



Albion Basin, Little Cottonwood Canyon

Central Wasatch Management Area

Desired Future Conditions

Central Wasatch Management Area

Setting Description:

Located east of Salt Lake City in the Wasatch Mountain Range, the Central Wasatch Management Area extends from the Davis and Salt Lake County line on the North to the Salt Lake and Utah County line on the South. It contains three designated Wilderness areas, Mt. Olympus, Twin Peaks, and Lone Peak and four major ski areas, Brighton, Solitude, Alta and Snowbird. The canyons in this area are valuable watersheds for Salt Lake and adjoining cities along the Wasatch Front.

Seven major canyons comprise the Central Wasatch Area. These range from broad, gentle sloping drainages in the north to steep narrow drainages in the south. Mountain peaks rise nearly seven thousand feet above the Salt Lake Valley. Lone Peak reaches an elevation of 11,253 feet and provides an impressive backdrop to the valley below. The U-shaped canyon of Little Cottonwood Creek rises from typical stream bottoms of cottonwood, willow and dogwood to the granite, red-quartzite and limestone walls of the upper mountainside. The circular basin at Brighton to the north drains into the V-shaped canyon of Big Cottonwood Creek. The ski areas include runs that appear

similar to avalanche chutes falling from open glacial troughs through aspen and conifer stands.

The Central Wasatch was the first center of urban development in Utah with the arrival of Brigham Young and European settlers to the Salt Lake Valley. Early European settlers' use of the canyons immediately adjacent to Salt Lake for wood, stone for temples and building construction, and water diversion/supplies are evident through historic sites. Early American Indians also used the canyons and their resources with rock art panels and small habitation sites present in the canyons. The birth of the modern ski industry resides in the Tri-canyon area of Salt Lake. Prior to skiing, these canyons were carved open for their mineral resources during the mining era of the region.

Small communities such as Alta and Brighton have developed in these canyons supporting recreation, skiing, and in the past, mining activities. Each of these communities has a character of its own set within aspen and conifer stands. Developed campgrounds, picnic areas, and trailheads are located in the major drainages providing refuge from the summer heat in urban areas below. The variety of vegetation and rock types from low to high elevations provides remarkable scenery enjoyed both within the Canyons and as the backdrop to the cities along the front. Mill Creek Canyon is a highly popular area for evening and weekend picnics, hiking, biking, and running or walking with only a short drive from the city below. A wide variety of recreation opportunities are provided for a growing urban population.

Drier, more rolling mountains typify the northern end of this area in Lambs, Emigration, and Red Butte Canyons. Lower elevations, poorer soils, past fires, and historic activities have created a vegetation mosaic with patches of scrub oak, maple, grasses and forbs. Cottonwood trees and other hardwoods occur along streams in the area. Rock outcrops are common along ridges and on sideslopes creating an interesting variety of colors and textures across the landscape.

Watershed Desired Future Conditions:

The underlying premise of resource management in this Management Area is the need to provide long-term, high quality culinary water to the large urban population of the Salt Lake Valley. Salt Lake City owns all or the largest percentage of water rights in each of the Wasatch Canyons except Red Butte, and has congressionally delegated authority to protect the water supply. Congress also directed the Forest Service to administer designated watersheds in cooperation with Salt Lake City for the purpose of storing, conserving and protecting water from pollution. Providing quality recreation opportunities within the framework of watershed protection will be an increasing challenge as the Wasatch front population and national and international destination use of the area continues to grow. Continued coordination and cooperation among federal,

state, and local government agencies, residents, businesses, and the recreating public will be imperative in order to meet these growing demands.

Given the importance of water coming from this area, watershed maintenance, protection and enhancement will be a primary consideration in all management decisions. Watersheds and streams will continue to provide high quality water supplies to the Salt Lake Valley. Various uses and developments (ski resort design and development, campgrounds, picnic areas, trailheads and trails) will be designed to prevent or fully mitigate impacts, resulting in properly functioning conditions in these watersheds. Impacts from historic activities will be mitigated to the greatest extent that is economically feasible.

Concerns about watershed degradation due to OHV use and unauthorized, user-created trails in the Corner Canyon Preservation area will be addressed through cooperation and coordination with other units of government (Draper City, Salt Lake County, the Uinta National Forest, and Alpine City).

In Little and Big Cottonwood Canyons the integrity of the stream corridor and side drainages will be an emphasis given the opportunity that public lands adjoining the stream here provides. Decisions responding to increasing recreation demands will give first consideration to desired water quality and riparian conditions, and the limited wildlife habitat here. Provisions will be made for a wide range of recreation uses including access and sanitation facilities that prevent deterioration of watershed conditions. Major trailheads and restrooms will be provided and maintained in cooperation with partners such as Salt Lake City. Users will be aware of the need to restrict in-water activities because of water quality and compliance with watershed ordinances will be excellent. Watershed protection and public education about appropriate behavior in these watersheds will be consistently accomplished in cooperation and partnerships with other agencies.

In Millcreek Canyon, the integrity of the stream corridor will continue to improve with developed recreation site hardening and changes in user behavior resulting from effective educational efforts. Concerns about water quality will be important to users as well as managers, and annual monitoring will indicate that conditions are on a steadily improving trend. Efforts to work with adjacent landowners within this Canyon will be successful in achieving a stream corridor that is properly functioning along its entire length. In the event that Millcreek Canyon becomes designated as a culinary watershed by Salt Lake City, management of the area will be adjusted accordingly in full cooperation with the City.

Biodiversity/Viability Desired Future Conditions:

Vegetation and Disturbance Processes

Vegetation cover types will form a mosaic of plant communities representing a diverse mix of ages, sizes, and species. Fire use will play a role in reducing fuels, maintaining the historic dynamic of aspen regeneration and ratio of conifer to aspen and mountain brush vegetation patterns and age classes. Mechanical treatment of fuels along with limited use of prescribed fire will emphasize the safety of people and protection of property in the heavily populated and increasingly developed urban wildland interface adjacent to National Forest.

Some of the Forest's healthiest and most beautiful tall forb (wildflower) communities occur in this management area. These healthy and recovering tall forb communities will be protected from uses that could cause undesirable changes in plant composition and abundance. Seed collection will occur in some of these plant communities to help revegetate disturbed areas. Seed collection will occur on a rotational basis (collecting in different areas from year to year) so that natural reproduction can continue to function across the entire area over time. Non-native plant species will be used for rehabilitation of disturbed areas only when native seeds and/or plants are unavailable.

Each of the permitted ski areas will be implementing vegetation management plans that meet resort needs while maintaining the health and vigor of native shrubs and trees.

Integrated pest management will be successfully employed to reduce noxious weeds. Active management will be a priority along travel routes, in designated and recommended Wilderness, and in habitats where rare plants exist. The extent of other weedy species, such as those introduced through various planting programs, will be reduced where efforts can be coordinated with noxious weed control.

Red Butte Canyon Research Natural Area (RNA) will continue to provide important research opportunities and baseline information about the ecological composition, structure, and function of plant communities (such as Gambel oak, aspen, riparian, and Douglas-fir) that naturally dominate the area.

Botanical Threatened, Endangered, and Sensitive Species Protection/Recovery

Rare plant habitats will be managed to maintain or restore populations of current and proposed Sensitive plant species. Riparian plant habitats and rare riparian species will be protected from trampling and the adverse effects of overuse and development. Populations of non-native plant species will be reduced or eradicated in actual and potential rare plant habitat. Habitats will be maintained

to promote pollinator success and survival and to provide for pollinator nesting needs.

Ski area management activities will be designed to maintain or restore habitat for species including sensitive species such as Wasatch Jamesia, Garrett's bladderpod, Utah Ivesia, and Utah bladderpod. Recreational rock climbing will be managed to protect cliff, crevice, and ledge habitats for the plants that grow there.

Recreational activities in habitats for rare plants such as Wasatch shooting star, alpine pepperplant, Utah ivesia, and Garrett's bladderpod, will be managed at a level that maintain individuals and habitat dynamics during key life stages including flowering and fruit production. Inventories will be conducted in known habitat for slender moonwort, a proposed threatened species that, based on historic collections, occurred on the Forest. Wildlife introduction programs will include reintroduction assessments, proper stocking levels and utilization intensities to maintain and protect rare plants and their associated habitat.

Protective measures and educational programs will provide for the maintenance of species at risk and contribute to their recovery. Pro-active efforts will be made to educate and inform Forest users of fundamental importance of plant species to society, plant conservation, and biodiversity. Viable populations of the many rare plant species and the areas with rare plant populations within the management area will be managed and protected.

Wildlife Habitat

Big game winter ranges are generally found below 7,000 feet, and include the entire western boundary of this Management Area. These habitats on national forest land will be protected and enhanced, with recognition that they become more important as urban development reduces the winter range available on private lands. Browse species will be managed to emphasize older age classes in winter range to provide browse above snow.

Terrestrial, Threatened, Endangered, and Sensitive Species Protection/Recovery

A number of species-at-risk occur within and/or have habitat within this Management Area.

In the Central Wasatch direction concern linkage habitat for lynx from the Lynx Conservation Strategy will be implemented considering watershed priorities and constraints, established uses of the area, and wilderness.

The golden eagle, which is not a threatened, endangered or sensitive species but is protected by The Bald And Golden Eagle Protection Act of 1940, has been a concern in the area. This species will continue to be monitored, and management activities designed in conformance with U. S. Fish and Wildlife Service raptor management guidelines (1999).

Aquatic Conditions

Fish Habitat: Aquatic habitats will be managed to maintain cool, clear water and well-vegetated stream banks for cover and bank protection. Instream flows and cover, in the form of deep pools and structures such as boulders and logs, will be maintained and their value recognized. Water temperature will be preserved through stable well-vegetated banks. Natural fish reproduction will be maintained through minimizing sediment input from roads, trails and campgrounds.

Amphibian and Invertebrate Habitat: Marshy edges of ponds or lakes and springs will be protected to allow for the development of in-water and riparian vegetation. Soils around water bodies will not be compacted and will allow for burrowing and over-wintering of amphibians.

Developed trails will be designed to minimize development in riparian habitat conservation areas (300 feet on each side of the stream channel). User-created trails will be modified or closed and rehabilitated to eliminate or significantly reduce impacts to the stream and to riparian vegetation. Springs will be protected and their value recognized.

Aquatic Threatened, Endangered, and Sensitive Species Protection/Recovery

The conservation of the Bonneville cutthroat trout population in Deaf Smith Canyon will be given management priority. The value of Red Butte RNA for the conservation of June sucker and Bonneville cutthroat trout will continue to be recognized.

Research Natural Areas Desired Future Conditions:

Red Butte Research Natural Area is part of a national network of ecological areas designated in perpetuity for research and/or education to maintain biological diversity on National Forest System lands. Red Butte RNA will continue to be managed for non-manipulative research, observation, and study. Red Butte RNA will also assist in implementing the Endangered Species Act and the monitoring provisions of the National Forest Management Act. This RNA will continue to provide unique research opportunities in an urban/wildland interface setting.

Trails surrounding the Research Natural Area will be realigned to protect against unauthorized public access. As a result of educational efforts, people will understand the value of research natural areas and compliance with the area closure will improve. Red Butte Creek will continue to provide important habitat for the native Bonneville cutthroat trout.

Special Interest Areas Desired Future Conditions:

The lowermost portion of the existing Red Butte RNA will be redesignated as a Special Interest Area in order to allow for necessary safety improvements of the

dam and reservoir. Red Butte Reservoir will be reconstructed to meet State dam safety standards and will be maintained by the Central Utah Water Conservancy District to provide a refuge for the Endangered June sucker. The area will be managed for restoration research complementary to management of the adjacent RNA, and will provide the opportunity for limited, guided educational tours to enhance public understanding of the ecosystem and of the values associated with designated research areas.

Inventoried Roadless Areas Desired Future Conditions:

The Central Wasatch management area has six inventoried roadless areas, including Lone Peak, Mount Aire, Mount Olympus, Mueller Park, Red Butte, and White Pine. Roadless values in these areas are maintained or mostly maintained, providing semi-primitive recreation opportunities, both non-motorized and mechanized on designated routes in non-snow conditions. About 500 acres of roadless are managed to allow development.

Wilderness and Recommended Wilderness Areas Desired Future Conditions:

Designated wilderness in the Tri-canyon area (Mt. Olympus, Twin Peaks and Lone Peak) provides undeveloped landscapes that will continue to play an important role in the spectrum of land management intensities for the area. The three wildernesses will be managed to protect ecological integrity and to provide non-motorized and non-mechanized recreation opportunities. . The Tri-canyon wilderness areas will be recognized and managed as wild areas that have emphasis on maintaining diverse and viable populations and habitat for flora and fauna including threatened, endangered and sensitive species, and valuable watershed while still existing adjacent to large urban areas and high use developed recreation canyons. Within the wilderness, any modification of the natural environment will conform to wilderness management principles. Wilderness use is will continue to be predominately day use in these areas. Overnight use areas are limited and will be closely monitored to protect other wilderness values. It is expected that high use levels will occur all year long in these wilderness areas, since winter use is as popular as summer use because of the adjacent large urban area. Opportunities for different levels of use and encounters will be available. Wilderness character and values will be maintained. Existing rugged and remote low use pristine areas between trail corridors and other adjacent developed use will be managed to prevent degradation, protect other wilderness values and maintain limited visitor encounters.

Wilderness users will be well educated in the principles of minimal impact use, and will apply those principles. Opportunities for solitude and primitive, unconfined recreation will be provided, but not to the degree possible in more remote wildernesses. National forest lands adjacent to wilderness will be managed in a manner that facilitates effective boundary management, and national forest lands visible from wilderness will be managed with special

attention to scenic integrity. Management of the wilderness boundary along the Wasatch Front portion will intensify to prevent user created trails and other challenging urban interface problems from damaging wilderness resources. Given the fact that the wildernesses are adjacent to private lands and to urban development, the sights and sounds of humanity will continue to be easily visible and audible from many wilderness vantage points. Non-wilderness backcountry areas will also provide an alternative to wilderness with important open space, recreation opportunities, and scenic views.

Additional trails will not be built into the wilderness except to facilitate short segments of the Bonneville Shoreline Trail along the wilderness Wasatch Front boundary and only where absolutely necessary to minimize resource impacts or to better manage visitor use. Wilderness character and values will be maintained, especially in pristine low-use areas where deterioration is prevented. Those user-created routes that receive high use will be evaluated for inclusion in the trail system and, if included, will be properly maintained. Those user routes that are causing resource damage, especially multiple user-created routes near lakes, will be closed and restored to natural conditions. The creation of additional user trails will not be allowed. Baseline information on use and conditions will be part of monitoring to inform future wilderness management decisions. Major emphasis will be placed on user education because of high visitor use and adjacency to the urban population. Total use levels in the Tri-canyon wilderness areas will be closely monitored to protect other wilderness values. In the future management may need to limit resource impacts from user visitation. Such management may include, but is not limited to use capacity analysis, allowed use limits and quotas, permit systems, designated camp sites, a wilderness unit management plan or needed amendments to wilderness management in this Forest Plan. Lone Peak Wilderness will be managed as one unit in coordination with the Uinta National Forest, and consistent management applied where necessary to avoid confusion by users. Compliance with Wilderness regulations will be high; violations of the boundary by motorized vehicles, and violations of watershed regulations will be negligible. Additional outfitter and guides will not be allowed in wilderness and current outfitter and guide areas and use levels in the wilderness will be closely monitored and adjusted if needed to protect wilderness values.

Eligible Wild and Scenic Rivers Desired Future Conditions:

Red Butte Creek (source to Red Butte Reservoir for ecological values) will be managed to protect the values that made it eligible in the inventory. Activities within the corridor will maintain a “Scenic” classification.

Little Cottonwood Creek (source to the Murray City Diversion for scenery, geology/hydrology, and ecological values) will be managed to protect the values that made it eligible in the inventory. Activities within the corridor will maintain a “Recreational” classification.

Roads/Trails/Access Desired Future Conditions:

Protection of watershed conditions will be a primary factor in managing roads, trails and access. In the Tri-canyon area (Big and Little Cottonwood Canyons and Mill Creek) parking capacities of canyon parking lots (ski areas, summer use homes, developed and dispersed recreation sites) will be not exceed 2000 levels unless modification is needed for watershed protection or to facilitate mass transit. Mass transit will be commonly used during winter, reducing crowding and increasing safety for users of the canyons. The Forest Service will work actively with other parties to explore options for reducing private vehicular use within these Canyons.

A comprehensive evaluation of the existing trail system (including user created routes) will be conducted, and a strategy developed to meet increasing demand while maintaining watershed condition and meeting social expectations for various types of opportunities. Trails to be retained will be modified and included as system trails; those not retained will be closed and rehabilitated where needed for watershed protection. Trails will be signed to standard, and compliance with rules addressing allowable uses will be excellent. Creation of new routes by users will be significantly curtailed. Users will assist with monitoring and will be well informed of impacts and needs for remaining on designated trails to prevent watershed deterioration. Travel planning for motorized access will be completed, and monitoring and enforcement will be accomplished through coordination with other agencies.

Trails that provide access to wilderness and backcountry areas will be well designed and maintained with the goals of natural resource protection and visitor safety. The use of trails will be managed to address safety concerns and user conflicts associated with different modes of access. Managerial and enforcement capability will, however, limit the degree to which competing trail uses can be effectively separated. Regional trails, such as the Great Western Trail and the Bonneville Shoreline Trail will be recognized and valued as unique opportunities to develop recreation corridors across multiple ownerships in the face of expanding development across potential trail corridors.

Recreation Desired Future Conditions:

Recreation activities and developments within ski resorts

The ski resorts in Big and Little Cottonwood Canyons will continue to serve as hubs of year-round outdoor recreation use on both private and public lands within the permit areas. Recreation opportunities offered on public lands within the resort boundaries will be complementary to and compatible with those that are allowed and/or emphasized on surrounding public lands outside the boundaries. Opportunities that build on the unique values of public land are featured over those that are focused on the constructed environment. Activities that facilitate

public understanding, appreciation, and respect for land and natural resources will be encouraged.

Lands and facilities within ski area permit boundaries will be managed with a primary emphasis on developed winter recreation while providing complementary summer recreation opportunities. The scope and scale of major facilities approved in past master development planning are expected to serve the general needs of the skiing and snowboarding public for the 10-15 year horizon of this forest plan. Additional development within that timeframe will generally involve the replacement and/or modification of existing facilities, modifications of existing ski runs, and adjustments to evolving technologies and user preferences. New resort developments on National Forest System lands will be confined to the permit boundaries in effect at the time of revision, though small-scale site-specific adjustments could be considered to address important management issues. Development and modifications at the resorts will continue to be designed to balance the comfortable carrying capacity within each resort, based on latest technologies, use patterns, and existing facilities, within the capabilities of the natural environment and transportation infrastructure.

Development will be designed with a high level of attention to scenic integrity, within the context of overall resort development. Facilities will be designed and constructed to harmonize with the natural setting, rather than to contrast with that setting. While developments in base areas will be visually dominant, that dominance will decline on the mountainsides and new development on ridgelines, beyond the levels approved at the time of plan revision, will be minimal. Special attention will be given to the scenic integrity of views from backcountry and wilderness trails. Non-winter recreational opportunities provided in base areas will rely more heavily on constructed facilities, while those higher on the mountain will become increasingly oriented toward the natural setting.

Balanced diversity of recreational opportunities

The Tri-canyon area provides a wide array of recreational opportunities designed to serve a large and growing urban population while maintaining stable watersheds, water quality, ecological integrity of the land, its physical resources, and its biological communities.

Recreation visitors to this area will accept a moderate to high level of responsible interaction with other users as a price they are willing to pay for ease and convenience of access from the urban setting. They can also expect that environmental education and appreciation programs will be present and enhance their recreation experiences. Although it will be possible to experience a range of user densities and regulation, this will not be an area in which people can expect either optimal solitude or optimal freedom. Proponents of the many activities offered will recognize that their use is limited by the needs and values associated with competing activities. People with diverse needs and values will function in

an atmosphere of cooperation and constructive resolution of differences rather than continually fighting to win at the expense of others.

Visitors to the Tri-Canyon area will make increasing use of mass transit to reduce congestion on the highways, and mass transit opportunities will expand to include year-round operations. Recreation activities on the national forest will feature non-motorized access. Watershed protection mandates, the relatively short distances to backcountry destinations, the relative ease of non-motorized access, and the relatively small area within which to buffer the competition and conflict between motorized and non-motorized uses are factors to consider in dealing with specific recreation management decisions.

Diverse winter backcountry recreation opportunities will continue to be found outside ski area boundaries. Ski and snowboard mountaineering, snowshoeing, and ski touring will occur throughout the area, with the location and extent of each activity dictated primarily by terrain. Helicopter skiing will continue to operate as a component of the recreation picture in the Central Wasatch. Helicopter skiing and ski mountaineering will continue to compete for untracked conditions, and those users seeking quiet in the winter backcountry may continue to object to helicopter skiing in preferred terrain. Information will continue to be available to all backcountry visitors to help them make informed decisions and avoid conflicts. Wilderness boundaries in the area were intentionally designed by Congress to allow for ridgeline helicopter landing zones, and no new wilderness is recommended on the Wasatch-Cache in the helicopter permit area. It is uncertain, however, whether helicopter skiing can be managed to remain profitable over the long term while accommodating a reasonable level of compromise with competing backcountry uses.

Mountain weather and backcountry avalanche forecasting will continue to be provided through cooperation among the Forest Service, state and local government agencies, and private parties. Avalanche control activities for canyon highways will continue to be a cooperative venture involving the Forest Service, and state and local government agencies. New technologies for avalanche control will be reviewed and considered as they become available.

Recreation Special Uses

The number of permitted outfitter-guide recreation operations will remain essentially the same as year 2000 over the next 10-15 years. The existing determination of desirable and appropriate guided services remains valid, and demand is in balance with supply. Opportunities to conduct conservation education and interpretive activities will continue to be provided, and may expand. Recreation events that have been authorized will continue. No new major events will be authorized (events involving more than 100 people), except those occurring within ski resort permit boundaries, authorized under the resorts' Special Use Permits and identified in resorts' operating plans.

Recreation facilities will be constructed and maintained to standard to protect water quality and stream/riparian habitat. Hardened access points to water will be identified and placed to provide for an enjoyable recreational experience and at the same time meet watershed functions.

Scenery Management

The scenery of the area will continue to be a valuable and pleasurable natural backdrop for the urban area. Views up and within the canyons of natural and developed areas will be carefully managed to sustain scenic resources. Views from the Scenic Byways in Emigration, Big Cottonwood and Little Cottonwood Canyons will be managed for their recognized values. Guidelines for scenery management will be applied to project undertakings. The following landscape character themes will be found in the management area as mapped: Natural Evolving, Natural Appearing, Developed Natural Appearing, and Resort Natural Setting.

Heritage Resources

Inventory efforts will continue to document the American Indian sites as well as the early European settlement of the area. Research and interpretive efforts will focus on developing the mining and early ski industry history of the tri-canyon area. Active partnerships with ski resorts will foster better interpretations and value for the early history of the canyons. Through partnerships with organizations such as Wilderness Watch, fragile and sensitive rock art sites will be protected and preserved. Historic Forest Service administrative sites, including campgrounds, amphitheaters, and guard stations, will continue to be repaired and preserved for future use.

Land Ownership Desired Future Conditions:

The ownership of Red Butte dam will be resolved and the boundary of the Red Butte Research Natural Area will be adjusted to accommodate management of the dam and reservoir and to recognize and project the ecological integrity of the canyon upstream from the reservoir. Public access to National Forest lands will be maintained and/or acquired. Coordination with local agencies and landowners will emphasize maintenance or improvement of access. Work will be conducted in cooperation with appropriate entities to acquire high priority inholdings for inclusion as public lands for the purpose of watershed protection.

Timber Management Desired Future Conditions:

No lands in this Area are capable/available for commercial timber harvest.

Rangeland/Livestock Grazing Desired Future Conditions:

Vacant Allotments will be removed from allotment status for watershed protection and to serve as ungrazed reference areas.

Non Recreation Special Uses Desired Future Conditions:

Existing communication sites at Scotts Peak, Hidden Peak, Shepard Peak, and Alta will be available for additional use, however no additional communication sites will be designated.

Social (non-recreation) Desired Future Conditions:

The Central Wasatch Canyons will continue to enhance the quality of life for a large, diverse, urban population with stable watersheds, high quality water, scenery, and natural retreat opportunities within easy reach of the urban valley.

