands and issues under Salt Lake County's jurisdiction.

CITY CREEK CANYON

City Creek Canyon's role is as a residential, memorial and urban park in the lower canyon and a nature area and watershed above Bonneville Loop road.

The first Mormon settlers camped near the mouth of City Creek Canyon in 1847 and water from City Creek was used by the new community as its initial source for drinking and irrigation. In 1857 Brigham Young was deeded land at the Canyon mouth by the territorial legislature upon which he operated a sawmill, flour mill and silk mill. During the 1860's and 1870's, he sold off parcels marking the beginning of residential development at the canyon mouth. Early this century, parks were developed near the mouth of the canyon and the stream was diverted into an underground conduit where it enters residential areas.

In 1914 the U.S. Congress withdrew federal lands within the Canyon from appropriation and entry under the federal mining laws to protect Salt Lake City's water supply.

Salt Lake City owns 56 percent of the surface lands in City Creek Canyon; 6,569 acres. The U.S. Forest Service holds 29 percent of the land; 3,417 acres, mostly in a checkerboard configuration intermingled with City lands. Smaller private landholding totalling 1,676 acres are located at the mouth of the canyon and along ridge lines. A proposed land exchange between the Forest Service and the City would reduce Forest Service landholding within this canyon and eliminate the checkerboard Forest Service/City land configurations.
City Creek Canyon has served as a valuable watershed and recreational area of local significance. Salt Lake City promotes the use of the canyon as a nature preserve and city park with limited vehicular access. Currently, the 845-person picnic sites are often used to capacity on summer weekends and holidays, with continued heavy use throughout the week. Recent restrictions limiting the canyon to pedestrian traffic on alternate days has caused an overall decrease in the use of the developed facilities, but jogging and biking activity has increased dramatically. Fishing and hunting by permit also occur in the canyon.

Management of City Creek Canyon falls primarily under the authority of Salt Lake City. The City Creek Master Plan was completed in 1986 to act as the chief planning document addressing land-use and circulation issues in the canyon. The primary plan goal is to have City Creek Canyon serve as a valuable watershed and recreation open space amenity of City-wide significance. According to the plan, such uses should take precedence over other land-use alternatives. Additional policies include preservation of the canyon above Memory Grove Park for watershed and limited public recreation, and promotion of the City Creek Park concept for the entire canyon. Areas extending into the canyon as a formally maintained park should be retained as today, with only minimal improvements to enhance recreational opportunities, to stabilize hillsides, and to define public/private property boundaries near the mouth of the canyon. The plan recommended land ownership consolidation by the City and Forest Service, and City annexation of the Canyon to resolve overlapping jurisdictional responsibilities in the Canyon.

The 1988 Salt Lake City Watershed Plan recommends implementation of the City Creek Master Plan, no further development of water resources, maintenance of instream flows below the water treatment plant for aesthetic and environmental purposes, and maintenance of high water quality.

Wasatch Canyons Master Plan Policies - City Creek Canyon

This Master Plan does not specifically address activities or land-use within City Creek Canyon except as Canyon-wide policies may apply. The Salt Lake City, City Creek Master Plan (1986), and Watershed Management Plan (1988) are applicable to the Canyon.

RED BUTTE CANYON

Red Butte is a near-pristine canyon whose role is a preserve for a broad range of research related to the natural environment. Strict management of Red Butte Canyon following the pioneer era of quarrying, timber harvesting, grazing and water development has resulted in a near-pristine area within the Salt Lake metropolitan
area. Initially the canyon was used for irrigation water by the valley settlers.

In October of 1862, Fort Douglas was established at the mouth of Red Butte Canyon. The newly created military reservation extended into the entire canyon and the U.S. Army assumed total control.

Measures to protect the quality of the canyon were taken in the early part of this century. In the early 1910's Red Butte was closed to the general public and to livestock grazing. In 1914, it was included in Federal legislation to withdraw Federal lands in the northern canyons from mineral location and surface disposal as a means of protecting the water resource. In 1969, jurisdiction for Red Butte was transferred from the U.S. Army to the U.S. Forest Service to be managed as a Research Natural Area.

The Federal Government owns 83 percent of the lands within the canyon: 4,501 acres. Salt Lake City owns 508 acres and private interests hold 415 acres. A proposed City/Forest Service land exchange would eliminate City landholding within the canyon.

Uses in Red Butte Canyon are limited to nature study and research. Fishing is allowed by veterans utilizing the nearby Veterans Administration Hospital. Traffic in the canyon is limited to that necessary for the maintenance and operation of research and monitoring activities. The U.S. Geological Survey uses the Creek as a national base station for water quality.

No uses are allowed that would diminish the natural values of the canyon. U.S. Forest Service policy limits uses to research, study, observations, monitoring, and educational activities that are nondestructive, nonmanipulative, and that maintain unmodified conditions. The Red Butte Canyon Steering Committee maintains a liaison between interested management agencies including the Wasatch-Cache National Forest, U.S. Army, Utah Division of Wildlife Resources, University of Utah, U.S. Geological Survey, and the Intermountain Forest and Range Experiment Station.

**Wasatch Canyons Master Plan Policies - Red Butte Canyon**

The Plan does not address activities or land use within Red Butte Canyon except as canyon-wide policies may apply, but supports Red Butte's continued management as a pristine canyon with limited human use and access.

**EMIGRATION CANYON**

Emigration Canyon constitutes a unique residential environment and its continued development in that role along with exploring opportunities for public use is anticipated within the restraints
of its mountain setting and highway constraints. The existing Emigration Canyon Master Plan remains in place.

Emigration Canyon was the route used by Mormon pioneers to enter the Great Salt Lake Valley in 1847. Early uses of the Canyon included ranching, limited farming, quarrying, and summer resorts. Private summer homes, many converted to year-round use, began to be built in the pioneer era and new homes continue to be constructed on private lands within the Canyon.

Emigration Canyon has a relatively large proportion of its lands in private ownership - 42 percent - totalling 4,856 acres. The amount of private lands has made possible a level of residential use not experienced in the other canyons. The U.S. Forest Service manages 3,210 acres (28 percent of the lands) and Salt Lake city owns 3,540 acres (30 percent). A proposed Forest Service/Salt Lake City land exchange would transfer most of the City land to Forest Service ownership in the Canyon.

The canyon's primary use is year-round residential with limited commercial development. Residential development has continued the past decade. Some hiking occurs in the canyon, but there are no developed trailheads or related facilities. Essentially the entire canyon is a hunting safety zone, where big game hunting is not allowed within one mile of buildings. Highway FAS 133, a County Highway, provides access for canyon residents and a route to Parleys and East Canyons. The canyon road is also a popular route for jogging and bicycling.

Salt Lake County has the lead planning and management role in Emigration Canyon. The Emigration Canyon Master plan was prepared by the Salt Lake County Planning Division Staff and adopted by the Salt Lake County Commission in 1985. The 1985 plan establishes a long-range, comprehensive framework for growth based on specific implementation strategies. The Plan identifies areas suitable for development considering the health, safety and welfare of the present and future canyon residents.

The plan determines development suitability based on the constraints of zoning, deer winter range, erosion and hillside slippage, hydrology and slope. Areas determined to be suitable for development are further subjected to development policies, including the phasing of development.

In addition to the plan, zoning is a critical element in the planning policy of Emigration Canyon. On September 25, 1980, the Hillside Protection Zone Ordinance was adopted for Emigration Canyon. This special zone reduces development density as the slope increases (prohibiting development on slopes of greater than 30 percent), and allows the Planning Commission to require additional information such as soils reports, revegetation plans, geologic
hazard reports, etc., to insure that a development will not adversely affect the canyon environment. The Hillside Protection Zone provides protection in canyon areas which were zoned before the establishment of Forestry and commercial zones.

In July 1987, Emigration Canyon underwent a downzoning in which residential densities were decreased and areas zoned commercial were changed to better reflect county-wide commercial classifications and the sensitive canyon environment.

The Salt Lake City Watershed Management Plan recommends development of sewer services for Emigration Canyon in order to establish long-term water quality improvements. To facilitate development of a sewer line, the City could allow connection to and use of the City sewer lines, and could promote annexation. The City Plan further urges that the City determine the best means to utilize its water rights in Emigration Canyon. Land management improvements through exchange with the U.S. Forest Service for ownership consolidation is supported.

Wasatch Canyons Master Plan Policies - Emigration Canyon

The 1985 Emigration Canyon Master Plan establishes guidelines for development in the canyon. It is not intended that these policies be revisited. However, there may be components of this Plan which are applicable and beyond the scope of the Emigration Plan and in such cases they should be applied.

Although Emigration Canyon residential use issues currently dominate Emigration canyon policies, significant public lands are accessible from the Canyon and at its head. Access to public lands and their recreational opportunities should be preserved.

The development of suitable camping and picnicking sites is encouraged to meet canyon recreation demand and expand Emigration Canyon opportunities for public use. However, studies must be performed in consultation with the Emigration Canyon Community Council and major land owners to determine environmental, traffic and other impacts as well as land use compatibility prior to making any decisions regarding public recreation in the canyon.

New commercial enterprises should be limited to the commercially zoned areas in the canyon.

Development and implementation of a traffic plan to alleviate congestion is vital to public safety. Transportation and traffic problems should be reviewed and a plan developed by traffic engineers, the County Planning Division, and the Emigration Canyon Community Council.

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Canyon resident concerns about increased congestion from expanded, diversified Canyon use is recognized. Increased jogging and biking, recreation site development, and completion of Little Dell Reservoir in 1992, would all further compound Canyon traffic congestion. Jogging and biking on the highway is an immediate public safety concern. Increases in this use should not be encouraged until separate lanes or other safety measures can be considered and implemented.

Existing and potential snowplay activities at Little Mountain are an appropriate Canyon activity. It is suggested that trash cans and sanitation facilities be provided and maintained in this area in the winter.

PARLEYS CANYON

Parleys Canyon has been a major transportation route for many years, yet it is suited for a wide variety of recreation-related activities that are compatible with that role.

Early use of Parleys Canyon included timber cutting, livestock grazing and water supply. In response to the Park City mining boom, a railway was built through the Canyon during the 1880's. It was eventually replaced by a new railway which has also since been abandoned. With the advent of the automobile, and the construction of U.S. 40, Parleys Canyon became a major route for transcontinental travel. In the late 1960's U.S. 40 was replaced by Interstate 80 which now carries large volumes of traffic on six lanes of divided freeway. Construction of I-80 radically altered the lower reaches of the canyon.

Mountain Dell Reservoir was constructed in 1917 and was raised to its present height in 1925.

The Federal Government is the largest landowner in Parleys Canyon with the Forest Service managing 13,994 acres, 42 percent of the Canyon. Forest Service holdings are concentrated in the lower portion of the canyon and in Lambs Canyon. Salt Lake City has consolidated landholdings in Little Dell Canyon and holds 12,207 acres in the canyon (36 percent of the land). Private ownership of 6,810 acres is largely in Lambs and Mount Aire side canyons where residences have been built. Salt Lake County owns 155 acres in Parleys Canyon. A proposed Forest Service/Salt Lake City land exchange would consolidate their respective landholdings in the canyon.

Uses within the canyon include summer cabins in Mount Aire and Lambs Canyons, the major transportation corridor of I-80 and recreational uses including picnicking, golf, hiking, bicycling, nordic track skiing, snowmobiling, fishing and hunting. Salt Lake City uses the Canyon for water storage at the Mountain Dell
Reservoir. Little Dell Reservoir is under construction and is scheduled for completion in 1992. Salt Lake City Parks and Recreation will operate the recreation uses of Little Dell. The uses will be limited to picnicking and non-motorized recreation on and around the reservoir.

No master plan has been completed for Parleys Canyon. The 1977 208 Technical Land Use Plan included Parleys Canyon but did not address many current planning issues. The 208 Plan also projected a large recreational impact from the Little Dell project. However, Little Dell subsequently was down-sized.

Parleys Canyon is protected under FR Zoning which has been established to permit the development of the canyon area for forestry recreation and other uses compatible with the protection of the natural and scenic resources of these areas. Salt Lake City owns all available water rights in the Canyon and has foreclosed further surplus water sales under a water sales moratorium since 1981.

Wasatch Canyons Master Plan Policies - Parleys Canyon

Completion of Little Dell Dam is scheduled for 1992. Recreation-site development is encouraged to include picnic sites, hiking and jogging trails, fishing, and non-motorized boating.

Continued use and expansion is supported for the camp and picnic sites at Affleck Park and picnic sites in Lambs Canyon operated by Salt Lake City Corporation.

Expansion of the Salt Lake City Mountain Dell Golf Course, the overlying winter-use Nordic Track facilities, and increased parking capacity at the Mountain Dell site is supported. Salt Lake City Parks and Recreation is encouraged to allow winter use of the expanded parking for winter dispersed recreation use.

Major sporting events have been proposed for Parleys Canyon. Construction of permanent new facilities for such purposes should only occur if they fill long-term recreation needs and are compatible with this Plan. Mass transit should be used to shuttle spectators to the event sites from Valley staging areas.

Private property above the dam site in Dell Canyon and from Parleys Summit to Lambs Canyon should be publicly acquired.

Development of alpine skiing in Parleys Canyon would be inconsistent with this Plan's policy regarding ski area expansion outside of existing Forest Service ski area permit boundaries.

Other plan canyon-wide policies may apply to Parleys Canyon.
MILL CREEK CANYON

Mill Creek Canyon is primarily a day-use canyon providing picnicking and related activities to the residents of the Valley.

Since early settlement of the Salt Lake Valley, Mill Creek Canyon has served as a popular recreation area. Other historical uses included timber harvest and saw milling, and livestock grazing. The 1904 establishment of the Wasatch-Cache National Forest provided management direction for the Canyon. By early in this century, picnicking and camping sites had been established in many areas of the Canyon. Although Salt Lake City owns most of the water rights, it has not used the creek for culinary purposes. The creek was used until late 1949 as a hydroelectric power source by Utah Power and Light Company.

The Forest Service has consolidated land ownership of 12,314 acres in the Canyon (81 percent). Private land ownership is 19 percent, or 1,600 acres, and is mostly in the lower portion of the Canyon except for one large block near the Canyon head.

Mill Creek Canyon uses are characterized by intensive summer developed and dispersed recreation and moderate, however increasing, dispersed winter recreation. A limited number of summer recreation residences have been constructed, but there has been no new construction in the past decade due to limited private land and Forest Service policy against additional Forest Service land leasing for private residential purposes. Two restaurants and a Boy Scout camp are located in the canyon.

The Forest Service Plan provides for minimal expansion of developed facilities, and maintenance and redevelopment of existing facilities; the focus over the next decades will be providing and managing increased dispersed recreation.

All of the private land in Mill Creek Canyon is covered by County FR-20 zoning with the exception of one commercially zoned area where an existing restaurant is located. Another restaurant is located on Forest Service land and operates under a Forest Service permit.

In anticipation of development of Mill Creek for culinary use, the Salt Lake City Watershed Management Plan recommends management strategies which may affect the future of Mill Creek Canyon, including a review of improvements in picnicking facilities, domesticated animal use, and the effects water supply development may have on downstream instream flows.
Wasatch Canyons Master Plan Policies - Mill Creek Canyon

Heavy day-use of picnic sites in Mill Creek Canyon has contributed to significant deterioration of the immediate terrain and groundcover. Some Mill Creek Canyon recreation sites have experienced use beyond their ability to sustain a natural environment.

Measures should be implemented in the immediate future to rehabilitate the canyon's heavy use areas, to assure protection of the natural features, to maintain a quality user experience, and to anticipate use of the canyon stream for culinary water supply. The following actions are suggested:

Intensive use of the Camp Tracy complex and past stream channel flood damage warrant special attention by the Boy Scouts of America to assure visual quality, rehabilitation of the stream area, and the protection of water quality through its property. Salt Lake County will cooperate with the Boy Scouts of America in assessing the need for stream impact mitigation, and in reviews and updating of its conservation plan for the camp. The Boy Scouts of America camp use has approached its maximum capacity and alternative camp facilities or modified use policies at the camp will be necessary in the future. It is suggested that increased stream water quality monitoring in conjunction with anticipated use of Mill Creek water for culinary purposes include monitoring above and below the camp to ascertain if there are water quality impacts associated with the facility.

Picnicking, hiking and dispersed recreation should continue to be the major uses in the canyon.

Public acquisition should be pursued for the section of privately owned land at the head of the Canyon for watershed protection and public recreation purposes.

It is recommended that the Forest Service impose fees for use of picnic sites and require reservations for their use by groups. Some sites have been monopolized by groups which limits opportunities for others to use them. Fees and group reservation systems will better control the duration, nature, and availability of canyon picnic sites.

Improved public information should be provided on the status of Mill Creek Canyon, on impacts from overuse at intensely used areas, and on seeking public cooperation in rehabilitation of the Canyon's picnic and heavy-use areas.
The road in the upper end of Mill Creek Canyon is in need of substantial repair and maintenance work. The road is maintained by Salt Lake County through a Forest Service Special Use Permit and provides access to private property within the Canyon as well as to recreational opportunities for the public at large. The road should be repaired within the existing right-of-way and County/Forest Service cooperation should determine shared decisionmaking/costs on construction of a parking area near the winter gate which closes the upper road to winter traffic. Such a parking facility would better enable off-season walking, biking, cross-country skiing and other dispersed recreational use of the seasonally closed road and upper Canyon.

Existing parking should be improved and limited additional parking should be provided for existing picnic sites.

Future transportation options are to be considered to reduce peak summer-use congestion. For the long term, the feasibility of mass transit for Mill Creek Canyon during high-use summer periods should be explored with a park-and-ride staging area in the valley. Private property owners in the canyon would be granted permits for private vehicles. Other private vehicles would be banned during high-use periods.

Non-motorized uses should be permitted on the highway above the gate once the highway is closed for the winter season.

Canyon-wide Plan policies having specific application to Mill Creek Canyon include the following:

Ski area expansion into Mill Creek Canyon outside of existing Forest Service ski permit area boundaries would be inconsistent with this Plan.

It is recommended to the Forest Service that grazing of domestic livestock be phased out as Forest Service grazing permits expire, particularly when Mill Creek begins to be used for culinary water supply.

As public picnic facilities are improved, modifications should be made to restrooms to make them barrier-free.

Jogging and biking lanes should be added to the County Road if feasible.

Improved hiker trail information and identification of private lands and public lands should be provided.

Designation of mountain bike routes or trails may be appropriate.
Horseback riding, which may be affected by designation of Mill Creek Canyon as a watershed, should be carefully reviewed by watershed managers in consultation with horseback riders prior to policy decisions. (See Watershed and Water Quality Protection p.27)

Other Canyon-wide policies may apply.

**BIG COTTONWOOD CANYON**

Big Cottonwood Canyon has served for many years as a predominantly day-use summer and winter recreation area for the residents of Salt Lake County. Developments in the Canyon are characterized by cabins and single family residences, except for a few buildings associated with the ski resorts. The type and character of uses in the Canyon are continued into the future in this Plan.

Until the arrival of the first white trappers, Big Cottonwood Canyon served native Indians as a hunting ground. After the 1847 settlement of the Salt Lake Valley, the canyon became important for lumber and mining. Public recreational use of the Canyon was also popular in the early days of valley settlement.

In 1863 mineral outcroppings were discovered in Big Cottonwood Canyon and the West Mountains Mining District was established. Big Cottonwood Canyon soon became one of the richest mining districts in the State. Mining operations were especially active in the Mill D South Fork (Cardiff Fork), and Silver Fork. Ores contained lead, silver, and small quantities of gold, zinc, and copper. A power plant was built to serve the mines, and camps for miners and their families were established. An 1873 slump in silver prices diminished mining activity and by the turn of the century, only one producing mine remained.

The Canyon's streams furnished power to operate sawmills to process abundant timber. The charter to build the first saw- mill was granted in 1857. As mining increased in the 1860's, use of wood to fuel mining machinery boomed. Timber demand was further compounded by construction of residential housing for a quickly growing valley population. Around 1875 the Big Cottonwood Lumber Company operated four sawmills with water power and another with steam. By the turn of the century massive deforestation had taken place.

In 1871, William and Catherine Brighton began operating a cafe and in 1874 the first hotel was built at Brighton near the head of the Canyon.
As the mines faded from the scene, a new activity to the region, skiing, began in Big Cottonwood Canyon. It appears the first recorded organized Canyon ski activity occurred on January 22, 1915. The first facility for skiing in the Brighton area was a home-made T-bar tow, constructed in 1936. A single chairlift was added to the existing T-bars and rope tows in 1947 and in 1954 the first double chairlift in the Intermountain area began operation.


Big Cottonwood Canyon is largely under U.S. Forest Service ownership, 25,242 acres, or 78 percent of the Canyon. There are also substantial blocks of private land totalling 6,937 acres, 21 percent. Private ownership is primarily in the higher elevations toward the ridgelines and in the residential areas off the canyon road near Reynolds Flat, Silver Fork, and Brighton. Salt Lake County owns one block of land in Mill D South Fork. Salt Lake City has a small landholding near Brighton.

During the last 40 years, recreational use of Big Cottonwood Canyon has grown steadily in relation to the population growth of the Salt Lake Valley. There is a wide variety of uses in the Canyon including ski resorts, year-round residences, picnicking, camping, summer homes, fishing, hunting, hiking, alpine, rock climbing, backcountry, and nordic track skiing, snowmobiling, and snowplaying.

The most current documents regarding Big Cottonwood Canyon are the 208 Technical Land Use Plan, the Forest Service Wasatch-Cache National Forest Management Plan, and the Salt Lake City Watershed Management Plan.

In 1972 Salt Lake County zoned all of the public and private lands in the Canyon. New developments were subject to conditional use permitting and subdivision review prior to development. The County has maintained a close relationship with the Big Cottonwood Community Association.

The Salt Lake City Watershed Management Plan recommends that the City support watershed protection measures and the development of a sewer line. City support for the sewer line is subject to the condition that all commercial facilities, feasible recreational facilities and residences be required to tie into the line from the mouth to the top of the canyon.
Wasatch Canyons Master Plan Policies - Big Cottonwood Canyon

Construction of a sewer line in Big Cottonwood Canyon is endorsed and encouraged. All commercial operations within the Canyon should be required to utilize the sewer line when completed. All other sewage sources are encouraged to hook up and use the line if feasible.

The consolidation of existing substandard lots, which are deficient due to size, slope, soils, etc, into larger lots is encouraged. High visual quality standards compatible with the Canyon surroundings should be maintained in the construction of any new structures.

The Silver Fork drainage is a popular area for hiking and other dispersed recreation and should remain available for those uses. Current development plans for the Solitude Resort do not envision utilization of Silver Fork for ski area expansion. In addition, the Forest Service amendment to the Forest Plan removed Silver Fork from the Solitude ski permit area.

Improvements included in the Forest Service Plan at the Big Cottonwood nordic track facility are acceptable. However, access to the track from Brighton Village must be maintained.

In 1982 Salt Lake County gave preliminary approval for a conditional use permit for the construction of 320 condominium units by Solitude Resort. On December 15, 1988, preliminary approval was provided for a modified Solitude Resort proposal consisting of 280 units. This will introduce a relatively large overnight use and a new dimension to uses in the Canyon. The number and type of accommodations granted preliminary approval in 1988 should be used to establish the maximum intensity of use in considering future design and composition proposals for the resort. Outside Brighton and Solitude, the rest of Big Cottonwood Canyon should maintain its traditional role and character.

Any future overnight lodging or commercial campgrounds in the Canyon should be visually compatible with the present character of the canyon.

Selective public acquisition of private lands within the Canyon on a case-by-case basis is encouraged to assure public access to trails, backcountry areas, and public lands in general; to improve watershed protection; to reduce user and property owner conflicts; and to maintain sensitive canyon terrain in its natural state for the long-term public enjoyment.
Priorities and funding for land acquisitions in Big Cottonwood Canyon should be coordinated with other entities as described on page 28 under Private Land Acquisition. However, the Donut Falls area is one in particular which should be given priority consideration. The area has suffered significant degradation due to off-highway vehicular use. Because the area includes privately-owned lands, restriction of off-highway vehicular use has been frustrated. It is recommended that the affected private lands be publicly acquired for purposes of eliminating off-highway vehicular terrain damage and for protecting the watershed from further degradation.

Better management practices are needed on public and private lands for summer and winter off-highway vehicle use. More intensive management of these activities is recommended to the Forest Service for National Forest Lands and the County should more diligently enforce off-highway use restrictions on private lands. If better management practices are unsuccessful in controlling damage from OHV use, elimination of OHV use in Cardiff Fork may be necessary.

Snowmobile use in the Reynolds Flat and Cardiff Fork area has caused conflicts with private property owners, backcountry skiers, and families involved in snow play activities. It is recommended that the U.S. Forest Service review snowmobile use on National Forest lands in Cardiff Fork and with Salt Lake County consider phasing out snowmobile use in this area by the end of the Plan period.

It is recommended to the Forest Service that new barrier-free facilities at Silver Lake, removal of barriers at the Spruces Campground and Jordan Pines picnic area, and cooperation with the County in the construction of a special trail for individuals with disabilities be priorities.

Canyon-wide Plan policies having specific application to Big Cottonwood Canyon include the following:

Ski area expansion is supported within existing Forest Service permit area boundaries, including privately owned lands, consistent with the 1985 Forest Service Plan with up to 2,900 additional S.A.O.T. Potential ski area alterations should be jointly reviewed by the affected jurisdictions.

Private land, with potential for alpine skiing, exists adjacent to ski area permit boundaries in Big Cottonwood Canyon.

Any consideration by Salt Lake County of ski area expansion would be subject to the criteria listed on page 33.
Additional ski area parking on private lands would not be allowed unless it is consistent with resolving transportation problems and would improve the physical environment.

Approval of conducting Olympic events is contingent upon specific proposals and their meeting Plan criteria.

Backcountry ski areas are to be preserved, while allowing for a potential Mountain Transportation System corridor.

Consideration of a Mountain Transportation System will include Big Cottonwood Canyon. Use of a proposed conventional chairlift/ski terrain interconnect system or the Guardsman's Pass road by themselves would not meet Mountain Transportation System criteria nor provide satisfactory year-round inter-canyon/resort transportation.

Reduction of peak winter vehicular traffic will be pursued through incentives for mass transit use, disincentives for private car use during peak periods, and multi-jurisdictional/ski resort cooperation. Ski resorts will be requested to evaluate and mitigate projected traffic impacts associated with proposals to expand resort capacities.

Small parking lots for dispersed recreation use will be constructed on a case-by-case basis and provision will be made for mass transit stops.

Large lot zoning will be retained.

Any future commercial development will be consolidated in close proximity to the resorts.

Aesthetic standards will be applied to future design and construction of structures.

It is recommended to the Forest Service that user fees be extended to picnic sites and that existing sites should be rehabilitated as warranted.

Grazing under Forest Service permit is recommended to be phased out by the Forest Service as permits expire.

Mining activities would be under a County Conditional Use permit with provisions for environmental controls and site rehabilitation.

Handicapped barriers will be removed at public facilities as they are improved.
Trails and trail access will be maintained, and some use restrictions may need to be imposed on a case-by-case basis. A new trail for summer hiking and winter cross country skiing should be designed, rights-of-way acquired, and built from Brighton to the Spruces.

Jogger and biking lanes should be added where safe and feasible.

Appropriate routes or trails for mountain bike use should be considered and designated by the Forest Service.

Other canyon-wide polices may apply.

**LITTLE COTTONWOOD CANYON**

Uses in Little Cottonwood Canyon are mostly recreational with hiking, camping, backcountry skiing, rock climbing, and the largest Canyon use, alpine skiing. Alta Ski Area has been in operation for 50 years, and since the early 1970's, the Snowbird Ski Resort has been a primary Canyon recreation center attracting guests worldwide to its numerous facilities, deep powder snow and challenging slopes. The Plan provides for existing Canyon roles to continue. The Town of Alta manages land use at the top of the Canyon for commercial facilities, residential, and recreational activities.

The early history of Little Cottonwood Canyon is most strongly associated with mining. In 1864 the first mineral discovery was made at the head of Little Cottonwood Canyon at what would later become the world famous Emma Silver Mine at Alta. The completion of the first transcontinental railway on May 10, 1869 made larger scale mining in the area feasible. Alta supported an estimated population of 5,000 by 1873. Between 1862 and 1877 an estimated $20 million in silver was taken from the Alta Mining area.

In 1904 the Wasatch-Cache National Forest was established including Little Cottonwood Canyon. Up to this point however, the Canyon had not been used for recreation as extensively as its sister canyons to the north.

The development of the Alta Ski Area began when the first lift was built up Collins Gulch in 1938. Private land was deeded by several mining companies to the U.S. Forest Service and a cooperative private, civic and Forest Service effort resulted in the development of the ski area. The establishment of the Avalanche Research Center during the first winter of operation constituted the first such facility in North America.
In conjunction with the development of the Ski Resort in 1937, Snowpine Lodge was built in 1939. The Alta Lodge was built in 1939 with 16 rooms. It was subsequently expanded in 1959, 1964, and in 1968. The Peruvian Lodge, was built in 1946 and expanded in 1967. The original Rustler Lodge was built in 1947; additions were built in the 1960's and 1970's. Gold Miners Daughter was built in 1962 and additions were subsequently made.

Prior to 1971, the majority of visits to Little Cottonwood Canyon were for day use. After several years of planning, a new resort, Snowbird, opened its first phase of operation in December of 1971 with a 162 room hotel/condominium. Over the next 16 years, an additional 740 units were constructed.

Land ownership in Little Cottonwood Canyon is dominated by the Forest Service with holdings of 13,853 acres, or 81 percent of the canyon. Privately held lands total 3,227 acres and are located at the canyon mouth, Wasatch Resort, Snowbird, Town of Alta, and various mining patents. Several land exchanges involving Salt Lake City, the U.S. Forest Service, Trust for Public Lands, and private landowners have altered the land ownership pattern in the Canyon by placing more private property in public ownership.

Land use in Little Cottonwood Canyon is primarily recreational. Hiking, rock climbing, camping, picnicking, resort activities and sightseeing are the most common summer activities with backcountry and downhill skiing occurring in the winter and spring.

The Alta/Little Cottonwood Canyon General Plan (1973) and the 208 Technical Land Use Plan have been the primary management documents for the Canyon in the past one-and-a-half decades. A review and updating of these plans may be timely.

The Salt Lake City Watershed Management Plan recommends that Salt Lake City maintain existing watershed management practices in the Canyon, and develop interlocal agreements with other municipalities with water rights. Private lands in critical watershed areas should be considered for acquisition.

The Town of Alta is an incorporated municipality in upper Little Cottonwood Canyon, including Albion Basin. Within its boundaries, Alta exercises land-use jurisdiction. Alta maintains its own planning and zoning controls, public safety standards and enforcement apparatus.

Wasatch Canyons Master Plan Policies - Little Cottonwood Canyon

Current uses of White Pine should be preserved. White Pine Canyon is one of the most popular dispersed recreational use areas.
in the Canyons. It serves picnickers, hikers, backcountry skiers, helicopter skiers, downhill skiers who traverse to it from the Snowbird ski area, and other users. White Pine offers one of the only remaining areas in Little Cottonwood Canyon for beginning and intermediate backcountry skiing.

White Pine Canyon is almost entirely National Forest lands. The 1985 Wasatch-Cache National Forest Plan states that development of White Pine for downhill skiing would "require further study and support of an environmental analysis." It is recommended to the Forest Service that White Pine Canyon be retained in its natural state for dispersed recreational use. This policy on White Pine Canyon is consistent with the Plan's position on limiting ski area expansion to within existing Forest Service ski permit area boundaries.

If in the future it is determined that it is appropriate to add terrain to Little Cottonwood Ski Resort permit areas, opportunities for ski resort boundary expansion could be explored outside of the Plan area, where user conflicts are less intense. It should also be noted that opportunities remain for expansion within existing ski area boundaries which may provide for more efficient skier utilization of terrain.

If the Forest Service were in the future to approve proposals inconsistent with this Plan for downhill ski area permit expansion into White Pine, this Plan, to be consistent with the Forest Service decision, would have to be amended.

Although the Plan relies upon supplemental mass transit utilization for addressing short-term peak transportation problems in Little Cottonwood Canyon, it should be noted that the County has approved construction of an additional Parking Terrace at the Snowbird Resort. This additional parking capacity is compatible with the winter and summer use peak-use needs at the Resort, but the added Snowbird facility shouldn't diminish cooperative efforts to encourage use of mass transit and discourage use of private vehicles in Little Cottonwood Canyon.

A Forest Service land exchange has recently added public property near the mouth of Little Cottonwood Canyon. Forest Service efforts to use this newly acquired property for dispersed recreation opportunities are supported.

Cooperation is requested from the LDS Church to allow public access for rock climbing enthusiasts and the provision for parking for that use near the mouth of the Canyon.

Canyon-wide Plan policies having specific application to Little Cottonwood Canyon include the following:
Ski area expansion is supported within existing Forest Service permit area boundaries, including privately owned lands, consistent with the 1985 Forest Service Plan with up to an additional 4,100 S.A.O.T. Potential ski area changes should be jointly reviewed by affected entities.

Additional ski area parking on private lands is not allowed unless it is consistent with resolving transportation problems and would improve the physical environment.

Approval of conducting Olympic events in the Canyon is contingent upon specific proposals and meeting the Plan criteria.

Backcountry ski areas are to be preserved while allowing for a potential Mountain Transportation System corridor.

Consideration of a Mountain Transportation System includes Little Cottonwood Canyon. Use of a conventional chairlift system to link ski areas in Little Cottonwood to other Canyons and ski areas is not by itself a viable Mountain Transportation System.

Reduction of winter vehicular traffic will be pursued through incentives for mass transit use, disincentives for private car use during peak periods, and multi-jurisdictional/ski resort cooperation. Ski resorts will be required to evaluate and mitigate project traffic impacts associated with proposals which would increase their use capacities.

Unobtrusive small parking lots for dispersed recreation use will be constructed on a case-by-case basis and provision will be made for mass transit stops.

Existing large lot zoning will be retained.

Any future commercial development will be consolidated in close proximity to the resorts.

Aesthetic standards will be applied to the future design and construction of structures.

Mining activities would be under a County Conditional Use Permit with provisions for environmental protection and post-mining site rehabilitation.

The dewatering of Little Cottonwood Creek near the mouth of the Canyon is regrettable. Salt Lake County supports provision for maintenance of water flows in Canyon streams in future decisions affecting canyon water use and recommends that owners of water rights review the potential for committing water rights to instream flows on a canyon-by-canyon and case-by-case basis.
It is recommended that the Forest Service rehabilitate camp sites as warranted. As public facilities are improved, handicapped barriers should be removed.

Trails and trail access will be maintained and some use restrictions may be imposed on a case-by-case basis. A trail for summer hiking and winter cross country skiing should be designed, rights-of-way acquired, and built from Alta to Tanners Flat.

More intensive management of off-highway vehicular use should be pursued.

Jogger and biking lanes should be added to the highway where feasible. Appropriate routes or trails for mountain bike use should be considered.

Other Canyon-wide policies may apply.
WASATCH CANYON MASTER PLAN

LEGEND

- Roads
- Streams / Drains
- Lakes
- Springs
- Study Area/Salt Lake County Boundary
- Backcountry/Ski Touring Areas
- Roadside Parking
- Developed Trailhead
- Ski Touring/Mounainteering Routes

NOTE:
Maps are for planning purposes only and
are not substitute for site-specific
planning.
Some reservations on shown are not compatible.
Some reservations shown on map do not appear
on the maps. The reservations shown are most culturally
sensitive to the human master planner.
AREAS SHOWN ARE HIGHLY DEPENDENT ON SNOW FALL,
AND WEATHER CONDITIONS ARE NOT ALL INCLUSIVE.

SOURCE INFORMATION
Roads and topography from
Salt Lake County Department of Public Works - Florey Division,
Backcountry/Ski Touring Map. Prepared by Wasatch County Planning Office.

Tres & Trailheads from
Salt Lake County Department of Public Works - Florey Division,
Backcountry/Ski Touring Map. Prepared by Wasatch County Planning Office.

BACKCOUNTRY/SKI TOURING AREAS
BIG COTTONWOOD CANYON

PREPARED BY SALT LAKE COUNTY PUBLIC WORKS DEPARTMENT PLANNING DIVISION
DATA COMPILED BY UTAH STATE AUTOMATED GEOGRAPHIC REFERENCE
MARCH 1989
BACKCOUNTRY/SKI TOURING AREAS
LITTLE COTTONWOOD CANYON
PREPARED BY SALT LAKE COUNTY PUBLIC WORKS DEPARTMENT PLANNING DIVISION
DATA COMPILED BY UTAH STATE AUTOMATED GEOGRAPHIC REFERENCE
APRIL 1989
WASATCH CANYON MASTER PLAN

SUMMER RECREATION AREAS
MILL CREEK CANYON

PREPARED BY SALT LAKE COUNTY PUBLIC WORKS DEPARTMENT PLANNING DIVISION
DATA COMPILED BY UTAH STATE AUTOMATED GEOGRAPHIC REFERENCE

APRIL 1989
WASATCH CANYON MASTER PLAN

SUMMER RECREATION AREAS
LITTLE COTTONWOOD CANYON

PREPARED BY SALT LAKE COUNTY PUBLIC WORKS DEPARTMENT PLANNING DIVISION
DATA COMPILED BY UTAH STATE AUTOMATED GEOGRAPHIC REFERENCE MARCH 1989
RESIDENTIAL/COMMERCIAL AREAS
EMISSION CANYON

PREPARED BY SALT LAKE COUNTY PUBLIC WORKS DEPARTMENT PLANNING DIVISION
DATA COMPILED BY UTAH STATE AUTOMATED GEOGRAPHIC REFERENCE APRIL 1989
RESIDENTIAL/COMMERCIAL AREAS
PARLEYS CANYON

PREPARED BY SALT LAKE COUNTY PUBLIC WORKS DEPARTMENT PLANNING DIVISION
DATA COMPiled BY UTAH STATE AUTOMATED GEOGRAPHIC REFERENCE
APRIL 1989
CHAPTER 7.
IMPLEMENTATION OF PLAN AREA POLICIES

Implementation of the plan is the responsibility of the government agencies having jurisdiction in the canyons. They are primarily Salt Lake County, the U.S. Forest Service, Salt Lake City, the City-County Board of Health, and the State of Utah. Implementation will occur in increments over many years, i.e. a new trail, a renovated picnic area, increased bus service, a new lodge, an extended ski lift, etc., as those responsible for various services develop their programs. It will be necessary for each operating entity to continually refer to and follow the plan policies and recommendations if the goals of the plan are to be achieved.

The Town of Alta and Salt Lake City exercise municipal jurisdiction within their boundaries.

Salt Lake County has broad administrative and legislative jurisdiction over most of the plan area and will be the lead agency in the following:

INTERGOVERNMENTAL COORDINATION

Salt Lake County will initiate the formation of the Wasatch Canyons Coordinating Committee through a memorandum of understanding (MOU) signed by Salt Lake County, the U.S. Forest Service, Salt Lake City, City-County Board of Health, Town of Alta, and the State of Utah.

Other governmental entities and private groups and individuals may be involved in an advisory capacity at the discretion of the organization on an ad hoc basis as issues warrant.

The Canyons Coordinating Committee should involve and complement existing organizational structures which coordinate watershed, water quality, and water planning activities including the Memorandum of Understanding (MOU) among Salt Lake County, the U.S. Forest Service, and Salt Lake City; the Area-wide Water Quality Council; and the Salt Lake City Public Utilities Advisory Committee.

The MOU would broadly define the parameters of the organization, determine sharing of organization expenses, establish opportunities and processes for public participation, state the committee's purposes and goals, and incorporate organizational flexibility to facilitate adaptation to changing issues, relationships, or other circumstances.
Salt Lake County will chair and staff the committee. Member entities will reimburse the County for their prorated share of organization costs borne by the County.

The committee should meet at least quarterly at established times, post an agenda and meeting announcement, and meetings should be open to the public. Beyond its formal meetings, the organization should serve as an on-going clearinghouse for intergovernmental coordination.

Member entities would retain their respective responsibilities and authorities.

**MOUNTAIN TRANSPORTATION SYSTEM**

Consideration of a mountain transportation system will involve cooperation with other affected entities including Wasatch and Summit Counties, the U.S. Forest Service, local governments, and the affected ski resorts. Cooperation among these entities will increase opportunities for the individual governments to arrive at the independent, but compatible decisions necessary to approve and realize future operation of a transportation system. Salt Lake County should vigorously pursue this cooperative analysis and based on its findings, proceed toward consideration of a system.

The criteria provided in this Plan will guide County consideration of plans, systems, and modes of transportation. However, the criteria and the Mountain Transportation System policy in this Plan can do little more than set the stage for a more comprehensive, technical, and multi-jurisdictional analysis. Subsequent, eventual Salt Lake County decisions on an appropriate amendment to this Plan and consideration of a specific proposal or proposals should be compatible with the overall policies of this Plan.

**DEVELOPMENT REGULATION**

Future development in the Plan Area should conform to the Canyon Plan land-use suitability standards and must comply with the requirements of the zoning and subdivision ordinances, the uniform building codes, and all applicable health and water quality codes. All zoning and conditional use approvals for development in the plan area should include conditions and requirements necessary to implement the Canyon Plan policies.

The County will continue to enforce zoning, building codes, and other regulations applicable to development in the Canyons.
This Master Plan anticipates changes and allows for development in the Canyons. It should be recognized that the master plan process cannot incorporate exhaustive analyses of specific development proposals or potential actions.

Existing ordinances and the established review procedures, which include public hearings, provide the framework for the evaluation of development proposals to check for consistency with the Master Plan, for focus on critical issues, to incorporate new information where necessary and appropriate, and to provide for appropriate review by regulatory agencies and the public.

Since most of the canyon areas are zoned Forestry Multifamily (FM) or Forestry Recreation (FR), the regulations of these Zones are included in Appendix (9 and 10) together with the regulations of the Hillside Protection Zone (HP) which covers land in Emigration Canyon Appendix (8). The Ordinance for Conditional Uses is found in Appendix 11.

The master plan process included a comprehensive review and analysis of environmental and suitability factors for a wide range of Canyons uses. The best available, current resource and use data was mapped on individual maps (layers) and combined into maps showing areas suitable for various uses and activities. Before finalizing, these suitability maps, and the information and factors that went into preparing these maps, were carefully reviewed and critiqued by the Citizens and Technical Advisory Committees. Caution, however, should be exercised when using these maps. The maps are general in nature, giving Salt Lake County and interested persons a sense of the locations and amount of suitable terrain in the canyons for various uses. The suitability maps are not intended to give a detailed picture of suitability for each parcel of land, having used 1:24,000 (40-foot contours) as the base for most information. Suitability maps should be used as a general guide. Environmental conditions for specific development proposals should be evaluated using site-specific analysis. The full range of considerations, including those used in this Plan's suitability analysis, availability of water, utilities, land-use relationships, access, etc., must be evaluated.

Protection of the Canyons environment has been foremost in preparation of this Plan. The following issues are considered to be requisite components of the review process to determine the short and long-term effect of a development:

1. Water Quality, with primary attention to municipal watershed management;
2. Transportation, with assessments of predominant modes, qualification of impacts, and traffic mitigation strategies;
3. Vegetation, including mountain wetlands;
4. Wildlife;  
5. Other users of Canyon resources, including public recreation;  
6. Visual Impacts including signs;  
7. Public health and safety;  
8. Public infrastructure;  
9. Cultural and historical impacts;  
10. Other factors deemed important.

Ordinances will be implemented by the Salt Lake County Commission to require easements or access to trailheads and public lands as a condition to approval of new subdivisions or land-use approvals as warranted on a site-specific basis.

The County will communicate with private landowners and developers to encourage their cooperation toward realization of larger lots and use of FUD's.

The County will continue to refine suitability standards and suitability analysis of potentially developable private lands to guide development decisions toward the most suitable Canyon sites.

COMMERCIAL ENTERPRISES - RETAIL, LODGES, CONDOMINIUMS

New commercial development will be required to comply with this Plan. Any development proposals not in close proximity to existing ski resort areas in the Cottonwood Canyons or within commercially zoned areas in other canyons would require amendment to this Plan. All significant proposals will require site specific suitability, traffic, water quality and other studies deemed necessary by the Planning Commission.

HIGHWAY TRANSPORTATION

Salt Lake County will place the following implementation measures on the agenda of the Wasatch Canyons Coordinating Committee:

- Options for governmental action by the County or in cooperation with other jurisdictions
- Participation in the Mountain Transportation System study
- Enforcement of parking regulations during peak periods
- Traffic mitigation plans by ski resorts for approval of increased skiers

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. Programs to increase public acceptance of measures to reduce car traffic during peak periods and cooperate with the UTA to promote mass transit use in the Canyons and with UTA, the U.S. Forest Service, and the Utah Department of Transportation in the location and implementation of multiple bus stops in the Cottonwood Canyons

. Developing a transportation safety evaluation program

. Measures for reducing traffic congestion on and associated with the County road in Mill Creek Canyon during summer peak use periods.

. Provision for sanitation and trash facilities (page 48).

PRIVATE LAND ACQUISITION

Salt Lake County will place development of criteria for land acquisitions in the Canyons including priorities for categories of lands for acquisition and funding options for purchases on the agenda of the Wasatch Canyons Coordinating Committee.

The County will establish a program for land acquisitions including guidelines for acquisitions and determine a source of funding.

AESTHETIC STANDARDS

The County Planning Division will prepare and implement architectural standards to guide building design, mass, and placement of future Canyon structures.

Development of the guide may include consultation with architects and builders and a review of existing structures in the Wasatch Canyons and in other mountain settings to appreciate the options and kinds of structures which may be viewed as compatible to the Canyon environment. Consultation with Canyon resident groups, the U.S. Forest Service, and other appropriate jurisdictions will afford review by the most directly affected entities.

Adoption as an ordinance and implementation through the normal planning and permitting processes will provide opportunities for public involvement as well as better assure consistency in the application of guidelines. The guidelines may be applicable to existing structures but modifications would not be required.
MINING

Salt Lake County will evaluate any proposals to reopen mining operations in the Canyons assuring protection of the watersheds, and consideration of implications for transportation, public safety, and the full realm of local governmental concerns.

PUBLIC SAFETY

Salt Lake County will place the public safety concerns addressed in the Plan on the agenda of the Wasatch Canyons Coordinating Committee. The County will consider adoption of policies resulting from these reviews and request other agencies to do likewise, as appropriate.

HANDICAPPED ACCESS/OPPORTUNITIES

The County will consult with community organizations representing the handicapped as to access needs and concerns of the handicapped relative to canyon facilities which can appropriately be addressed by the county in the future.

New publicly accessed facilities in the Canyons will be barrier free. Salt Lake County should urge other jurisdictions to make progress in removing barriers in existing facilities.

ROCK CLIMBING

The County will seek cooperation from private property owners and the LDS Church in providing access to rock climbing areas at the mouths of the Canyons and will work with the Forest Service and the Utah Department of Transportation toward the provision of parking, sanitation, and trash collection facilities at these sites.

WATERSHED AND WATER QUALITY PROTECTION

Salt Lake City and the City-County Board of Health have primary responsibility for maintenance of the watershed and water quality in the Plan area.

Beyond their existing formal relationships as discussed on page 9 and 10, agencies with watershed responsibilities should cooperate through the Wasatch Canyons Coordinating Committee in an annual joint review of watershed conditions. Individual entities should determine and implement measures as warranted in response to review findings.

Salt Lake County will continue cooperating with other entities in maintaining excellent water quality of the Canyon streams.
Salt Lake County will continue cooperating with other entities in maintaining excellent water quality of the Canyon streams.

**RECOMMENDATIONS TO U.S. FOREST SERVICE FOR IMPLEMENTATION:**

**Forest Service: Camping and Picnicking**

Rehabilitation of existing sites, elimination of handicapped barriers, development of limited new canyon sites, and the imposition of fees for picnic site use and reservations for all group use.

The County will pursue development of additional alternative sites outside of the Canyons and a public information program to notify users of existing or such new sites outside of the Plan area.

**Forest Service: Off-Highway Vehicle Use**

A review of Off-Highway Vehicle uses and management practices in use areas will be an agenda item for the Canyons Coordinating Committee.

More vigilant County enforcement of Off-Highway Vehicle use restrictions and better management of such use on private lands is necessary as is more intensive management of these uses on National Forest lands.

**Forest Service: Mountain Biking**

The County recommends to the U.S. Forest Service that it design a limited number of trails or routes within the Canyons for off-road mountain bike use. An information program should notify users of this use on such designated trails. Trail maintenance may need to be intensified depending on user response.

**RECOMMENDATION TO UTAH DEPARTMENT OF TRANSPORTATION FOR IMPLEMENTATION**

The Utah Department of Transportation is responsible for maintenance and use of the highway in Parleys, Big Cottonwood and Little Cottonwood Canyons.

**Utah Department of Transportation: Jogging and Bicycling**

The County will recommend to the Utah Department of Transportation and will consider for County Canyon roads the addition of jogger/bicycle lanes on Canyon highways where feasible as highway improvements or maintenance permit.
AMENDMENTS TO THE PLAN

This Plan is based on existing situations and current information, knowledge, and judgement. It is expected that the planning process for Salt Lake County will allow this Plan to evolve through the amendment process as time, conditions, and perceptions change.

The Plan is for an area that is subject to change. Some changes that occur will have been anticipated in the Plan; others will not. The Plan must be able to evolve to address new issues and concerns.

The process to change or amend a Master Plan is set forth in State law and involves studies, notices, hearings and official action by the County Planning Commission and County Commission. Specifically, any plan amendment must include a minimum of a four-week notice of a hearing before the Planning Commission, a hearing on the proposed amendment, action by the Planning Commission, a four-week notice and public hearing before the County Commission, and action by the County Commission. This process should allow all interested parties ample opportunity to become informed about and participate in proposed changes to the Salt Lake County Wasatch Canyons Master Plan.

The preparation of this Plan involved a process that far exceeded the minimum requirements of the law, and included public information meetings, ongoing involvement of a citizens advisory committee, and public comment through meetings and written comment periods at three stages before the statutorily-directed plan adoption process began.
APPENDIX 1.
UTAH STATE CODE
Chapter 27
Zoning and Planning

Section 17-27-5 General purposes in making master plan.

In the preparation of a county master plan, a county planning commission shall make careful and comprehensive surveys and studies of the existing conditions and probable future growth of the territory within its jurisdiction. The county master plan shall be made with the general purpose of guiding and accomplishing a coordinated, adjusted, and harmonious development of the county which will, in accordance with present and future needs and resources, best promote the health, safety, morals, order, convenience, prosperity, or the general welfare of the inhabitants, as well as efficiency and economy in the process of development, including, amongst other things, such distribution of population and of the uses of land for urbanization, trade, industry, habitation, recreation, agriculture, arboretum and other purposes, as will tend to create conditions favorable to health, safety, energy conservation, transportation, prosperity, civic activities, and recreational, educational and cultural opportunities; will tend to reduce the wastes of physical, financial, or human resources which result from either excessive congestion or excessive scattering of population; and will tend toward an efficient and economical utilization, conservation and production of the supply of food and water, and of drainage, sanitary, and other facilities and resources.

Section 17-27-6. Method of adopting proposed master plan.

(1) A county planning commission may adopt the proposed county master plan as a whole by a single resolution, or, as the work of making the whole master plan progresses, may adopt a part of it.

(2) The commission may amend, extend, or add to the plan, or carry any part of it into greater detail.

(3) (a) Before adopting the plan, or any part, amendment, extension, or addition to it, the commission shall hold a public hearing on the plan or part, amendment, extension, or addition to the plan.

(b) The commission shall publish notice of the hearing once each week for four successive weeks in a newspaper having general circulation in the county.

(4) (a) The commission shall prepare a resolution that:

(i) adopts the proposed plan, or the proposed part, amendment, extension, or addition to the plan; and
(ii) recommends to the county governing body that the plan, part, amendment, extension, or addition to the plan be adopted by them.

(b) The resolution shall refer expressly to the plans and descriptive matter intended by the commission to form the whole or part of the plan.

(5) (a) The proposed plan, or the proposed part, amendment, extension, or addition to the plan may be approved only by the affirmative votes of not less than a majority of the entire membership of the commission.

(b) The action taken shall be recorded on the plan and descriptive matter by the identifying signature of the chairman of the commission.

(6) The commission shall make the master plan available for public inspection in the office of the planning commission at all reasonable times, but its purposes and effect is to aid the planning commission in the performance of its duties.

Section 17-27-6.5. County governing body to adopt master plan -- Procedures.

(1) (a) The county governing body may adopt the proposed master plan recommended by the county planning commission, or any part, amendment, extension, or addition to the plan by a majority vote after a public hearing.

(b) A proposed master plan, or any part, amendment, extension, or addition to the plan is not effective until approved by the county governing body.

(2) (a) Before adopting the plan, or any part, amendment, extension, or addition to it, the county governing body shall hold a public hearing on the plan, or part, amendment, extension, or addition to the plan.

(b) The county governing body shall give notice of the time and place of the hearing by:

(i) publishing notice of the hearing once each week for four successive weeks in a newspaper having general circulation in the county;

(ii) providing written notice to the county planning commission, the county departments, and the municipalities in the county.

(3) At the hearing, the county governing body shall hear testimony and comments from all of the following that wish to be heard:

(a) the county planning commission;

(b) any county department;

(c) any municipality in the county;

(d) representatives of the property owners in the county; and

(e) other interested parties.
<table>
<thead>
<tr>
<th>Project/Activity</th>
<th>Salt Lake County</th>
<th>U.S. Forest Service</th>
<th>Salt Lake City</th>
</tr>
</thead>
<tbody>
<tr>
<td>LITTLE COTTONWOOD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Snowbird Master Plan/developments</td>
<td>No approvals</td>
<td>No approvals</td>
<td></td>
</tr>
<tr>
<td>Snowbird Parking Terrace addition</td>
<td>Approved</td>
<td>No approvals</td>
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<tr>
<td>BIG COTTONWOOD</td>
<td></td>
<td></td>
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<tr>
<td>Big Cottonwood Canyon Sewer</td>
<td>Approval</td>
<td>Decision Notice</td>
<td>Supports sewer, seeks maximum Canyon connections and full Canyon service</td>
</tr>
<tr>
<td></td>
<td></td>
<td>issued 10/11/88 to permit construction of 10 inch sewer line; under appeal</td>
<td></td>
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<tr>
<td>Solitude 280 Condominium Units</td>
<td>Preliminary approval, 12/15/88, contingent upon sewer line construction</td>
<td>No action required (private land)</td>
<td>Existing water contract for 320 condo units</td>
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<tr>
<td>Solitude Master Plan, Phase I (lift reconfiguraiton)</td>
<td>Preliminary approval, 1988, subject to F.S. Environmental Assessment</td>
<td>Decision Notice issued, 8/22/88; under appeal</td>
<td>N/A</td>
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<tr>
<td>Brighton Touring Center (nordic track)</td>
<td>Zoning application on hold (exempt from County moratorium)</td>
<td>Encouraged in F.S. Plan</td>
<td>N/A</td>
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<td>Brighton Master Plan</td>
<td>No pending approvals</td>
<td>Environmental Assessment completed for snowmaking system; other components pending</td>
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<td>Project/Activity</td>
<td>Salt Lake County</td>
<td>U.S. Forest Service</td>
<td>Salt Lake City</td>
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<td><strong>MILL CREEK</strong></td>
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<td>Water contract applies</td>
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<td>Water Treatment Plant - Watershed protection</td>
<td>No approvals</td>
<td>No approvals</td>
<td>Planning</td>
</tr>
<tr>
<td>measures by 1992, plant completion by 1998</td>
<td></td>
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<tr>
<td><strong>PARLEYS</strong></td>
<td></td>
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<tr>
<td>Mt. Dell Golf Course/Nordic Track Expansion</td>
<td></td>
<td></td>
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<tr>
<td>(18 hole expansion; additional 120-140 acres;</td>
<td>18 holes with nordic</td>
<td>No action (SLC land)</td>
<td>Is SLC proposal, under active</td>
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<tr>
<td>150 new parking spaces, nordic track on golf</td>
<td>track, preliminary</td>
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<td>consideration</td>
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<td>course</td>
<td>approval</td>
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<td>Summit Ski Resort</td>
<td>No approvals</td>
<td>No approvals</td>
<td>Denied for water and use of land</td>
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<tr>
<td>Little Dell Dam and Reservoir - under</td>
<td>Participating entity</td>
<td>No approvals (City land)</td>
<td>Approved</td>
</tr>
<tr>
<td>construction, completion in 1991</td>
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<tr>
<td><strong>EMISSION</strong></td>
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<tr>
<td>Emigration Oak</td>
<td></td>
<td>No action required</td>
<td>N/A</td>
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<tr>
<td>40 lots - final approval, 105 lots preliminary</td>
<td></td>
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<tr>
<td>approval, subdivision plat recorded</td>
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<tr>
<td>Criterion Solar Homes PUD</td>
<td>6 lots, preliminary</td>
<td>No action required</td>
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Sources: Salt Lake County Planning Division  
U.S. Forest Service, Salt Lake District  
Salt Lake City Department of Public Utilities
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**APPENDIX 2**
## Historical and Projected Demand for Alpine Skiing

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**Ann. Y**  
**Change**  
1987-2000 | 1.85X | 2.03X | 1.59X | 2.61X | 1.77X | 1.46X
APPENDIX 5.

SUITABILITY ANALYSIS

Suitability analysis was conducted for major Canyon land uses. Residential/commercial development suitability analysis information is provided as an example of that effort. Factors were considered to identify desirable and/or unavailable terrain for future uses. The following tables delineate factors considered to determine what lands in the Canyons might be appropriate for residential/commercial development and factors used to rate available terrain as suitable or highly suitable.

Elements considered in the suitability analysis which are dependent on objective information based on physical features and on established planning methods, regulations, ordinance, established practices or policies, hazards and other components which are objective rather than subjective are absolute factors. Descriptive factors in the suitability analysis are subjective in nature including factors which may enhance or detract from the viability of a land use but do not absolutely inhibit it.

RESIDENTIAL/COMMERCIAL DEVELOPMENT SUITABILITY (Example)

Determining areas in the Wasatch Canyons that are suitable for residential and commercial development involves the analysis of environmental and institutional considerations. Policy, ordinances, and professional judgement provide the basis for specifying the requirements of areas that would qualify as suitable. In addition to these types of absolute requirements, other conditions that influence suitability to a lesser degree are analyzed. The factors affecting the assessment of suitability for residential and commercial development are discussed below.

Delineation of Factors Affecting Developed Residential/Commercial Development Suitability

ABSOLUTE FACTORS

ENVIRONMENTAL

Hydrology: Areas within 100 feet of water features are generally excluded from consideration, subject to review by the County on a site-by-site basis.

Wetlands: Areas within a potential wetland area derived from soils descriptions are excluded from consideration.
Slope: Areas of slope greater than 30% are excluded from consideration.

Natural Hazards: Areas of known avalanche danger are excluded from consideration for residential/commercial development. (Support facilities requiring low human occupancy may not be excluded.)

Wildlife Habitat: Critical wildlife habitat and habitat of threatened, endangered, or candidate species will not be considered suitable for Residential/Commercial Development.

Soils: Soil types with slippage constraints will not be considered suitable.

DEVELOPMENT

Developed Areas: Areas currently allocated to residential, commercial, or institutional uses will be excluded from consideration. These include subdivisions that have been approved for development regardless of whether the development has been completed.

JURISDICTION

Surface Ownership: Areas with surface ownership other than private will be generally excluded from the analysis of Residential and Commercial Development suitability.

Wilderness Areas: Designated wilderness areas will be excluded from consideration.

Natural Areas: The Red Butte Research Natural Area will be excluded from consideration.

Nature Preserves: City Creek Canyon Nature Preserve will be excluded from consideration.

City Boundaries: Areas within Salt Lake City or Alta Town jurisdictions will be excluded from consideration.

DESCRIPTIVE FACTORS

ENVIRONMENTAL

Minimum Area: Areas less than 2.0 acres will be excluded from mapping for Residential/Commercial Development suitability due to spatial resolution of the terrain data.
Earthquake Faults: Earthquake faults that have been mapped will be identified. Any special earthquake study zones occurring within the study areas will also be identified.

Visual Quality: Visual Quality Objectives identified by the Forest Service will be extended into privately-owned areas. Recommendations for development characteristics will be based, in part, on visual quality considerations and aesthetic standard recommendations that are being developed as part of the Plan.

Soils: Cumulative soils constraints affecting development will be described.

Soil Erosion: Soil loss potential will be calculated using the Universal Soil Loss Equation and will influence suitability in combination with inherent soil characteristics and constraints.

Utilities: Existing utility locations will be identified for purposes of proximity analysis.

Roads: Existing road locations will be identified for purposes of proximity analysis.

Commercial: Existing commercial areas will be identified for purposes of proximity analysis.

JURISDICTION

Water Serv. Areas: Water Service Areas with established water surplus will be identified. Water service areas that coincide with potentially suitable Residential and Commercial Development areas will be highlighted.

Zoning: The zoning classification for areas delineated as potentially suitable for Residential and Commercial Development will be described.

RECREATION

Trailheads: Areas delineated as potentially suitable for Residential and Commercial Development which coincide with areas currently used for trail head access will be identified.
Other Recreation: Areas delineated as potentially suitable for Residential and Commercial Development which coincide with areas currently used for other recreation activities (not including those described under PRESCRIPTIVE) will be identified.

Parking Lots: Areas delineated as potentially suitable for Residential and Commercial development which coincide with existing parking lots will be identified.

FACTORS USED TO DETERMINE RELATIVE SUITABILITY

The suitability models and resulting maps were also programmed to indicate the relative suitability of areas. Factors were determined to indicate areas which were "highly suitable" and those which were "suitable". As an example, the following table indicates those factors and their map display for residential/commercial development.

Residential/Commercial Development Relative Suitability

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</tr>
<tr>
<td>6. Water service</td>
<td>descriptive</td>
<td>surplus,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;5 connections</td>
</tr>
</tbody>
</table>

Overplot on maps:
1. Nordic track
2. Developed camping
3. Developed trailhead
4. Developed picnic area
5. Commercial development
6. Residential development
7. Alpine ski areas
8. Trails
APPENDIX 6.

GLOSSARY

Alpine Skiing: Resort development downhill skiing with lifts and designated boundaries.

Antidegradation Policy: Statutory regulations applying to the streams of the Wasatch Canyons prohibiting degradation of water quality beyond existing levels.

Backcountry Skiing: Downhill and crosscountry skiing outside of designated ski area boundaries and exclusive of skiing on developed nordic track or groomed crosscountry ski trails. Most use does not rely upon ski lifts for access to terrain, however, backcountry skiing can originate from developed ski areas.

Baseline: As used in Chapter 2, the baseline is a frame of reference based on historical use levels, projections for future uses, and carrying capacities of the canyons.

Canyons: The seven major drainages of the Wasatch Mountains into the Salt Lake Valley. They include: City Creek, Red Butte, Emigration, Parleys, Mill Creek, Big Cottonwood, and Little Cottonwood.

Carrying Capacity: The assimilative ability of physical, cultural, and environmental systems identified as to the amount of human activity that can be sustained without exceeding limitations of that system.

Commercial Development: Multi-family dwelling units, hotels, restaurants, bars, shops, etc.

Computerized Maps: Maps generated through use of computer software which allows base map data to be overlain by input of other factors and data and manipulating such data to provide a graphic depiction of various characteristics and/or potential surface or use modifications.

Critical Wildlife Habitat: Key land areas used by wildlife for forage and reproduction.

Crosscountry Skiing: Ski touring usually on level terrain or gentle slopes and usually not associated with lifts or other mechanized facilities. Activity may take place on trails groomed for such use.

Culinary Water: That portion of the water supply which is suitable for human consumption as opposed to water for irrigation or industrial use which may not be potable.
**Developed Recreation:** Recreation activities that require specific facilities and spatial requirements. In general, these uses occur in proximity to established traffic corridors. These uses include developed camping, developed picnicking, trailheads, cultural/historical sites, Nordic track skiing, alpine skiing, and sight-seeing.

**Dispersed Recreation:** Recreation use that requires few, if any, improvements and may occur over a wide area. This type of recreation involves activities that normally occur away from roads, do not require mechanical equipment, and generally do not occur in large groups. Activities tend to be day-use oriented and include hunting, fishing, hiking, rock climbing, cross-country skiing, ice climbing, dispersed picnicking, dispersed camping, viewing scenery, horseback riding (Mill Creek and Emigration only), mountain biking, and others.

**Established Use:** Areas which are characterized by a substantial history in which a given use has occurred.

**Existing Lots of Record:** Parcels in an approved subdivision existing prior to current zoning designation; residential lots which have been platted and are on record with Salt Lake County for potential use for residential development.

**Geographic Information System (GIS):** A computerized data base of geographic information which affords analysis of data registered to specific geographic locations. A system for the efficient input, storage, representation, and retrieval of spatially-indexed data in both map-based and image-based data. GIS is used in preparation of this plan.

**Goal:** A concise statement that describes a desired condition to be achieved under the provisions of a planning scenario.

**Helicopter Skiing:** Backcountry skiing in remote areas where the skier access is provided by helicopter. Helicopter skiing operations and terrain for such use in the Plan Area are permitted by the U.S. Forest Service. Helicopter skiing permitted use is not exclusionary and other uses may also occur on the same terrain.

**Interconnect:** A proposal to connect the Canyon Ski Resorts and the Park City Ski Area (similar to that studied by the 1986 Governor's Interconnect Task Force) for ski season use with a chairlift system, new downhill ski terrain, and a specified corridor.

**Minimum Stream Flows:** The amount of flow determined to be necessary at a minimum to maintain the integrity of the streambed and/or fisheries or other characteristics associated with the stream. Prescribed minimum stream flows usually are expressed as a stipulation in a permit authorizing a dam or water diversion for
the purpose of meeting National Forest System management objectives.

**Mountain Biking:** Non-motorized bicycling off of paved roads usually using bicycles especially designed to withstand rugged use having larger, sturdier tires and from 15 to 21 gears with a lower ratio than a street bicycle.

**Mountain Development:** Aspects of mountain development associated with downhill ski area construction which require modification to vegetation and the land surface. This includes, but is not limited to, roads, chairlift construction, ski run clearing and lodge and restaurant development on the mountain. It does not include base area facilities.

**Mountain Transportation System:** A four-season transportation system connecting the Salt Lake Valley, the Plan Area Ski Resorts in Big and Little Cottonwood Canyons, Park City, and possibly the Heber Valley.

**Multiple Use:** The management of all the various renewable surface resources so that they are utilized in the combination that will best meet the needs of the people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in the use to conform to changing needs and conditions; that some lands will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.

**Nature Preserve:** Use in this document refers to City Creek Canyon which has been set aside to maintain its natural state to protect important flora and fauna and is managed as a natural park.

**Nordic Track Skiing:** Cross-country skiing on a course laid out with a system of groomed trails.

**Objective:** A concise, time-specific statement of measurable planned results that respond to preestablished goals. An objective forms the basis for further planning to define the precise steps to be taken and the resources to be used in achieving identified goals.

**Off Highway Vehicle (OHV):** Vehicles designed for use off of paved highways to include heavy duty trucks and pick-ups, four wheel drives, mountain bikes, some motorcycles and motorbikes, all-terrain vehicles, snowmobiles, and others.

**PACT:** People-At-One-Time. The total number of people that can occupy a facility or area (a campground, picnic area, or any other developed recreation site) at a given time.
**Permit Area:** The area designated to an individual, organization, or company under a special use permit to use National Forest Service land for some special purpose (i.e. commercial development, alpine skiing, helicopter skiing).

**Planned Unit Development:** a method of integrated design that allows flexibility in site, building, design and location to provide for development of compatible land uses arranged in such a way as to provide desirable living environments that may include private and open spaces for recreation, circulation, and/or aesthetic uses. Can be used to promote clustered development to preserve open space and sensitive environments.

**Recreation Visitor Day (RVD):** One visitor day equals 12 hours (one person for 12 hours, or 12 people for one hour, or any combination thereof.)

**Research Natural Area:** An area in or as near a natural condition as possible which exemplifies typical or unique vegetation and associated biotic, geologic and aquatic features. The area is set aside to preserve a representative sample of an ecological community primarily for scientific and educational purposes; commercial and general public use is not allowed.

**Residential Development:** Single family homes or cabins.

**Riparian:** Land areas which are directly influenced by water. They usually have visible vegetative or physical characteristics showing this water influence. Stream sides, lake borders, or marshes are typical of riparian areas.

**SAOT:** Skiers-At-One-Time. An estimate of the number of people who can use a ski area comfortably. It is estimated to be 600 skiers per base facility.

**Scenario:** A hypothetical future of a projected course of action(s) related to alternative land-use management strategies.

**Site:** Refers to the camping or picnic facilities serving one group or family unit.

**Ski Resort:** A commercial downhill skiing enterprise with lifts and associated facilities within permitted boundaries, primarily to provide maintained ski terrain and base facilities for the paying public.

**Ski Interconnect:** The existing guided, on-ground, ski tours among the Canyon Ski Resorts and the Park City Ski Area.

**Snowplay:** Sledding, tobogganing, inner-tubing, and other non-organized recreation associated with snow.
**Soil Tolerance (A/T):** The tolerance of the soil type to slope, precipitation, wind, and other disturbance, without significant degradation of that soil type. The amount of erosion that a specific soil can withstand and still maintain long-term productivity.

**Special Use Permit (permit area):** A permit issued under established laws and regulations to an individual, organization, or company for occupancy or use of lands for some special purposes.

**Stream Set-back:** Requirements for structures and developed facilities to be located a minimum distance from a stream.

**Subdivision:** Tracts of land which have been divided into individual building lots and are officially approved and recognized as such. They are not subject to zoning when approved prior to zone designation.

**Suitability:** Analysis of factors which may accommodate reasonable land use and the absence of factors which may preclude that use. The capability of terrain to accommodate specific land uses based on the physical and environmental factors which constitute opportunities and constraints.

**TriCanyons:** Mill Creek, Big Cottonwood, and Little Cottonwood Canyons.

**Universal Soil Loss Equation (USLE):** An empirical erosion model, originally designed for agricultural situations that computes long-term average soil losses from sheet and rill erosion under specific conditions. Recent research has provided methods so that USLE can also be used to estimate sheet and rill erosion in mountainous environments.

**Visual Quality Objective (VQO):** A desired level of excellence based on physical characteristics of an area. Refers to the degree of acceptable alterations of the characteristic landscape.

**Watershed:** The entire area that contributes water to a drainage or stream.

**Wetland:** Areas adjacent to water features characterized by hydrologic soil groups.

**Wilderness Area:** An area of Federal lands which has retained its primeval character and has no permanent improvements or human habitation and which has been designated by the Congress under the provisions of the Wilderness Act of 1964 as "wilderness". The designated area is to be managed and protected in its natural state without intrusions which may leave any lasting alterations by mankind.
APPENDIX 7.

MAPS AND REPORTS AVAILABLE FOR REVIEW
AT SALT LAKE COUNTY PLANNING OFFICE

Maps compiled and produced by Utah Automated Geographic Reference for the Salt Lake County Wasatch Canyons Master Plan. Maps produced at scale of 1:50,000 (information gathered at 1:24,000).

DATA MAPS:
- Winter Recreation
- Jurisdiction/ownership
- Natural Hazards (e.g., avalanches)
- Aspect
- Critical Value Wildlife
- Habitat
- Precipitation
- Soil Constraints
- Zoning
- Summer Recreation
- Slope
- Elevation
- Development Uses
- High Value Wildlife
- Habitat
- Soils
- Soil Tolerance
- Utilities

SUITABILITY MAPS:
- Camping/Picnicking Suitability
- Parking Suitability
- Developed Nordic Track Suitability
- Residential/Commercial Suitability
- Developed Alpine Skiing Suitability
- Backcountry Skiing Suitability (including helicopter skiing areas)

SCENARIOS MAPS
- Baseline
- Scenario A
- Scenario B
- Scenario C
- Scenario D

REPORTS AND DOCUMENTS

Documents prepared in the Plan process, and available for review at the Salt Lake County Planning Division include:

Wasatch Canyons Preliminary Plan -- prepared for public comment and consideration by the County Planning Commission prior to preparation of a final Master Plan. Bear West Consultant Team and Salt Lake County Planning Division, November 1988.
Scenarios and Policy Options for Salt Lake County Wasatch Canyons Master Plan -- scenarios and policy options for public comment, synopsis of data and information used in scenario development. No preferences were suggested or recommended. Bear West Consultant Team and Salt Lake County Planning, July 1988.

Wasatch Canyon Characteristics, Data, and Analysis -- additional background information on Canyon environmental and jurisdictional characteristics, suitability analysis, and carrying capacity analysis. Bear West Consulting Team, July 1988.

Analysis of Demand for Recreation Uses in the Wasatch Front Canyons -- a statistical review of current recreational use in the Canyons, and projections of future Canyons recreational use levels with an explanation of the methodology for arriving at those projections. Brad Barber, Natalie Gochnour and Scanlon Romer, Data Resources Section, Utah Office of Planning and Budget, July 1988.

Salt Lake County Canyons Master Plan Analysis of Transportation Facilities for the Cottonwood Canyons -- additional information and analysis of transportation issues in the Canyons. Horrocks/Carollo Engineers, February 1988.

Public Comments on Scenarios and Policy Options for Salt Lake County Wasatch Canyons Master Plan -- tabulations of public comments as indicated on "response forms" and a synopsis of oral and written comments received on the July 1988 document. Utah Office of Planning and Budget, Salt Lake County Planning Division, and Bear West, November 1988.
Chapter 19.72

HILLSIDE PROTECTION ZONE

Sections:

19.72.010 Purpose of provisions.
19.72.020 Overlay zone—Scope—Conflict resolution.
19.72.030 Applicability of provisions—Maps.
19.72.040 Slope and lot size specifications.
19.72.050 Building site requirements.
19.72.060 Plans and reports required.
19.72.070 Soils report.
19.72.080 Geology report.
19.72.090 Grading and drainage plan—Contents.
19.72.100 Vegetation plan.
19.72.110 Other reports and plans.
19.72.120 Vegetation preservation requirements.
19.72.130 Grading and drainage plan—Review and approval.
19.72.140 Access to other properties.
19.72.150 Development proposal processing.
19.72.160 Lots of record.
19.72.170 Bonds for improvements.

19.72.010 Purpose of provisions.

A. The purpose of the hillside protection zone is to promote health, safety and the general public welfare of the residents of the county by establishing standards for development of certain hillsides located in the unincorporated areas of the county to minimize soil and slope instability, erosion, downstream siltation, and to preserve the character of the hillsides.

B. The provisions herein are designed to accomplish the following:

1. Encourage the location, design and development of building sites to provide maximum safety and human enjoyment while adapting the development to the natural terrain;

2. Provide for safe circulation of vehicular and pedestrian traffic to public and private areas and minimize the scarring and erosion effects of cutting, filling and grading related to hillside street construction;

3. Prohibit activities and uses which would result in degradation of fragile soils and steep slopes;

4. Encourage preservation of open space by encouraging clustering or other design techniques to preserve the natural terrain;

5. Minimize flooding by protecting streams, drainage channels, absorption areas and floodplains from substantial alteration of the natural functions. ((Part) of Ord. passed 9/25/80: prior code § 22-35-1)

19.72.020 Overlay zone—Scope—Conflict resolution.

The hillside protection zone shall be an overlay zone of the zoning classifications set out in Section 19.06.010 of this title. In case of conflict between the provisions of the existing zoning classification, building code, subdivision ordinance and or health ordinance and the overlay zone, the most restrictive provision shall apply. ((Part) of Ord. passed 9/25/80: prior code § 22-35-2)

19.72.030 Applicability of provisions—Maps.

The maps showing those foothill areas which are included in the hillside protection zone are attached to the ordinance codified in this chapter and are on file with the county planning commission. Such maps are a part of this title as if fully described and detailed herein. ((Part) of Ord. passed 9/25/80: prior code § 22-35-3)

19.72.040 Slope and lot size specifications.

In keeping with the purposes set forth in Section 19.72.010, and after excluding all property

(Salt Lake County 7-§8)
having a slope greater than thirty percent, lots within the hillside protection zone shall comply with the following schedule:

<table>
<thead>
<tr>
<th>Slope</th>
<th>Minimum Lot Size (Unless existing zone requires larger lots)</th>
<th>Maximum Residential Lots Per Acre in a Planned Unit Development (Unless existing zone requires a smaller maximum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 20%</td>
<td>See existing zone</td>
<td>See existing zone</td>
</tr>
<tr>
<td>20 - 25%</td>
<td>15,000 square feet</td>
<td>2.9</td>
</tr>
<tr>
<td>25 - 30%</td>
<td>½ Acre</td>
<td>2</td>
</tr>
<tr>
<td>Over 30%</td>
<td>Development not permitted</td>
<td></td>
</tr>
</tbody>
</table>

Average slope is determined by the following:

\[
S = \frac{.00229 \times L \times L}{A}
\]

where: 
S = Average slope in percent, .00229 = a conversion factor, 
L = the contour interval (or vertical distance between adjacent contour lines of the map, in feet). 
The contour interval may not exceed 10 feet. 
L = the total length in feet of all the contour lines within the subject parcel, excluding areas of slope greater than 30%. 
A = the area in acres of the subject parcel, excluding the areas of slope greater than 30%. 
Average slope shall be determined on an individual lot basis and/or by areas of generally uniform slope which have a maximum size of five acres.

Roads and other vehicular routes shall not cross property having a slope greater than thirty percent unless, after review by the planning commission, it is determined that:

A. Appropriate engineering measures can be taken to minimize the impact of the cuts and fills, consistent with the purpose of this chapter; and

B. The environment and aesthetics of the area will not be significantly affected. (Ord. 966 § 3, 1986; (part) of Ord. passed 9/25/80; prior code § 22-35-4)

19.72.050 Building site requirements.

A. Each lot or parcel of land shall contain a primary building site appropriate to accommodate the primary residential structure, which building site shall be outlined on the subdivision plat.

B. Grading of the lot or parcel which is related to creation of the primary building site or construction of the structure shall not extend more than thirty feet, horizontally, in front, to the rear or to the side of the proposed structure unless a greater distance is approved by the planning commission upon a showing by the developer that a greater distance will not be contrary to the purposes of this chapter.

C. The primary building site shall have a natural or manmade slope of twenty percent or less.

D. Building sites for accessory buildings or structures such as tennis courts, swimming pools, outbuildings, etc., shall be approved by the planning commission.

E. The driveway(s) to the building site shall have a maximum slope of fifteen percent and shall have direct access to a public street or private right-of-way approved by the planning commission. (Ord. 966 § 4, 1986; (part) of Ord. passed 9/25/80; prior code § 22-35-5)

19.72.060 Plans and reports required.

The planning commission shall require the following reports and plans to be provided by the applicant. Unless the applicant is notified of deficiencies in such reports and plans within thirty days of their submission to the planning commission, the reports and plans shall be deemed adequate for the planning commission to complete the processing of the application. The planning commission may waive any reports and plans it determines are not necessary to determine whether the development meets the requirements of this chapter. (Part of Ord. passed 9/25/80; prior code § 22-35-6(part))

19.72.070 Soils report.

The soil report shall be prepared by a qualified soils engineer, and must contain at least the following information:

A. A slope analysis;

B. An estimate of the normal highest elevation of the seasonal high-water table;

C. The location and size of swamps, springs and seeps, which shall be shown on the site plan, and the reasons for the occurrence of these underground water sources. An analysis of the vegetative cover or other surface information may be used to show the presence of underground water;
D. A unified soil classification for the major horizons or layers of soil profile, or of the zone of the footing foundation:

E. Appropriate accepted soils engineering tests to determine bearing capacity, settlement potential, and shrink/swell potential of the site soils:

F. Potential frost action, based on the depth to the water table and the Unified Soils Classification:

G. An analysis of the soil suitabilities, constraints and proposed methods of mitigating such constraints in implementing the proposed development plan:

H. A written statement by the person or firm preparing the soils report, identifying the means proposed to minimize hazard to life, property, adverse effects on the safety, use or stability of a public right-of-way or drainage channel, and adverse impact on the natural environment. (Part of Ord. passed 9/25/80: prior code § 22-35-6(1))

19.72.080  Geology report.
A. A geology report shall be prepared by a person or firm qualified by training and experience to have expert knowledge of the subject. A geologic map shall accompany the report. Mapping should reflect careful attention to the rock composition, structural elements, and surface and subsurface distribution of the earth materials exposed or inferred within both bedrock and surficial deposits. A clear distinction should be made between observed and inferred features and/or relationships.

B. The report shall contain at least the following information:
   1. Location and size of subject area and its general setting with respect to major geographic and geologic features:
   2. Identification (including author and date) of the geologic mapping upon which the report is based:
   3. Topography and drainage in the subject area:

4. Abundance, distribution and general nature of exposures of earth materials within the area:

5. Nature and source of available subsurface information:

6. Estimated depth to bedrock:

7. Bedrock: igneous, sedimentary, metamorphic types:

8. Structural features, including but not limited to stratification, stability, folds, zones of contortion or crushing, joints, fractures, shear zones, faults, and any other geological limitations:

9. Conclusions and recommendations regarding the effect of geologic conditions on the proposed development, and recommendations covering the adequacy of sites to be developed:

10. A written statement by the person or firm preparing the geology report identifying the means proposed to minimize hazard to life or property, adverse effects on the safety, use or stability of a public right-of-way or drainage channel, and adverse impact on the natural environment. (Part of Ord. passed 9/25/80: prior code § 22-35-6(2))

19.72.090  Grading and drainage plan—
Contents.
A. A grading and drainage plan shall be prepared by a professional engineer registered in the state. The plan must be sufficient to determine the erosion-control measures necessary to prevent soil loss during construction and after project completion.

B. The plan shall include, at least, the following information:
   1. A map of the entire site, showing existing details and contours of the property and proposed contour modifications, using a minimum of ten-foot contour intervals at a scale of one inch equals one hundred feet:
   2. Map(s) of area(s) to be graded, showing existing details and contours at five-foot intervals where terrain will not be modified, and proposed
details and contours of two-foot intervals where terrain modification is proposed, using a scale of one inch equals twenty feet:

3. An investigation of the effects of high-intensity rainstorm (one-hundred-year occurrence according to U.S. Department of Commerce Weather Bureau Frequency Curves), evaluating how the proposed drainage system will handle the predicted flows, including effects of drainage areas outside the development which drain through the subject area and the anticipated flow of the drainage leaving the development:

4. The history, including frequency and duration, of prior flooding:

5. The location of any existing buildings or structures on the development, and any existing buildings or structures on land of adjacent owners which are within one hundred feet of the property, or which are on the land of adjacent owners and may be affected by the proposed development:

6. The direction of proposed drainage flow and the approximate grade of all streets (not to be construed as a requirement for the final street design):

7. Proposed plans and locations of all surface and subsurface drainage devices, walls, dams, sediment basins, storage reservoirs, and other protective devices to be constructed with or as part of the proposed work, together with a map showing drainage areas and the proposed drainage network, including outfall lines and natural drainageways which may be affected by the proposed project. Include the estimated runoff of the areas served by the drainage plan;

8. A description of the method to be used on obtaining fill for use on the site and the site of acquisition of such fill;

9. A description of methods to be employed in disposing of soil and other material which is removed from the site, including the location of the disposal site;

10. A plan showing temporary erosion-control measures to prevent erosion during the course of construction:

11. A schedule showing when each stage of the project will be completed, including the total area of soil surface which is to be disturbed during each stage and an estimate of starting and completion dates. The schedule shall be drawn to limit to the shortest possible period the time that soil is exposed and unprotected. In no event shall the existing natural vegetation or ground cover be destroyed, removed or disturbed more than fifteen days prior to commencing grading for development as scheduled:

12. A written statement by the person or firm preparing the grading and drainage plan, identifying any grading and drainage problems of the development and further stating an opinion as to the ability of the proposed plan to mitigate or eliminate such problems in a manner as to prevent hazard to life, hazard to property, adverse effects on the safety, use or stability of a public way or drainage channel, and adverse impact on the natural environment. ((Part) of Ord. passed 9/25/80: prior code § 22-35-6(3))

19.72.100 Vegetation plan.

The vegetation plan and report shall be prepared by a person or firm qualified by training and experience to have expert knowledge of the subject, and shall include at least the following:

A. A survey of existing trees, large shrubs and ground covers:

B. A plan of the proposed revegetation of the site, detailing existing vegetation to be preserved, new vegetation to be planted, and any modifications to existing vegetation:

C. A plan for the preservation of existing vegetation during construction activity:

D. A vegetation maintenance program, including initial and continuing maintenance necessary:
E. A written statement by the person or firm preparing the vegetation plan and report, identifying any vegetation problems, and further stating an opinion as to the ability of the proposed plan to mitigate or eliminate such problems in a manner as to prevent hazard to life or property, adverse effects on the safety, use or stability of a public way or drainage channel, and adverse impact on the natural environment. (Part) of Ord. passed 9/25/80: prior code § 22-35-6(4)

19.72.110 Other reports and plans.
Other reports and plans shall be prepared as deemed necessary by the planning commission. (Part) of Ord. passed 9/25/80: prior code § 22-35-6(5)

19.72.120 Vegetation preservation requirements.
Vegetation shall be removed only when absolutely necessary, i.e., for buildings, filled areas, roads, and firebreaks. Every effort shall be made to conserve topsoil which is removed during construction for later use on areas requiring vegetation or landscaping, i.e., cut-and-fill slopes. Vegetation sufficient to stabilize the soil shall be established on all disturbed areas, including lots which may be subject to future grading, as each stage of grading is completed. Areas not contained within lot boundaries shall be protected with adapted fire-resistant species of perennial vegetative cover after all construction is completed. The new vegetation shall be equivalent to or exceed the amount and erosion-control characteristics of the original vegetation cover.

B. The property owner and contractor shall be fully responsible for any destruction of native vegetation proposed for retention under the approved vegetation plan, and shall be responsible for the replacement of destroyed vegetation, including vegetation destroyed by employees and subcontractors. (Part) of Ord. passed 9/25/80: prior code § 22-35-7

19.72.130 Grading and drainage plan—Review and approval.
A. The drainage and grading plans shall be approved by the development services division prior to final approval by the planning commission. Approvals by said divisions shall be based upon official standards and ordinances administered by the individual divisions.
B. It is unlawful to excavate or grade any area within the hillside protection zone prior to final approval of the grading and excavation plan by the planning commission. (Part) of Ord. passed 9/25/80: prior code § 22-35-8

19.72.140 Access to other properties.
Safe, convenient and adequate access, approved by the planning commission, shall be provided to adjacent private and public lands for vehicles, pedestrians and essential service and maintenance equipment. (Part) of Ord. passed 9/25/80: prior code § 22-35-9

19.72.150 Development proposal processing.
A. Development proposals in the hillside protection zone shall be processed in a timely manner under established conditional use or subdivision procedures.
B. In order to fulfill the purpose of the hillside protection zone, described in Section 19.72.010, the planning commission shall determine whether the proposed development meets the requirements of this chapter, based on the required reports and other data available to it. The planning commission shall, when it deems necessary, request recommendations from other agencies such as the board of health, Utah State Forestry, U.S. Forest Service, and the U.S. Soil Conservation Service.
C. Any area which is determined to contain natural hazards to life, limb or property, including but not limited to soil hazards, geologic hazards or hydrologic hazards, shall not be approved for development unless the applicant demonstrates that such identified hazards or limitations
can be overcome in such a manner as to minimize hazard to life, limb or property; adverse effects on the safety, use or stability of a public way or drainage channel; and other adverse impacts on the natural environment.

D. The planning commission may set requirements it determines are necessary to overcome any natural hazards and to ensure that the purposes of this chapter are met. These requirements may include, but not be limited to, a revegetation program, a time schedule for completion of the development, flood-control and erosion-control improvements, location of structures, and phasing of development. ((Part) of Ord. passed 9/25/80: prior code § 22-35-10)

19.72.160 Lots of record.

The planning commission may waive any requirements of this chapter for lots of record, lots and plans of subdivisions which were approved by the planning commission prior to the enactment of the ordinance from which this section derives, if such waiver would not be injurious to health, safety and the general public welfare of the inhabitants of the county and is consistent with the purpose of this chapter. (Ord. 966 § 5, 1986; (part) of Ord. passed 9/25/80: prior code § 22-35-11)

19.72.170 Bonds for improvements.

Bonds for improvements required under this chapter shall be subject to the provisions of the Salt Lake County subdivision ordinance set out at Title 18 of this code, and Section 19.02.110 of this title. ((Part) of Ord. passed 9/25/80: prior code § 22-35-12)
APPENDIX 9.

Chapter 19.12

FR-0.5, FR-1, FR-2.5, FR-5, FR-10, FR-20, FR-50 AND FR-100 FORESTRY AND RECREATION ZONES

Sections:

19.12.010 Purpose of provisions.
19.12.040 Lot area, width and slope.
19.12.050 Yard requirements.
19.12.060 Building height.
19.12.070 Maximum coverage.
19.12.080 Natural hazards.
19.12.090 Board of health approval.
19.12.100 Grading.
19.12.110 Natural vegetation.
19.12.120 Utilities.
19.12.150 Site plan approval.

19.12.010 Purpose of provisions.

The purpose of the the forestry and recreation zones is to permit the development of the canyon areas of the county for forestry, recreation and other uses, as set forth in and limited by Sections 19.12.020 and 19.12.030 of this chapter, to the extent such development is compatible with the protection of the natural and scenic resources of these areas for the continued benefit of future generations. (Prior code § 22-9A-1)


All permitted uses in the the forestry and recreation zones are subject to Sections 19.12.070 and 19.12.090 through 19.12.150 of this chapter, and include:

A. Accessory uses and structures customarily incidental to a permitted use;
B. Agriculture, as defined in Section 19.04.020;
C. Household pets, as long as the area proposed for animals is not in a watershed area, as determined by the city-county board of health;
D. Single-family dwellings. (Ord. passed 1/13/82; prior code § 22-9A-2)


All conditional uses in the forestry and recreation zones are subject to Sections 19.12.070 and 19.12.090 through 19.12.150 of this chapter, except that the regulations of said sections may be modified by the planning commission as they relate to mineral extraction and processing, and public uses, and include:

A. Accessory uses and structures customarily incidental to a conditional use;
B. Commercial and private recreation;
C. Day care/preschool center, subject to Section 19.76.260;
D. Dwelling group;
E. Horses, and animals and fowl for family food production, as described in Section 19.04.235 of this title, provided that:
   1. The area proposed for animals is not a watershed area, as determined by the city-county board of health,
   2. The use will not create unreasonable on-site erosion, downstream siltation, bacteriological or biological pollution in subsurface or surface waters, destruction of vegetation, air pollution, including dust and odors or other detrimental environmental effects. In determining the environmental effects of the use, the planning commission shall seek and consider recommendations from the city-county board of health and other concerned agencies, and may require the applicant to submit scientific studies including analysis of slope, soils, vegetative cover, availability of water, and other elements necessary to establish environmental effects of the proposed use,
   3. The planning commission may limit the number of animals and fowl, or limit the amount of ground to be devoted to such use, or make other conditions to ensure environmental protection,

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4. After the use is established, if the planning commission determines, based on findings of facts, that unreasonable environmental degradation is occurring, the planning commission may, after notification to the applicant and hearing, establish additional conditions or order the use to be abated;

F. Living quarters for persons employed on the premises of any main use;

G. Logging and lumber processing;

H. Mineral extraction and processing;

I. Offices incidental to main use;

J. Planned unit development;

K. Public and quasi-public use;

L. Temporary structures. (Prior code § 22-9A-3)

19.12.040 Lot area, width and slope.

A. Lot area and lot width requirements in the forestry and recreation zones are as follows:

<table>
<thead>
<tr>
<th>District</th>
<th>Minimum Lot Area</th>
<th>Minimum Lot Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR-0.5</td>
<td>1/2 acre</td>
<td>100 feet</td>
</tr>
<tr>
<td>FR-1</td>
<td>1 acre</td>
<td>200 feet</td>
</tr>
<tr>
<td>FR-2.5</td>
<td>2-1/2 acres</td>
<td>250 feet</td>
</tr>
<tr>
<td>FR-5</td>
<td>5 acres</td>
<td>300 feet</td>
</tr>
<tr>
<td>FR-10</td>
<td>10 acres</td>
<td>300 feet</td>
</tr>
<tr>
<td>FR-20</td>
<td>20 acres</td>
<td>300 feet</td>
</tr>
<tr>
<td>FR-50</td>
<td>50 acres</td>
<td>300 feet</td>
</tr>
<tr>
<td>FR-100</td>
<td>100 acres</td>
<td>300 feet</td>
</tr>
</tbody>
</table>

B. In all FR zones, construction is not permitted where the slope exceeds thirty percent. Roads and other vehicular routes shall not cross property having a slope greater than thirty percent unless, after review by the planning commission, it is determined that:

1. Appropriate engineering measures can be taken to minimize the impact of the cuts and fills, consistent with the purpose of this chapter, and

2. The environment and aesthetics of the area will not be significantly affected. (Ord. 1013 § 4, 1987; Ord. 966 § 1, 1986: prior code § 22-9A-4)

19.12.050 Yard requirements.

Because of the unique nature of the topography and climatic conditions of the canyon areas in the forestry and recreation zones, the side, rear and front yard requirements will be determined on an individual basis by the planning commission for conditional uses and by the development services division director for single-family dwellings. (Ord. 982 § 8, 1986: prior code § 22-9A-5)

19.12.060 Building height.

In the forestry and recreation zones, no single-family dwellings shall be erected to a height greater than two and one-half stories or thirty-five feet, nor less than one story. (Prior code § 22-9A-6)

19.12.070 Maximum coverage.

The maximum coverage for the aggregate of all buildings, paved surfaces and graded areas in the forestry and recreation zones shall be limited by the following schedule:

<table>
<thead>
<tr>
<th>Zone</th>
<th>Maximum Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR-0.5</td>
<td>25%</td>
</tr>
<tr>
<td>FR-1</td>
<td>25%</td>
</tr>
<tr>
<td>FR-2.5</td>
<td>15%</td>
</tr>
<tr>
<td>FR-5</td>
<td>10%</td>
</tr>
<tr>
<td>FR-10</td>
<td>5%</td>
</tr>
<tr>
<td>FR-20</td>
<td>5%</td>
</tr>
<tr>
<td>FR-50</td>
<td>2%</td>
</tr>
<tr>
<td>FR-100</td>
<td>1%</td>
</tr>
</tbody>
</table>

(Ord. 1013 § 5, 1987: prior code § 22-9A-7)

19.12.080 Natural hazards.

Construction of permanent structures is not permitted in areas of the forestry and recreation zones subject to hazards such as floods, landslides and avalanches. (Prior code § 22-9A-8(1))

19.12.090 Board of health approval.

Prior to issuance of a conditional use permit or site plan approval for all uses in the forestry and recreation zones, regardless of size or number of

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units, the applicant shall receive the written approval of the city-county board of health certifying that all health requirements have been satisfied and that the proposed construction will not damage the natural watershed. In addition, developments of more than nine lots or more than nine units shall receive the written approval of the State Division of Health, certifying the culinary water system and the sewerage system. All approvals shall be in accordance with the regulations of the State Division of Health relating to culinary water supply and wastewater disposal. (Prior code § 22-9A-8(2))

19.12.100 Grading.

To eliminate the possibility of erosion and unsightly scars on the mountain slopes, cut-and-fill in the forestry and recreation zones shall be controlled by standards adopted by the planning commission which are based on slope and grade analysis for construction of access roads, private rights-of-way, and building sites. All cut-and-fill surfaces shall be replanted and maintained to negate the possibility of erosion and scarring. (Prior code § 22-9A-8(4))

19.12.110 Natural vegetation.

In the forestry and recreation zones, vegetation shall not be removed unless the site plan and the plan for vegetation clearing is approved by the planning commission for conditional uses or the development services division director for permitted uses, subject to all the provisions of this chapter. (Ord. 982 § 9, 1986: prior code § 22-9A-8(5))

19.12.120 Utilities.

In the forestry and recreation zones, all utilities shall be placed underground. (Prior code § 22-9A-8(7))


Buildings in the forestry and recreation zones shall be designed to preserve the natural beauty of the canyon areas. Only those building materials which will blend harmoniously into the natural environment shall be permitted. The use of wood and stone and other harmonious materials is encouraged, and the use of bland, unpainted concrete blocks and unpainted metal is prohibited on exterior surfaces. (Prior code § 22-9A-8(3))


For conditional uses in the forestry and recreation zones, the planning commission shall determine the number of parking spaces required. For permitted uses, the planning division director shall determine the number of parking spaces required. However, the minimum requirements of Chapter 19.80 shall be provided, except that the planning commission may modify the requirements of Sections 19.80.060 through 19.80.120. Covered parking is encouraged. (Ord. 1022 § 2, 1988: Ord. 982 § 10, 1986: prior code § 22-9A-8(6))

19.12.150 Site plan approval.

In order to determine compliance with this title and to promote orderly and harmonious development of canyon areas, site plans for single-family dwellings in the forestry and recreation zones shall be approved by the development services division director prior to issuance of any building permits. Applications for site plan approval shall be accompanied by a site plan and elevations showing the relationship of the construction to the natural grade and finished grade. Drawings shall show proposed signs, landscaping, exterior material, color schedules, and all other information necessary to enable the development services division director to make the findings set forth in this chapter. Applications may be approved as submitted, approved subject to conditions, or disapproved. Actions of the development services division director shall be subject to appeal to the planning commission. (Ord. 982 § 11, 1986: prior code § 22-9A-9)

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The planning commission for conditional uses and the development services director for permitted uses may waive the slope requirements of this chapter for lots of record in forestry and recreation zones, lots and plans of subdivisions which were approved by the planning commission prior to the enactment of the ordinance from which this section derives if such waiver would not be injurious to health, safety and the general public welfare of the inhabitants of Salt Lake County and is consistent with the purpose of this chapter. (Ord. 966 § 6, 1986: prior code § 22-9A-10)
Chapter 19.10

FM-10 AND FM-20 FORESTRY MULTIFAMILY ZONES

Sections:
19.10.010 Purpose of provisions.
19.10.020 Permitted uses.
19.10.030 Conditional uses.
19.10.040 Lot area, width and slope.
19.10.050 Yard requirements.
19.10.060 Building height.
19.10.070 Density of development.
19.10.080 Maximum coverage.
19.10.090 Natural hazards.
19.10.100 Board of health approval.
19.10.110 Grading.
19.10.120 Natural vegetation.
19.10.130 Utilities.
19.10.140 Building materials.
19.10.150 Off-street parking.
19.10.160 Site plan approval.
19.10.170 Lots of record.

19.10.010 Purpose of provisions.
The purpose of the FM-10 and FM-20 zones is to permit development of certain areas in the canyons of the county for high-density residential, limited commercial and other uses, as set forth in this chapter, to the extent that such development is compatible with the protection of the natural and scenic resources of these areas for the continued benefit of future generations. (Prior code § 22-9B-1)

19.10.020 Permitted uses.
All permitted uses in the FM-10 and FM-20 zones are subject to Sections 19.10.040 through 19.10.160 of this chapter and include:
A. Accessory uses and structures customarily incidental to permitted use;
B. Agriculture, as defined in Section 19.04.020;
C. Single-family dwellings. (§ 1(part) of Ord. passed 2/184; prior code § 22-9B-2)

19.10.030 Conditional uses.
All conditional uses in the FM-10 and FM-20 zones are subject to Sections 19.10.040 through 19.10.160 of this chapter, and include:
— Accessory uses and structures customarily incidental to a conditional use;
— Apartments, boardinghouse; lodginghouse, hotel; motel; resort hotel;
— Class B beer outlet; package agency; state store;
— Class C beer outlet;
— Commercial and private recreation;
— Day care/preschool center, subject to Section 19.76.260;
— Dwelling group;
— Living quarters for persons employed on the premises of any main use;
— Office incidental to main use;
— Planned unit development;
— Private and nonprofit locker club;
— Public and quasi-public uses;
— Restaurant, boutique, gift shop, and other limited commercial uses determined by the planning commission to be of the same character as these listed and serving the needs of the visitor and residents of the canyons;
— Restaurant liquor license;
— Temporary structures;
— Two-family dwelling; three-family dwelling; four-family dwelling; multiple-family dwelling. (Ord. 1988 § 3(part), 1987; prior code § 22-9B-3)

19.10.040 Lot area, width and slope.
The minimum lot area in the FM-10 and FM-20 zones shall be one-half acre. The minimum width of any lot shall be one hundred feet. Construction is not permitted where the slope exceeds thirty percent. Roads and other vehicular routes shall not cross property having a slope greater than thirty percent unless, after review by the planning commission, it is determined that:
A. Appropriate engineering measures can be taken to minimize the impact of the cuts and fills, consistent with the purpose of this chapter, and
B. The environment and aesthetics of the area will not be significantly affected. (Ord. 966 § 2, 1986: prior code § 22-9B-4)

19.10.050 Yard requirements.
Because of the unique nature of the topography and climatic conditions of the canyon areas, the side, rear and front yard requirements in the FM-10 and FM-20 zones will be determined on an individual basis by the planning commission for conditional uses and by the development services division director for single-family dwellings. (Ord. 982 § 12, 1986: prior code § 22-9B-5)

19.10.060 Building height.
A. The unique nature of the topography, vegetation, soils, climatic and aesthetic characteristics of the canyons defy uniform regulations and require that the heights of structures in the FM-10 and FM-20 zones be determined on an individual basis. Maximum and minimum heights of all conditional uses shall be determined by the planning commission, based on a careful analysis of the following:
1. Natural setting;
2. Relationship to other structures and open spaces;
3. Contour intervals and topographic features;
4. Height, density and type of vegetation;
5. Scenic vistas;
6. Other elements deemed appropriate to ensure that the provisions of Section 19.10.010 are met.
B. The maximum height for single-family dwellings shall be two and one-half stories or thirty-five feet. Single-family dwellings shall not be less than one story. (Prior code § 22-9B-6)

19.10.070 Density of development.
A. In the FM-10 and FM-20 zones, the maximum density for residential dwelling units, except single-family dwellings, shall be as follows:

<table>
<thead>
<tr>
<th>Zone</th>
<th>Maximum Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>FM-10</td>
<td>10 dwelling units or 20 guestrooms per net developable acre;</td>
</tr>
<tr>
<td>FM-20</td>
<td>20 dwelling units or 40 guestrooms per net developable acre.</td>
</tr>
</tbody>
</table>

B. Where net developable acreage is defined as ground with all of the following:
1. Slope less than thirty percent;
2. Soils of a suitable depth and type based on soil exploration and percolation tests in accordance with the regulations of the State Division of Health to ensure against detriment to surface water and groundwater quality;
3. Minimum distance from any stream or creek of fifty feet;
4. Free from any natural hazards such as flood, avalanche, landslide, high water table, etc. (Prior code § 22-9B-7)

19.10.080 Maximum coverage.
The maximum coverage for the aggregate of all building, paved surfaces and graded areas in the FM-10 and FM-20 zones shall be twenty-five percent of the site area. (Prior code § 22-9B-8)

19.10.090 Natural hazards.
Construction of permanent structures in FM-10 and FM-20 zones is not permitted in areas subject to hazards such as floods, landslides and avalanches. (Prior code § 22-9B-9(1))

19.10.100 Board of health approval.
Prior to issuance of a conditional use permit or site plan approval for all uses in an FM-10 and FM-20 zone, regardless of size or number of units, the applicant shall receive the written approval of the city-county board of health certifying that all health requirements have been satisfied and that the proposed construction will not damage the natural watershed. In addition, developments of more than nine lots or more than nine units shall receive the written approval of the State Division of Health certifying the (Salt Lake County 10-87)
culinary water system and the sewerage system. All approvals shall be in accordance with the regulations of the State Division of Health relating to culinary water supply and wastewater disposal. (Prior code § 22-9B-9(2))

19.10.110 Grading.
To eliminate the possibility of erosion and unsightly scars on the mountain slopes, cut-and-fill in the FM-10 and FM-20 zones shall be controlled by standards adopted by the planning commission which are based on slope and grade analysis, for construction of access roads, private rights-of-way, and building sites. All cut-and-fill surfaces shall be replanted and maintained to negate the possibility of erosion and scarring. (Prior code § 22-9B-9(4))

19.10.120 Natural vegetation.
Natural vegetation shall not be removed in the FM-10 and FM-20 zones unless the site plan and the plan for vegetation clearing are approved by the planning commission for conditional uses, or the development services division director for permitted uses, subject to all the provisions of this chapter. (Ord. 982 § 13, 1986: prior code § 22-9B-9(5))

19.10.130 Utilities.
All utilities in FM-10 and FM-20 zones shall be placed underground. (Prior code § 22-9B-9(7))

19.10.140 Building materials.
Buildings in FM-10 and FM-20 zones shall be designed to preserve the natural beauty of the canyon areas. Only those building materials which will blend harmoniously into the natural environment shall be permitted. The use of wood, stone and other harmonious materials is encouraged and the use of bland, unpainted concrete blocks and unpainted metal is prohibited on exterior surfaces. (Prior code § 22-9B-9(3))

19.10.150 Off-street parking.
For conditional uses in FM-10 and FM-20 zones, the planning commission shall determine the number of parking spaces required. For permitted uses, the planning division director shall determine the number of parking spaces required. However, the minimum requirements of Chapter 19.80 of this title shall be provided, except that for hotels and resort hotels one-half parking space shall be provided for each guestroom. The planning commission may modify the requirements of Sections 19.80.060 through 19.80.120. (Ord. 982 § 14, 1986: prior code § 22-9B-9(6))

19.10.160 Site plan approval.
In order to determine compliance with this title and to promote orderly and harmonious development of canyon areas, site plans for single-family dwellings in FM-10 and FM-20 zones shall be approved by the development services division director prior to issuance of any building permits. Applications for site plan approval shall be accompanied by a site plan and elevations showing the relationship of the construction to the natural grade and finish grade. Drawings shall show proposed signs, landscaping, exterior material, color schedules and all other information necessary to enable the development services division director to make the findings set forth in this chapter. Applications may be approved as submitted, approved subject to conditions, or disapproved. Actions of the development services division director shall be subject to appeal to the planning commission. (Ord. 982 § 15, 1986: prior code § 22-9B-10)

19.10.170 Lots of record.
The planning commission for conditional uses and the development services director for permitted uses may waive the slope requirements of this chapter for lots of record, lots and plans of subdivisions which were approved by the planning commission prior to the enactment of the ordinance from which this section derives.
if such waiver would not be injurious to health, safety and the general public welfare of the inhabitants of Salt Lake County and is consistent with the purpose of this chapter. (Ord. 966 § 7, 1986: prior code § 22-9B-11)
APPENDIX 11.

Chapter 19.84

CONDITIONAL USES

Sections:

19.84.010 Purpose.
19.84.020 Conditional use permit required when.
19.84.030 Application requirements—Fee.
19.84.040 Public hearing.
19.84.050 Determination of commission.
19.84.060 Delegation of approval authority.
19.84.070 Policies established.
19.84.080 Review by planning commission.
19.84.090 Conditions for approval.
19.84.100 Appeal of planning director decision.
19.84.110 Appeal of planning commission decision.
19.84.120 Inspection.
19.84.130 Time limit.
19.84.140 Sale of alcoholic beverages.

19.84.010 Purpose.

The purpose of this chapter is to allow the proper integration into the county of uses which may be suitable only in certain locations in the county or zoning district, or only if such uses are designed or laid out on the site in a particular manner. (Prior code § 22-31-1)

19.84.020 Conditional use permit required when.

A conditional use permit shall be required for all uses listed as conditional uses in the district regulations or elsewhere in this title. A conditional use permit may be revoked upon failure in compliance with conditions precedent to the original approval of the permit or for any violation of this title occurring on the site for which the permit was approved. (Ord. 947 § 2, 1986: prior code § 22-31-2(part))

19.84.030 Application requirements—Fee.

A. Application for a conditional use permit shall be made by the property owner or certified agent thereof to the planning commission.

B. Accompanying Documents. Detailed site plans drawn to scale and other drawings necessary to assist the planning commission in arriving at an appropriate decision.

C. Fee. The fee for any conditional use permit shall be as provided for in Section 3.52.040 of this code. (Prior code § 22-31-2(1)—(3))

19.84.040 Public hearing.

No public hearing need be held; however, a hearing may be held when the planning commission shall deem such a hearing to be necessary in the public interest.

A. The development services division director may delegate to the planning director the holding of the hearing.

B. The development services division director shall submit to the planning commission a record of the hearing, together with a report of findings and recommendations relative thereto, for the consideration of the planning commission.

C. Such hearing, if deemed necessary, shall be held not more than thirty days from the date of application. The particular time and place shall be established by the development services division director.

D. The development services division director shall publish a notice of hearing in a newspaper of general circulation in the county not less than ten days prior to the date of the hearing. Failure of property owners to receive notice of the hearing shall in no way affect the validity of action taken. (Ord. 982 § 20, 1986: prior code § 22-31-2(4))

19.84.050 Determination of commission.

The planning commission may permit a conditional use to be located within any district in which the particular conditional use is permitted by the use regulations of this title. In authorizing

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any conditional use the planning commission shall impose such requirements and conditions as required by law and any additional conditions as may be necessary for the protection of adjacent properties and the public welfare. Such conditions of approval may include but shall not be limited to limitations or requirements as to the height, size, location and design of structures, landscaping, density, ingress-egress, fencing, parking or lighting. Height, density and size requirements for structures in each zone are maximums and may be reduced or modified as conditions to the approval of any conditional use application. (Ord. of 5/29/85; prior code § 22-31-2(5)(part))

19.84.060 Delegation of approval authority.

The planning commission may delegate to the development services division director the authority to approve, modify or deny all or part of the conditional uses set forth in this title. (Ord. 982 § 21, 1986: prior code § 22-31-2(5)(part))

19.84.070 Policies established.

The planning commission shall establish policies regarding landscaping, fencing, lighting, ingress-egress, height of buildings, etc., to guide the decision of the development services division director to ensure consistency in the issuance of conditional use permits. (Ord. 982 § 22, 1986: prior code § 22-31-2(5)(part))

19.84.080 Review by planning commission.

The development services division director is authorized to bring any conditional use permit application before the planning commission if, in his opinion, the general public interest will be better served by review of the planning commission. (Ord. 982 § 23, 1986: prior code § 22-31-2(5)(part))

19.84.090 Conditions for approval.

The planning commission shall not authorize a conditional use permit unless the evidence presented is such as to establish:

A. That the proposed use at the particular location is necessary or desirable to provide a service or facility which will contribute to the general well-being of the neighborhood and the community; and

B. That such use will not, under the circumstances of the particular case, be detrimental to the health, safety or general welfare of persons residing or working in the vicinity, or injurious to property or improvements in the vicinity; and

C. That the proposed use will comply with the regulations and conditions specified in this title for such use; and

D. That the proposed use will conform to the intent of the county master plan. (Prior code § 22-31-2(5)(part))

19.84.100 Appeal of planning director decision.

Any person shall have the right to appeal the decision of the development services director to the planning commission by filing a letter with the planning commission within ten days of the development services director's decision, stating the reason for the appeal and requesting a hearing before the planning commission at the earliest regular meeting of the commission. (Ord. 979 § 3, 1986: prior code § 22-31-2(5)(part))

19.84.110 Appeal of planning commission decision.

A. Any person shall have the right to appeal to the board of county commissioners any decision rendered by the planning commission by filing in writing, and in triplicate, stating the reasons for the appeal with the board of county commissioners within ten days following the date upon which the decision is made by the planning commission. After receiving the appeal the county commission may reaffirm the planning commission decision, remand the matter to the planning commission for further consideration, or set a date for a public hearing.

B. Notification of Planning Commission. The board of county commissioners shall notify
planning commission of the date of the review, in writing, at least seven days preceding the date set for hearing so that the planning commission may prepare the record for the hearing.

C. Determination by Board of County Commissioners. The board of county commissioners after proper review of the decision of the planning commission may affirm, reverse, alter or remand for further review and consideration any action taken by the planning commission. (Ord. 1004 § 2, 1987; prior code § 22-31-2(6))

**19.84.120 Inspection.**

Following the issuance of a conditional use permit by the planning commission the director of building inspection shall approve an application for a building permit pursuant to Chapter 19.94 of this title and shall ensure that development is undertaken and completed in compliance with the permits. (Prior code § 22-31-2(7))

**19.84.130 Time limit.**

Approval of the conditional use application by the planning commission or the development services director shall expire twenty-four months after the date of the approval decision (see Section 19.02.070) unless the applicant has obtained the conditional use permit and a building permit, where required, for the use within the twenty-four-month period. The date of the approval decision shall be the date of the preliminary approval decision where the application approval process includes both a preliminary and final approval. A twelve-month extension can be obtained subject to paying an extension fee equal to 1.0 times the original filing fee. (Ord. 1037 § 2, 1988: Ord. 963 § 1, 1986: prior code § 22-31-2(8))

**19.84.140 Sale of alcoholic beverages.**

A. The planning commission shall authorize a conditional use permit to sell alcoholic beverages except Class A beer outlets and Class B beer outlets where it is determined by the planning commission:

1. That the use is not in the immediate proximity of any school, church, library, public playground, or park;

2. That the proposed use at a particular location is necessary and desirable to provide the service or facility which will contribute to the general well-being of the neighborhood and the community; and

3. That such use will not, under the circumstances of the particular case, be detrimental to the health, safety or general welfare of persons residing or working in the vicinity, or injurious to property or improvements in the vicinity; and

4. That the proposed use will comply with regulations and conditions specified in this title for such use; and

5. That the proposed use will conform to the intent of the county master plan.

B. All conditional use permits for uses dispensing alcoholic beverages to be consumed on the premises are subject to an annual review, and all applications for a conditional use permit for consumption of liquor or beer on the premises must be accompanied by a payment of fees as provided in Section 3.52.040. The fees are considered reasonable because of the costs of investigation and studies necessary for the administration hereof.

C. The granting of any permit by the planning commission to dispense alcoholic beverages is subject to review by the county commission. The denial of any permit by the planning commission to dispense alcoholic beverages is subject to review by the district courts. All appeals of planning commission decisions to the board of county commissioners or the district courts must be filed with the appropriate body within thirty days from the date of the planning commission decision. (Ord. 804, 1982: prior code § 22-31-4)