I. INTRODUCTION

A. PLAN PURPOSE

Colorado State Parks is dedicated to long-term planning in order to provide a consistent and progressive management presence at all of its properties. The agency s mission, development, and acquisition goals are set forth in Horizons , State Park s five-year plan.

To aid in the planning process, State Parks has also adopted a policy of revising each Park Management Plan every ten years. This process allows staff to gather input from park visitors, local citizens and other natural resource professionals on topics that relate to the overall management of the park.

As the population grows state and region wide, we will see an increased demand for water-based recreation along the Front Range. Conservation and enhancement of our limited resources through sound planning will insure their existence for future generations. This management plan updates information contained in the park s overall Master Plan which was completed in 1989. It is designed to provide concepts, information and goals for the future development of the area. The area management philosophy, outlined below, was used as a basis in the formulation of this plan.

- To provide a safe, high quality recreational experience for all visitors to the area.
- To preserve, for the use and enjoyment of future generations, the natural, cultural and historic values of the resource.
- To maximize recreational opportunities and enhance the natural quality of the site through planned area and facility development.

B. PARK PURPOSE

Trinidad Dam and Reservoir was created by the Army Corps of Engineers, primarily to protect the town of Trinidad and the lower Purgatoire valley from floods. Secondly, water stored in Trinidad Lake is utilized for the irrigation of croplands. The third purpose for the project is recreation.

The purpose of Trinidad Lake State Park is clearly defined by state statute. It entrusts Colorado State Parks with the responsibility To protect, preserve, enhance, and manage for the use, benefit, and enjoyment of the people of, and the visitors to, Colorado, the natural, scenic, scientific and outdoor recreation areas of this state.

C. PARK SIGNIFICANCE

Trinidad Lake State Park is the only area on the Purgatoire River that is set aside specifically for large scale, water-based recreation. The fluctuating reservoir averages 800 surface acres and can balloon to over 1400 surface acres in wet years. It is open to all forms of water related recreation. The closest lakes of this size are Lake Pueblo State Park, 100 miles to the north and John Martin State Park, 100 miles to the east.

It should be noted that the area is located three miles from a major artery into the state, Interstate 25. The park provides recreational opportunities and camping facilities to regional travelers and tourists. It is also economically valuable to the City of Trinidad and Las Animas County. An Economic Impact and Perception Report was completed for the Colorado State Park system in 1994. This survey indicated that each individual visitor spent approximately $75.00 on trip costs that included entrance and camping fees, lodging, groceries, gas, licenses, and other miscellaneous expenses. It is estimated that the State Park generates approximately 15 million dollars into the regional economy.

D. LOCATION INFORMATION

Trinidad Lake is located three miles west of Trinidad on State Highway 12, a designated Scenic By-way, The Scenic Highway of Legends. It is the largest water-based recreation area on the Purgatoire River. It sits in a narrow valley in the foothills of the Sangre de Christo Mountains at an elevation of 6,300 feet. The park is in the South Region of the Colorado State Park system. The South Region Administration Offices are in Colorado Springs, CO.

PARK CONTACT INFORMATION
Trinidad Lake State Park
32610 Highway 12
Trinidad, CO 81082
(719) 846-6951
(719) 846-0676 fax

SOUTH REGION OFFICE
Colorado State Parks, South Region
2128 North Weber
Colorado Springs, CO 80907
(719) 471-0900
(719) 473-4201

II. BACKGROUND

A. MANAGEMENT AGREEMENTS

The construction of Trinidad Dam was authorized by the Flood Control Act of 1958. The project was started by the Army Corps of Engineers in the early1970 s and was completed in 1979. The State acquired management responsibility through two separate agreements. The first, a lease for 1,435 acres of land and water, was signed in July of 1978. The second, a license for 864 acres of land and water, was signed in June of 1980. Both the license and the lease are for 25-year periods. The lease expires in 2003, the license in 2005. State Parks is attempting to negotiate a cost share agreement with the Army Corps of Engineers before the agreements are renewed. The cost share would focus on the renovation of existing facilities.

Prior to leasing the area to the Division of Parks, the Army Corps of Engineers, in cooperation with other agencies, developed the following documents to assist the Division in management of the property:

- Design Memorandum Number 13, Master Plan.
- Environmental Statements, 1974, 1994.
- Lease for Public Park and Recreational Purposes, DACW47-1-77-008
- License for Fish and Wildlife Management Purposes, DACW47-3-77-000
- Plans for Construction of Trinidad Recreation Facilities.
- Specifications for Trinidad Recreation Facilities.
- Trinidad Lake Cultural Resource Study Parts I & II.

Six lease amendments have been made; all of which are minor in nature. Two of these amendments convey additional land management responsibilities from the Army Corps of Engineers to Colorado State Parks. The two parcels total 125.31 acres.

Plans developed by Colorado State Parks to aid in the management of the area include:

- Controlled Maintenance/Winterization Plan
- DNR Safety Handbook
- Emergency Procedures
- Employee Handbook
- Forest Management Plan
- Interpretive Master Plan
- Interpretive Services Environmental Education Plan
- Management Practices for Wetlands
- Native Plant Revegetation Guide

- Noxious Weed Control Plan
- Resource Inventory
- State Parks Law Enforcement Operational Procedures Manual
- Trinidad Lake Interpretive Guide
- Trinidad Lake Sign Plan
- Trinidad Lake Management Plan
- Trinidad Lake Trails Plan
- Trinidad Lake Visitation Study 1997-1998
- Volunteer Management Handbook

These documents are on file at the park office and are utilized to assist in management and operation decisions.

Colorado State Parks has entered into a recreational lease agreement with the State Land Board for management of 100 acres of land in the Reilly Canyon area of the park. This parcel is adjacent to the park and provides a buffer to a sensitive area. The recreational lease overlaps an agricultural lease. Both leases expire in 2003. Colorado State Parks will attempt to renew the recreational lease at that time.

In 1997 Colorado State Parks acquired 217.12 acres of land in the Long s Canyon area. This land was purchased to provide a buffer from development. The total amount of land and water managed by State Parks through lease agreements and fee title ownership is 2,742.49 acres.

Other management agreements include two with the City of Trinidad and one with the National Park Service. The more significant of the two with the City requires that they maintain the original 4,500-acre foot recreation pool. The second allows State Parks to utilize a road under their control as a hiking/biking trail. The agreement with the NPS identifies Trinidad Lake State Park as a Complementary Interpretive Facility for the Santa Fe National Historic Trail.

B. AREA AND REGION DESCRIPTION

Trinidad Lake State Park is located in south central Colorado, three miles west of the City of Trinidad. Situated in Las Animas County, the largest county in the state, the park is approximately twelve miles north of the Colorado/New Mexico state line, and two hundred miles nearly due south of Denver.

In the early 1900 s the region flourished due to the coal mining industry. Mining camps and coke towns were located throughout much of Las Animas County. After World War II, there was a rapid decline of the mining industry, which contributed to a decline in the population and economy of the region. Today, the major economic base is ranching, farming, methane gas

extraction, land development and related construction. Economic recovery has been slow and spotty at best. Approximately 10,300 people live in Trinidad; the population of Las Animas County is estimated at 17,385.

Regional properties owned by various government agencies offer a variety of recreational opportunities. The Colorado Division of Wildlife manages six wildlife areas within the county, which offer both hunting and fishing. The City of Trinidad manages a small resort, Monument Lake, located 30 miles west of Trinidad near Stonewall, Colorado. The San Isabel National Forest is located 35 miles west of the park. There are also two museum facilities in Trinidad. The Baca/Bloom House and Pioneer Museum Complex is managed by the Colorado Historical Society, and the A.R. Mitchell Museum & Gallery is managed by a private foundation. A.R. Mitchell was a noted southwestern artist who lived in Trinidad. The Santa Fe National Historic Trail passes through Trinidad and is within one mile of the park s southeast boundary.

The primary access to the park is via Colorado Highway 12, which runs adjacent to its northern boundary. Highway 12 is also a state designated Scenic By-way, The Scenic Highway of Legends. This highway continues west and eventually accesses Lathrop State Park three miles west of Walsenburg. The park can also be reached from the south via county road 18.3.

All property adjacent to the park is zoned rural residential. The property south of the parks southern boundary to the New Mexico State line was purchased by a developer, subdivided into smaller parcels, and is being sold for home sites. In 1997, 200 acres in the Longs Canyon area of the park was purchased to buffer a watchable wildlife site at that location. A railroad line separates the majority of the subdivided parcels from the park. All property along the park s northern boundary is subdivided and privately owned. Development in these areas is slow now, but the potential for additional development is high. The recreational lease with the State Land Board will help buffer this area. An attempt to purchase an additional 275 acres in the Reilly Canyon area in 1998 was unsuccessful.

C. HISTORY

Archaeological sites in the park date from the early Sopris Phase (1075 — 1150 A.D.) to the Baca Phase, which was the Spanish-American occupation of the area from 1860 through 1900. The most widespread native Indian tribes were the Jicarilla Apache, Utes and Commanches.

The first Spanish expedition into the Purgatoire Valley was led by Archuleta in 1664. He was followed by Ulibarri in 1706, and Valverde in 1719. The Ulibarri expedition entered the valley through the mouth of Long s Canyon, which is within the present day park boundaries. Valverde is credited with naming the Purgatoire River, first known as El Rio De Las Animas Perdias in Purgatory (The River of the Lost Souls in Purgatory). It was so named for a small band of Spanish Conquistadors who were killed and thrown into the river without receiving last rites. French trappers later shortened it to Purgatoire, and many

early travelers mistakenly called it the Picketwire. The Spanish cultural influence can still be seen through much of southern Colorado today.

In 1821, William Becknell opened the Santa Fe Trail and started a lucrative trading business. The Santa Fe Trail, which is currently Main Street in Trinidad, passed within a mile of the Park s southern boundary. When settlers began to farm along the Purgatoire in 1858, the town of Trinidad was founded. During this period, the main economic base of the area was sheep and cattle ranching, but this was soon to change. In 1876 the first coal mining operation was begun, and by 1930 there were over fifty major coal companies located in and around the upper Purgatoire Valley. The mining industry declined dramatically after 1950. In 1995, the last operating coal mine in Las Animas county was closed. During the 70 s the old mining communities of Sopris, Piedmont, St. Thomas, Jerryville, Sopris Plaza and Viola were removed, and the inhabitants relocated, to make way for the construction of Trinidad Dam.

A portion of the Sopris Mine coal tailing pile, which was located on park land, was reclaimed by a project sponsored by the Division of Mined Land Reclamation. The project was started in 1985 and was completed in 1988. The remainder of the pile, located on private property adjacent to the park, stands in mute testament to the days when coal was king . The region's history is explained through interpretive displays in the Visitor Center and by wayside exhibits that are scattered throughout the park.

Evidence of Trinidad s early days, and the cultural influence of several ethnic groups that came to this coal-rich region, is still to be found throughout the area. Regional historic sites that are listed on National and State Registries include The Trinidad History Museum Complex, The Cokedale Historic District, The Ludlow Tent Colony Site, The Corazon de Trinidad District, The Jaffa Opera House, Raton Pass, The Torres Cave Archaeological Site and The Santa Fe National Historic Trail.

D. EXISTING DEVELOPMENT

The Army Corps of Engineers spent approximately 2.5 million dollars for the initial development of recreational facilities at Trinidad Lake. Over the first 20 years of operation, Colorado State Parks has maintained, and in some cases enhanced, the facilities built during the initial construction phase. Facilities that have been added include:

- A 2000 square foot Visitor Center.
- A 60 seat amphitheater.

- 8 miles of natural surface trails, including a one mile self guided trail.
- 1 mile of paved trail.
- Additional vehicle access and parking areas along the South Shore, Carpios Cove, Reilly Canyon and in Long s Canyon.
- Extension of the Boat Ramp to the top of the irrigation pool (elevation 6,230).
- Wildlife viewing blinds (2).

The majority of the park s facilities are located at the Carpios Ridge area.

The 62-site campground features a fully equipped comfort station, laundry facilities and a dump station. Most sites have electricity and are adaptable to recreational vehicles or tent campers. Water hydrants are centrally located throughout the campground, and five sites are specifically designed for use by the physically challenged.

Also located on Carpios Ridge are two group picnic shelters, available by reservation, and family picnic sites, many of which are covered.

An amphitheater, overlook and interpretive site lie between the picnic area and campground. The park staff presents campfire programs on weekends and holidays, Memorial Day through Labor Day.

A trailhead adjacent to the campground leads to approximately eight miles of hiking trails. A one mile paved trail meanders through the Carpios Ridge area and connects numerous interpretive sites.

A Visitor Center is located adjacent to the Carpios Ridge Campground. This multi-purpose facility serves as the park s administrative offices, is used to collect fees and dispense information, and contains displays that interpret the park s natural, cultural and historical resources.

Trinidad Lake offers a variety of water-based recreational activities including sailing, water skiing, boat and shore fishing. A boat ramp area on the east side of the lake offers a two-lane boat ramp, boat docks and ample room for trailer parking.

Shore fishing is a popular activity, and the lake supports both cold and warm water fish species. The west end of the park is also used by waterfowl and small game hunters through the fall and winter months. Facilities at these areas are limited to portable restrooms and a small number of family picnic sites.

The Piedmont group picnic and group camping area is located on the east side of the park (below the dam). This area offers a group shelter and a small number of primitive campsites.

A maintenance and employee residential area near the Carpios Ridge access road consists of two metal buildings that were used as laboratories during the construction phase of the dam. The buildings were relocated from below the dam to their present site in 1983. There are also two trailer pads for employee housing at the site.

The Longs Canyon Watchable Wildlife Area is located in the southwest corner of the park. It features a _ mile hiking trail and two viewing blinds that overlook a wetland habitat.

There are approximately seven miles of road within the park. The access road to the Carpios Ridge area and all roads in the campground are paved, and the remainder are gravel. The majority of the roads and recreational facilities were built between 1978 and 1980. The Visitor Center was constructed in 1995.

The Corps of Engineers operates a Visitor Center at the northwest corner of the park, featuring displays explaining the area s flood control history. It also serves as their administrative offices.

III. NATURAL AND CULTURAL RESOURCES

A. TOPOGRAPHY

Trinidad Lake State Park, located in the southern extension of the Colorado Front Range, is characterized as being a transition zone between the Rocky Mountains and the Great Plains. The park lies in a narrow river valley bordered by mountainous foothills at an average elevation of 6,300 feet. To the west, the foothills rise to meet the Culebra Range of the Sangre de Cristo Mountains, which includes Culebra Peak (elevation 14,047 feet). This range provides a 671 square mile drainage area from which the Purgatoire River emanates. To the east, the foothills blend into rolling, grassed plains, and the river gradually levels and widens. Two prominent landmarks that can be viewed from the park include Fishers Peak, a flat-topped mesa to the south, and the Spanish Peaks to the north.

B. SOILS AND GEOLOGY

The soils in the reservoir area are in the Table Mountain and Fort Collins series. These soils have loamy surfaces and are easily cultivated. Much of the area above the high water level is within the Louviers-Prieta and Travessila series. These soils have very severe limitations that make them unsuitable for cultivation and restrict their use largely to grazing, woodland or wildlife habitat. These soils are susceptible to erosion and exhibit past erosion damage.

The geological features of the park are chiefly comprised of eroded sandstone and shale foothills dissected by several small canyons, and divided by the Purgatoire River Valley. Trinidad Lake lies on the eastern flank of a broad subsidence known as the Raton Basin.

A geologic feature of note was discovered on the site in the mid 90 s, the K-T Boundary. This one inch white claystone layer is located adjacent to a hiking trail in the Long s Canyon area of the park. Scientists believe that 65 million years ago an asteroid struck the earth near the Yucatan Peninsula. The ensuing dust cloud killed 75% of all living things on earth including all of the dinosaurs. Ejected debris from the impact formed this unique layer. It contains shocked quartz grains unique to impact craters and an abundance of iridium, an element common in asteroids, but very rare on earth. This layer marks the boundary between the Cretaceous and Tertiary Periods of geologic time, which is called the K-T Boundary by geologists.

C. VEGETATION

Trinidad Lake State Park is in Pinon-Juniper woodland, classified as the lower transition life zone. Although it is a distinct plant community, the park s Pinon-Juniper woodland represents a transition between the shortgrass prairie and the montane life zone of the southern Rocky Mountains. Pinon Pine, One-seed Juniper, and Rocky Mountain Juniper are the dominant species of the community. Shrubs that are commonly present in the park include Mountain Mahogany, Antelope Bitterbrush, Service Berry, Big Sagebrush, Rabbit Brush, Gambel Oak and a variety of cactus species. Grasses common to the park include Indian Rice Grass, Needle-and-Thread, Squirrel Tail, June Grass, Gallita, Blue Grama, Sideoats Grama, Ring Grass, Western Wheat Grass, Bluestem Wheat Grass, Slender Wheat Grass, Downy Chess and Threeawn.

A sub-community of the Pinon-Juniper zone is noticeable along streams, canyons and other drainage areas. This riparian habitat consists of vegetative species that require more moisture than do the plants of the surrounding hills. Common species found along these corridors are cottonwood, willows, Mountain Alder, Box Elder, Wild Plum and Chokecherry. Since human activity was common along the Purgatoire River before the dam was constructed, Russian Olive and Elm can be found where they were once planted.

D. CLIMATE

The Colorado Park Plateau, on which Trinidad Lake sits, is considered a semi-arid region. The area is characterized by a yearlong abundance of sunshine days, with scattered intense local thunderstorms during July and August, and moderate snowfall from November through April. The average annual precipitation at the park is from 16 to 18 inches. Snowfall in the area averages 38 inches annually. The greatest precipitation in the area occurs during the period from April through August. The air is usually dry, as low relative humidity is the norm. The prevailing wind is from the southwest, and strong gusty winds usually precede thunderstorms from the west.

E. WILDLIFE/FISHERIES

Trinidad Lake State Park, as a transition zone, offers a diverse habitat for a variety of wildlife species. Some of the more common mammals found include squirrel, porcupine, cottontail rabbits, bats, skunk, coyote, bobcat and mule deer. Abundant elk, bear and mountain lion populations can be

found higher up the Purgatoire River Valley, and are occasionally seen in the park.

Migratory waterfowl occur in the park in autumn and spring — but not in great numbers. The lake is currently used as a resting spot rather than a feeding or nesting area. There are several indigenous species of birds not commonly seen in other parts of the state. They include Broadtail Hummingbirds, Pinon Jays, Kingfishers, turkeys and an occasional roadrunner. Other birds often seen in the area are hawks, buzzards, owls, ravens, gulls, woodpeckers, sparrows, Towhees, finches, juncos and meadowlarks.

The park also features a good number of reptiles, amphibians and insects. These include toads, frogs, salamanders, collared lizards, horned lizards, prairie rattlesnakes, bull and garter snakes, scorpions and tarantulas.

The fishery in Trinidad Lake is managed by the Colorado Division of Wildlife and supports both warm and cold-water fish species. The lake is usually stocked with catchable sized Rainbow Trout from March through July. Other species introduced that can now be caught by anglers include Largemouth and Smallmouth Black Bass, Walleye, Saugeye, Channel Catfish, Crappie, Bluegill, Perch and Tiger Muskies. An occasional Brown Trout is also caught. These fish have probably worked their way downstream form the upper stretches of the Purgatoire. Shad have also been introduced as a forage fish.

F. ARCHAEOLOGY

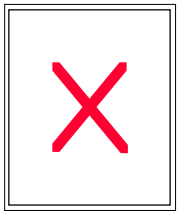
Early man left abundant evidence of his occupation of the park. Following government acquisition of the site, salvage archaeology was conducted by the Trinidad State Junior College Anthropology Department, under contract with the National Park Service. Forty-eight sites were found within the project boundaries. All cultural resources found at these sites were identified and curated by 1980, thus satisfying all federal laws for protection of historic and prehistoric remains. Detailed notes of the salvage operation are contained in the Trinidad Lake Cultural Resource Study , parts I and II, on file at the park office. Some of the artifacts found in the park are now on display at the Corps Visitor Center. One of the sites that is linked to the Jicarilla Apaches, and located near the Carpios Ridge Campground, has been developed into an interpretive area. Interpretive signing installed in the fall of 2000 explains the site to visitors.

High water conditions in 1999 severely eroded one of the original forty-eight sites. In the spring of 2000, park visitors discovered skeletal remains at the site. The remains and numerous artifacts were recovered by salvage archaeologists that were contracted by the Army Corps of Engineers. The remains are believed to be associated with Native Americans. Additional research and salvage will be conducted at this site. The area is currently closed to the public.

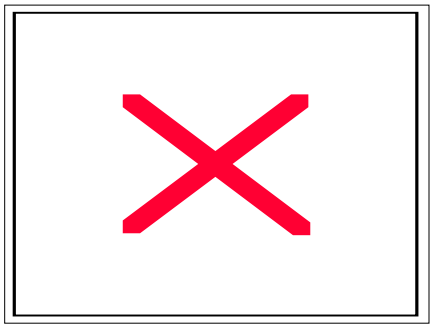
G. HISTORY

In 1991, State Parks entered into an agreement with the National Park Service, which designates Trinidad Lake as a Complementary Interpretive Facility for the Santa Fe

National Historic Trail. Through this agreement, State Parks receives technical assistance on all interpretive materials related to the Santa Fe Trail. The park is also listed as an interpretive site on the Santa Fe Trail in all related National Park Service brochures.



In 1995, a functional horno was built near the park s amphitheater through a grant from the State Historic Society. An horno is a beehive shaped adobe oven used by traditional Spanish and Native American cultures for cooking. Horno cooking demonstrations are offered throughout the high use season.



In December of 1999, the Reilly Canyon Bridge, which is located in the northwest corner of the park, was added to the State Register of Historic Properties. The bridge includes three separate spans and a large single-span overpass that was used by the Denver and Rio Grande Railroad. Constructed in 1936 by the Work Progress Administration, the bridge with its rock-faced masonry and beaded mortar joints, is characteristic of WPA construction in southeastern Colorado.

IV. AREA MANAGEMENT INFLUENCES

A. LEGISLATIVE/ADMINISTRATIVE INFLUENCES

1. Army Corps of Engineers Lease - The majority of Trinidad Lake State Park is owned by the Army Corps of Engineers and managed through a lease agreement by Colorado State Parks. The Corps, per its lease with State Parks, exercises significant influence on park management, primarily through its approval of all land use at the park. This agreement will expire in 2003. Negotiations to develop a cost share agreement between the Army Corps of Engineers and Colorado State Parks are currently under way. This agreement would forge a partnership between the two agencies for the express purpose of rehabilitating facilities that have deteriorated over the past 20 years. The agreement should include facility improvements, expansions, and additions to better serve the needs and expectations of park visitors. This cost share will also effect two other state parks that have management agreements with the Army Corps of Engineers, Chatfield and Cherry Creek.

2. Related Agencies - Other agencies that influence the management of the park to varying degrees are as follows:

- City of Trinidad — Water line easement, trail easement, water agreement.
- Colorado Division of Water Resources — Coordinate water releases, assess evaporative losses associated with stored water, assist with water transfers.
- Colorado Department of Highways — Highway access and signing.
- Colorado Division of Wildlife — Cooperative wildlife management, fish stocking and cooperative enforcement of fishing and hunting regulations.
- Fishers Peak Fire Protection District — Fire suppression.
- Las Animas County Ambulance Service — Medical service response.
- Las Animas County Commissioners.
- Las Animas County Planning Commission — Coordinate planning and zoning issues throughout Las Animas County.
- Las Animas County Road and Bridge Department — Provide road maintenance service for the Park through a memorandum of understanding.
- Las Animas County Sheriffs Department — Concurrent jurisdiction of law enforcement.
- Las Animas-Huerfano Counties Health Department — Water quality monitoring and health inspections.
- Maxwell Land Corporation — Railroad line easement.
- National Park Service Long Distance Trails Group — Cooperative agreement that designates the Park as a Complementary Interpretive Facility for the Santa Fe National Historic Trail.
- Natural Resource Conservation Service — Assist Park with natural resource management issues.
- Purgatoire River Water Conservancy District — Regulate release of water from Trinidad Lake for irrigation purpose.
- San Isabel Electric — Electrical line easement.
- State Patrol — Cooperative law enforcement, accident investigation.

3. Railroad Easement — A railroad line borders the parks entire southern boundary. This small spur line starts below Trinidad Dam and proceeds west up the Purgatoire Valley approximately 36 miles. At this time there are no operating coal mines in Las Animas County and the rail line has not been used to transport coal since 1995. The Maxwell Land Corporation owns the rail line except for the 2_-mile section that borders the park. For this section, they have been granted an easement by the Corps of Engineers.

Since the line is no longer used to transport coal, other uses have been discussed publicly. They include a tourist train, abandonment and salvage, and a Rails-to-Trails project. Any of these changes would have, to some degree, an effect on the park. This situation will be monitored over time to insure that changes to this easement will be positive in nature and complementary to the activities and operation of the State Park.

B. REGIONAL INFLUENCES

1. Lake Fluctuation — The original recreation pool assigned to the project was 4,500-acre feet and offers about 284 surface acres for recreation. When the lake is filled with irrigation water it can hold over 71,000-acre feet and expands to over 1,400 surface acres. There is 84 vertical feet of fluctuation between the top of the original recreation pool and the top of the irrigation pool. The ideal lake size from a recreational standpoint is between 700 and 1,000 surface acres.

Water is stored in Trinidad Lake for irrigation purposes from October 15 through April 15 every year. Irrigation releases begin after April 15, and the lake is usually drawn down through the six-month irrigation season. Determining factors during this period include local precipitation and the size of the snowpack in the Culebra Range of the Sangre de Cristo Mountains.

Another factor affecting lake levels is the susceptibility of the Purgatoire River Valley to flash floods. A flash flood in August of 1981 caused the lake level to rise over 17 vertical feet in a three-day period. A rain/snow event on April 29th, 30th and May 1st of 1999 resulted in a 43 foot vertical rise in the lake level during the month of May. It is difficult to estimate or predict lake levels or even establish an average due to the varying conditions and age of the reservoir.

There are strong ties between lake levels and visitation to the site. Due to changes in water storage policy, the Kansas lawsuit involving the Arkansas River and drought conditions in the late 80 s and early 90 s, lake levels dropped below the 400 surface acre mark. In 1992 park visitation dropped to an all time low of less than 146,000 visitors. Some of the problems associated with low water conditions include:

- Low water levels deter visitors that are seeking a water based recreation experience. It causes a yo-yo effect in visitation which ties to the park s and the region s revenue picture.

- Extreme low water conditions deter development. All facilities must be constructed above the high water mark. During low water years these facilities would be a considerable distance from the lake.
- Fluctuation is harmful to the fishery.
- It hinders marketing efforts; low water conditions make it difficult to draw water related special events.
- Low water levels create vehicle access problems, as there are no maintained roads to the shoreline.

In the mid-80 s, a hydrology study conducted by the Army Corps of Engineers identified 11,467 acre feet of unallocated storage space in Trinidad Lake. Through diligent work by the State Park staff and the approval of the Arkansas River Compact Commission, this space was assigned to the recreation pool in 1997. When this pool is full it will reduce the fluctuation of the lake by 27 vertical feet and more than double the amount of surface acres for the recreation pool. With additional water stored for irrigation, the lake should average between 700 and 1000 surface acres (see maps in appendices).

In 1999 State Parks filled this new space with Transmountain water. The last step in this process is to acquire water to offset evaporative losses associated with the new space. Park staff has identified this acquisition as a high priority.

Storage in Trinidad Lake began in 1979 and since then has reached a high elevation of 6,230 feet in 1999, and a low elevation of 6,145.91 feet in September of 1989. Water levels tend to be highest in March and April and lowest is September and October (a chart found in the appendices reflects the average elevation and surface acres of Trinidad Lake since 1980).

2. Development — Much of the land in Las Animas County that was owned by large coal companies has been sold to land developers. This includes a 10,000-acre parcel that is adjacent to the park s southern boundary and continues south to the New Mexico State line. All of the land in this parcel has been subdivided into smaller parcels and resold as home sites. This activity is taking place all over the county and is helping to bolster a sluggish economy through land sales and related construction.

The park has been impacted by development in several ways:

- The viewshed of the park, particularly along the southern boundary, has been altered by the construction of homes.
- Wildlife population in and around the park have been impacted by house pets that are often permitted to roam freely.
- Road cuts and other disturbances related to the installation of utilities will result in a loss of habitat and will accelerate the siltation of the lake.
- Continued development may result in a source of non-point pollution.

3. Coal-Bed Methane Gas Extraction — Due to the abundant coal resources in Las Animas County, coal-bed methane gas extraction has flourished in the upper Purgatoire Valley. There are currently five large companies that are involved in this industry. The Las Animas County Planning office estimates that there are over 700 gas wells operating in the valley. The average life of a methane gas well is 30 years. Additional wells will be placed into operation in the future and it appears that gas extraction is here to stay. Many feel that this industry is a welcome addition to the county and will help to fill the economic void left by the closing of the coal mines.

Water is a by-product of the gas extraction process and is brought to the surface over the first 15 years of operation of each well. Recently, the State Health Department issued a Discharge Permit to one mining company that permits them to bring 1.4 million gallons of water to the surface per day. The long-term effects this industry will have on water quality in the Purgatoire River Watershed are unknown at this time. Water quality will continue to be monitored by the Army Corps of Engineers and the State Health Department.

4. Transportation — Access to Trinidad Lake State Park is very good. Interstate 25 passes through Trinidad three miles east of the park. I-25 at Trinidad is the second most popular vehicle access into Colorado and averages 9,500 vehicles per day, an increase of 53% over the last 10 years.

I-25 and the main park entrance are connected by State Highway 12, which continues past the park and winds up the Purgatoire River Valley. It eventually crosses Cuchara Pass and intersects State Highway 160 west of Walsenburg. In 1988, Highway 12 was designated as a State Scenic By-way and named the Scenic Highway of Legends.

Large numbers of potential park users enter the state from the south on I-25 at Trinidad. The Scenic Highway of Legends and the Santa Fe National Historic Trail, which is Main Street in Trinidad, attract additional visitors to the area. As traffic to the area

increases, visits to the park by travelers and tourists will also increase. Most of this will be related to selected day use activities and single night stays in the campground.

Over the past five years, traffic flows on the Dam Crest Road have increased over 57%. Recent development along I-25 just south east of the park has included a Wal-Mart Super Center, a truck stop and a fast food restaurant. The Dam Crest Road connects this area to Highway 12, a significant east-west artery in the region. This two-lane road is bordered by a cement parapet wall on one side and a guardrail on the other. There are no road shoulders or lighting. The increased traffic numbers, coupled with the restrictive nature of the road and a stunning view of the Sangre de Cristo Mountain Range and Trinidad Lake, is a cause for increased concern for visitor safety.

5. Special Events — There are two reoccurring special events that take place at the park. Both are summer events that are regional in nature.

One involves the descendents of Sopris; a small coal mining community that occupied the valley before the dam was built. This group gathers every ten years on the South Shore of the lake near the old town site for a daylong reunion. Approximately 700 people attended the 2000 reunion.

On most 4th of July holidays a fireworks display is provided for the general public at the park. The local Chamber of Commerce raises funds for this event, which is coordinated by the park staff. The local law enforcement community assists the park staff with crowd control, parking and law enforcement duties. This event was cancelled in 1999 and 2000 because of high water conditions. In 1998, approximately 4,000 people attended the display.

6. Regional Tourism - The City of Trinidad, located three miles east of the park, has a population of about 10,000. The main economic base of the community has previously been coal mining, but this industry has steadily declined over the last twenty years. Due to the area s historical past, its location on Interstate 25, and the abundance of recreational opportunities surrounding Trinidad, many local civic leaders feel that the tourism trade is a possible way of enhancing or stabilizing the economy. If tourist attractions and activities are enhanced significantly in the region, it will have an effect on the park s visitor base.

C. THE PARK USER



A State wide visitation study was conducted by the Division of Parks in 1998. This study contains detailed information concerning visitors to Trinidad Lake State Park. New and improved vehicle counters were installed at the majority of the park s entrances in 1997. The park s method of estimating visits and associated activities was revamped at that time.

A detailed look at the Park Manager Report and camping logs revealed the following information:

- 199,755 people visited the park in calendar year 2000.
- The most popular activity was fishing followed by sightseeing, pedestrian use (walk/hike/bike/horseback), picnicking, camping and boating.
- 74% of the park s visitation takes place during the high use season, May through the end of September.
- There were 54 group picnic or group camp events at the park s three group facilities.

Camping populations are a relatively small percentage; a little less than 10% of the park s overall visitation, but this user group generates over half of the park s reported revenue. A closer look at camping populations during the high use season reveals that;

- Over 60% of the overnight stays were for one night only.
- 18% of the overnight stays were for three or more nights.
- 29% of those that camped utilized tents. The remaining used varying types of hard-sided camping conveniences.
- 63% of the overnight stays are related to Colorado residents.
- 14% of the overnight stays are related to Texas residents.
- 5% of the overnight stays are related to New Mexico residents.
- 3% of the overnight stays are related to Oklahoma residents
- 15% of the overnight stays are related to residents from other states and countries.
- The campground occupancy rate for the 2000 high use season was 58%.

The following is a look at the park s visitation and revenue figures for the last ten-year period.

Year	Visitors	Revenue
1990	149,724	$51,018.10
1991	144,022	$54,809.45
1992	151,087	$55,570.50
1993	176,172	$72,099.20
1994	199,989	$81,013.70
1995	206,760	$90,629.60
1996	182,388	$92,306.25
1997	166,869	$109,805.30
1998	171,825	$136,640.05
1999	198,429	$138,792.47
2000	199,755	$171,663.67
	1,947,020	**$1,054,348.29**

V. GENERAL MANAGEMENT PLAN

A. NATURAL RESOURCE MANAGEMENT

The State Park Stewardship Section is currently working on a Stewardship Plan for Trinidad Lake. The Stewardship Section utilizes the latest technology to formulate natural resource management prescriptions for all state parks. The goals of this project are as follows:

Goals

- To provide direction for the protection of natural resources into the foreseeable future.
- To provide the appropriate tools to park staff for effective conservation of natural resources.

Objectives

- Compile a comprehensive knowledge base including existing resource information and field data on boundaries, wildlife, soils, water, wetlands, geologic and paleontologic resources, and vegetation, including rare plants and noxious weeds.
- Summarize the current conditions of a park s natural resources and define a desired future condition for each resource.
- Identify specific impacts, influences, and threats to the natural resources.
- Provide a prioritized set of management recommendations and suggestions for park staff, consultants, or other agencies to conduct specified work over a five-year period.
- Outline specific resource goals and objectives to apply over the next five years, which may be incorporated into the next general management plan to ensure protection of resources.
- Provide implementation advice for the use of a Geographic Information System (GIS) as a planning and monitoring tool.
- Train park staff in the use of GIS and install a GIS program on one of the park s computers.

The Stewardship Plan will address the management of all natural resources at the park.

1. Water Quality

The Army Corps of Engineers monitors water quality at Trinidad Lake. Temperature, dissolved oxygen, pH, turbidity and coliform tests are taken on a regular basis. These tests, taken since water storage began at Trinidad Lake, have always shown water quality to be at acceptable levels or better.

A chemical spill in February of 1988 poisoned a two-mile stretch of the Purgatoire below the Golden Eagle Mine. This was the only significant incident that effected water quality in the Upper Purgatoire Valley in the last twenty-year period. This incident was related to a chemical spill at a coal mining operation approximately 30 miles west of the park. At this time there are no coal mines in operation within the Purgatoire River watershed. However, there are currently over 700 coal-bed methane gas wells within the watershed. A large amount of water is brought to the surface as a by-product of this operation. The long-term effects this industry will have on water quality in the Purgatoire River Watershed are unknown at this time. Water quality will continue to be monitored by the Army Corps of Engineers and the State Health Department.

2. Vegetation — Noxious weeds are appearing in greater numbers in the flood plain of the lake and especially in the live and interment watercourses. Annual control methods are administered by park staff and licensed contractors. They include mechanical and chemical controls. Biocontrols may be considered in the future.

The majority of the Pinon and Juniper stands that dominate the park s landscape are in a healthy state. Prescribed burns are recommended for some of the park s open, grassy areas to rejuvenate existing species and provide diversity. These burns should be kept to 10 to 15 acres. Prescribed burns are not recommended for the park s denser stands of Pinon and Juniper. These trees should be thinned mechanically to imitate a burn and produce the desired effect. Mechanical, chemical, biocontrols and fire are acceptable methods of control for management of the forest resources on the park.

Several species of drought-resistant trees have been introduced for shade, screening and general appearance purposes. A small number of these plantings have been complemented with a drip irrigation system. This practice will continue, but mostly in developed areas of the park. Drip irrigation systems will be applied to new plantings when feasible. Occasional plantings will take place in less-used areas to enhance wildlife habitat and prevent erosion.

The park mowing program includes only road shoulders and high-use areas. All other areas will be kept in a natural state to support native animal and plant species. To maintain a vegetative cover, occasional off-season plantings of native grass species will be required in high traffic areas.

3. Wildlife — Wildlife populations and habitat will be managed in an effort to encourage a diverse number of both game and non-game species to frequent the park. This will enhance visitor viewing experiences and also allow a limited amount of hunting in the west end of the park.

The area will continue to be closed to hunting Memorial Day through Labor Day. Hunting will be permitted during established seasons. Legal weapons will still be limited to shotguns loaded with birdshot, and bows and arrows.

In the mid-90 s, two wildlife viewing blinds were constructed in the Long s Canyon area of the park. The blinds overlook a wetland habitat and offer visitors the opportunity to view a variety of wildlife in their natural habitat.

In 1990, all trash cans in the park were replaced with animal proof containers to protect visitors and wildlife alike. Interpretive signs have been developed to make visitors aware of the park s wildlife, their habitats and tendencies.

The additional land acquired in Long s Canyon was fenced utilizing a design that is wildlife friendly . This type of fence reduces conflicts between boundary fences and deer and elk. This design will continue to be utilized on park fencing projects.

4. Fisheries — Park manager reports and surveys indicate that fishing is the most popular activity at the lake. The three fish that show up most in the creel are trout, walleye/saugeye and catfish. Inventories conducted by the Colorado Division of Wildlife have shown excellent populations of these fish.

An increasing trend appears to be the pursuit of warm water fish species. The lake is becoming fairly well known as a warm water fishery. This is evidenced by bass and walleye clubs that schedule tournaments at the lake. Since fishing is such a popular activity, interpretive signs have been formulated to provide visitors with information designed to increase success rates.

The trout that are currently stocked at Trinidad Lake are infected with whirling disease. The Colorado Division of Wildlife is attempting to eliminate this problem on a statewide basis. There are no other known parasites or diseases that effect the fishery.

The largest detriment to the fishery is extremely low water conditions. When the lake drops down below the 400 surface acre level, much of the habitat and structure is left exposed on the shoreline. Fish are also flushed through the outlet structure during large releases. This problem will be eliminated if State Parks is successful in its water acquisition efforts.

B. CULTURAL RESOURCE MANAGEMENT

1. Historical — The rich history of the region is conveyed to the visiting public through many of the park s interpretive programs. Displays have been added to the Visitor Center and many of the park s wayside exhibits have been upgraded to address this topic. The area s cultural and historical resources are the focus of many of the park s campfire programs that are offered through the high use season. The majority of these programs are presented by local volunteer guest speakers.

The interpretation of the region s history will continue to be presented to the public through personal and non-personal methods. Wayside interpretive sites will be developed and installed in appropriate locations. This effort will be directed through the park s Interpretive Master Plan.

The Reilly Canyon bridge should be repaired and renovated through a cooperative agreement with the State Historical Society. After it is repaired, the bridge will be incorporated into the park s trail system and interpretive signing will explain its purpose and significance.

2. Archaeological — All cultural resources recovered from archaeological sites during the original construction phase of the project have been identified and curated. A number of these sites are located in the flood pool and will be subject to the fluctuation of the lake. This process may disturb existing sites or uncover new ones. Park staff should be trained to identify sites and artifacts. Routine inspections of cataloged sites should be conducted to note disturbance or the presence of artifacts.

Interpretive signing that informs visitors of Federal and State laws relating to archaeological sites have been developed. This sensitive yet important message will continue to be presented to the public through personal and non-personal interpretive methods.

Mitigation of the site that was disturbed by wave action/lake fluctuation in 1999 will continue. This process will be managed by the Army Corps of Engineers. This area of the park will be closed to public use until the process in completed.

C. FUTURE DEVELOPMENT

Since the park opened in 1980, almost 3.7 million visitors have utilized facilities at Trinidad Lake. Some of these facilities need to be renovated and enhanced to continue to serve visitors in the future. New development is also recommended. This section addresses development projects that should be accomplished in the next ten-year period. The completion of projects in this section is dependent on a renewed management agreement with the Army Corps of Engineers, which includes a cost-share component.

1. Recreation Zones

The location of recreation zones and development areas at Trinidad Lake are largely determined by water levels and terrain. All permanent facilities must by constructed above the top of the irrigation pool, at elevation 6,230. The majority of the north shore is dominated by mesas dissected by steep arroyos, making vehicle access into most of this area difficult. The eastern half of the south shore is characterized by rolling terrain, and offers gentler slopes that extend to the lakeshore.

State Parks manages a total of 2,742 acres of land and water at Trinidad Lake. At the top of the irrigation pool, the lake s surface is 1,423 acres, leaving 1319 acres of land.

a. Minimum Development Zone — This zone is characterized by natural habitat where wildlife and natural vegetation species are dominant. Development of this approximately 780-acre zone will be restricted to trails. The majority of this zone is located in the western half of the park and is inaccessible to the public by vehicle. Much of the land in this zone buffers the park from development.

b. Medium Development Zone — There are three plots of land that fall into this category, each located adjacent to a park access. Development in these areas will be limited to access roads, parking areas, trails, entrance stations, and limited day use and sanitation facilities. This zone is comprised of 219 acres.

c. High Development Zones — There are four high development areas within this zone. Located in the eastern half of the park, they total approximately 233 acres. The first, the Carpios Ridge area, contains the majority of the existing facilities. Most of the development at Carpios Ridge is on a mesa overlooking the lake. The steep slopes of this area would present an obstacle in developing facilities intended to support water-based recreation. A spur road provides access to the west side of Carpios Cove, a popular fishing area. Water, power, and phone are readily available to both sites.

The second area within this zone is located in the northeast corner of the park. There are day use and boat launching facilities in a third of this area, but the remainder is currently undeveloped. Water, power and phone services are all accessible to this site.

The third area in this zone is located on the South Shore. It has two access roads, one above the irrigation pool and one below. Several individual picnic sites have been installed along the upper road, and shore fishing is the most popular recreational activity on the South Shore. In 1987, the Mined Land Reclamation Division sponsored a project to reclaim a coal waste pile in this area. This project provided some spin-off benefits to the recreation base. Water is accessible to this site.

The fourth, the Piedmont area, is located below the dam. This area features a pavilion and a small number of primitive campsites. It is used for reservation group camping and picnicking. Water, power, and phone are accessible to this site.

d. Water Zone — Trinidad Lake can fluctuate between 284 and 1423 surface acres. The average over a twenty-year period has been approximately 766 surface acres. The lake is usually iced over for two months every year, and during this time it s used mostly by a small number of ice fisherman and skaters. The boating season runs from March through November, when boat fishing and water skiing are the most popular activities. Sailboaters and windsurfers also use the lake but in lesser numbers. The use of personal watercrafts has increased steadily over the last five years.

Two areas predominately used by boat and shore fisherman are zoned with no wake buoys. These are a section of the South Shore starting at the dam and proceeding

west approximately _ of a mile, and the Carpios Cove area on the northeast corner of the reservoir.

2. Visitor Access

a. Vehicle Access - Overall, highway access to the site is very good. The majority of visitors access the park via State Highway 12. Increased vehicle use along the dam crest road is a concern. This road is used by many visitors to access the South Shore, the Piedmont area, and the boat ramp. The road is owned and maintained by the U.S. Army Corps of Engineers and is also a designated county road, C.R. 18.3.

A speed reduction program is recommended for this stretch of road to encourage compliance with posted speed limits. A cooperative program between the Corps of Engineers, Las Animas County, and Colorado State Parks should be implemented to limit the size and type of vehicles that utilize this road. Rerouting or closing the road to through traffic should also be considered if alternatives become available.

Carpios Ridge — The Carpios Ridge access road is the only paved interior park road. It is accessed from Highway 12. All paved roads in the Carpios Ridge area should be resurfaced and striped. The Carpios Cove road and parking area should be paved. This access should be extended an additional _ mile to the south and culminate with a ten-car parking lot. This addition should also be paved. Additional paving in this area should include the shop area and a five-car parking lot at the Carpios Ridge trailhead.

Boat Ramp — All portions of this road are gravel and is accessed from the dam crest road. When the lake is at or near the top of the irrigation pool, the parking area is reduced to a twelve-car parking lot. An overflow lot on the east side of the dam crest road is then utilized. At this level, the cement boat ramp is difficult to use due to an inappropriate pitch.

A small high water boat ramp should be added to accommodate boat launching during periods of high water. The parking area should be expanded to the north and east to provide additional vehicle and boat trailer parking.

The undeveloped area north of this site, the northeast side of Carpios Cove, should be accessed with a two-lane gravel road. This would open the area up to additional day-use activity, especially shore fishing. This road would also provide good access to a site for a marina concession. Two small additional parking areas would be required.

Piedmont Area — This area is accessed from the dam crest road. The entrance is a narrow two-lane road. All portions of the road are gravel. Visitors that turn north on to the two-lane dam crest road often cross over into the southbound lane. The entrance to this access should be widened to improve access and turning radiuses.

South Shore — This area is accessed from the dam crest road. All portions of this road are gravel. In 1995, State Parks assumed management responsibility from the Corps of Engineers for a 45-acre tract of land referred to as The Corps Overlook . This site is accessed from a fork in the South Shore access road that is before the existing fee station. The entrance to this road should be renovated so that the fee station will serve all facilities and locations on the south side of the lake.

A 700-foot section of this road just north of the existing fee station was built below the high water line. When the lake level approaches the top of the irrigation pool, this section of road is submerged. This creates access problems for visitor use on the south side of the lake during periods of high water. The road at this location should be built up above the high water line to provide a consistent, safe access to the South Shore.

As this road progresses it splits into two accesses, one above the high water line, and one below it. This higher road currently terminates at a small day-use area. This road should be extended an additional mile to the west. Two small additional parking areas would be required.

Reilly Canyon — This area is accessed from State Highway 12. All portions of this road are gravel. Used mainly by fishermen and hunters, it is the only vehicle access into this area of the park. The road is actually a section of old Highway 12, which was rerouted during construction of the dam. Most of this road has been submerged from time to time by the fluctuating lake, leaving the roadway in a deteriorated condition. A road should be built above the high water mark to provide a safe, all-season access. The new road would extend east from the existing self-service area, requiring approximately _ of a mile of two-lane gravel road. An additional small parking area will be required.

All of the park s gravel roads and parking areas should be re-graveled. Broken bumper blocks and guard rail posts will need to be replaced.

b. Trails

Local trail connections — There are currently no exterior trails into the park. The State Recreational Trails Master Plan identifies a proposed three-mile-long, non-motorized trail from the town of Trinidad to the park. It is recommended that this trail, if constructed, enters the park through the South Shore spillway cut, and tie into the park s interior trail system on the South Shore.

A trail from Walsenburg to Trinidad over Cuchara Pass has been discussed by a number of groups and community officials. It is recommended that this trail, if constructed, tie into the park s trail system along the west boundary at the old Highway 12 access near Madrid.

The concept of a front range trail from Fort Collins to Trinidad has also been discussed by several governmental entities. The exterior access points listed in this section would serve as access points for the trail.

If the rail line that borders the park s southern boundary is abandoned, it could present several opportunities associated with trails and trail connections.

Interior trails — There are approximately ten miles of multi-purpose trails within the park. Equestrian use is limited to the South Shore trail; motorized use is prohibited on all of the park s trails. All trails are natural surface with the exception of a _ mile paved trail located on Carpios Ridge. The paved trail is handicapped accessible and connects interpretive features that include overlooks, a wildlife kiosk, an archaeological site and the park s amphitheater.

One of the trails, the Levsa Canyon Trail, is a self-guided nature trail. Wayside exhibits along some of the trails interpret the park s cultural and natural resources. Non-personal interpretation along the park s trails will continue as opportunities become available.

All of the trails are in relatively good condition with the exception of the Carpios Ridge trail. This trail is severely eroded and a section of it is closed at this time. Repair of the trail is beyond the capabilities of the park staff. This trail should be repaired or closed to the public. The planning process for the repair of this section of trail has started.

It is recommended that the park s existing trails be connected to form a loop trail that circles the lake. The two highest priorities in this area are connecting the Reilly Canyon trailhead and the west boundary of the park via an abandoned section of old Highway 12, and a paved trail from the South Shore entrance to the South Shore overlook site. The latter would parallel the east side of the access road.

3. Recreation Activity Needs

Information gathered from park users indicate that a large number of campers (60%) stay only one night at Trinidad Lake. Most of these visitors are on their way to other recreation sites north of Trinidad. One goal of this plan is to develop Trinidad Lake into a viable destination area. To do so, the activity base should be expanded.

a. Swimming — At this time, swimming is prohibited at Trinidad Lake. An existing site on the South Shore offers slopes that are conducive to the development of a beach area. A drop/take off zone for water skiers should also be designated within this area. This project will be more feasible after additional water is acquired for recreation.

b. Camping

All existing campsites are located on the north shore of the lake on Carpios Ridge. Access to the shoreline is impeded by the terrain. A basic campground should be installed on the South Shore, west of the proposed swimming area. This area provides gentler slopes to the shoreline and would be within walking distance of the swim beach. This project is also dependent on the acquisition of additional water.

c. Group Camping — In 1996, State Parks assumed management responsibility from the Army Corps of Engineers for the Piedmont area. The Corps had previously managed this site, which is on the east side of the dam, as a group picnic area. State Parks currently manages the site as a group picnic and group camping area.

This site holds tremendous promise as a group camping area. It contains a large pavilion, has a great viewshed and is isolated from other forms of public use. The facilities at this site should be renovated and modernized to include campsites with electrical hookups and appropriate furniture, and a new and larger vault toilet.

If marketed properly, this site would become popular with camping clubs and could generate significant revenue for the park.

d. Interpretation

Many visitors seek this form of recreation when visiting a State Park. Even though it is usually not the primary purpose for a visit, it still complements the user s experience at the park. It provides staff with an opportunity to interact with visitors in a positive atmosphere, present sensitive or management issues to the public, and to foster a sense of stewardship in the state s natural and cultural resources.

Staff efforts in this area will be guided by the park s Interpretive Master Plan. Non-personal and personal methods of interpretation will continue to be utilized. These methods will be periodically evaluated and upgraded. All full-time staff will be involved in this process. Volunteers and a seasonal interpreter funded by Great Outdoors Colorado will assist full-time staff with this program.

The park s amphitheater, built by the Young Adult Conservation Corps in 1982, is an important component of the park s interpretive infrastructure. The existing amphitheater should be replaced with a more modern and sustainable facility.

4. Support Facilities

a. Existing Facilities — Many of the park s existing facilities are over 20 years old. The following existing facilities should be renovated or replaced.

- Vault toilets at the South Shore overlook, the Piedmont area and the Boat Ramp (2) should be replaced.
- The Carpios Ridge camper services building should be replaced. The day-use area comfort station on Carpios Ridge should be renovated.
- The entrance stations at the Boat Ramp and South Shore accesses are staffed through the high use season. Both of these wooden contact stations should be replaced with more sustainable structures.
- The overlook adjacent to the Boat Ramp was damaged by high water conditions in 1999. This area should be renovated and include riprap, resurfacing and fencing.
- Approximately 1/3 of the campsites in the Carpios Ridge campground are too small to accommodate larger camping vehicles. These sites should be expanded. Park furniture, playground structures and signs should be replaced.
- The existing park maintenance shop building was donated to Colorado State Parks by the Army Corps of Engineers. This building was relocated to its present location in 1983 by the park staff and members of the Lathrop Youth Camp. This structure should be replaced with a modern, multi-bay maintenance shop. Storage space for supplies, vehicles and equipment should also be added.
- A need for seasonal housing exists. A mobile home is currently utilized for this purpose. A permanent structure should be built at this site.
- The three group shelters and fifteen individual shelters, including related furniture, will need to be renovated.
- The Visitor Center will need to be renovated and enlarged to accommodate additional staff members.
- The park s sewage treatment plant should be replaced.
- The electrical system that serves the Carpios Ridge area should be renovated.

b. New Facilities — Additional new support facilities will be needed to complement the new development and improvements outlined in this plan.

- Basic vault restrooms will be needed at the Reilly Canyon parking area, the northeast side of Carpios Cove and at the end of the South Shore road extension.
- The proposed swimming and camping area on the south side of the lake will require restrooms and change facilities.
- Individual high-use picnic and camping pads will be needed to supplement the proposed development along the South Shore, Carpios Cove and Reilly Canyon.

Related park furniture and a large playground structure at the beach site should be included.

5. Acquisition

a. Water

The new storage space that enlarged the original recreation pool offers State Parks the potential to guarantee a minimum of almost 600 surface acres for recreation at Trinidad Lake. With irrigation water stored in addition to the enlarged recreation pool, it is anticipated that the lake will average between 700 and 900 surface acres. Operating the park at this improved level will stabilize the visitor and revenue base, improve the fishery and will allow for the future development of facilities that will benefit water-based recreational activities.

Colorado State Parks filled the new storage space with water in 1999. The last step in this process is to acquire permanent water rights that could be used to offset evaporative losses associated with the enlarged recreation pool. This acquisition would maintain the new pool for public recreation in perpetuity.

b. Land — Development around the park s boundaries has accelerated tremendously over the last ten years. This development has impacted the esthetics and habitat associated with the park.

State Parks has attempted to buffer critical or sensitive areas of the park as opportunities have presented themselves. 200 acres of land adjacent to the Long s Canyon area of the park was purchased in 1997. In 2000, State Parks entered into a recreational lease with the State Land Board for 100 acres of land that is adjacent to the park s western boundary. In 1998 an attempt to purchase 275 acres in the Reilly Canyon area was unsuccessful. State Parks will continue to pursue land acquisitions to buffer the park s boundaries and to absorb in-holdings.

6. Concessions

The only current park concession is a small laundry at the Carpios Ridge campground. Another viable concession that could be considered is a marina. A possible marina site would be the first point north of the existing boat ramp area. This location would be accessed by the proposed development of the northeast side of Carpios Cove. This project is dependent on Colorado State Parks acquisition of additional water for recreation, and the approval of the Army Corps of Engineers.

7. Other Management Recommendations

Marketing techniques and promotions should be used to attract overnight visitors to Trinidad Lake. The immediate focus of this effort should be attracting travelers passing through the Trinidad area on Interstate 25. As the park is developed, this program should expand to attract destination campers from the Panhandle area of Texas, Albuquerque, NM, Pueblo, Colorado Springs and La Junta. Efforts should be made to attract visitors to the park during the off-peak and off-season periods. The effort should be focused on the high-use shoulder seasons, especially September and October.

D. VISITOR MANAGEMENT

1. The Visitor

Over the first twenty years of operation, approximately 3,679,894 visitors have been entertained at Trinidad Lake State Park. The park has been the site of weddings, baptisms, graduations, school activities, senior picnics, concerts, fireworks displays, fishing tournaments, regattas, and family reunions small and large. The park can be typified as an all season outdoor playground for all ages. A high percentage of visits are centered around family or group involvement.

Visitor capacities are usually reached in the campground on weekends, Memorial Day through Labor Day. Through the remainder of the high-use season, the park rarely experiences capacity situations. Weekdays often find the campground at 50% of capacity with uncrowded conditions throughout the park. Off-season use is mainly comprised of shore and boat fishers, walkers, hikers, and a smattering of campers.

It is recommended that the reoccurring special events that take place at the park be authorized to continue. The dependents of Sopris have strong emotional ties to the region and the park itself. The contribution their families made to make the Trinidad Lake Project possible should be recognized and respected.

The 4th of July fireworks display over Trinidad Lake has grown to be a much anticipated event. It draws large numbers of visitors and is actually the only time that the park comes close to reaching total capacity. The park provides a safe venue for this event and a positive experience for a large number of regional residents.

If State Parks is successful in acquiring water for Trinidad Lake, it should stabilize visitation at approximately 200,000. Visits and revenue should climb slowly over the next ten-year period.

2. Level of Service

Over the last twenty years, a three-person, full-time staff has been assigned to Trinidad Lake: A Park Manager, A Senior Ranger, and one Ranger. The existing staff

will be augmented with two additional positions in July 2001: A Tourist Assistant and a Park Resource Technician. This staff will be able to maintain service levels that visitors have come to expect at State Parks.

In addition to the full-time staff, approximately 15 seasonal employees are hired each year. Hiring and training quality seasonal staff is essential to efficient operations of the park through the summer months. Seasonal employees work as rangers, gate attendants, maintenance workers, and interpreters.

A four to five person Youth in Natural Resources crew has worked at the park since 1991. This ten-week program is designed to give high school students a chance to learn about Colorado s natural resources and about career opportunities in natural resource fields.

Volunteers are used to augment staff needs associated with park programs, especially interpretation and maintenance. Larger projects that focus on volunteer participation are offered at least once per year. A volunteer Adopt a Trail program is planned for the future. This program will be geared towards the maintenance and care of the park s trail system.