Introduction

The purpose of the Recreational Opportunities Inventory for the Existing Conditions Report is to examine the present conditions of recreational sites, facilities and activities within the Butte Creek Watershed boundaries. The inventory identifies the locations of facilities and activities on a corresponding map and matrix.

This inventory provides valuable information to stakeholders such as residents, landowners, water users, recreational users and local, state and federal agencies. Because there is a close relationship between public and private land use in this area, it is important to clearly define recreational areas, facilities, and activities in order to have a complete existing conditions report of the entire watershed area.

There are no set standards or rules regarding the issues and topics that should be included in a recreational opportunity inventory. Because every watershed has different opportunities and goals, it is important to identify the Issues and Concerns of the region.

The topics that are addressed in this project reflect information gathered from existing management reports and studies, interviews, and field investigations. Although there are a wide range of topics that could be included in this inventory, this study focused on the issues that were found to be of greatest concern to its users (see Issues and Concerns chapter, # 1).

Related Studies

This inventory is a compilation of information that has been gathered from various agencies, stakeholders, interest groups and organizations, and recreational users. It is unique in that it combines multiple sources of information into one document.

This inventory began with a collection of secondary data and related studies (see list of related studies found at the end of this chapter). There were numerous sources of information that had to be reviewed in order to prepare a complete and comprehensive study that encompassed a wide range of issues. These sources included state and federal documents, local and city documents, and existing studies:

- BLM *Forks of the Butte Creek Recreation Area Management Plan*, 1990
- Butte Creek Watershed Conservancy *Addressing Public Recreational Access on Butte Creek, CA*, 1997
- Butte County *Draft Butte County General Plan Energy, Natural Resources, and Recreational Element*, 1991
- Town Paradise *Paradise General Plan*, 1982
- DWR *Butte and Sutter Basin’s Water Data Atlas*, 1994
- Durham Recreation and Park District *Masterplan*, 1992

Each of these documents provided information concerning existing facilities and sites, recreational activities, existing conditions, character of the landscape, resource availability, and current management strategies.
These documents were found to be the most informative and useful. They provided the information necessary to compile a list of recreational activities and identify the sites where these activities occur.

**General Overview of Land Uses and Land Ownership**

For the purposes of this report the Butte Creek Watershed is separated into three major regions. These include: 1) the upper watershed - Butte Meadows mountain zone, 2) the foothill canyon zone - below Butte Meadows to the canyon's end at the Skyway bridge, and 3) the valley and Butte Basin zone - from below the Skyway bridge to the Sutter Buttes.

**Butte Meadows Basin Zone**

A majority of the land within the Butte Meadows Basin Zone of the Butte Creek Watershed is managed for public use. Butte Meadows is located adjacent to the Lassen National Forest which is managed by the USFS Almanor Ranger District. The Forest offers year-round recreational opportunities including: camping, hunting, fishing, hiking, horseback riding, sightseeing, picnicking, snowmobiling, cross-country skiing, and off-road vehicle use. Also located on national forest land are two residence tracts in Butte Meadows and Jonesville that are leased by special permit.

Privately owned land constitutes the remaining portion of this zone. Small subdivisions, generally used for vacation homes, are located throughout Butte Meadows with small resorts providing services to residents and visitors.

**Butte Creek Canyon Zone**

This zone contains land that is managed at the federal and local jurisdictions. Federal land consists of areas managed by the BLM including the Forks of the Butte Creek Recreation Area and the Upper Ridge Wilderness Area. Activities in this area include: backpacking, biking, camping, mineral collection, nature viewing, fishing, hiking, horseback riding, kayaking and tubing, picnicking, and swimming.

The Town of Paradise Recreation and Parks District manages parks and trails that fall within the watershed boundaries. Furthermore, private organizations within the town offer recreational opportunities at the Paradise Reservoir and DeSabla Lake.

The remaining land within this zone is semi-public, private and commercial recreational facilities. These facilities include: museums, golf facilities, and bridges.

**Valley and Butte Basin Zone**

Land ownership within the Valley and Butte Basin Zone is primarily private. Public facilities within this zone are managed by the USFS, DFG, and the USFWS.

**Overview of Recreation Opportunities**

**Developed Recreation Use**

Developed recreation refers to opportunities presented by sites that are built and managed to enhance specific types of outdoor recreation, and to provide for varied degrees of resource protection. Examples of developed recreation sites in the Butte Creek Watershed include the USFS Cherry Hill campground above Butte
Meadows, and the Honey Run Covered Bridge. Established trails are also considered developed recreation sites, though they may traverse essentially undeveloped wildlands.

Developed Recreation Sites

A facilities matrix (see Appendix O) provides the details of facilities at developed recreation sites within the watershed. Additional description of selected areas continues below.

**Butte Meadows Mountain Zone**

Pacific Crest Trail: Managed by the USFS (Lassen NF), the Pacific Crest trail crosses the upper ridge of the Butte Creek Watershed from Humboldt Summit to Humbug Summit, and then exits the watershed to the east of Snow Mountain. Elevations range from 6,000 to 7,000 feet. Use is primarily seasonal (late spring, summer, fall) and is limited to hiking and equestrian passage.

Butte Creek Trail: Managed by the USFS (Lassen NF), the Butte Creek Trail follows Butte Creek from Jonesville to Butte Creek House on Humbug Road, in an elevation range of 5,000 to 5,800 feet. Uses include hiking, horseback-riding, fishing and mountain biking.

Colby Mountain Lookout: Managed by the USFS, Colby Mountain Lookout (6,200 feet) is accessible to vehicular traffic and is popular with cyclists in summer, and skiers and snowmobilers in winter. The lookout commands exceptional views of the upper Butte Creek Watershed and the Deer Creek Watershed.

Butte Meadows and Cherry Hill Campgrounds: Managed by the University Foundation of California State University, Chico under permit by the USFS. Butte Meadows (4,300 feet, 13 sites) and Cherry Hill (4,700 feet, 25 sites) campgrounds offer seasonal late spring to fall use. The campgrounds include tables, fire rings with grilling grates, potable water, and vault toilets.

Jonesville Snowmobile Park (Winter OHV Area): Managed by the USFS, the Jonesville Snowmobile Park (5,000 feet) provides a sizable parking area designed for pull-through trailer parking. The park also provides parking for the nearby Colby Meadows Cross-Country Ski Area. Facilities include vault toilets. Use is primarily winter, though the parking area and restrooms are also used in summer months by hikers, fishers, cyclists and equestrians.

Private developed sites in the Butte Meadows area: The Butte Meadows area is a popular location for vacation homes. Most vacation homes are on private land, though the USFS manages two tracts of permit recreational residences in Butte Meadows (12), and in Jonesville (16). Three small resorts operate in the Butte Meadows area - The Bambi Inn, The Outpost, and the Tank House.

**Foothill Canyon Zone**

A notable characteristic of the Foothill Canyon Zone is its lack of developed recreational sites, and the predominance of private land (mostly owned by Sierra Pacific Industries). In the canyon's upper reaches between Centerville and Butte Meadows, only the BLM - managed Forks of Butte Creek Recreation Area (1,200 to 3,200 feet) is designated for recreational access. Primary access to Forks of Butte is via Doe Mill Road between the Skyway and Butte Creek, and by Doe Mill Road and Garland Road which continues through to Highway 32 above Forest Ranch. Developed sites in the Forks of Butte are limited to the Doe Mill Road bridge across Butte Creek, and to the Black Prince Trail which runs from the Doe Mill Road Bridge downstream to the DeSabla Powerhouse Road below the Forks of Butte Hydroelectric Project. The trail is maintained by the Butte Creek Trails Council. Further details on the Forks of Butte Recreation Area are contained in the BLM Forks of Butte Recreation Area Plan (1990).

The Paradise - Magalia area, which covers a section of the watershed's southeast ridge, offers several developed recreation sites and trails within the watershed. Prominent among these are the Upper Ridge Nature Preserve on BLM land, operated by the Upper Ridge Wilderness Area Group, and Bille Park, operated by the
Paradise Area Park and Recreation District. These areas are best detailed in the Town of Paradise General Plan (1982).

**Lower Foothill Canyon Zone - Centerville to Skyway**

The lower stretches of Butte Creek Canyon are primarily in private ownership, and there is little developed recreational access. Notable sites include the Centerville Museum on Humbug Road (640 feet) above what once was referred to as the "Steel Bridge", and the Honey Run Covered Bridge area (347 feet) at the junction of Honey Run and Humbug roads. Both sites have historical significance, and provide opportunities for a variety of recreational activities.

**Valley and Butte Basin Zone**

The Valley and Butte Basin Zone of the watershed are characteristically quite different from the canyon and upper reaches of the watershed. Here too, developed recreational opportunities along the creek are minimal. Land ownership in the valley section is also primarily private. However, there are a variety of public developed sites within the valley section of the watershed. Elevations in this area are 200 feet and below.

USFS Genetic Resource Program: Located off of Morrow and Cramer Lane in south Chico, the USFS (Mendocino NF) Genetic Resource Program facility (approximately 209 acres) provides an interpretive site, nature trail, and picnicking opportunities. Recreational use levels are low.

Butte Creek Canyon Ecological Reserve: Located adjacent to Highway 99 at the end of Southgate Lane in south Chico, this 285 acre reserve is managed by DFG. Closed to vehicular access, the reserve is used primarily by anglers, waders, sunbathers, and for nature study.

Durham Recreation and Park District: The Durham Recreation and Park District spans Butte Creek in the Durham area. Developed community park sites and trails provide a variety of recreational opportunities. Further details on the Durham Recreation and Park District are available in the Durham Recreation and Park District Master Plan (1992).

Sacramento River National Wildlife Refuge: The Llano Seco Unit of the Sacramento River National Wildlife Refuge, located on 7 Mile Lane southwest of Dayton, is managed by the U.S. Fish and Wildlife Service (USFWS). The refuge provides an interpretive site with parking, observation stands, and trails. Primary use is seasonal birdwatching and nature study.

Upper Butte Basin Wildlife Area: Three units comprise the Upper Butte Basin Wildlife Area, managed by the California State Department of Fish and Game (DFG), 1) the Llano Seco Unit off of 7 Mile Lane (note this DFG unit is separate from the USFWS managed Llano Seco Unit of the Sacramento River National Wildlife Refuge just to the north) 2) the Howard Slough Unit off of road ZZ and Highway 162, and 3) the Little Dry Creek Unit off of Colusa Highway. Each of these units provide access and parking. Recreational opportunities include seasonal birdwatching, nature study, and hunting.

Gray Lodge Wildlife Area: The Gray Lodge Wildlife Area, west of Gridley off of Pennington Road, is managed by DFG. Gray Lodge provides a variety of recreational opportunities including seasonal hunting, nature study, birdwatching, fishing, hiking, picnicking, and bicycling. Gray Lodge includes an interpretive site, nature trails, hunters’ check station, potable water, and restrooms.

Butte Sink: More than 45 private hunting clubs are located in the valley and Butte Sink sections of the lower Butte Creek Watershed. These areas are managed for agricultural production as well as hunting, or managed exclusively as game reserves, primarily for waterfowl, and for the benefit of club members. The Butte Sink Waterfowl Association is a non-profit association representing the interests of member clubs in the Butte Sink area.
Dispersed Recreation Use

Dispersed recreation refers to opportunities presented by areas that are not developed specifically for recreational use. Dispersed recreational activity occurs over a broad landscape, and is not confined as it often is in developed sites. Examples of dispersed recreation include angling, cycling, hiking in undeveloped areas, and picnicking or camping in undeveloped areas. Examples of dispersed recreation use in the Butte Creek Watershed include parking along Honey Run Road to gain access to Butte Creek for tubing, and pulling off the Skyway heading west from Paradise to take in a clifftop view of the Butte Creek Canyon. The key concept to consider in dispersed recreation is access. Therefore, roads and trails provide the foundation of access upon which dispersed recreation is dependent.

Dispersed Recreation Areas

Dispersed recreation is, by definition, not restricted to specific sites. Rather, dispersed recreation is better described as patterns of use in generally defined areas and landscapes. The three major zones within the watershed: Butte Meadows Mountain, Foothill Canyon, and Valley Butte Sink, help to describe recreational opportunities that are of a dispersed nature. Further, the systems of roads and trails within the watershed help define the major corridors along which dispersed recreation occurs.

Butte Meadows Mountain Zone

Accessible roads and trails that structure the patterns of dispersed recreation in the Butte Meadows Mountain Zone include: Butte Meadows Road (paved from junction with Highway 32 to Jonesville; Skyway between Inskip and Butte Meadows; Forest Roads to Colby Mountain, Humboldt Summit, Humbug Summit, and Snow Mountain; Pacific Crest Trail; and Butte Creek Trail. Attractions in this area that draw seasonal recreationists include Butte, Willow, Scotts John, Jones, Colby, and Bolt Creeks; Humbug Summit and Cold Springs; Summit Lake; and Humboldt Summit. Activities in these dispersed areas are noted in the Activities Matrix (see Appendix P).

Foothill Canyon Zone

Accessible roads and trails that structure the patterns of dispersed recreation in the Foothill Canyon Zone include: Doe Mill Road; Butte Creek Trail; Nimshew - Centerville Road; DeSabla Powerhouse Road; Helltown Road; Humbug Road (paved); Honey Run Road (paved); and Skyway (paved). Major attractions in the Foothill Canyon Zone include access to Butte Creek's waters, scenic vistas, and the roads themselves. Typical of dispersed use in the Foothill Canyon Zone are activities such as hiking along the Centerville Flume, "putting in" kayaks and tubes at the former Steel Bridge, and cycling the roads that lace the area. Unlike the Butte Meadows Mountain Zone of the watershed, land ownership in the Foothill Canyon Zone is primarily private, setting the stage for conflicts over dispersed recreational use that at times constitutes trespass. Activities in these dispersed areas are noted in the Activities Matrix (see Appendix P).

Valley and Butte Basin Zone

Accessible roads and trails that structure the patterns of dispersed recreation in the Valley and Butte Basin Zone include: numerous county roads (paved); Highway 162; an extensive network of unpaved roads, public and private; and levee-top roads that are selectively accessible. Attractions in this area include wildlife, fish, generally uncrowded roadways, and access to water. Typical recreation activities include hunting, nature study, cycling, and driving for pleasure. As in the Foothill Canyon Zone, land ownership in the Valley and Butte Sink Zone is predominantly private. Dispersed use tends to follow developed road access, though trespass by recreationists is a common occurrence. Legal access becomes a conflict in the Butte Sink, when floodwaters create what some believe to be "navigable waterways", open to public access. Owners and members of private clubs inundated by these seasonal waters take exception to the navigable waterways...
concept under these circumstances, and consider such access to be trespass. Activities in these dispersed areas are noted in the Activities Matrix (see Appendix P).

Anecdotal Use Reports

Phone interviews were conducted to obtain further input as to the current conditions of the recreational opportunities within the watershed. Federal, State, and local residents and organizations provided valuable information for this portion of the existing conditions report.

- **Butte Creek Trails Council** provided information regarding the Butte Creek Trail located in the Forks of the Butte Creek Recreation Area. Information included: trail accessibility, conditions of trail after the 1997 flood, types of recreational uses, and involvement of the council concerning the maintenance and preservation of the trail.
- **BLM Redding Resource Area** representative expanded on the information obtained about the Forks of the Butte Creek Recreation Area and the Upper Ridge Wilderness Area. Additional information was provided about gold collection or mining activities at the Forks of Butte Creek area.
- **Almanor Ranger District** provided maps and information about the types of facilities available at the Butte Meadows and Cherry Hill camping areas as well as residential tracts within the area.
- **Chico Velo Biking Club** provided maps indicating routes and trails that the club uses within the watershed.
- **Honey Run Covered Bridge Association** provided information about ownership, activities, and conditions of the bridge and visitor area after the 1997 flood.
- Among the issues described by the Chico Area Flyfishers, littering was one of their primary concerns. Furthermore, the club feels that the creek is "fished-out" and they no longer fish within this area as a group. Suggestions of this organization included: a catch-and-release program and replanting of fish.
- **Paddleheads** is a kayaking club whose members use the creek regularly. The information provided indicated the most popular runs used on the creek. Access to the creek is limited and many times kayakers hike and cross over private property to reach the creek.
- **A California Department of Fish and Game** warden discussed popular places to fish within the watershed.

Recreation Opportunities Matrixes

The purpose of this section is to define and outline the information contained in the Recreational Opportunities Matrixes (see Appendices Q and R).

The matrixes serve as a quick reference for site identification and existing recreational uses. Based on secondary data collection, interviews, map identification and field investigations two recreational opportunities matrixes were prepared: (1) facilities matrix and (2) activities matrix. Each matrix lists all of the recreational sites within the watershed as well as the corresponding map identification number.

Facilities Matrix

The facilities matrix identifies the types of developed or constructed facilities that are located at that particular site. During field investigations each site was examined for existing facilities. The matrix indicates if each of the sites provides the following facilities:

- public facility - located on public land such as a national forest
- private facility - located on private land
- BBQ pits or grills - often associated with campsites
- bridge - provides access across the creek
- campsites - areas designated for camping
interpretive site - signs, kiosk, visitor center or informational bulletin boards
lease cabins - associated with national forest land, known as residence tracts
legitimate access - legal access either by road or trail
parking - areas where users can park vehicles
picnic tables - areas designated for picnicking
potable water - drinking water and faucets
roads (paved) - legitimate access
roads (unpaved) - legitimate access
signs - indicating recreation area
store/lodge/restaurant - services provided to users
toilets - pit or flush restrooms
trails (maintained) - legitimate access maintained by a public agency
trails (not maintained) - legitimate access not maintained

Activities Matrix

The Activities Matrix identifies the various types of recreational opportunities that can be found at a particular site. The activities that occur at a site were identified by signs, interviews, and secondary data. It should be noted that each site is not limited to the types of activities indicated on the matrix. It is possible that recreational users may partake in other forms of recreation. The matrix identifies the types of activities that were commonly identified to occur at that particular site.

- Backpacking
- Biking  On road/off road
- Camping
- Collecting
- Cross-country skiing
- Fishing
- Golf
- Hang-gliding
- Hiking/jogging
- Horseback riding
- Hunting
- Kayaking
- Mining/panning
- Motorcycling/ORV  Off-road/on-road
- Nature study/birding
- Picnicking
- Rock-climbing
- Shooting/plinking
- Sightseeing/driving
- Snow-shoeing
- Snow-mobiling
- Sunbathing
- Swimming/wading
- Tubing
Mapping

Included in this study is a Recreational Opportunities Map. The matrixes include a column indicating the sites' Map Identification Number. This number indicates the sites' location on the corresponding map. The sites' identification on the map indicates any of the following:

- the location of the site, such as a campground
- trailheads, including bicycle paths, hiking trails, or cross-country ski trails
- location where there is legitimate access, such as a portion of a trail or creek

Tubing and Whitewater Paddlesports (Canoeing, Kayaking, and Rafting)

Butte Creek is known to many Paradise and Chico-area locals as a retreat from the summer heat. This is the act of floating down the creek while sitting on top of a tire inner-tube. This activity occurs primarily during the warmer months of the year, roughly April or May through August or September. While this is not a whitewater activity per se (creek flows are low during this time of year), it is included in this section as it pertains to human's navigating the creek, and as such, the activity is dictated by the same sorts of conditions that influence the more traditional whitewater activities of kayaking, rafting, and canoeing.

Kayaking, rafting, and canoeing activities usually occur in the winter and spring (October or November through April or May, depending on water conditions). This season corresponds to the higher creek flows that are sought by these recreationalists in order to float their crafts over gravel bars, as well as to create the difficulty and hydraulics that are desired by advanced paddlers. It is this very rate of flow that makes tubing an unsafe activity in Butte Creek during the high water season.

Tubing

Tubers, as those who float the creek in tubes are called, usually float a section of the creek beginning at the upper crossing of the creek by Centerville Road (the Steel Bridge, or Bailey Bridge as it is called in its current configuration) down to the Honey Run Covered Bridge day-use area, a distance of 5.2 miles. Some tubers used to “put in” at the Centerville Powerhouse about 0.75 mile upstream of the Bailey Bridge, although the access road is now gated. Other tubers choose to float a lower section, starting at the Honey Run Covered Bridge, and ending at either the BLM land just downstream, or continuing on to the recreation area at the CDFG property above Parrott-Phelan Dam.

The float makes for a long day, and the canyon’s long, late-afternoon shadows can make the creek seem especially cold, even on the hottest of summer days. The creek is shallow, slow, and a leisurely float can take three hours or more. This, along with late-in-the-day put ins, and alcohol, can lead to cold, tired, drunk, and disoriented tubers. Cold and tired, or with darkness approaching, some head through private property to gain access to Centerville Road in order to hitch a ride up to their put in, as they are unable to reach their destination. Some local residents have observed tubers harassing salmon holding in the creek. These occurrences have led to conflicts with private landowners in the past (see Issues and Concerns chapter, # 1).

The creek itself has changed considerably (see Fluvial Geomorphology chapter of this report) in the last two years (winter of 1996 through the present). These changes have brought some considerations for summer recreationalists. The high water event of January 1997 removed vegetation on both sides of the creek, widening the bed of the creek. This created a shallower creek in numerous sections during low summer flows. This created more sections where tubers must walk and carry their tubes, slowing their progress. The high waters of 1997 also created several cobble bars that have no distinct line of main flow through them. At lower flows, the water essentially runs through the cobbles, not over them, creating another portage for tubers.
The most serious creek change from the high water event of January 1997 affecting tubers was the introduction of trees and large woody debris directly in the stream channel. While the Butte County Private Industry Council sent crews through the residential portion of the canyon to remove trees and woody debris from the streambanks on many parcels of land, many such items are still to be found in the stream channel itself. These trees and snags are an integral part of healthy fish habitat (see Fisheries chapter), yet they can pose a threat to any unsuspecting tuber with his/her feet dangling in the water. Foot entrapment is a leading cause of moving-water drowning, and the need to bring this to the public’s attention should not be underestimated.

Some WAC and Conservancy Board members have suggested restrictions on numbers of tubers, restrictions on parking at the Bailey (Old Steel) Bridge and other sites, and stricter enforcement of these regulations in the hope that by making it more difficult to use the creek for tubing, associated impacts will be decreased. Others in the WAC and on the Board have put forward the idea that a shuttle to and from the canyon, with staff explaining the situation regarding private property, litter, safety, and fisheries issues could alleviate the current level of impacts, especially the parking problems. The idea of educational signs at the put in and take out sites with information on float times, water temperatures, rules, and suggestions has been accepted by most.

Kayaking, Rafting, and Canoeing

The whitewater activities of kayaking, rafting, and canoeing on Butte Creek during the winter high-water season are different tremendously from summer season tubing. First and foremost, the creek is not so much a creek as it is a small river. Whitewater paddlers (as this section will refer to kayakers, rafters and canoeists) differ from the summer tuber in that they seek the speed and power of the dynamic hydraulics that are created by high winter flows. On the whole, the paddling community is very aware of the dangers associated with navigating these sorts of conditions, and therefore are fairly well trained and equipped to deal with problems encountered on a trip down Butte Creek, just as they would be for a more isolated creek or river. Due to this and their lower numbers, whitewater paddlers on Butte Creek appear to be less of a problem than summer tubers.

Proper equipment, responsible and experienced leaders, and common sense should be used whenever participating in a whitewater activity. Butte Creek may attract recreationalists that are not prepared for what they may encounter. With the population of Chico growing along with the popularity of whitewater paddling, more beginner paddlers will be seeking a place to try the sport. This, coupled with the fact that summer tubers see the creek as an "easy float," great for a beginner friend that may be looking for a first run, sets Butte Creek up as a prime candidate for first-time whitewater recreationalists.

Butte Creek is an excellent place for beginning through advanced whitewater enthusiasts. One of the main reasons why the creek itself is so well suited to whitewater recreation is the varied degrees of difficulty found on the creek and listed later in this section. Another reason the creek is a good place to learn and enjoy whitewater is that there is already a decent number of public and private groups or individuals certified and highly qualified as instructors and guides. Conservancy cooperation with local paddling groups, such as the Chico Paddleheads, Adventure Outings at CSU, Chico, and private individual instructors will assure that first time paddlers are instructed properly in safety, basic river navigation and boat maneuvering, as well as respect for private property and natural resources. These organizations also serve as an information source for out-of-town paddlers searching for runs that suit their ability levels.

Whitewater Difficulty Classifications And Butte Creek Ratings

International Scale Of River Difficulty

The following is the American version of a rating system used to compare river difficulty throughout the world. It was taken from the American Whitewater Affiliation homepage, located at: www.awa.org. This system is not exact; rivers do not always fit easily into one category, and regional or individual interpretations
may cause misunderstandings. It is no substitute for an accurate first-hand description of a run by experienced
guides or recreational river runners.

Paddlers attempting difficult runs in an unfamiliar area should act cautiously until they get a feel for the way
the scale is interpreted locally. River difficulty may change each year due to fluctuations in water level,
downed trees, geological disturbances, or bad weather, as has Butte Creek, especially over the past two years.
Stay alert for unexpected problems!

As river difficulty increases, the danger to swimming paddlers becomes more severe. As rapids become longer
and more continuous, the challenge increases. There is a difference between running an occasional Class IV
rapid and dealing with an entire river of this category (ie the section just above the Steel Bridge down versus
the section from Chimney Rock down). Allow an extra margin of safety between skills and river ratings when
the water is cold or if the river itself is remote and inaccessible.

The Six Difficulty Classes:

**Class I: Easy.** Fast moving water with riffles and small waves. Few obstructions, all obvious and easily
missed with little training. Risk to swimmers is slight; self-rescue is easy.

**Class II: Novice.** Straightforward rapids with wide, clear channels which are evident without scouting.
Occasional maneuvering may be required, but rocks and medium sized waves are easily missed by trained
paddlers. Swimmers are seldom injured and group assistance, while helpful, is seldom needed.

**Class III: Intermediate.** Rapids with moderate, irregular waves which may be difficult to avoid and which
can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or
around ledges are often required; large waves or strainers may be present but are easily avoided. Strong eddies
and powerful current effects can be found, particularly on large-volume rivers. Scouting is advisable for
inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may
be required to avoid long swims.

**Class IV: Advanced.** Intense, powerful but predictable rapids requiring precise boat handling in turbulent
water. Depending on the character of the river, it may feature large, unavoidable waves and holes or
constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to
initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards.
Scouting is necessary the first time down. Risk of injury to swimmers is moderate to high, and water
conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced
skills. A strong Eskimo roll is highly recommended.

**Class V: Expert.** Extremely long, obstructed, or very violent rapids which expose a paddler to above average
endangerment. Drops may contain large, unavoidable waves and holes or steep, congested chutes with
complex, demanding routes. Rapids may continue for long distances between pools, demanding a high level
of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the scale, several
of these factors may be combined. Scouting is mandatory but often difficult. Swims are dangerous, and
rescue is difficult even for experts. A very reliable Eskimo roll, proper equipment, extensive experience, and
practiced rescue skills are essential for survival.

**Class VI: Extreme.** One grade more difficult than Class V. These runs often exemplify the extremes of
difficulty, unpredictability and danger. The consequences of errors are very severe and rescue may be
impossible. For teams of experts only, at favorable water levels, after close personal inspection and taking all
precautions. This class does not represent drops thought to be unrunnable, but may include rapids which are
only occasionally run.

**Note:** "+'s" and "-'s" may be added to the above ratings to give further refinement in classifying a run. For
example, a rapid may be given the designation of "Class IV-" rather than just a "Class III" if, for instance, the
hazards for a swimmer may make self rescue difficult, requiring group assistance.
Butte Creek Draft ECR

Butte Creek: Classes Of Difficulty

Butte Creek is interesting in that the farther you go upstream, the more difficult the creek becomes. Lower sections of the creek are perfect for beginners in an instructional setting. The middle portions of the creek are great for intermediate and advanced paddlers, with the upper portions of the creek a place for advanced and expert paddlers only. It should be kept in mind that if the creek is above the 3,500 to 4,000 cfs range, it is considered to be at flood stage, and all of the following ratings should be disregarded. As the creek level approaches this range, it is becoming increasingly difficult with the corresponding rise in water level. When the creek is at or above flood stage, flow through streamside vegetation and trees is a common occurrence. These tree branches and large vegetation are known as "strainers," being named for their ability to catch a paddler or swimmer and strain them like spaghetti, with the water going right over the unlucky paddler's head. There are no "eddies" or resting spots in the creek, as the pools are now places of high velocity flow.

Doe Mill Road to De Sabla and Forks of the Butte Powerhouses Class VI
This section of creek is influenced heavily by the serpentine and metavolcanic basement rocks of the Sierra Nevada Basement Complex (see the Geology, Basin Morphology and Hydrologic System section of this report). The creek falls an average 215 feet per mile for the approximately three and one-half miles down to the powerhouses, yet has sections that fall at over 400 feet per mile. Many dangerous waterfalls and rocky rapids lie in this reach. It is in a very steep canyon, and although a trail (the BLM's Black Prince Mine Trail) follows high above the creek for a portion of the run, the run is quite isolated and portage of difficult rapids may be close to impossible once in the gorge. An informal survey of the local paddling community found that this section has most likely not been attempted by whitewater enthusiasts.

De Sabla Powerhouse to Chimney Rock Class V
While the upper mile or so of this run is still quite steep (well over 160 feet per mile), the gradient lessens as the run progresses, corresponding to changes in geology. This geology change also allows for the canyon to open up more. The creek is not in an inner gorge, and portages are easier. There are still many large drops, at least one substantial waterfall, and many rocky rapids. This reach is run by at most about two dozen kayakers in a year with favorable water conditions.

Chimney Rock to Helltown Class IV
Although it offers some excellent scenery with a reduced difficulty level, with nearly a two hour hike to the put-in, this section is not run very much. More often, kayakers will run the next section downstream, described below.

Helltown to Centerville Powerhouse Class III+; IV-
No public access and a one mile hike to the put-in discourages rafts. This section starts in the hard, dark colored slates of the Sierra Nevada Basement Complex, but quickly the transition is made to the sandstones of the Chico Formation. The canyon becomes much wider, and the creek is able to establish a floodplain in some areas, making for a creek with some sand and cobble substrate, rather than the bedrock seen upstream.

Centerville Powerhouse to the Honey Run Covered Bridge Class III
This is the classic introduction run for Butte Creek. The scenery, although there are homes along much of the run, is excellent. The creek is not excessively "pushy" or steep through this reach, although boaters may encounter strainers that require skillful maneuvering. There are several good "play spots" for more advanced boaters.

Honey Run Covered Bridge to the Parrott-Phelan Diversion Dam Class II
This is a great run to instruct first-timers on. The creek is essentially a braided, sand and gravel stream at this point, with no major rapids. Although there are some spots where the main flow may go into strainers, this is a great place for beginners to practice the basics of ferrying and catching eddies.
Visual Resources - Viewsheds

The Butte Creek Watershed is generally attractive for its visual resources. The watershed's three zones offer distinctive landscape forms, and are developed in ways best characterized by the nature of the landscapes, and the ownership of the lands. The Butte Meadows Mountain Zone is predominantly forested highlands managed by the USFS. Land uses fall under the USFS general principles of multiple-use management, and landscapes are characterized by a forested environment managed for a variety of resource values including forest products, water quality, wildlife, and aesthetics. The Foothill Canyon Zone is predominantly in private ownership, and is characterized by a managed forest environment changing to a chaparral and grassland landscape as the canyon descends in elevation. Land uses include forest husbandry, hydroelectric generation, grazing, and rural residential development. The Valley Butte Sink Zone is where Butte Creek wanders into the landscape of the Sacramento Valley Region, characterized by flat agricultural and wetlands, and punctuated in the south by the profile of the Sutter Buttes.

No single managerial entity governs the lands and resources within the Butte Creek Watershed. Therefore, visual resources management can only be implemented as a cooperative and often voluntary exercise between land jurisdictions. The USFS and BLM, both agencies that practice visual resource management, have holdings in the watershed. The Lassen National Forest manages a good part of the Butte Meadows Mountain Zone, and the Forks of Butte Creek Recreation Area is the major ownership by BLM within the Foothill Canyon Zone of the watershed. The visual resource management systems employed by these agencies can provide a general groundwork for assessing the visual resources of the Butte Creek Watershed.

Visual Resources Management (VRM)

The USFS has recently revised its visual resources management system to what is now called the Scenery Management System. The BLM is currently working on a revised visual resource management system. The existing BLM and former USFS visual resource assessment systems are closely related and should be easily understood for the purposes of this inventory.

Visual Resource Inventory Components

A visual resource inventory is conducted by 1) evaluating the nature of the landscape for scenic attractiveness, and categorizing areas in one of three classes based on landscape characteristics; 2) determining the sensitivity of these areas based on levels and types of recreational use, and on regional interest in the visual quality of the landscape; and 3) determining the visual distance and observability of objects in the landscape. Each of these three components is divided into three classes as follows:

- **Variety Class:**
  - Class A = Distinctive
  - Class B = Common
  - Class C = Minimal

- **Sensitivity Level:**
  - Level 1 = Highest Sensitivity
  - Level 2 = Average Sensitivity
  - Level 3 = Lowest Sensitivity

- **Distance Zones:**
  - fg = Foreground
  - mg = Middleground
  - bg = Background
Variety Class Descriptors
Class A Distinctive

Landform: Over 60 percent slopes which are dissected, uneven, sharp exposed ridges, or large dominant features.

Rock Form: Features stand out on landform. Unusual or outstanding, avalanche chutes, talus slopes, outcrops, etc.

Vegetation: High degree of patterns in vegetation. Large old-growth timber. Unusual or outstanding diversity in plant species.

Water Forms, Lakes: 50 acres or larger. Those smaller than 50 acres with one or more of the following: 1) unusual or outstanding shoreline configuration, 2) reflects major features, 3) islands, 4) class A shoreline vegetation or rock forms.

Water Forms, Streams: Drainage with numerous or changing flow characteristics, falls, rapids, pools and meanders or large volume.

Class B Common

Landform: 30-60 percent slopes which are moderately dissected or rolling.

Rock Form: Features obvious but do not stand out. Common but not outstanding avalanche chutes, talus slopes, boulders and rock outcrops.


Water Forms, Lakes: 5 to 50 acres. Some shoreline irregularity. Minor reflections only. Class B shoreline vegetation.

Water Forms, Streams: Drainage, with common meanderings and flow characteristics.

Class C Minimal

Landform: 0-30 percent slopes which have little variety. No dissection and no dominant features.

Rock Form: Small to non-existent features. No avalanche chutes, talus slopes, boulders and outcrops.

Vegetation: Continuous cover with little or no pattern. No understory, overstory or ground cover.

Water Forms, Lakes: Less than 5 acres. No irregularity or reflection.

Water Forms, Streams: Intermittent streams or small perennial streams with no fluctuation in flow or falls, rapids, or meanders.

Sensitivity Level Descriptors

Sensitivity ratings of Level 1 (highest sensitivity), Level 2 (average sensitivity), and Level 3 (lowest sensitivity), are a measure of public concern for scenic quality. Ratings are based on evaluation of the following indicators of public concern:

Type of Users: Visual sensitivity will vary with the type of users. Recreational sightseers may be highly sensitive to any changes in visual quality, whereas workers who pass through the area on a regular basis may not be as sensitive to change.

Amount of Use: Areas seen and used by large numbers of people are potentially more sensitive. Protection of visual values usually becomes more important as the number of viewers increases.
Public Interest: The visual quality of an area may be of concern to local, state, or national groups. Indicators of this concern are usually expressed in public meetings, letters, newspaper or magazine articles, newsletters, land-use plans, etc. Public controversy created in response to proposed activities that would change the landscape character should also be considered.

Adjacent Land Uses: This interrelationship with land uses in adjacent lands can effect the visual sensitivity of an area. For example, an area within the viewshed of a residential area may be very sensitive, whereas an area surrounded by commercially developed lands may not be visually sensitive.

Special Areas: Management objectives for special areas such as Natural Areas, Wilderness Areas or Wilderness Study Areas, Wild and Scenic Rivers, Scenic Areas, Scenic Roads or Trails, and Areas of Critical Environmental Concern frequently require special consideration for protection of the visual values. Management objectives for these areas may be used as a basis for assigning sensitivity levels. (Note: These are BLM land class distinctions cited above.)

Other Factors: Consider any other information such as research or studies that includes indicators of visual sensitivity.

Distance Zones Descriptors
Foreground (fg): This is the area that can be seen from each travel route where landforms and activities might be viewed in detail.

Middleground (mg): This is the area where details are not as discernible, perhaps a range of 1 to 5 miles. The outer boundary of this distance zone is defined as the point where the texture and form of individual plants are no longer apparent in the landscape.

Background (bg): This is the remaining area which can be seen from each travel route to approximately 15 miles. Vegetation should be visible at least as patterns of light and dark. Landscapes discernible in the distance as only forms or outlines should not be included.

Visual Resource Management methods combine Variety Class with Sensitivity Level and Distance Zone ratings to establish general visual resource management objectives for land areas. These methods are used on relatively continuous lands over large areas under management of a single agency, such as the USFS or BLM. Within the Butte Creek Watershed, only the lands in the upper watershed managed by the USFS are mapped for VRM objectives. (Adopted Visual Quality Objectives Map. Lassen National Forest Land and Resource Management Plan., 1992)

For the purposes of this inventory, watershed lands will be rated for the general VRM components by zone: 1) Butte Meadows Mountain, 2) Foothill Canyon, 3) Lower Foothill Canyon, and 4) Valley and Butte Basin. Specific scenic viewshed areas will be noted. Identifying management objectives for lands within the watershed is beyond the scope of this inventory.

Butte Meadows Mountain Zone
Visual Resource Management objectives for the Butte Meadows Mountain Zone are described in the Lassen National Forest Land and Resource Management Plan. Specific areas are detailed in the plan's accompanying "Adopted Visual Quality Objectives Map" (1992). Visual Resource Inventory components for this portion of the watershed are:

- Variety Class: B Common
- Sensitivity Level: Level 2 Average Sensitivity, to Level 1 Highest Sensitivity
- Distance Zones: fg Foreground along roadways and trails, mg Middleground elsewhere
Vistas: Unique vistas in the Butte Meadows Mountain Zone include open views from Colby Mountain Lookout, locations along Humboldt and Humbug Roads, and views of Butte Meadows.

Foothill Canyon Zone
The Foothill Canyon Zone below Butte Meadows is mostly private land (Sierra Pacific Industries), with some ownership under BLM (Forks of Butte Creek Recreation Area). Access to this zone is limited. The major route into the area is Doe Mill Road that bridges the creek at Forks of Butte Creek between Highway 32 and the Skyway. Visual Resource Inventory components for this portion of the watershed are:

- Variety Class: B Common, to A Distinctive (along creek corridor)
- Sensitivity Level: Level 3 Lowest Sensitivity, to Level 1 Highest Sensitivity (at Forks of Butte Creek Recreation Area)
- Distance Zones: fg Foreground along roadways and trails, mg Middleground elsewhere.

Vistas: Unique vistas in the Upper Foothill Canyon Zone are concentrated along the Butte Creek corridor. Most significant of these foreground view areas is the Forks of Butte Creek Recreation Area. Middleground and some background vistas are present along Highway 32 above Forest Ranch, which looks over the West Branch of Butte Creek south of Lomo. Quality middleground and background vistas exist on the upper Skyway beyond Inskip to Butte Meadows. These views are primarily in Variety Class B Common, though sensitivity is reasonably high because of travel along these routes.

Lower Foothill Canyon Zone
The Lower Foothill Canyon Zone is the most heavily settled portion of the watershed above Durham. The area is unique for canyon views from both canyon bottom and canyon rim, as well as from the few travel routes that ascend the canyon. Access to this zone is high in the canyon bottom (Honey Run and Humbug roads) and along the south rim (Skyway). Views from the north rim along Doe Mill Road are limited by accessibility. Visual Resource Inventory components for this portion of the watershed are:

- Variety Class: B Common, to A Distinctive (along creek corridor and bluffs)
- Sensitivity Level: Level 2 Average Sensitivity, to Level 1 Highest Sensitivity (along creek corridor and from bluffs where easily accessible)
- Distance Zones: fg Foreground along roadways, mg Middleground elsewhere, with some bg Background distances looking southwest into the north valley.

Vistas: Unique vistas are a significant attraction of the Lower Foothill Canyon Zone of the Butte Creek Watershed. The area is primarily rural and rural-residential, providing a relatively pastoral appearance. The riparian creek corridor is attractive for water features and diverse vegetation. Sloping canyon walls are crowned by cliffs and bluffs, creating distinctive landforms for which the County was named. Significant rim views are present along the westbound lanes of the Skyway, where several dispersed pullouts are frequently used. Small hiking paths allow people to view the canyon away from their autos. Vistas in this area are of high sensitivity because of high levels of travel and intentional sight-seeing behavior. Rim views from Doe Mill Road are also of high quality (common to distinctive), but the remoteness of Doe Mill Road keeps visitation low and thus rates the lowest sensitivity level. From the canyon bottom, Honey Run and Humbug roads, as well as Centerville Road where it is unpaved between Centerville and Nimshew, offer distinctive views of Butte Creek and the creek's canyon. These areas are Class B Common to Class A Distinctive, and rate Level 1 Highest Sensitivity because of high levels of travel and intentional sightseeing behavior.

Valley and Butte Basin Zone
The Valley and Butte Basin Zone is characterized by flat topography with distance views of the foothills to the east, coast range to the west, and Sutter Buttes to the south. Land ownership is predominantly private, with several government managed wildlife areas. Unique views include the agricultural lands, Sutter Buttes when
weather permits, and opportunities to view avian wildlife. Visual Resource Inventory components for this portion of the watershed are:

- Variety Class: C Minimal to B Common
- Sensitivity Level: Level 2 Average Sensitivity, to Level 3 Lowest Sensitivity Distance Zones: fg Foreground along roadways, mg Middleground where riparian vegetation is visible on near horizon, and bg Background distances viewing foothills, coast range, and Sutter Buttes

Vistas: Unique views are provided by the Sutter Buttes, particularly in closer proximity and during periods of clean air quality in the valley. Riparian areas add variety to the agricultural landscape. Waterfowl presence during winter months provides unique viewing opportunities. Openness in the Valley and Butte Basin Zone offers a full view of the day and nighttime skies.

**Issues and Concerns Regarding Recreation** (see Issues and Concerns, #1)

**Stakeholder Concerns**

The Butte Creek Watershed Project held its first Stakeholders meeting on February 18, 1997. At this meeting participants voiced their "issues and concerns" regarding the watershed. Each of the various topics that were discussed at this meeting was tabulated and grouped by theme. One of the topics included recreational issues. The specific issues of concern included:

- Recreational Uses: Impact on the use of Butte Creek since other creeks restricted. Users putting pressure on Butte Creek - increased traffic, inadequate parking, trespassing, trash. Solution: Alcohol checks and surprise checkpoints, garbage cans, Board of Supervisors enforce ordinances.
- Driving inappropriately is growing - drinking - flooding off road damage, parking, garbage, bathrooms.
- Uncontrolled dirt bike and off road vehicle use in the upper watershed. Causes erosion and increases sediments.
- Recreational trespass on private property.
- How can human contamination be controlled in the Butte Creek Watershed? Campers/Septics.
- Look at regional needs and availability of recreation, habitat, etc.
- Butte Creek Access: Exclusion moves problem to another location. Solution: Post signs for public access and private access, increase parking access for public access.

**Resident Concerns**

- Litter
- Trespassing
- Over fishing
- Cyclists and vehicle conflicts
- Private duck clubs and trespassing
- Disturbance to soil, vegetation, and water quality
- Increased traffic
- Disturbance to migratory salmon
Recreationist Concerns

- Lack of access/parking
- Cycles and vehicle conflicts
- Lack of fishing opportunities
- Conflicts between incompatible recreation activities

Conclusions

The Butte Creek Watershed presents a number of challenging issues. The watershed possesses qualities that make it enticing to recreational use: flowing water suitable for wading, swimming and whitewater floating, fish, scenery, riparian areas, trails, roads, and a generally natural or rural appearance. The proximity of the Chico urban area, and the communities of Paradise, Oroville, Biggs, Gridley, Nelson, Richvale, and Durham, present population pressures projected only to increase in the future.

Though open space is plentiful in the watershed, private land is the primary ownership pattern. With the exception of national forest lands in the upper watershed, limited BLM holdings in the foothill canyon zone, and wildlife areas in the valley, publicly accessible lands are relatively scarce, particularly in the part of the canyon nearest Chico and Paradise.

It is to be expected that recreationists will continue to seek recreational opportunities in the Butte Creek Watershed. As accessing these opportunities may frequently require crossing private lands, trespass conflicts will continue to occur. Non-trespassing recreationists will continue to crowd the few legal access points in the canyon stretches of the watershed, causing ongoing parking and traffic problems. The need for cooperative efforts leading toward mutually agreeable changes from the conditions of existing recreational resources is apparent (see Issues and Concerns chapter, # 1).

List of Related Studies for the Recreation Component of the Butte Creek Watershed Project ECR


Paradise General Plan, 1982.
