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Acknowledgements

The authors acknowledge the assistance of numerous individuals in the preparation of this Resource Management Plan (RMP). On behalf of the Oklahoma Tourism and Recreation Department’s Division of State Parks, staff members were extremely helpful in providing access to information and in sharing of their time. The essential staff providing assistance for the development of the RMP included Bruce Divis, Regional Manager of the Western Region, David Sutton, park manager at Red Rock Canyon State Park, with assistance from other members of the staff throughout OTRD. In particular, assistance was provided by Deby Snodgrass, Kris Marek, and Doug Hawthorne – all from the Oklahoma City office of the Oklahoma Tourism and Recreation Department. Further assistance was provided by park staff as every request for information was handled quickly and efficiently. Similarly, Art Peters and staff at the Hinton Historical Museum provided supporting documents and insight regarding Red Rock Canyon and the history of the area.

It is the purpose of the Resource Management Plan to be a living document to assist with decisions related to the resources within the park and the management of those resources. The authors’ desire is to assist decision-makers in providing high quality outdoor recreation experiences and resources for current visitors, while protecting the experiences and the resources for future generations.

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### Abbreviations and Acronyms

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<tr>
<td>ADAAG</td>
<td>Americans with Disabilities Act Accessibility Guidelines</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control</td>
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<tr>
<td>CLEET</td>
<td>Council on Law Enforcement Education and Training</td>
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<tr>
<td>CPSC</td>
<td>Consumer Product Safety Commission</td>
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<tr>
<td>GIS</td>
<td>Geographic Information Systems</td>
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<tr>
<td>GPS</td>
<td>Global Positioning System</td>
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<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
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<tr>
<td>MCL</td>
<td>Maximum Contaminate Level</td>
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<tr>
<td>NAAQS</td>
<td>National Ambient Air Quality Standards</td>
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<tr>
<td>NAWQA</td>
<td>National Water Quality Assessment Program</td>
</tr>
<tr>
<td>NEPA</td>
<td>National Environmental Policy Act</td>
</tr>
<tr>
<td>NPRM</td>
<td>Notice of Proposed Rule Making</td>
</tr>
<tr>
<td>ODWC</td>
<td>Oklahoma Department of Wildlife Conservation</td>
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<tr>
<td>OSU</td>
<td>Oklahoma State University – Stillwater</td>
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<tr>
<td>OTRD</td>
<td>Oklahoma Tourism and Recreation Department</td>
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<tr>
<td>OWRB</td>
<td>Oklahoma Water Resources Board</td>
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<tr>
<td>PBCR</td>
<td>Primary body contact recreation</td>
</tr>
<tr>
<td>pH</td>
<td>Potential for hydrogen ions</td>
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<tr>
<td>ppm</td>
<td>Parts per million</td>
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<tr>
<td>R</td>
<td>Range</td>
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<tr>
<td>RMP</td>
<td>Resource Management Plan</td>
</tr>
<tr>
<td>SCORP</td>
<td>Statewide Comprehensive Outdoor Recreation Plan</td>
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<tr>
<td>T</td>
<td>Township</td>
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<tr>
<td>USFWS</td>
<td>United States Fish and Wildlife Service</td>
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<tr>
<td>USGS</td>
<td>United States Geological Survey</td>
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<td>WBDO</td>
<td>Waterborne Disease Outbreak</td>
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Mission Statement of the Oklahoma Tourism and Recreation Department

The mission of the Oklahoma Tourism and Recreation Department is to advance Oklahoma’s exceptional quality of life by preserving, managing, and promoting our natural assets and cultural amenities.

Vision Statement

The vision of the Oklahoma Tourism and Recreation Department is to promote and enhance tourism throughout the state; protect and preserve the environment and natural resources; educate the public about Oklahoma’s people and places; provide exceptional customer service to all citizens and visitors; create a team environment in which all employees are successful, productive, and valued; embrace and seek diversity in our workforce and those we serve.

OTRD Values

- Responsibility and leadership
- Respect
- Quality
- Exemplary customer service
- Balance and self-fulfillment
- Teamwork and communication
- Flexibility
- Creativity and innovation
- Coordination
- Commitment
- Integrity
Figure 0.1 – Rappelling at Red Rock Canyon State Park
Chapter 1 – Introduction

Resource Management Plan: Purpose and Process

The Resource Management Plan (RMP) program and policy is to document management responsibilities to balance the use of water and land resources as they relate to recreation; in this instance, Red Rock Canyon State Park. As a guiding plan, the RMP seeks to propose long-term policies that limit adverse impacts to critical resources while providing protection and management of fish, wildlife, and other natural and cultural resources. In addition, the RMP will provide guidelines for public health and safety, public access, and a wide variety of outdoor recreational opportunities.

The purpose and scope of the RMP are to provide background information, identify the policies and goals governing the management of Red Rock Canyon State Park and its incorporated resources, summarize the plan’s components, and provide descriptive and historical information related to the project.

The ultimate purpose of the RMP is to establish a management framework for the conservation, protection, enhancement, development, and use of the physical and biological resources at Red Rock Canyon State Park. With regard to Red Rock Canyon State Park, the RMP is to:

- Provide managers and decision-makers with long-term direction and guidance for the successful management of the resources at Red Rock Canyon State Park;
- Ensure that management of the resources is compatible with authorized purposes;
- Ensure that recreation experiences and facilities are compatible with other environmental resources;
- Ensure that planned developments are based on public need and the ability of the environmental resources to accommodate such facilities and use; and
- Resolve issues and concerns related to management of the environmental resources.

Planning Process

The planning process for preparation of this Resource Management Plan included discussion between research staff at Oklahoma State University (OSU) and management personnel from Oklahoma State Parks. In addition, the process incorporated (1) the acquisition of archival information from libraries, state parks, books, research reports, and other sources; (2) interviews of state park personnel; (3) records provided by state park management; (4) input from members of the public through surveys, comments cards, and focus groups; and (5) searches of the internet for information that expanded on other archives.

The purposes of public involvement are to inform the public and solicit public response regarding their needs, values, and evaluations of proposed solutions. Public involvement programs are designed not only to meet state and federal regulations, but also to include interested individuals, organizations, agencies, and governmental entities in the decision-making process. Techniques used for public involvement include interviews, workshops, advisory committees, informational brochures, surveys, and public hearings. The process of public
involvement is important to help strengthen the relationship between public and government agencies involved in the proposed plan. The relative success of public involvement techniques and the participation of supporting government agencies regarding the program as a whole is indicated by how well informed the public is and by how much the public has contributed to making environmentally sound, feasible decisions that are supported by a significant segment of the public. The public involvement process for the Red Rock Canyon State Park RMP is incorporated into the text of this document.

The original concept in preparation of an RMP is a federal action that requires compliance with the National Environmental Policy Act (NEPA); therefore, the public involvement process must fulfill the RMP and NEPA requirements as well as those of other entities. Oklahoma State Parks has committed the agency to follow a similar model at the state level for all state parks.

Using several public involvement methods to gain insight into the concerns of the public and governmental agencies potentially affected by provisions of the Red Rock Canyon State Park RMP, representatives from OSU compiled and analyzed the data. The public involvement process offered citizens and various interest groups information about the project and its potential impacts. This course of action was used to gather information, ideas, and concerns regarding the different issues to be compiled and addressed to determine issues of public concern. The issues were then evaluated resulting in alternative solutions and recommendations for the park.

Finally, the RMP process included integration of global positional system (GPS) technology into Geographic Information System (GIS) software to document features and attributes within the park. This component of the process permits an on-going record of facilities with their respective attributes, locations, and conditions. As a result, the GPS and GIS components of the RMP process are integral to on-going implementation and application of the planning effort.

**Agencies Involved**

In 2006, Oklahoma State Parks, through the Oklahoma Tourism and Recreation Department (OTRD), contracted with Oklahoma State University to prepare Resource Management Plans for each park. This agreement has been renewed annually since 2006. The current agreement specified Red Rock Canyon State Park during 2012 – 2013, and the intent of the agreement is to continue the RMP process across all state parks in Oklahoma.

The RMP agreement became effective July 1, 2012 between Oklahoma Tourism and Recreation Department and Oklahoma State University. Following a meeting between OTRD and OSU staff, information, reports, and comment cards were provided to OSU for review. In accordance with the RMP contract, OSU performed research services and delivered reports to OTRD concluding with a written plan for Red Rock Canyon State Park in June 2013, updated in 2014.

The authority for the agreement between OTRD and OSU is based upon Title 74 § 2213 as authorized by Engrossed Senate Bill 823 of the 2005 session: “The Commission may contract for the study, analysis, and planning as reasonably necessary to aid in determining the feasibility of leasing, selling or privately managing or developing the property or facilities under the control of the Commission. The Commission shall be exempt from the competitive bidding requirements of the Competitive Bidding Act for the purpose of soliciting, negotiating, and effectuating such a contract or contracts.”
Further, this authority is specified in Title 74 § 2215 which states: the Division of State Parks, subject to the policies and rules of the Commission shall formulate, establish, maintain, and periodically review, with public participation, a resource management plan for each state park. The resource management plan, upon approval by the Commission, shall be considered a guide for the development, utilization, protection, and management of the state park and its natural, cultural, historic, and recreational resources.

Figure 1.1 – Rock Mary and Rock Mary Trail

Outside the boundaries of Red Rock Canyon State Park

Source: http://www.blogoklahoma.us
Figure 1.2 – Rough horsetail within Red Rock Canyon State Park
Chapter 2 – Project Description

About Red Rock Canyon State Park
The Division of State Parks, a part of the Oklahoma Tourism and Recreation Department, is governed by the laws of the state of Oklahoma. These laws define the authority for the Division and the context in which individual state parks are managed. Title 74 § 2214 of the Oklahoma Statutes states that the Division of State Parks shall, subject to the policies and rules of the Commission:

1. Conserve, preserve, plan, supervise, construct, enlarge, reduce, improve, maintain, equip and operate parkland, public recreation facilities, lodges, cabins, camping sites, scenic trails, picnic sites, golf courses, boating, and swimming facilities, and other similar facilities in state parks reasonably necessary and useful in promoting the public use of state parks under the jurisdiction and control of the Commission;

2. Supervise the management and use of state properties and facilities under the jurisdiction of the Commission. The Commission may adopt rules to lease concessions in any state-owned facility if the Commission deems it feasible;

3. Authorize those employees in the Park Manager job family classification series, as established by the Oklahoma Office of Personnel Management, to maintain administrative control over all facilities, programs, operations, services, and employees in the park to which they are assigned; and

4. Enforce the rules and policies governing the use of and conduct of patrons in all recreational facilities and properties of the Commission.

Purpose and Significance of Red Rock Canyon State Park
An initial requirement of the RMP process is the development of a purpose statement for the property under consideration. The process selected for the development of resource management plans for state parks requires purpose statements and statements of significance for each park. These statements drive the decisions as to planning for the respective parks, since individual parks in the state park system do not have identical purposes or intents.

At the initiation of this project, a purpose statement for Red Rock Canyon State Park did not exist. As a result, it was necessary that one be developed. Research staff from OSU worked with OTRD staff, representing Red Rock Canyon State Park and the broader agency, to develop a draft purpose statement. During that process staff created the following statement.

Red Rock Canyon State Park protects the natural, scenic, historical, geological, and ecological values and resources present in an Oklahoma canyon while providing public access to and recreational enjoyment of that environment. Red Rock Canyon State Park encompasses resources for education, interpretation, and recreation, while conserving and managing those resources for public enjoyment.
Similarly, in response to requests from the research staff, OTRD personnel, in cooperation with the research staff, developed a statement of significance for Red Rock Canyon State Park. That statement follows:

Red Rock Canyon State Park protects, manages, and provides public access to a stream and canyon environment in western Oklahoma while protecting the historical, geological, ecological, and recreational resources present on the property. Red Rock Canyon State Park serves an educational role, and can expand that role, founded upon the features present in the park.

\[Figure 2.1\] demonstrates the inter-relationship of purpose and significance statements with the mission of the management agency in decisions related to a given park or property. This model has been developed by the National Park Service to assure consistency between the mission of the National Park Service and the operation of their respective properties. In a similar manner, park purpose statements and park significance must be consistent with the mission of the Oklahoma Tourism and Recreation Department.

**Geographic Location of Red Rock Canyon State Park**

Red Rock Canyon State Park is located in west central Oklahoma in Caddo County. Red Rock Canyon State Park is approximately five miles south of Interstate Highway 40 on U.S. Highway 281, adjacent to the city of Hinton, Oklahoma. In this location, Red Rock Canyon is easily accessible by highway, with community support from Hinton residents.
As indicated, Red Rock Canyon State Park is located five miles south of the intersection of U.S. Highway 281 and Interstate Highway 40. U.S. Highway 281 is also marked as State Highway 8 along this section of the road. At the intersection of I-40 and U.S. Highway 281, there are two casinos at the north edge of Hinton. The city of Hinton stretches north and south along U.S. Highway 281 and is adjacent to the north and west boundaries of Red Rock Canyon State Park.

Hinton is a relatively small town with a population about 2,175. However, the location of the city along I-40 provides high volume traffic on the north side of Hinton. In addition, U.S. Highway
281 is a major north-south route. Hinton is located at the northern portion of Caddo County about 40 minutes west (via I-40) of the Oklahoma City metropolitan area.

Anadarko is the county seat of Caddo County, with a population approaching 6,700. Maps of Oklahoma identify a number of small communities in Caddo County including Bridgeport and Hydro north of I-40, with Lookeba, Binger, Eakly, Albert, Gracemont, Alfalfa, Carnegie, Fort Cobb, Boone, Stecker, Washita, Cement, Cyril, Riverside and Anadarko south of I-40.

Signs along U.S. Highway 281 provide directions to Red Rock Canyon State Park. Additional signs in Hinton aid visitors in locating the park. The exit from Highway 281 into the park has been identified with a landmark-sign, replaced during preparation of the Resource Management Plan.

**Community and Regional Context**

**Brief History of Caddo County**

The following history of Caddo County was written by Linda Wilson for the Oklahoma Historical Society and retrieved from the website for the Oklahoma Historical Society ([http://digital.library.okstate.edu/encyclopedia/entries/c/ca005.html](http://digital.library.okstate.edu/encyclopedia/entries/c/ca005.html)).

“Located in west-central Oklahoma, Caddo County is bordered on the north by Blaine and Canadian counties, on the east by Grady County, on the south by Comanche County, and on the west by Kiowa, Washita, and Custer counties. Most of Caddo County is situated in the Gypsum Hills and Red Bed Plains physiographic regions with the exception of the far southwestern corner that lies in the Wichita Mountains region. Comprised of 1,290.31 square miles of land and water, the county is drained by the Washita River and various creeks such as Sugar and Pond. The Canadian River passes through the northeastern corner of Caddo County. Streams have cut deep canyons such as Red Rock Canyon near Hinton and Devil’s Canyon near Lookeba. Outcrops south of Hydro are known as the Twin Mounds, Ghost Mound, Dead Woman Mound, and Rock Mary. At the turn of the twenty-first century incorporated towns included Anadarko, the county seat, Apache, Binger, Bridgeport, Carnegie, Cement, Cyril, Eakly, Fort Cobb, Gracemont, Hinton, Hydro, and Lookeba.

At the turn of the twenty-first century Caddo County had 451 reported archaeological sites of which 180 had been identified to time period. One hundred fifteen of those sites relate to the Plains Village era (A.D. 1000 to 1500). The Domebo Canyon Site, where a Columbian mammoth had been killed approximately 11,000 years ago, is the most significant. Also, the Caddo County Medicine Creek Archaeological District (NR 95000235) and the Stevens Rock Shelter (NR 95000237) were listed in the National Register of Historic Places in 1995.
In 1803 the United States acquired from France the area known as the Louisiana Purchase, which included present Oklahoma. In 1818 the Quapaw ceded to the United States the land between the Canadian and Red rivers. During the 1820s and 1830s the Choctaw and Chickasaw removed from the southeastern portion of the United States to this area that became part of Indian Territory. Through an agreement with the Choctaw and Chickasaw in June 1855 their land west of the 98th Meridian was leased to the United States to provide reservations for Plains tribes. Known as the Leased District, the Choctaw and Chickasaw ceded the area to the United States under the Reconstruction Treaty of 1866, following the Civil War. In 1859 the superintendent of Indian Affairs for Indian Territory founded the Wichita Agency, which was established four miles east of the present town of Fort Cobb. Before the town was established, a fort by that name existed from 1859 to 1869. In 1867 the Kiowa, Comanche, and Apache were located in the southern part of present Caddo County, and in 1868 the Wichita and Caddo were situated north of the Washita River.

Between the 1830s and 1850s expeditions passed through the area. In 1834 the Dodge-Leavenworth Expedition traveled through present Caddo County, crossing the Washita River on its march back to Fort Gibson. Nine years later Nathan Boone led a reconnaissance that went northwest from Fort Gibson through northern Oklahoma to the 98th and 99th meridians before turning south and following the Canadian River back to the fort. In 1849 gold seekers going to California used the southern branch of the California Road that passed through Indian Territory. Emigrant parties left Fort Smith and Van Buren, Arkansas, and traveled the Californian Road that basically ran parallel to the Canadian River. Rock Mary, one of the landmarks along that road, is situated in present Caddo County. In 1853 the Whipple Expedition commenced from Fort Smith and crossed Indian Territory by following a route south of the Canadian River.

Caddo County was organized on August 6, 1901, when the area was opened by lottery to non-Indian settlers. According to historian George Shirk, the county is named for the Caddo tribe and that the word stems from kaadi meaning “chief.” Caddo County lost area to Grady County at 1907 statehood and in 1911. Initially, county government was administered under a tent on the courthouse square in Anadarko. Late in 1901 a one-story, wood-frame building was constructed. A second story was added in 1902. That year construction started on a three-story, brick courthouse, which served the county until 1958, when a two-story structure was built by Barbour and Short Company.

Agricultural pursuits have dominated Caddo County’s economic base. At 1907 statehood 80 percent of the county was farm land, with 360,000 acres under cultivation. The fertile river and creek bottom land provided rich nutrients for the principal crops of cotton, corn, wheat, alfalfa, broom corn, and kaffir corn. In 1920 the State Board of Agriculture reported 4,214 farms, of which 49 percent were operated by owners and 51 percent operated by renters. In 1930 the county had livestock numbering 24,331 cattle, 7,147 horses, 5,820 mules, 4,033 swine, and 2,591 sheep and goats. In the early 1930s cotton gins operated in Anadarko, Bridgeport, Carnegie, Gracemont, and Hydro. Elevators and mills in Anadarko and Bridgeport served farmers. By 1960 Caddo County ranked first in Oklahoma for the production of peanuts and raising hogs and poultry. By 1963 livestock numbered 90,500 chickens, 88,000 cattle, 4,500 milk cows, 9,500 hogs, and 5,200 sheep. That year farmers had planted 96,000 acres in wheat, 43,900 acres in cotton, 39,400 acres in sorghums, 31,700 acres in peanuts, 23,000 acres in barley, and 18,000 acres in oats. At the turn of the twenty-first century Caddo County had 1,496 farms consisting of 726,629 acres.
In addition to agriculture, the petroleum industry has supplemented the economy. At Cement oil fields were discovered in 1911 and by 1924 that field had one hundred producing wells. In the 1930s the Magnolia Oil Corporation was the largest company in the Cement area. The Anderson-Pritchard Refinery Company in Cyril stored the oil output from the Cement field. In the early 1930s Anadarko had six oil service businesses. Brief economic boosts due to oil production came to Gracemont in the 1960s, to Carnegie and Lookeba in the 1970s, and to Hydro in the 1980s.

Following the Great Depression, Pres. Franklin D. Roosevelt’s New Deal programs put the unemployed back to work. Among the projects in Caddo County were a Civilian Conservation Corps camp near Binger and the construction of the Anadarko National Guard Armory. The armory (NR 94000479) was added to the National Register of Historic Places in 1994.

The Riverside Indian School and mission schools were the earliest educational facilities in present Caddo County. John Jasper Methvin, a Methodist missionary, opened the Methvin Institute near Anadarko in 1890. Father Isidore Ricklin established St. Patrick’s Mission in 1892. The Baptists and Presbyterians also organized mission schools. Following the land lottery in 1901 non-Indian children attended subscription schools until taxes could be assessed and collected to support public schools. At the turn of the twenty-first century Caddo County had eleven school districts: Anadarko, Binger-Oney, Boone-Apache, Carnegie, Cement, Cyril, Fort Cobb-Broxtown, Gracemont, Hinton, Hydro-Eakly, and Lookeba-Sickles.

The earliest transportation routes in Caddo County included the California Road and military roads such as the route from Camp Supply to Fort Sill. At the turn of the twentieth century the Chicago, Rock Island and Pacific (CRI&P) Railway had two lines in Caddo County. One line traversed the county in a north-south direction that passed through Bridgeport, Hinton, Lookeba, Binger, Gracemont, Anadarko, and Apache. The line between Hinton and Anadarko was abandoned in 1939. The other CRI&P line passed through the county from east to west connecting Chickasha (Grady County), Anadarko, Fort Cobb, and Carnegie with southwestern Oklahoma. Between 1901 and 1903 the Oklahoma City and Western Railroad (later the St. Louis and San Francisco Railway) built a line from Chickasha to the Red River that came through Cement and Cyril in southeastern Caddo County. Modern motorists use U.S. Highways 62, 277, and 281 and State Highways 8, 9, 19, 37, 58, 146, and 152.

Caddo County had 30,241 residents at 1907 statehood. Numbers increased to 35,685 in 1910 and declined slightly to 34,207 in 1920. Unlike most Oklahoma counties that lost population in 1930 due to the Great Depression, Caddo County reached its peak population of 50,799. Through the next three decades the numbers dwindled from 41,567 in 1940 to 28,621 in 1960. Due to the temporary oil boom between the 1970s and 1980s the population increased to 30,905 in 1980. At the turn of the twenty-first century the county had 30,150 inhabitants, of which 65.6 percent were white, 23.7 were American Indian, 6.4 were Hispanic, and 3.2 were African American.

Caddo County offers many amenities. Outdoor enthusiasts can enjoy Red Rock Canyon State Park, Fort Cobb State Park, Fort Cobb Lake, Lake Chickasha, and Lake Ellsworth. The Southern Plains Indian Museum, Anadarko Philomathic Pioneer Museum, Indian City USA, National Hall of Fame for Famous American Indians, and the Delaware Tribe Museum offer exhibits relating to American Indians and regional history. The annual American Indian Exposition is held in August in Anadarko. In addition to the National Guard Armory and the two archaeological sites, Caddo County had eight other listings in the National Register of Historic Places. They were the
Amphlett Brothers Drug and Jewelry Store (NR 82003669), Anadarko Downtown Historic District (NR 82005385), Apache State Bank (NR 72001060), Black Beaver’s Grave (NR 73002256), Fort Cobb Site (NR 73001556), Provine Service Station (NR 97000803), Randlett Park (NR 03000878), and Rock Mary (NR 70000528). Internationally known Kiowa artist Stephen Mopope painted murals in the Anadarko post office.

As an update to the history provided by Linda Wilson, recent documentation revealed that the Works Progress Administration (WPA) aided the town of Hinton in developing the entry road that descends into Red Rock Canyon. This included sculpting of the entrance/exit hill road, authorized at $15,000 and completed about 1938.

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**Demographic and Socioeconomic Conditions and Impact**

The U.S. Bureau of Census provides summary data related to the demographic profile of the residents of Caddo County. The 2010 Census provided the statistical basis for the detail related to the population of Caddo County in 2012.

The following tables provide this summary based upon data retrieved during May 2013 from [http://factfinder2.census.gov](http://factfinder2.census.gov).

**Table 2.1 – Population of Caddo County**

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caddo County</td>
<td>30,400</td>
<td>29,600</td>
</tr>
</tbody>
</table>

The population of Caddo County has decreased at a rate of 2.3% over the past ten years, returning to the 1980 population addressed by Wilson in the history of Caddo County and similar to the numbers shown at statehood in 1907. Whereas the 2010 census placed the population at 29,600, the estimate for 2012 had shown an increase to 29,678 persons.

Caddo County shows a population diverse by race, demonstrated by 63.1% of the population being White and 24.5% American Indian. This percentage is much higher than that demonstrated within the state of Oklahoma. In addition, Caddo County presents a population related to ethnicity with a higher percentage of Hispanic residents (10.1%) than is true across Oklahoma (8.2%). This composition of the population is rooted in historic settlement of the area and in recent employment activity. This employment pattern may also be reflected in the higher percentage of males living in Caddo County than is true in the general population (see Figure 2.2 on the following page).

Table 2.2 on the following page provides detail on the population characteristics of Caddo County. Of particular note is the median age in Caddo County at 36.1 years, whereas the state of Oklahoma shows a median age of 36.3 years. Caddo County residents are similar in age to the general population of the state of Oklahoma, but younger than many western Oklahoma counties. This composition of population affects the local workforce and recreation activity, as well as educational opportunities throughout the county.
The residents of Caddo County reflect the American Indian heritage of this area to a much greater extent than is true in the general Oklahoma population. Further, the residents of Caddo County also reflect a higher percentage of Hispanic ethnicity than is true across the state of Oklahoma.

### Table 2.2 – Demographic Characteristics of the Population

<table>
<thead>
<tr>
<th>Factor</th>
<th>Caddo County Number (Percent)</th>
<th>Oklahoma Number (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex and Age Male</td>
<td>15,296 (51.7%)</td>
<td>1,816,749 (49.4%)</td>
</tr>
<tr>
<td>Female</td>
<td>14,301 (48.3%)</td>
<td>1,858,590 (50.6%)</td>
</tr>
<tr>
<td>Median age (years)</td>
<td>36.1</td>
<td>36.3</td>
</tr>
<tr>
<td>Under 18 years of age</td>
<td>7,489 (25.3%)</td>
<td>911,484 (24.8%)</td>
</tr>
<tr>
<td>18 years of age and over</td>
<td>22,111 (74.7%)</td>
<td>2,762,318 (75.2%)</td>
</tr>
<tr>
<td>65 years of age and over</td>
<td>4,343 (14.7%)</td>
<td>491,422 (13.5%)</td>
</tr>
<tr>
<td>Race White</td>
<td>18,668 (63.1%)</td>
<td>2,720,135 (72.2%)</td>
</tr>
<tr>
<td>Black or African American</td>
<td>820 (2.8%)</td>
<td>267,179 (7.4%)</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>7,262 (24.5%)</td>
<td>259,809 (8.6%)</td>
</tr>
<tr>
<td>Asian</td>
<td>72 (0.2%)</td>
<td>61,581 (1.7%)</td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander</td>
<td>14 (0.0%)</td>
<td>3,967 (0.1%)</td>
</tr>
<tr>
<td>Two or more races</td>
<td>1,787 (6.0%)</td>
<td>263,896 (7.2%)</td>
</tr>
<tr>
<td>Hispanic/Latino Of any race</td>
<td>2,995 (10.1%)</td>
<td>302,167 (8.2%)</td>
</tr>
</tbody>
</table>

Table 2.3 on the following page reports the household characteristics of the population in Caddo County. The aging nature of the population is again revealed with a much higher percentage of households in Caddo County (29.9%) having one or more members of the household over the age of 65 than is true in the general population of Oklahoma (9.9%). Census data showed that Caddo County had a higher percentage of vacant housing units (19.0%) than that shown across the state. However, during preparation of the RMP, research staff found that housing in Caddo County was extremely limited. Numerous oil and gas field crews were long-time occupants of hotels and motels. Some of the state parks also showed higher occupancy from long-term renters and several private rental properties expanded during this period.
Table 2.3 – Household Characteristics in Caddo County

<table>
<thead>
<tr>
<th>Household Related Factor</th>
<th>Caddo County Number (Percent)</th>
<th>Oklahoma Number (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of households</td>
<td>10,645</td>
<td>1,421,705</td>
</tr>
<tr>
<td>Population in households</td>
<td>27,665 (93.5%)</td>
<td>3,563,497 (96.9%)</td>
</tr>
<tr>
<td>Households with a child or children under 18</td>
<td>3,736 (35.1%)</td>
<td>425,149 (29.9%)</td>
</tr>
<tr>
<td>Households with person 65 years and over</td>
<td>3,184 (29.9%)</td>
<td>140,851 (9.9%)</td>
</tr>
<tr>
<td>Occupied housing units</td>
<td>10,645 (81.0%)</td>
<td>1,421,705 (86.5%)</td>
</tr>
<tr>
<td>Vacant housing units</td>
<td>2,496 (19.0%)</td>
<td>222,523 (13.5%)</td>
</tr>
<tr>
<td>Owner occupied housing units</td>
<td>7,693 (72.3%)</td>
<td>969,959 (68.2%)</td>
</tr>
<tr>
<td>Renter occupied housing units</td>
<td>2,952 (27.7%)</td>
<td>451,746 (31.8%)</td>
</tr>
</tbody>
</table>

Another characteristic on which the population of Caddo County differs from that across Oklahoma is household income. The median household income in Caddo County is significantly lower than the statewide average. Median household income as reported by the U.S. Bureau of Census may be somewhat misleading: by definition 50% of the population in the county is above the median income level and 50% is below that number. The mean household income in Caddo County is $47,995, an indication that a small number of households are doing quite well, while a large number of households may be at the lower end of the income base. Sixty-four households in Caddo County (0.6%) reported incomes exceeding $200,000, whereas 6,495 (63.1%) reported household incomes below $50,000.

It is important to recognize that 20.9% of the population of Caddo County is identified as being below federal poverty guidelines. The percentage of households below poverty levels and the percentage of individuals in those households are higher than the comparable statistics for the state of Oklahoma. It can be concluded that the residents of Caddo County are well below the comparable financial characteristics for Oklahoma.

Table 2.4 – Financial Characteristics in Caddo County

<table>
<thead>
<tr>
<th>Characteristic or Factor</th>
<th>Caddo County</th>
<th>Oklahoma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median household income</td>
<td>$37,835</td>
<td>$42,979</td>
</tr>
<tr>
<td>Households below poverty level</td>
<td>15.4%</td>
<td>11.9%</td>
</tr>
<tr>
<td>Individuals below poverty level</td>
<td>20.9%</td>
<td>16.2%</td>
</tr>
</tbody>
</table>
Residents of Caddo County also present education characteristics that are associated with the financial status of the county. In Caddo County, the greatest variation from the statewide educational pattern is shown in the transition between high school and college. Caddo County residents exceed state percentages in educational attainment through “High school diploma or equivalency.” However, beyond that level, residents of Caddo County lag behind state educational achievement levels. Education levels have been shown to be highly correlated with other economic measures. As a result, the economic status of residents of Caddo County reflects the lower educational attainment of these residents.

Table 2.5 – Education Characteristics in Caddo County

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>Caddo County Number (Percent)</th>
<th>Oklahoma Number (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 9th grade</td>
<td>1,073 (5.6%)</td>
<td>115,248 (4.8%)</td>
</tr>
<tr>
<td>9th to 12th grade, no diploma</td>
<td>2,307 (12.5%)</td>
<td>232,987 (9.8%)</td>
</tr>
<tr>
<td>High school diploma or equivalency</td>
<td>7,879 (41.4%)</td>
<td>775,478 (32.6%)</td>
</tr>
<tr>
<td>Some college, no degree</td>
<td>4,341 (22.8%)</td>
<td>559,367 (23.5%)</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>779 (4.1%)</td>
<td>159,557 (6.7%)</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>1,865 (9.8%)</td>
<td>362,043 (15.2%)</td>
</tr>
<tr>
<td>Graduate or professional degree</td>
<td>729 (3.8%)</td>
<td>176,139 (7.4%)</td>
</tr>
</tbody>
</table>

Table 2.6 – Employment Characteristics in Caddo County

<table>
<thead>
<tr>
<th>Characteristic or Factor</th>
<th>Caddo County Number (Percent)</th>
<th>Oklahoma Number (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population in the labor force (16 years and over)</td>
<td>11,604 (51.8%)</td>
<td>1,806,858 (63.0%)</td>
</tr>
<tr>
<td>Employed</td>
<td>10,554 (90.9%)</td>
<td>1,674,765 (92.3%)</td>
</tr>
<tr>
<td>Private wage and salary workers</td>
<td>6,772 (64.2%)</td>
<td>1,260,965 (75.3%)</td>
</tr>
<tr>
<td>Government workers</td>
<td>2,826 (26.8%)</td>
<td>285,562 (17.1%)</td>
</tr>
<tr>
<td>Self-employed (non-incorporated business)</td>
<td>943 (8.9%)</td>
<td>124,013 (7.4%)</td>
</tr>
<tr>
<td>Unpaid family workers</td>
<td>13 (0.1%)</td>
<td>4,225 (0.3%)</td>
</tr>
</tbody>
</table>
Another demographic factor that is highly correlated with financial characteristics and educational characteristics is employment. The employment figures for Caddo County are reported in Table 2.6. As of 2010, Caddo County reported unemployment to be approximately 4.2% as compared with a statewide 7.7%, both of which were better conditions than current national conditions.

Another demographic factor that assists in understanding the local population is related to persons with disabilities. The 2010 census reported that among those persons in Caddo County between the age of five and seventeen, there are 621 individuals (2.1%) of the population with a disability. This percentage increases in the population from ages 18 to 64 years to 9.3% or 2,056 individuals. Among those persons aged 65 years or more, 47.2% or 2,049 individuals have one or more disabilities. These percentages are similar to those found statewide in Oklahoma.

In summary, Caddo County comprises a rural area with approximately 22.9 persons per square mile as compared to an average of 50.3 for Oklahoma. The largest community in the county (Anadarko) reports slightly more than 22% of the populace for Caddo County. That population shows an average household income significantly below the statewide average; a higher percentage of Caddo County residents are below the poverty level than is true statewide; the county shows greater diversity than is true in the statewide population, particularly among American Indians. The residents of the county have achieved educational levels beyond high school diplomas at lower percentages than is true statewide.

**Competing and Complementary Recreational Opportunities**

Western Oklahoma encompasses an area of limited population and a geography that is perceived to offer few public recreation areas. However, there are numerous outdoor recreation opportunities, particularly in Caddo County.

Oklahoma State Parks within Caddo County include Fort Cobb State Park about 20 miles south of Red Rock Canyon. Fort Cobb offers camping, golf, and cabins (which are operated by a private concessionaire) in a lake setting that contrasts with the sculpted, canyon geography of Red Rock Canyon. Roman Nose State Park is directly north of Red Rock Canyon, about 30 miles along Highway 281. Roman Nose includes camping, cabins, a lodge, an historic swimming pool, group camp, and golf in a more developed recreational environment. These properties may directly compete with Red Rock Canyon State Park for campers, although each property offers experiences or attractions specific to each park.

Fort Cobb Lake and Foss Lake are Bureau of Reclamation lakes with an Oklahoma State Park located at each lake. Foss State Park is approximately 50 miles west of Red Rock Canyon on I-40. Foss State Park may compete more directly with Fort Cobb State Park than it does with Red Rock Canyon.

Other regional recreation opportunities are more distant to the north or southwest from Hinton. These more distant public locations include the Wichita Mountains Wildlife Refuge which offers hiking and climbing experiences for visitors. However, the Wildlife Refuge is primarily managed as habitat for specific species rather than as a recreation setting.

Great Plains State Park is located west of the Wichita Mountains Wildlife Refuge, near the geographic center of the Wichita Mountains on Tom Steed Reservoir (Mountain Park Project) and provides recreation opportunities in a lake and mountain environment. As a result, Great
Plains State Park is more similar to the recreation opportunities at Foss State Park or Fort Cobb State Park. Quartz Mountain Nature Park is managed by the Oklahoma State Regents for Higher Education and provides hiking and climbing in a mountainous setting along Lake Altus-Lugert. Although Lake Altus-Lugert is slightly larger than Tom Steed Reservoir, it is utilized for irrigation and may not sustain water levels adequate for some forms of recreation.

Several private campgrounds have developed in the surrounding area. However, the level of service and amenities offered by these businesses varies greatly from the quality of the recreation experience offered by Red Rock Canyon State Park.

A complementary resource benefiting Red Rock Canyon State Park is the Great Plains Trail of Oklahoma, a cooperative venture of several organizations including Oklahoma Wildlife and Prairie Heritage Alliance, Oklahoma Department of Wildlife Conservation, Oklahoma Tourism and Recreation Department, Playa Lakes Joint Venture, Oklahoma Economic Development Authority, High Plains RC&D, and Great Plains RC&D. Red Rock Canyon State park is an identified stop on the Caddo Canyons Loop of the Great Plains Trail, highlighted as an oasis created by narrow red walls and flowing creeks. Emphasis is placed on the nature trails within Red Rock Canyon State Park.

The Great Plains Trail is marked along Oklahoma highways with signs as shown in Figure 2.3. In addition, visitors traveling the trail benefit from printed materials, web-based materials, and additional support information to enrich the travel experience along the route.

Regional and Park History

The history of the property that would become Red Rock Canyon State Park is integrally connected to cultures and peoples who have used this property for hundreds of years. Prior to European advancement into the plains, American Indians had utilized Red Rock Canyon as a winter haven. The sheltering canyon walls and the fresh water supply made the canyon an excellent setting for winter camps.

Discovery of gold in California in 1848 spurred easterners to move west to the gold fields. There were several possible routes for such westward travel, including the famous routes of the Oregon Trail, the Mormon Trail, and the Santa Fe Trail. A lesser known route became known as the California Road Trail. This route started at Fort Smith, Arkansas, and followed the South Canadian River through Indian Territory including passage through Red Rock Canyon.

The following history of the California Road was written by Ryoko Okamura for the Oklahoma Historical Society and retrieved from the website for the Oklahoma Historical Society (http://digital.library.okstate.edu/encyclopedia/entries/c/ca012.html).

“The gold rush also affected the Indian Territory, or present Oklahoma, from the spring of 1849, and a southern California Road developed. During the peak year, 1849, as many as twenty thousand emigrants traveled on the southern route. Emigrant parties began leaving Fort Smith and Van Buren, Arkansas, crossing parts of Indian Territory along a Canadian River route used in 1839 by Josiah Gregg, author of The Commerce of the Prairies. The federal government
decided that the emigrants should be protected, and in 1849 Capt. Randolph B. Marcy escorted a large company of them westward along the Canadian River, establishing the Canadian River route of the southern California Road. Like its northern counterpart, the southern trail had branches.

The main upper branch of the southern California Road began at Fort Smith, Arkansas. Some emigrants went directly west along the north bank of the Canadian to North Fork Town, Choctaw Nation, and continued north of the river. Most followed the road that went from Fort Smith fifteen miles southwest to Choctaw Agency (Skullyville). There the route divided. One path led westward to Edwards’ Trading House on Little River. From that place, travelers found paths on both banks of the Canadian River. Those on the north bank went past the former site of Chouteau’s Fort; those on the south bank went to Delaware Mound and The Mound and then northwest to Mustang Creek. The alternate Canadian River paths rejoined west of Chouteau’s and proceeded northwest past landmarks such as Rock Mary and the Antelope Hills before crossing into the Texas Panhandle. The road continued westward to Santa Fe and turned south to extend three hundred miles across New Mexico along the Rio Grande River to El Paso, Texas. This branch of the California Road totaled more than two thousand miles from Fort Smith to El Paso, where it joined Cooke’s Wagon Road across southern Arizona.

The lower branch of the southern California Road, blazed by Marcy on his return trip, ran from Fort Smith to Choctaw Agency and then southeast to Boggy Depot and Fort Washita, crossed the Red River at Colbert’s Ferry (Preston, Texas), and traveled southwest across central Texas to El Paso. This route took travelers seventeen hundred miles from Fort Smith to El Paso. There it joined Cooke’s Wagon Road. It became the route adopted in 1858 by the Butterfield Overland Mail and stage line to California.

To maintain the routes and provide sufficient supplies to travelers, various stops became important stations and developed as towns or military posts. In comparison with the northern trails, which suffered heavy snowfalls in winter, the southern routes benefitted from warmer, drier winters and abundant natural resources such as water, timber, and grass. Some areas offered fertile soil for agriculture. Moreover, the opening of the southern routes contributed to a movement to construct a transcontinental railroad, and the California Road served as an important transportation for military and civilian movements. Following its development, immigrants began to view the West’s Indian owner-occupants as an obstacle. Therefore, the rapid progress of the southern route not only affected economy and social activities of the region, but also swayed federal policy toward the Indian Territory.”

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**Figure 2.4 – Red Rock Canyon**

Source: Hinton Chamber of Commerce

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Travelers along the California Road Trail anticipated their arrival in the area surrounding Red Rock Canyon and into the canyon itself.
Less than five miles west of present day Hinton, a natural feature – Rock Mary – became a landmark for these westward travelers.

The following history of Rock Mary was written by Dianna Everett for the Oklahoma Historical Society and retrieved from the website for the Oklahoma Historical Society (http://digital.library.okstate.edu/encyclopedia/entries/r/ro012.html).

“A geographical feature and a travelers’ landmark, Rock Mary is a large, red sandstone outcrop, or butte, located approximately 4.75 miles west of Hinton, in Caddo County, Oklahoma, and about a mile from Sugar Creek, a tributary of the Washita River. A number of similar features, earlier called “Natural Mounds,” occur in the vicinity, about midway between the Canadian and Washita rivers. Rising above a fairly level plain that is at elevation of approximately 1,600 feet above sea level, the Rock is approximately sixty feet in height and approximately two hundred feet in diameter. It stands alone, east of the other mounds. It is composed primarily of Permian-age Rush Springs sandstone capped with Weatherford dolomite. The Rock is visually characterized by two tower-like projections that loom upward from the top.

Rock Mary appears in official reports made by explorers and surveyors in the mid-nineteenth century. Lt. James W. Abert in 1848 was the first to note and describe the “mounds” as a group of features, but he did not distinguish between them. Capt. Randolph B. Marcy’s expedition was the first to record the butte that is called Rock Mary. He led a party of emigrants across present Oklahoma in spring 1849 on a route that came to be known for a short period as the California Road. A detachment led by Lt. James H. Simpson first spied the large feature with the twin projections and on May 23, 1849, named it for Mary Conway, a young woman among the emigrants. Later, railroad and wagon-road surveys of the area provided additional descriptions, including those of Lt. Amiel W. Whipple and artist Heinrich Balduin Möllhausen in 1853 and Lt. Edward F. Beale in 1858. Möllhausen’s drawing remains the most accurate picturing of Rock Mary in the 1850s, and the original image resides in the Whipple Collection at the Oklahoma Historical Society (OHS).

In 1960 the OHS board selected a committee of historians, including George Shirk and Muriel Wright, to plot the precise location of Rock Mary and distinguish it from the other similar outcrops. For several months the committee pored over the Whipple and Simpson reports, various maps, and Möllhausen’s drawings, and then went on the ground to follow, as much as possible, the route taken by Simpson through the locality. Using various landmarks and correlating the descriptions and images, the group reached the conclusion that the large outcrop in Section 1, Township 11 North, Range 12 West, was the historical Rock Mary. It is now so designated on official topographic maps of the U.S. Geological Survey. OHS placed appropriate descriptive markers on the Rock and near the town of Hinton. Lone Mound and Dead Woman’s Mound lie to the west, and Red Rock Canyon State Park lies to the east, south of Hinton. In 1970 listed in the National Register of Historic Places (NR 70000528) for its significance in Oklahoma’s
transportation history, Rock Mary is situated on private property five miles south of Interstate 40 off County Road E1060.”

Evidence of the effort required to make the trip west is visible in Red Rock Canyon State Park. Ruts from the many wagons are visible in the rock at the southern end of the park as shown in Figure 2.6. While Rock Mary (NR 70000528) is listed on the National Register of Historic Sites, these wagon wheel ruts are not presently listed. Similar evidence of westward trails is registered in other states. Nomination of this site within Red Rock Canyon has merit to document the importance of this property in the history of the United States.

The actual history of Red Rock Canyon State Park is more closely linked to the people of Hinton and their desire to conserve the canyon as a recreation setting. In April 1930, the Hinton Kiwanis Club signed a lease agreement with Herman Gerdes for the canyon property. This agreement included a 25-foot access route from the state highway eastward, across an existing railroad bed, down into the canyon. By 1931, the Kiwanis Club brought a rodeo to the community and utilized proceeds from these events to improve the park-like atmosphere of the canyon.

The Daily Oklahoman, Sunday, August 2, 1931, included a headline news story: “Hinton makes playground out of canyon used by the Dalton gang.” The accompanying photographs and story make it clear that “the fact that the scenic canyon is known locally as the Dalton Gang canyon, had nothing to do with its selection as a public park by the Kiwanis club. It was selected solely because of its scenic grandeur.”

Carl Gerdes, son of Herman Gerdes, renegotiated the lease agreement in 1938. Then in 1939, the Hinton Kiwanis Club agreed to purchase the property. By 1954, the Kiwanis Club recognized that they had reached their limits in ability to develop and manage the property. On December 20, 1954, the Kiwanis Club donated 20 acres to the state of Oklahoma. Within a month (January 8, 1955), John Murphy donated an additional 20 acre tract and the town of Hinton donated approximately 97 acres. As a result, approximately 137 acres were transferred to the Oklahoma Industrial Development and Park Department and the name changed from Kiwanis Canyon Park to Red Rock Canyon State Park (April 6, 1956).

Additional properties were acquired between 1955 and 1963, with a final acquisition of 99 acres at the south end of the park in 1971, bringing Red Rock Canyon State Park to 295 acres. Documents related to this acquisition of property are included in the appendix.
Early development of the new state park included comfort stations and the swimming pool between 1956 and 1959. Campgrounds and picnic areas followed, as did construction of the park residence and maintenance area between 1960 and 1969. During this time, the Group Camp construction was initiated and final bunkhouses were added in 1967.

Red Rock Canyon
By Marj Bennett McAlister

In this red rock room
lichens paper thirty-foot walls
red floors sport green carpets
now beginning to fade
trees, half-clad from first frost decorate
floors and walls.
Wrap-around sunshine beam
from sapphire shy-ceiling:
Red Rock Canyon, timeless room.

Peace accented by gently moving leaves
red boulders rest the eye
quietness soothes the ear
clear crisp air attends
autumn at its best –
halcyon days before
winter’s white décor.

Balm to urban-tired visitor:
exhilarating, poignant, transient
enveloped by euphoria:
Red Rock Canyon, timeless room.
Natural Resources in the Park

Climate and Air Quality

Using the Koeppen classification of climate types, Caddo County is in the humid subtropical zone, a moist, mid-latitude climate with mild winters. Most of Oklahoma is classified in this same humid subtropical climate. Average precipitation for Caddo County is 32.13 inches per year. This precipitation may include about 6.2” of snow annually, with the balance of precipitation occurring largely from thunderstorms during the spring and summer. Temperatures average 61° F, with the coldest average temperature occurring in January (48°) and the warmest average temperature occurring in August (73°). The highest recorded temperature in Caddo County occurred August 12, 1936, in Carnegie at 117°. Similarly, the lowest recorded temperature (-17°) occurred in Anadarko on February 12, 1899.

Winds from the south to southwest are quite dominant, averaging just over nine miles-per-hour. Relative humidity, on average, is 67% during the day. During the year, humidity is highest in May and June and lowest in August. Winter months tend to be cloudier than summer months. The percentage of possible sunshine ranges from an average of about 65% in winter to nearly 85% in summer. The growing season in Caddo County averages about 208 days annually.

Thunderstorms occur on about 46 days each year, predominantly in the spring and summer. During the period 1950 – 2003, Caddo County recorded an average of less than two tornadoes per year. Caddo County typically has about six events each year of hail exceeding one inch in diameter. As information collection has improved, both the number of reported tornadoes and the number of severe hail events have increased (OK Climatological Survey).

The Pollution Information Site (Scorecard) reports that 86% of all days in Caddo County show good air quality, with the primary pollutants being particulate matter (PM-2.5 and PM-10). Having said that, according to the Clean Air Task Force website, Caddo County is at the 80th percentile for PM-2.5 and 90th percentile for PM-10 emissions and is among the “dirtiest counties in the United States” (Clean Air Task Force).

Archeology of Red Rock Canyon State Park

The Oklahoma Archeological Survey (2012) reports 451 archeological sites in Caddo County as of 2013. Among these identified sites are 19 Paleo sites, 27 Archaic sites, 19 Woodland sites, and 115 Plains Village sites. The Domebo Canyon Site along Tonkawa Creek offered a rare glimpse of the past at a Paleo-indian mammoth kill site. Red Rock Canyon State Park has been utilized for recreation and numerous other activities during the past century. As a result, the likelihood of significant archeological finds within the park is quite small. However, an archeological survey should be conducted prior to development within the park.

Topography

Red Rock Canyon State Park and all of Caddo County are situated in the Interior Plains using the Fenneman Physiography Classification. This ecoregion extends northwest from a diagonal line from Oklahoma’s northeastern corner to Lake Texoma. This portion of northwest Oklahoma lies within the Central Lowlands province in the Fenneman classification. Caddo County, including Red Rock Canyon State Park, is located in the Osage Plains province of the Central Lowlands.
The topography of Caddo County reflects the presence of the Washita River running west to east across the county, with numerous creeks as tributaries. Red Rock Canyon State Park is situated north of the Washita River and is directly the product of erosion along a south-flowing creek bed leading into Sugar Creek and eventually to the Washita River.

**Geology**

Most of Caddo County and all of Red Rock Canyon State Park are situated in the Anadarko Basin as shown in Figure 2.8. According to Charpentier (2010) the Washita River is an approximate line of separation between the Anadarko Basin to the north and the Wichita Uplift to the south. Only the southwestern corner of Caddo County is included in the Wichita Uplift.

![Figure 2.8 – Geological regions in Oklahoma](source: Charpentier (2010))

The detail of the geology of Red Rock Canyon State Park is available in a handbook sold within the park. Suneson and Johnson (1996) document the geology that provides the major features of Red Rock Canyon State Park. As they indicate, the most spectacular feature in the canyon is provided by Rush Springs Sandstone with its red color. This reddish to orange coloration results from oxidized iron minerals that stain individual sand grains in the rock.

Suneson and Johnson divide Red Rock Canyon State Park into three physiographic zones: the canyon at the north end of the park; the box-head area in the middle; and the upland prairie in south. Red Rock Canyon is about 2.5 miles long and averages 80 feet wide at its head and 750 feet wide at its mouth. In the northern end of the park, the canyon walls are nearly vertical to overhanging.

The box-head area (a canyon closed on three sides) of the main canyon is at the end of the Rough Horsetail Nature Trail at the north end of the park. As Suneson and Johnson noted, there actually are three box-heads at this site. Two other box-heads have developed where streams enter the canyon from the sides. These box-heads are located at the north end of the canyon campground and at the east end of the group camp.

The upland prairie dominates the area surrounding Red Rock Canyon State Park, but also occurs within the park boundaries. Upland prairie occurs between the canyon rim and the park.
boundary. During 2012 – 2013, this area showed visible evidence of stress on plant life due to the heat and drought. Thicker vegetation follows in places with more permeable, water-charged sandstone.

The Rush Springs Sandstone in the Hinton area has only a small amount of natural mineral cement between the sand grains. As a result, this sandstone is highly porous and permeable. Water soaks into the sandstone rapidly, resulting in an excellent ground-water aquifer. The Rush Springs aquifer in the Hinton area is recharged entirely through precipitation seeping downward through the porous sandstone.
The geology of Red Rock Canyon is shown in graphic form in Figure 2.9. This graphic shows the box-heads and two cross-sections within the canyon. It is suggested by Suneson and Johnson that the water table was near the level of the canyon floor during and before the 20th century.
Soil

The Natural Resources Conservation Service (NRCS) gathers data and prepares custom soil resource reports for specific areas. In each report they define various terms related to soils and the related capacities. Soils that have profiles that are almost alike make up a soil series. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into soil phases. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series. Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A complex consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An undifferentiated group is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, are an example.

Some surveys include miscellaneous areas. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example of a miscellaneous area (NRCS, 2010).

Soil Suitability for Recreational Development

Figure 2.10 on the following page details the soil at Red Rock Canyon State Park. There are three dominant soils within the park boundaries. Almost one-half of Red Rock Canyon State Park is Darnell-Noble Association with 12 to 30 percent slopes. This is primarily situated along the canyon rim and outward to the boundary of the park. Little development other than trails has occurred in these locations.

The second large soil complex is slightly less than one-fifth of the park, composed of Gracemont and Ezell soils with slopes of 0 to 1 percent. This soil is located through much of the central portion of the park on the canyon floor. This soil complex is now utilized for some of the campgrounds, much of the picnic area, and other day use activity. These soils are frequently flooded.
Figure 2.10 – Soil map of Red Rock Canyon State Park
Source: Natural Resource Conservation Service
The third soil dominant complex is Darnell-Rock outcrop complex, visible as the canyon wall and other prominent outcrops. Darnell-Rock outcrop complex has slopes ranging from 20 to 75 percent.

For recreational development, the soils of Red Rock Canyon State Park show major limitation for septic tank absorption fields and sewage lagoons. The porous soils and rocks leading to the Rush Springs aquifer are the primary limiter for these installations without significant design mediation. The same limitations exist for ponds, whether excavated or impounded, although the pond within Red Rock Canyon State Park has been sustained for several decades.

Red Rock Canyon State Park is also limited by flooding along and surrounding the creeks that flow through the canyon. While flooding does occur, water levels subside quickly due to flow and absorption.

The entire property is moderately limited due to potential damage to vegetative roots caused by fire. Fires that are intense enough to remove the duff layer are also intense enough to damage roots in these shallow soils.

Additional limitations related to recreational development are shown for roadways and parking lots, campgrounds, picnic areas, and installation of playgroups. These limitations are presented by shallowness of soils, depth to bedrock or a cemented pan, slope, stoniness, and porous soils. These limitations usually require major soil reclamation, special design, or expensive installation procedures. They also frequently lead to higher maintenance costs.
Hydrology

Caddo County straddles portions of four watersheds, although Red Rock Canyon State Park is entirely within one watershed. These watersheds are shown in Figure 2.12 and identified as follows:

- 11090201 – Lower Canadian-Deer (OK, TX)
- 11090202 – Lower Canadian-Walnut (OK)
- 11130202 – Cache (OK)
- 11130302 – Upper Washita (OK)

The watershed of immediate proximity to Red Rock Canyon State Park is the Upper Washita. This watershed (11130302) extends along the Washita River northwest of Clinton southeastward through Carnegie and Hinton, and on to Chickasha. Portions of counties in Oklahoma encompassed by this watershed include Beckham, Caddo, Canadian, Comanche, Custer, Dewey, Grady, Kiowa, and Washita. All water from the county flows in a general southeastward direction into either the Washita River or the South Canadian River.

Surface waters in all of these watersheds have been identified as having impairments from lack of dissolved oxygen, sulfates, and enterococcus bacteria. In addition, these surface waters show impairments for fish bioassessments, thallium, turbidity, Escherichia Coliform (E. Coli), lead, and fecal coliform.

Vegetative Cover

Red Rock Canyon State Park is in the Bluestem-Grama Prairie using the Kuchler Vegetation Classification. The area is in the Subtropical Steppe division and the Great Plains Steppe and Shrub province.

The Lenihan Vegetation Classification identifies these areas with slightly different descriptors. In the area around Hinton and Red Rock Canyon
State Park, Caddo County is in the South Mixed Grass Prairie (including Red Rock Canyon State Park), while the southern portion of Caddo County is identified as Tall Grass Savanna.

The vegetation associated with this area is identified as sandsage grassland and mixed grass eroded plains. This vegetation provides habitat for a variety of wildlife, with the addition of the forest associated with the park property. Eastern Red Cedar is invasive in this environment.

Park staff provided an extensive listing of vascular plants of Red Rock Canyon State Park, with additional listings of trees, wildflowers, shrubs, vines, and common herbs. These listings are included in the appendices. The variety of plants within the park is an indication of the unique environment offered in a canyon with springs.

Two plants found within Red Rock Canyon State Park are of particular note. Rough Horsetail (Equisetum hyemale, Figure 1.2, page 16) is particularly unusual in this prairie environment. Rough Horsetail grows along the springs and creeks and provides an attraction for persons hiking the Rough Horsetail Trail in the north end of the park.

The second plant of note is a specific tree, the largest Box Elder tree in the state of Oklahoma. This Box Elder (Acer negundo) grows near the swimming pool in the central portion of Red Rock Canyon State Park. Among the maples, the Box Elder and the Caddo maple are native to the park.
Wildlife

As is true with all Oklahoma state parks, Red Rock Canyon State Park is a wildlife sanctuary. The variety of wildlife resident within Red Rock Canyon State Park has been documented by park personnel and is included in the appendix in two groups: (1) birding list, and (2) wildlife list. The birding list provides additional information on species that have been observed within the park by identifying species as residents, transients, or seasonal visitors. In addition, the species are separated as common, uncommon, rare, or accidental in visitation at Red Rock Canyon State Park.

Similarly, the wildlife listing categorizes species as mammals, reptiles, amphibians, fish, mollusks, and crustaceans. Further definition is provided within some of these categories. While these listings may be incomplete and have not been independently verified, they provide evidence of the diversity of wildlife that relies upon the park as habitat and that may be enjoyed by visitors.

Caddo County and Red Rock Canyon State Park are habitat for many of the common forms of wildlife native to Oklahoma. Red Rock Canyon State Park provides excellent habitat, mixing the canyon features with the surrounding grasslands. As a result, there is a greater concentration and variety of wildlife present within the park than in surrounding areas. Visitors to the park comment frequently on the presence of wildlife or the pleasure of driving through the park just to observe the wildlife.

Among the wildlife species present within Red Rock Canyon State Park is the copperhead. This is the only venomous snake identified within the park.

Nuisance Species

As of 2007, feral hogs were reported in Caddo County as they are also reported and present in all the surrounding counties (Stevens, 2007). Concentration of feral hogs varies in three zones within Caddo County. The greatest density of feral hogs parallels the Washita River with 64 or more feral hogs per square mile. The western half of Caddo County has the second highest density at 13 to 58 hogs per square mile. The eastern half of the county has sparse populations of 13 or fewer hogs per square mile.

Caddo County is listed as having three Nuisance Wildlife Control Operators. Two of these individuals are identified as associated with OTRD and Oklahoma State Parks. One Nuisance Wildlife Control Operator is located in Hinton.

The greatest nuisance species in Red Rock Canyon State Park is Eastern Red Cedar. Park staff has initiated and sustained an eradication effort, with some success. This effort has been voluntary and dependent upon the efforts of individual members of park staff.

Endangered or Threatened Species

At present there are no state-listed threatened or endangered species listed for Caddo County. However, federally listed endangered and threatened species that may be present in Caddo County include: Arkansas River Shiner (Notropis girardi), Whooping Crane (Grus americana), Interior Least Tern (Sterna antillarum), Piping Plover (Charadrius melodus) and Black-capped vireo (Vireo atricapillus). The Whooping Crane, Interior Least Tern, Arkansas River Shiner, and Black-capped Vireo are listed as endangered. The Piping Plover is listed as threatened.
The Arkansas River Shiner may be present within the waters in Red Rock Canyon State Park. These small, minnow-sized fish are possible in shallow braided channels of sandy prairie rivers. As a result, it is possible that Arkansas River Shiners may inhabit the creek flowing through Red Rock Canyon State Park.

The Whooping Crane is migratory, moving annually from Canada to the Gulf of Mexico each fall and spring. Whooping Cranes may utilize the Washita River or Fort Cobb Lake as a stopping point along their semi-annual migration routes. It is unlikely that Whooping Cranes would be found within Red Rock Canyon State Park. No cranes or other shore birds were identified in the listing provided by park personnel of wildlife and birds found within the park.

As is true across much of Oklahoma, the Interior Least Tern (Figure 2.17) is also a migratory bird that nests along isolated areas of several rivers. As a result, the Interior Least Tern is possible to be close to the Washita River. The Interior Least Tern is migratory and may be present during spring and summer.

The Piping Plover is also a shorebird, commonly associated with mud flats, sandy beaches, and shallow wetlands. Normally the Piping Plover is a migrant through Oklahoma in the spring and fall, although there are records of nesting areas in Oklahoma. Recent records include sightings of the Piping Plover in Caddo County.

The Black-capped vireo is one of two vireos identified within Red Rock Canyon State Park. The red-eyed vireo is more common and is not identified as either threatened or endangered. However, the Black-capped vireo has declined in numbers and range in Oklahoma. Only two populations remain: one in the Wichita Mountains of northern Comanche County and the other in northern Blaine County near Roman Nose State Park. This small songbird is migratory and may occur in Red Rock Canyon State Park from mid-April through early September.
Accessibility

Oklahoma State Parks strives for accessibility for those with disabilities in all park locations and facilities and has an access plan for the Division. Many parks and facilities were designed and constructed before the passage of the 1990 Americans with Disabilities Act (ADA), and well before the Americans with Disabilities Act Accessibility Guidelines (ADAAG) were developed.

The technical provisions of the ADA permit deviation from the stated guidelines. These provisions allow deviation from full compliance if accessibility cannot be provided because (1) compliance would cause substantial harm to cultural, historic, religious or significant natural features or characteristics; (2) substantially alter the nature of the setting or purpose of the facility; (3) require construction methods or materials that are prohibited by federal, state or local regulations or statutes; or (4) would not be feasible due to terrain or the prevailing construction practices.

In 2007, the United States Access Board issued a Notice of Proposed Rule Making (NPRM) for outdoor developed areas. These rules and their associated interpretations have direct bearing on the consideration of access in Red Rock Canyon State Park. The minimum requirements found in the NPRM for outdoor developed areas are based on several principles developed through the regulatory negotiating process. They include (U.S. Access Board, 2009):

1. Protect the resource and environment
2. Preserve the experience
3. Provide for equality of opportunity
4. Maximize accessibility
5. Be reasonable
6. Address safety
7. Be clear, simple, and understandable
8. Provide guidance
9. Be enforceable and measurable
10. Be consistent with Americans with Disabilities Act Accessibility Guidelines (as much as possible)
11. Be based on independent use by persons with disabilities

Trails that currently exist are all natural surfaces, although there are hard surface sidewalks in the developed areas. Any one designated trail may make use of all or several surface types. If major trail redesign or construction were to occur, it would be important to ensure compliance with the ADA standards where appropriate. The NPRM addresses ten provisions that must be considered related to trail accessibility. These provisions are:

1. Surface – must be firm and stable
2. Clear tread width – minimum of 36 inches
3. Openings in surface – may not permit passage of sphere one-half inch in diameter
4. Protruding object – minimum of 80” of clear headroom above the trail
5. Tread obstacles – cannot exceed a maximum of two inches
6. Passing space – minimum of 60” by 60” at intervals of 1000’ or less
7. Slope – addresses cross slope and running slope
8. Resting intervals – at least 60” in width
9. Edge protection – not necessarily required, but may be provided
10. Signage – information on distance and departure from technical provisions

An example of possible signage for trails as suggested by the National Center on Accessibility is shown in Figure 2.20. As of 2010, no specific signs have been designated for universal communication related to accessible trails. However, these signs communicate the concept of accessibility in outdoor developed recreation spaces that include trails.

Other considerations related to access for persons with disabilities include “Braille trail” concepts that allow persons with visual limitations to enjoy the features of a trail. This is particularly true if the trail is interpretive in nature, with signs communicating information related to natural, cultural, historic, or other significant topics related to the park environment.

In an effort to fully disclose the extent of accessibility within state parks, the Oklahoma State Park Division developed terms to describe two levels of access; these terms are used in State Parks publications: accessible and usable.

*Accessible* indicates that the park “substantially complies with the Americans with Disabilities Act Accessibility Guidelines (ADAAG). The facility is connected with a barrier-free-route-of-travel from an accessible parking area.”

*Usable* indicates that the “facility allows significant access. Some individuals with disabilities may have difficulty and need assistance. Due to topography and the primitive nature of some sites, parking and connecting routes may not be accessible to all with disabilities” (OTRD, 2007).

OTRD began development of the properties at Red Rock Canyon State Park before the passage of the ADA; thus, many of the established structures do not meet the explicit requirements of the law. In several locations, OTRD has added accessible restrooms, developed hard surface campsites, installed walkways, and made other efforts to improve accessibility. Some of the existing trails are not currently accessible trails, and such modification may not be desirable. The natural terrain varies considerably; in addition, the environment includes vulnerable animal species. Thus, ADAAG-defined accessibility to every area of the park is not practical, nor necessarily desirable.

An example of this rule-making and interpretation took effect March 15, 2011 under the Department of Justice ruling that specified “other power-driven mobility devices” (OPDMD) that could be used on trails by individuals with mobility limitations. At present, the expectation is that the operating entity (OTRD) shall “make reasonable modifications in policies, practices, or procedures to permit the use of other power-driven mobility devices by individuals with mobility disabilities, unless the public entity can demonstrate that the class of OPDMD cannot be operated in accordance with legitimate safety requirements that the public entity has adopted based on actual risks” (American Trails, 2011). Such consideration may be necessary for Red Rock Canyon State Park.
Chapter 3 – Current Status of the Resource

Recreational Development

As a state park in Oklahoma, Red Rock Canyon State Park incorporates historic, cultural, economic, natural, and recreational resources. The establishment of Red Rock Canyon State Park was based on strong local support through the Kiwanis. That public support for the park has continued to the present, building a loyal following among many people who visit and return frequently. The property has served a variety of purposes over the years including hosting local special events, serving as a wintering ground for native peoples, and providing recreational pleasure to many. Throughout its history, the environment of Red Rock Canyon State Park leaves an indelible impression upon those who visit.

The map on the following page, Figure 3.2, provides an overview of the features of Red Rock Canyon State Park. The park boundaries include 295 acres of land encompassing campgrounds, swimming pool, a group camp, day use areas, trails, and other facilities. These facilities are detailed in the following discussion. For ease of presentation, the discussion and presentation begins at the entrance to Red Rock Canyon State Park and proceeds southerly along the main road through the canyon.

For all visitors entering Red Rock Canyon State Park by automobile, there is one route of access. Visitors enter the park at its northwest corner via an access drive eastward from Highway 281 about one mile south of Main Street in Hinton. It is possible to enter the park on foot from surrounding private property, but this is quite unusual. The entrance to Red Rock Canyon State Park has been marked by an iconic sign, used in numerous publications and websites. That sign was removed in early 2013 and has been replaced (Figure 3.1) as part of branding of Oklahoma State Parks.

Figure 3.1 – Entrance to Red Rock Canyon State Park

Right: iconic sign removed in 2013
Below: new entry sign
Figure 3.2 – Map of Red Rock Canyon State Park
Entry Drive and Park Environs

Highway 281 is two-lanes with a 45 mile per hour speed limit heading south out of Hinton. In town, the speed limit is lower, while vehicles coming from the south have been under a 65 mile per hour limit. A visitor entering Red Rock Canyon State Park is in a rural, small-town environment, particularly for those coming from the north.

However, upon turning onto the park entry road, the speed limit decreases to 15 miles per hour on Red Rock Canyon Road. This access road is divided from the entry point to the park office (Figure 3.3). To the south of the entry drive there is an open field, while the north edge of the drive is fenced separating the drive from the adjacent private property. This entry drive is tree-lined and flat, giving little indication of the true nature of the canyon to the east of the park office.

Since Highway 281 is two-lane at the intersection with the park access road, there is limited turning space especially for vehicles coming from the north. For larger recreational vehicles or cars turning left into the park, there may be some delay caused by on-coming traffic. Sight-lines at this location are adequate due to the open terrain.

Immediately at the entry sign, visitors may stop and park or utilize a turn-around. A second opportunity to turn around or access the opposite lane is available at the park office.

Park Office

Upon entry into Red Rock Canyon State Park, all vehicles continue eastward for about an eighth of a mile to the park office. A “welcome sign” provides information regarding services available at the park office. The office is located between the incoming lane and the out-going lane along the entry drive (Figure 3.4). The office is normally staffed during daylight hours and includes a visitor center, a small gift shop, and park information. In addition, this office serves as the central hub for park business operations.

Several parking spots are available along the entry drive near the office. In addition, a temporary parking lane allows incoming campers to park while registering inside the office.
For traffic exiting Red Rock Canyon State Park, the westbound lane of the access road includes a turn-out location for a sanitary dump station. The sanitary dump station is situated on the right hand side of this exit lane. A small, portable storage building and dumpster are located adjacent to the dump station (Figure 3.5).

**Figure 3.5 – Sanitary dump and storage building near the office**

**Park Residence and Maintenance Area**

To the east of the office location along the north side of the entry drive, there is a park residence and maintenance area. Both are visible to visitors entering the park, although both areas are marked with signs indicating restricted access.

The park residence is attractive and fitting within the park environs (Figure 3.6). This residence sits at the upper level of the canyon. Directly to the south of the residence, the western border of the park parallels the eastern edge of an old railroad right-of-way.

Private property adjoins Red Rock Canyon State Park to the south of the entry drive and to the west of this old railroad right-of-way. At present this private property is utilized for agricultural purposes.

**Figure 3.6 – Park residence**
Immediately east of the park residence and slightly below the crest of the canyon, there is a maintenance area. Two entries into the maintenance area access two elevations along the upper level of Red Rock Canyon. The upper level includes a cinder-block building and a portable storage shed (Figure 3.7). This area is primarily utilized as a storage location for essential equipment and vehicles.

The maintenance and storage area is visible from the entry road, although the area is off-limits to park visitors. A fence with a gate provides some visual separation for this area. However, as shown in Figure 3.7, that fence has deteriorated over the years. At present, the gate is often open during working hours, allowing visitors to see into the maintenance yard.

The entry drive into Red Rock Canyon State Park begins a steep, downhill, curving route just east of the park office and southeast of the park residence. Figure 3.8 shows the “caution” sign at the top of the hill and the change in grade looking uphill from within Red Rock Canyon. This sign is scheduled for replacement. Park personnel indicated that some drivers have difficulty navigating this hill with larger recreational vehicles or in bad weather conditions.
Entry into Red Rock Canyon provides a significant visual and dramatic elevation change for visitors. The environment within Red Rock Canyon contrasts sharply with the open plains above the canyon walls.

**Canyon Area (North portion)**

Upon entry into the canyon, Red Rock Canyon Road bridges a creek and turns toward the south down the canyon. Canyon Area extends along both sides of the creek and incorporates a day use area, two trailheads, a small impoundment, and a campground with additional visitor amenities.

Two paved parking turn-outs provide space for six to eight vehicles along the entry drive. These turn-outs allow visitors to access the Rough Horsetail Trailhead, Old-timers Spring Trail, the Red Mulberry group shelter, and a comfort station as shown in Figure 3.9. The northern portion of Canyon Area is designated as Caddo Maple Conservation Area.

There are two comfort stations in the Canyon Area. The comfort station shown in Figure 3.9 is adjacent to the entry drive and is an older installation. While it is usable for persons with mobility limitations, it is not fully in compliance with current accessibility guidelines. The comfort station is on the west side of the entry drive, while the picnic shelter is on the east side and slightly above the elevation of the roadway requiring visitors to navigate steps.

Rough Horsetail Trail crosses Red Rock Canyon Road with trailheads on either side of the roadway at the north end of the canyon. More discussion related to trails is provided later in the RMP. The next prominent feature along Red Rock Canyon Road is a pond along the west side of the roadway. This pond is created by an impoundment of the creek and was shown in Figure 2.7, page 32, of this RMP. The pond in that photograph from the middle of the 20th century is considerably larger than the present quarter-acre water body. The pond provides opportunities for fishing, enhancement of the wildlife habitat, and aesthetic value.
As shown in Figure 3.10, the area surrounding this pond is designated for day-use only including an accessible picnic site and fishing station. The pond provides an excellent habitat for observation of birds, insects, and other wildlife. In addition, the water supply provides an environment for Rough Horsetail and other plant life. The impoundment along the creek is a concrete structure with earthen sidewalls. Water levels are typically adequate to permit some continuous flow along the creek. Fishing is permitted in the pond and ODWC occasionally stocks the pond with fish appropriate for this habitat.

An entrance to a box-head canyon is located just east of the pond. This area provides space for picnicking, rappelling, and camping. In the box-head, camping is intended for tents. The area also provides opportunities for rappelling as shown in Figure 3.11. The campground offers camp sites with tables and grills although with limited designation of campsites. Frequently, the visitors who utilize this area for rappelling are day visitors. As a result, there is a mixing of campers and day visitors within the campground setting.
A portion of Canyon Campground with semi-modern campsites is situated just south of the boxhead canyon along the main road. The main roadway divides into one-way traffic through this area. Nine semi-modern campsites are accessed from the main roadway. A modern, accessible comfort station (Figure 3.12) is located between the camping area at the north end of the boxhead canyon and this portion of Canyon Campground. This comfort station includes showers and is fully compliant with current standards for accessibility, as is a fully accessible campsite.

Table 3.1 – Campground Detail for the Canyon Campground

<table>
<thead>
<tr>
<th>Campground amenity</th>
<th>Canyon Campground</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semi-modern sites</td>
<td>9</td>
</tr>
<tr>
<td>Unimproved sites</td>
<td>8</td>
</tr>
<tr>
<td>Comfort Station</td>
<td>1</td>
</tr>
<tr>
<td>Sanitary dump station (in southern portion of area)</td>
<td>1</td>
</tr>
</tbody>
</table>

Swimming Pool Area

Red Rock Canyon Road continues southward, again crossing the creek. A swimming pool (Figure 3.13) is located just southwest of the point at which the roadway crosses the creek. This swimming pool was renovated in 2013 with new water play features, a rock climbing wall, and new mechanical and hydraulic systems. Safety equipment is available within the pool area.
Chemicals and hydraulic equipment essential for the pool operation are housed securely at the north end of the swimming pool in the adjoining mechanical building. This area is clearly marked as restricted, with identification placards for the chemicals and electrical hazards that are present. Three parking spaces are located near the pool house with additional parking in the adjacent grassy area. Three unimproved camping or picnic sites are also located south of the swimming pool.

Renovations during 2013 included addition of a double flume water slide, several water play features, and a rock climbing wall. In addition, the area south of the swimming pool includes access to the canyon wall for rappelling. This area is designated as Swimming Pool Rappelling Area as shown in Figure 3.13a.

**Figure 3.13a – Swimming Pool Rappelling Area**

**Walnut Grove**

About a quarter mile further south along Red Rock Canyon Road, the main park road is intersected by a roadway heading east: this is Group Camp Road. As shown in Figure 3.14, Walnut Grove Area includes a day use area, a campground, and the group camp within Red Rock Canyon State Park. The area east of the creek is considered to be Walnut Grove.

**Figure 3.14 – Walnut Grove**
Walnut Grove day-use offers open, shaded space with picnic tables, a picnic shelter, a playgroup, and other amenities for picnicking and recreational activity. The area is accessible by roadway from Red Rock Canyon Road and by a bridge (Figure 3.14) across the creek through the middle of Red Rock Canyon. The day use area is accessible along a sidewalk from the parking lot, with that sidewalk leading past the playgroup to the picnic shelter. The parking lot can accommodate five cars with one accessible parking space. The restroom in Walnut Grove is an older design and installation, not fully compliant with current construction standards or accessibility guidelines. There are also picnic tables distributed throughout this area on the relatively flat canyon floor.

Walnut Grove campground (Figure 3.16) parallels Red Rock Canyon Road, but is a separate drive. Nine back-in semi-modern campsites are situated on the west side of this campground access road. Three modern sites are located inside a loop road at the south end of the campground.
The three full hook-up sites in Walnut Grove were observed to be in high demand throughout preparation of the RMP. Park personnel indicated that there is latent demand for additional full hook-ups in Red Rock Canyon State Park.

**Table 3.2 – Campground Detail for the Walnut Grove Campground**

<table>
<thead>
<tr>
<th>Campground amenity</th>
<th>Walnut Grove Campground</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semi-modern sites</td>
<td>9</td>
</tr>
<tr>
<td>Modern sites</td>
<td>3</td>
</tr>
<tr>
<td>Comfort Station (in the day use area)</td>
<td>1</td>
</tr>
<tr>
<td>Sanitary dump station (in Canyon Campground)</td>
<td>1</td>
</tr>
<tr>
<td>Playgroup in day use area (in the day use area)</td>
<td>1</td>
</tr>
<tr>
<td>Picnic shelter in day use area (in the day use area)</td>
<td>1</td>
</tr>
</tbody>
</table>

The day use portion of Walnut Grove includes a picnic shelter, a comfort station, and playgroup (Figure 3.17). The picnic shelter includes parking for 10 to 12 cars, with one spot designated for persons with disabilities. The playgroup is also fully compliant with CPSC and accessibility guidelines, supported by a walkway to the parking area with designated accessible parking. The comfort station in this area is of the older design and installation. As a result, it is not fully compliant with current standards for accessibility.

Campers in Walnut Grove may utilize comfort stations in the Walnut Grove day use area or across the creek in the southern portion of Canyon area.

*Figure 3.17 – Walnut Grove picnic shelter*
Walnut Grove Group Camp

Walnut Grove Group Camp is located in a box-head canyon at the eastern end of Group Camp Road. The entry to the group camp is located between Walnut Grove day use area and Walnut Grove campground. This entrance can be closed and secured, limiting vehicular access into the group camp. The group camp is visible from outside its immediate location, but is somewhat separated by geography.

**Figure 3.18 – Entry to group camp**

Walnut Grove Group Camp includes ten A-frame cabins (Figure 3.19 on the following page) that accommodate up to 140 occupants total for the camp. These bunkhouses do not have heat or air-conditioning. The kitchen in the dining hall is equipped with commercial stoves, ovens, warming or serving trays, and a walk-in refrigerator. The dining hall is heated and also has evaporative cooling. The dining hall also includes large grills for group cookouts.

Some recreational equipment is available at the group camp including a volleyball net and horseshoes. The west end of the box-end canyon provides adequate open space for a variety of group activities.

The group camp is open from May 1 through October each year. At present, the Walnut Grove Group Camp has shown a decline in use from 73 groups in 2008 to 30 groups in 2012. This decline has been steady each year, dropping from 20% occupancy during open times to less than 10% usage.

**Table 3.3 – Amenities at Walnut Grove Group Camp**

<table>
<thead>
<tr>
<th>Amenity</th>
<th>Walnut Grove Group Camp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>140 campers</td>
</tr>
<tr>
<td>Bunkhouses</td>
<td>10</td>
</tr>
<tr>
<td>RV hookup</td>
<td>None designated</td>
</tr>
<tr>
<td>Commons building</td>
<td>1 with dining hall and kitchen, storage</td>
</tr>
<tr>
<td>Comfort station</td>
<td>2 restrooms</td>
</tr>
<tr>
<td>Recreation space</td>
<td>Open field space, horseshoes, playgroup</td>
</tr>
</tbody>
</table>
Significant improvements and upgrades of Walnut Grove Group Camp occurred during 2013. These improvements included addition of accessible parking, concrete walkways from the parking to the entrances of the dining hall, to the restrooms, to one bunkhouse, and to a new accessible playgroup and fire ring. Several of these improvements are shown in Figure 3.19.
Canyon Area (Southern portion)

Returning to Red Rock Canyon Road and crossing the creek, a visitor re-enters Canyon Area. Canyon Area continues for about a quarter mile south of the intersection leading into Walnut Grove. This portion of Canyon Area includes day use and tent camping.

There are two picnic shelters in this portion of Canyon. These shelters are designated as Sycamore, on the west side of the creek, and Red Cedar, on the east side of the creek. A comfort station is also located on the east side of the creek and serves this area. Sycamore is located between the creek and Red Rock Canyon Road and includes parking for 10 to 12 cars. However, this parking would require vehicles to be parked on grass. Red Cedar has a short drive providing access to a parking area that can accommodate about six vehicles. The comfort station in this area is of the older design and installation, as is the swing set (Figure 3.21). As a result, they are not fully compliant with current standards for accessibility.

A final amenity for park visitors is located at the extreme southern end of the Canyon area. This is a sanitary dump station for recreational vehicles. The dump station is situated along a loop allowing vehicles to have reasonable access in a drive-through design. In this location, the sanitary dump station is readily available to campers in the California Road campground as well as the Walnut Grove area, while also serving the Canyon area.

Red Rock Canyon Road is designed with a turn-around loop at this location. A gate separates Canyon from California Road further south.

Figure 3.20 – Canyon picnic shelters
Note restroom in background

Figure 3.21 – Sanitary dump station and swing set in Canyon
California Road Area

The southernmost portion of Red Rock Canyon State Park is designated as California Road campground. This campground can be closed by gate limiting access into the campground. In addition, California Road campground is divided into two units so that sites 41 – 54 may be utilized while sites 55 – 68 can be closed. A lockable gate separates these two areas within the campground.

Campsites 41 – 54 include seven back-in sites with semi-modern amenities with 30-amp service and water hookups between alternating campsites. Five pull-through sites on the east side of Red Rock Canyon Road include 50-amp electrical service. Two unimproved campsites (#48 and #49) complete this portion of the campground. A modern comfort station is situated at the south end of this group of campsites. At that location, the comfort station can serve both sections of California Road campground. Red Rock Canyon Road is a divided-one-way route through this portion of California Road campground. Traffic going south will use the southbound lane along which the seven back-in campsite spurs are located. Traffic going north on the northbound lane have access to the five pull-through sites.

The second portion of California Road campground includes sites 55 – 67. These campsites are all designed as back-in areas with 30-amp electrical service and water shared between every two sites. Red Rock Canyon Road terminates at a gate marking the end of the campground and loops back to the north permitting vehicles to turn-around at this location.

California Road campground is shaded and quiet. The terrain within the campground is relatively flat; the western side of the campground is defined by the vertical wall of Red Rock Canyon while the eastern side of the campground is defined by the creek and canyon wall beyond.
Figure 3.22 on the preceding page documents the modern, accessible comfort station located between the two sections of California Road campground. In addition, during 2013, a campsite in California Road campground was renovated into an accessible site shown in Figure 3.23. Site #68 is designed as an accessible tent campsite.

Caddo Maple picnic shelter is located at the northern end of the campground, while the newly installed playgroup is directly south of the comfort station. This playgroup complies with safety and accessibility standards, including designated accessible parking.

Table 3.4 – Campground Detail for the California Road Campground

<table>
<thead>
<tr>
<th>Campground amenity</th>
<th>California Road Campground</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semi-modern sites (1 ADA accessible)</td>
<td>25</td>
</tr>
<tr>
<td>Unimproved sites (1 ADA accessible tent site)</td>
<td>3</td>
</tr>
<tr>
<td>Trail</td>
<td>1</td>
</tr>
<tr>
<td>Comfort Station</td>
<td>1</td>
</tr>
<tr>
<td>Playgroup</td>
<td>1</td>
</tr>
<tr>
<td>Picnic shelter</td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 3.23 – Accessible site in California Road campground

Figure 3.24 – Amenities in California Road campground
Above: modern comfort station
Top right: Caddo Maple picnic shelter
Right: older swing set
The canyon wall on the west side of California Road campground provides access to the California Road Nature Trail. Some of the preferred rappelling area is also located along the canyon wall west of the California Road campground. As a result, day visitors who are rappelling may intermingle with overnight guests in the campground.

**Hiking/Walking Trails**

As mentioned within the various discussions for sections of Red Rock Canyon State Park, there are several trails distributed throughout the property. These trails are intended for walking and hiking. There is no accommodation of mountain bikes, off-road-vehicles (ORVs) or horses within Red Rock Canyon State Park.

The Rough Horsetail Nature Trail is a nature trail at the north end of Red Rock Canyon State Park. It is accessible from Canyon campground. Rough Horsetail Nature Trail is approximately one-half mile in length within the box canyon at the north end of the park leading into the Caddo Maple Conservation Area. Interpretive signs correlate with information on brochures to provide interpretation of plant life and other features within the park. However, several of these signs are in need of repair or replacement.

Old Timers Spring Trail also follows the creek in this area, but is not well marked.

The second interpretive trail in Red Rock Canyon State Park is the California Road Trail. The California Road Trail is accessed from the northwest portion of California Road campground. This trail is a portion of the wagon road used between 1852-1888 by gold-seeking pioneers traveling to California. Wheel ruts left by these pioneers can still be seen in the rock of Red Rock Canyon (Figure 3.26). The trail loops northward along the canyon wall and then turns south parallel to the western park boundary before looping back to California Road campground.

Other trails are located primarily along the eastern portion of Red Rock Canyon at various elevations on the canyon wall. One trailhead is located near Balancing Rock and may be accessed from the north end of Canyon campground in the box-head canyon. The trail follows the canyon rim and permits a hiker to walk to the southern end of Red Rock Canyon State Park.

![Figure 3.25 – Rough Horsetail Trail](image)
Various other trailheads emanate from locations within the park and permit access to this longer section of the trail. Trailheads are located at (1) Walnut Grove, (2) several locations within the group camp, (3) the north end of California Road campground, and (4) the south end of California Road campground.

At numerous locations within Red Rock Canyon, visitors have climbed the canyon walls and made hand/foot holds in the sandstone (Figure 3.27). These locations become voluntary trailheads providing access from the canyon floor to the trails which are north/south on the canyon rim.

Trail maps available at the park office identify many of these trails by color and distance. Trails range from 0.17 mile to 2.8 miles in length on this map and vary in difficulty.
Property Summary

Beyond California Road area, the southern boundary of California Road campground is demarcated by a gate along a roadway that extends further south (Figure 3.28). Beyond the gate, the road extends about 600 feet further south to the property line at the southern boundary of Red Rock Canyon State Park. The area beyond the gate is accessed by park personnel in association with maintenance activities. The trails from the two sides of the canyon also link in this area south of California Road campground.

A summary of documents related to the property of Red Rock Canyon State Park is provided in the appendix. However, in brief this property summary shows the following.

- **1956:** Three Special Warranty Deeds were filed on April 6, 1956; those included the acquisition of 20 acres (including the group camp area) from the Kiwanis Club of Hinton (December 20, 1954), approximately 97 acres from the Town of Hinton (January 8, 1955), and 20 acres (rodeo grounds) from John Murphy (January 8, 1955). These properties comprise most of the northern and central portion of the park, including a former street which provided the initial access from the highway.
- **April 7, 1956:** management and operation as Red Rock Canyon State Park begins.
- **1959:** Two properties were later acquired from Clara DiBona (Baysinger) which expanded the property at the entrance where the current entry drive and park office are located, including 2.22 acres (January 31, 1959) and 2.6 acres (October 27, 1959).
- **1962 and 1963:** Land adjacent to the previously acquired Kiwanis Club property was added to the park including 38 acres above the canyon rim surrounding the group camp from Frank Burkhalter (August 29, 1962), and an additional 16.64 acres in the canyon from the Hinton Kiwanis Club (November 23, 1963).
- **1971:** The park was extended to the south with the acquisition of 99 acres from Bennie and Janice Lindley (June 17, 1971).

These acquisitions bring the total property for Red Rock Canyon State Park to 295 acres. The park property belongs to the state, an advantage in management of the resources as a state park.

Public Access and Entry Aesthetics

Public access to Red Rock Canyon State Park was discussed earlier. The only route of access for visitors by vehicle is from Highway 281. This route links to Interstate Highway 40 about five miles north of Hinton and to numerous county roads, state and federal highways south of Hinton.

Access to Red Rock Canyon State Park is provided by two-lane, hard surface routes. These access routes have limited shoulder space and traditional lane width. Speed limits from Hinton increase to 45 miles-per-hour from lesser speeds within town, while vehicles coming from the
south have transitioned from 65 miles per hour to 55 miles per hour and then to 45 miles per hour just south of the entrance to the park.

Signs for Red Rock Canyon State Park are in place along routes further from the park. For example, travelers along Interstate 40 are directed onto Highway 281 with ODOT signs providing direction and distance to the park. Similar signs south of the park direct travelers northward on Highway 281 to the park’s entrance.

**Park Visitation**

Attendance records have been kept since the opening days of the park including some notations of attendance prior to designation as a state park. It should be noted that counting park visitors is an inaccurate process. Technically, every person entering the park is a park visitor, but not all of those visitors are recreational visitors. At Red Rock Canyon State Park, every person who drives the road into the park is a park visitor – although that visitor may only experience the aesthetic and environmental values associated with the park. At Red Rock Canyon State Park a certain percentage of the visitors recorded in the park would include park staff, vendors, and members of the general public entering the park to utilize the restroom or for other purposes. Other aspects of park visitation can be calculated more accurately. This would include those situations in which there is an exchange of a fee for a specific service. As a result, the following discussion reports total visitation to Red Rock Canyon State Park and specific usage of particular areas within the park.

For clarity in understanding of visitation patterns, total park visitation is presented in the following discussion. This would include group camp guests, campers and day visitors.

**Recreational Use of Park Facilities**

Visitation for Red Rock Canyon State Park has trended downward over the past five years based on reported figures for campers and group camp guests. Total visitation, including day visitors, was not reported for 2010 and 2011. Total visitation includes day visitors and overnight visitors. The day visitors include sightseers, swimmers, picnickers, trail hikers, and many other recreational visitors. Overnight visitors include campers and group campers who spend one or more nights within Red Rock Canyon State Park.

Determining the number of campers is more accurate than is the calculation of total visitors to the park. Total visitors are calculated based on traffic counters and a proxy variable for number of occupants in vehicles passing entry points into the park. Total number of visitors should not be interpreted as “individuals” in that numerous individuals are repeat visitors to the park on a daily, weekly, monthly, or annual basis. In addition, visitors frequently enter a park, exit the park, and re-enter during a single day. These would be counted as multiple visitors.

It is difficult to identify exactly how many campers are individually associated with a registration for a campsite. In the campgrounds, records are maintained of the number of campsites rented. As demonstrated in the photographs presented it is fairly common for one campsite rental to include a recreational vehicle and one or more tents. In addition, it is common for multiple motorized vehicles to be associated with a single campsite rental. Logically, group size associated with a single campsite rental can vary greatly.
Table 3.5 – Camping and Total Visitation

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>Campsites rented - improved</th>
<th>Campsites rented - unimproved</th>
<th>Total Visitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>3,411</td>
<td>1,786</td>
<td>185,331</td>
</tr>
<tr>
<td>2009</td>
<td>3,096</td>
<td>1,458</td>
<td>143,686</td>
</tr>
<tr>
<td>2010</td>
<td>3,658</td>
<td>1,435</td>
<td>Not available</td>
</tr>
<tr>
<td>2011</td>
<td>3,502</td>
<td>1,439</td>
<td>Not available</td>
</tr>
<tr>
<td>2012</td>
<td>3,634</td>
<td>1,536</td>
<td>112,037</td>
</tr>
</tbody>
</table>

Table 3.6 presents the campsite rentals for the past five years. These sites are defined as improved or unimproved, for which the category of improved sites include modern and semi-modern site design. The number of campsites available varies slightly as new sites are developed, old sites are taken “off-line,” and new campground design changes the configuration of a campground. The number of campsites available is an estimate, calculated based on number of sites of a given category multiplied by 365 and reduced by 5% for days on which individual sites may have been unavailable due to maintenance or construction.

Table 3.6 – Camping at Red Rock Canyon State Park

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>Type of campsite</th>
<th>Campsites rented</th>
<th>Campsites available*</th>
<th>Occupancy rate on campsites</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>Unimproved campsites</td>
<td>1,786</td>
<td>1,734</td>
<td>102.9</td>
</tr>
<tr>
<td></td>
<td>Improved campsites</td>
<td>3,411</td>
<td>16,297</td>
<td>20.9</td>
</tr>
<tr>
<td>2009</td>
<td>Unimproved campsites</td>
<td>1,458</td>
<td>1,734</td>
<td>84.1</td>
</tr>
<tr>
<td></td>
<td>Improved campsites</td>
<td>3,096</td>
<td>16,297</td>
<td>19.0</td>
</tr>
<tr>
<td>2010</td>
<td>Unimproved campsites</td>
<td>1,435</td>
<td>1,734</td>
<td>82.7</td>
</tr>
<tr>
<td></td>
<td>Improved campsites</td>
<td>3,658</td>
<td>16,297</td>
<td>22.4</td>
</tr>
<tr>
<td>2011</td>
<td>Unimproved campsites</td>
<td>1,439</td>
<td>1,734</td>
<td>83.0</td>
</tr>
<tr>
<td></td>
<td>Improved campsites</td>
<td>3,502</td>
<td>16,297</td>
<td>21.5</td>
</tr>
<tr>
<td>2012</td>
<td>Unimproved campsites</td>
<td>1,536</td>
<td>1,734</td>
<td>88.6</td>
</tr>
<tr>
<td></td>
<td>Improved campsites</td>
<td>3,634</td>
<td>16,297</td>
<td>22.3</td>
</tr>
</tbody>
</table>

*Based on number of total sites, either improved or unimproved, less 5% for maintenance.

It should be noted that the park manager at Red Rock Canyon State Park challenged the assumption that 5% of the campsites may be unavailable because of maintenance or construction.
He indicated that any work is performed immediately and all campsites are available each day. However, for uniformity in comparison with other state parks and the model that has been used in preparation of the RMPs, the research staff used this calculation. As a result, occupancy of unimproved campsites in 2008 exceeded 100%.

The occupancy rate on unimproved campsites is hindered by extremes of weather since these sites do not have electricity. The summers of 2011 and 2012 were particularly hot and dry. These conditions likely affected the numbers of guests interested in staying in an unimproved site during the summer months. However, occupancy of the unimproved campsites at Red Rock Canyon State Park is extremely high.

In the same manner, group camp rentals have declined over the five-year period. Table 3.7 reports the number of nights each year rented at the group camp. Based on these numbers, group camp rentals at Red Rock Canyon State Park have declined by 58% during the past five years, a decline similar to that reported at other group camps in Oklahoma State Parks. This may reflect the lack of air-conditioning in the bunkhouses, a change in behavior among potential group camp guests, or a change in marketing efforts.

### Table 3.7 – Group Camp Guests at Red Rock Canyon State Park

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>Total Group Camp nights</th>
<th>In-state Group Camp guests</th>
<th>Out-of-state Group Camp guests</th>
<th>Percent occupancy*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>73</td>
<td>NA</td>
<td>NA</td>
<td>20%</td>
</tr>
<tr>
<td>2009</td>
<td>59</td>
<td>NA</td>
<td>NA</td>
<td>16%</td>
</tr>
<tr>
<td>2010</td>
<td>53</td>
<td>NA</td>
<td>NA</td>
<td>14%</td>
</tr>
<tr>
<td>2011</td>
<td>49</td>
<td>NA</td>
<td>NA</td>
<td>13%</td>
</tr>
<tr>
<td>2012</td>
<td>30</td>
<td>NA</td>
<td>NA</td>
<td>8%</td>
</tr>
</tbody>
</table>

*Group camps are closed from October 15 to March 31 annually.

### Public Perception of Red Rock Canyon State Park

At the time of preparation of this resource management plan, the authors reviewed numerous websites and marketing sources related to Red Rock Canyon State Park, which were provided by private sources. Further, private citizens and visitors to Red Rock Canyon State Park maintain personal “blogs” and social networking sites that address their experiences and visits to the park. These blogs addressed activities such as hiking the various trails, staying at the group camp, or camping, but addressed Red Rock Canyon State Park in some manner. For the purpose of the RMP, these comments are presented with the language, spelling, and other details left intact. Examples of comments from visitors include:

- We took our kids to Red Rock for an early breakfast and exploring adventure. They played on the playground equipment which has a couple of artificial rocks to climb on. I will say that I wish there was a larger play structure as they were quickly bored. We did
hike the first trail when you pull into the park. It was a blast! A very enjoyable hike for the kids to explore and adventure. Loved it!

- Spent the day with my son hiking and climbing the entire top of the canyon both sides. Beautiful place, clean and a great family getaway. Fun for all.
- My husband wanted to show the kids something interesting and relaxing at the same time. We all enjoyed the view as we were going into the park and we also got off and did some walking. My son enjoyed climbing and the trails. My husband said that was his best father’s day he had. We plan to go back!
- We were not very impressed, the canyon is not very deep, the trails are small, not well maintained and very short, it took us only 20 minutes to walk them, the canyon itself is only about a mile long, so in the busy season, we imagine this place is very cramped and crowded, it is a very small state park, we drove 4 hours to get there and thought it would be big enough to explore all day and spend the night somewhere, needless to say we saw it all in 20 minutes and drove 4 hours back home.
- Beautiful campground, very clean, very quiet. No road noise at all. It is a very nice place to stay.
- A nice little state park which preserves red rock cliffs in a natural area. Easy to drive through and view from the inside, it also enables people to camp and hike and climb the rock walls. But it is a geological treasure for those who are interested in reading up on how it was formed and why it is located here in a state of the Southern Plains. Staff was smiling, friendly and welcoming, too.
- We have travelled to this site every October for the past five years. It is a perfect spot for a cookout and for the kids to go climbing on the... what else... red rocks! There are even places where one can climb up or down the various cliffs with climbing ropes. The facilities in October are extremely limited, but some restrooms are open. It is a simple park area, about 120 feet below the surrounding grade. Use low gear to descend. Take only photographs. Leave only footprints.
- Oklahoma may not have very many large state or national parks but Red Rock Canyon is proof that good things can happen with small areas. This lovely little patch of land is great for camping and hiking and even climbing. Beautiful scenery and nice campgrounds is what really makes this place great. While I couldn’t see staying here for a week, it is a great weekend spot. This canyon has had visitors going back a long time. The local tribes used it in winter as a campground and after that settlers going down the California Road stopped here as well (look for the ruts from the wagons being lowered down in the canyon walls). The best word of advice for this place I can give is to avoid it during the summer months because there’s no breeze and it’s like an oven. It’s best to go during the fall or spring. If you like winter camping this is the perfect place for you. Because what makes it a must avoid during the summer, the fact that it’s a narrow canyon with no breeze, makes it perfect during the winter because there is usually no wind. I’ve stayed comfortable in the canyon in a tent when it’s dropped down to seven degrees Fahrenheit. So make the effort to come see this little canyon. You’ll be glad you did.
- Scenery is what Red Rock is all about. There are plenty of campsites. Rock climbers love it here. Photo ops galore.
- We stayed at Red Rock the night of April 21st and were set up at the very end of the California Rd Campground. The area is beautiful - bright green trees on a backdrop of brilliant red canyon walls. The park is well-maintained. Even while we were there,
maintenance workers were removing dead tree limbs. The facilities are clean and up-to-date (even cleaner than in some national parks I’ve been to). The only problems were with the guests. We were the only visitors with LEASHED dogs. Everyone else was letting their dogs run free. There were three loose pets just in our area. One pair of campers left their fire burning after they packed up and left the campground. Another set of about 10 people stayed up until 1am yelling, laughing, fighting, playing basketball, riding their bicycles, playing music ... and no rangers ever told them to stop (even though the campground quiet hours begin at 11pm). It’s really too bad because this park is exceptional in all other ways – but irresponsible redneck rv “campers” ruin it for the real campers out there. There is a fee, but only for overnight campers.

- The staff there is the best. Emily was the best campground attendant we have ever encountered. Jennifer, who ran the office/gift shop was just awesome!! Lots to do and see there. We will definitely be returning!

**User Evaluations of Red Rock Canyon State Park**

The most formal and scientific evaluations for Red Rock Canyon State Park were generated during the 2003 park visitor survey (Caneday & Jordan, 2003). Although these evaluations are now somewhat dated, these evaluations were the result of on-site interviews with park visitors contacted at various locations throughout the park. The analysis of the data from these interviews was reported by category of type of visitor: day visitor or camper. Although dated, this visitor survey is the most recent thorough analysis of attitudes and opinions represented by visitors to Oklahoma state parks. Since contacts were made at public locations throughout the park, the determining factor for classification of the visitors was their respective place of lodging during the visit on which they were contacted.

Day visitors to Red Rock Canyon State Park were familiar with the park, averaging approximately six visits per year. Almost 90% of all day visitors interviewed were repeat visitors to the park. The most frequent recreational activities reported by these day visitors were picnicking, observing wildlife, hiking, walking and climbing (rappelling). Day visitors tended to be satisfied with their experiences at the park. The park was the primary destination for all of the day visitors in this study, who were motivated to visit the park by the activities available within the park.

Day visitors tended to be in groups, ranging up to five individuals, with the most common grouping of day visitors being two members. The day visitors contacted during the survey tended to be white, non-Hispanic with a high school education or above. More than 60% of the day visitors were college graduates. They ranged in age from 27 to 52 years of age, with a median of 35 years of age; they included similar numbers of males and females. Since these individuals were day visitors, most had traveled a limited distance to get to Red Rock Canyon State Park, reporting a mode of two miles in travel. As a result, it can be concluded that many of the day visitors were residents of Hinton and the surrounding rural area. However, the mean distance traveled by day visitors was 34 miles indicating they may have come from Weatherford, Anadarko, or the western suburbs of the Oklahoma City metropolitan area.

Campers at Red Rock Canyon State Park were also quite familiar with the park in that approximately 60% of respondents were repeat visitors. These visitors tended to get to Red Rock Canyon State Park three times a year. These campers participated in a wide range of recreation activities, but most frequently they walked or hiked, drove for pleasure (sightseeing), observed
wildlife, or just relaxed in the park. Campers expressed great satisfaction with the facilities provided in the park.

Red Rock Canyon State Park was the primary destination for 80% of the campers contacted in the survey. For the vast majority of these respondents, Red Rock Canyon State Park offered a “weekend get-away.” They chose to visit the park to relax or rest and to be with friends or family, with the single highest factor in motivation being “enjoy nature.” All of the responding campers were white and non-Hispanic. In addition, the campers were well educated in that two thirds had some college or had graduated from college.

Campers reported having traveled an average of 171 miles on their visit to Red Rock Canyon State Park, although the median distance traveled was 77 miles and the mode was 60 miles. This would indicate that visitors tended to drive less than two hours to visit the park.

**Park Management**

Over the years of operation, the management structure for various state parks in Oklahoma has changed at the direction of leadership within OTRD from Oklahoma City. However, Red Rock Canyon State Park has been quite stable in organization and operation throughout the years.

Red Rock Canyon State Park is currently included in the Western Region of Oklahoma State Parks. This intermediate management structure allows park management to work with regional oversight as an intermediary or through direct contact with the Oklahoma City office. As with all state parks in Oklahoma, personnel, purchasing, contracting, and all other aspects of operation are governed by Oklahoma state statutes, policies, and procedures.

**Staffing**

Total park staffing for Red Rock Canyon State Park has been stable over the past five years, although the composition of that staff has changed during that time. During preparation of the RMP, Red Rock Canyon State Park was staffed by one individual living on-site and six seasonal employees. Table 3.8 documents the staffing pattern for Red Rock Canyon State Park in recent years.

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>Permanent salaried staff</th>
<th>Seasonal staff Park</th>
<th>Total park staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>3</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>2009</td>
<td>3</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>2010</td>
<td>3</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>2011</td>
<td>2</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>2012</td>
<td>1</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
Most state parks in Oklahoma experienced similar staffing adjustments in response to budgetary appropriations. Red Rock Canyon State Park has sustained a dedicated, loyal manager over the years. In addition, affiliation with Southwestern Oklahoma State University has provided additional seasonal staff members on a fairly consistent basis. These individuals provide valuable service to the park while increasing their knowledge of park management. As reflected in comments from the public, staff at Red Rock Canyon State Park maintains very positive public relations.

Revenue and Expenses

Data related to revenue and expense at Red Rock Canyon State Park was provided by the park manager and staff. Table 3.8 reports this revenue and expense data for the past five years.

The principal revenue sources for Red Rock Canyon State Park are campsite rentals and group camp rentals. Most other services within the park are supported through state appropriations and allocation of state budgeted funds. Once the swimming pool is reopened, this will be an additional revenue source – and expense. As a result, the difference between revenue and expense for operation of Red Rock Canyon State Park has ranged from $200,000 to $250,000 annually, with a reduction in that difference in 2011 and 2012. Such expense is reflected in operation of the swimming pool, general maintenance and operations of buildings, mowing and other grounds maintenance, and related park operations.

Based upon the revenue and expense numbers for the past two years, Red Rock Canyon State Park has generated revenue covering operating expenses other than personnel costs.

Table 3.9 – Expense and Revenue at Red Rock Canyon State Park

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>Expense</th>
<th>Revenue</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Revenue - expense</td>
</tr>
<tr>
<td>2008 Total</td>
<td>$254,888</td>
<td>$118,935</td>
<td>($236,233)</td>
</tr>
<tr>
<td>Personnel Expense</td>
<td>$100,280</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Expense</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009 Total</td>
<td>$261,914</td>
<td>$108,109</td>
<td>($250,335)</td>
</tr>
<tr>
<td>Personnel Expense</td>
<td>$96,530</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Expense</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010 Total</td>
<td>$250,210</td>
<td>$115,162</td>
<td>($226,286)</td>
</tr>
<tr>
<td>Personnel Expense</td>
<td>$91,238</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Expense</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011 Total</td>
<td>$228,237</td>
<td>$117,814</td>
<td>($207,733)</td>
</tr>
<tr>
<td>Personnel Expense</td>
<td>$97,310</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Expense</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012 Total</td>
<td>$222,390</td>
<td>$117,223</td>
<td>($206,326)</td>
</tr>
<tr>
<td>Personnel Expense</td>
<td>$101,158</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Expense</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hazards Analysis – Natural and Operational

Any recreational activity includes the exposure to hazards, and the probability of specific risks may increase in many outdoor settings. In most current discussions related to hazard and risk, hazards are defined as conditions or events. Risk is the likelihood of injury resulting from a given hazard and is typically defined as a probability of adverse effects from those conditions or events. Everything people do exposes them to hazards. It is how people conduct themselves that determines the risk. An agency or site risk management plan addresses potential loss from anticipated hazards.

Natural Hazards

As with all natural areas, Red Rock Canyon State Park includes a number of hazards. Some of those hazards are natural and related to such things as topography, flora, and fauna. Some of the hazards are structural or related to design; other hazards are operational in nature.

Natural hazards in Red Rock Canyon State Park include the terrain, flora and fauna, as well as a number of other natural conditions or events. In addition, the development of facilities encourages visitors to interact with the natural environment, encouraging people to participate in recreation in an outdoor setting. For example, the establishment of designated rappelling locations encourages that activity and the associated risks. Quite commonly, the visitor is not informed of the various hazards and is not prepared for the risks involved in their interactions. Red Rock Canyon State Park does an excellent job of informing visitors regarding potential risks associated with rappelling. Due to the topography of Red Rock Canyon State Park, it is virtually impossible for an individual to become “lost” on property. Heat, thirst, falls, weather events, and exposure present greater risks for most visitors.

Among the natural hazards present in the park are those associated with weather events. The National Climatic Data Center reports a variety of such hazards by county over several years. These hazards include hail, floods, thunderstorms with accompanying wind and lightning, tornadoes, heavy snow, ice, excessive heat, and drought. Staff members are prepared to notify park visitors in the event of severe weather, but appropriate shelter is limited. At the present time, neither signage nor printed visitor materials provide severe weather information to park visitors. Park management reported that flooding of Red Rock Canyon Road does occur once or twice a year. Those flood waters subside quickly, but park visitors are temporarily confined to the floor of the canyon.

Other natural hazards are related to life forms in the natural environment. Any time people are hiking and recreating in an outdoor environment, a chance exists that they will inadvertently encounter such wildlife; this is the case in Red Rock Canyon State Park. The park and forest encompass an environment suitable for venomous snakes including the copperhead and various species of rattlesnakes, although no rattlesnakes have ever been found in the park. There are no recent records of any adverse encounters between people and snakes within the park.

A number of mammals common to the park are subject to rabies. They include raccoons, opossums, skunks, badgers, and bats. Additional animals include armadillos and the possibility of coyotes, bobcats, and foxes, although these are less likely.

The prairie and grassland environment in and around Red Rock Canyon State Park is home to mosquitoes, ticks, and spiders, all of which may be hazards or present hazards to recreational
visitors. The Brown Recluse spider and the Black Widow are native to Caddo County. Both spiders have produced adverse effects for humans in recreational settings (and other environments). Both types of spiders were observed in outdoor structures in the park, including picnic shelters. In addition, ticks are known carriers of a number of serious diseases in humans.

The 2002 Statewide Comprehensive Outdoor Recreation Plan (Caneday, 2002) stated:

An “environmental problem” of increasing occurrence in Oklahoma in recent years is related to ticks and tick-transmitted diseases. Although there are a number of tick-transmitted diseases, the most frequent occurrence is shown by Rocky Mountain spotted fever, Lyme disease, and Tularemia. A number of factors are related to this increased occurrence of disease including demographics, living preferences, and recreational behavior. Oklahoma has experienced significant increases in tick-transmitted diseases over the past decade. While most of these diseases can be treated, the diseases can also be life threatening. Participants in outdoor recreation are among those who encounter the ticks and who contract the tick-transmitted diseases. A concerted, unified effort is necessary to educate the recreational visitor regarding the results of recreational behaviors.

At the time of the writing of the 2002 SCORP, the author contacted the Centers for Disease Control (CDC) in Atlanta regarding rumors (at that time) of a mosquito borne virus, West Nile virus. The CDC assured Caneday that Oklahoma would not experience West Nile virus within the five-year period covered by the 2002 SCORP (2002-2007). However, by summer 2003, Oklahoma was experiencing cases of West Nile virus among horses and humans. Often these resulted from outdoor recreation activity, and that pattern is continuing. Equine activity is not permitted within Red Rock Canyon State Park, but does occur outside park boundaries.

Some plants are also hazardous to some individuals and the risk varies by degree of exposure and response to that exposure. Poison ivy is among those potentially hazardous plants at Red Rock Canyon State Park.

Another potential natural hazard in a recreation environment is waterborne disease. As stated in the 2002 Statewide Outdoor Recreation Plan (SCORP) for Oklahoma (Caneday, 2002):

Since 1971, Federal agencies (CDC and EPA) have maintained a collaborative surveillance system for collecting and reporting data related to occurrences and causes of waterborne-disease outbreaks (WBDOs). As an environmental hazard, waterborne diseases have always been present in the United States; however, outbreaks linked to drinking water have steadily declined since 1989. By contrast, the number of outbreaks linked to recreation activity has increased (Center for Disease Control). It is not clear whether this is due to increased outdoor recreation activity, larger numbers of people involved in outdoor recreation, or greater hazard present in the water environment. CDC reports for 1995 – 1996 have shown that the exposure to the disease occurred in lakes in 59% of waterborne-disease outbreaks of gastroenteritis associated with recreational water. Equal percentages (27%) of Cryptosporidium parvum and Escherichia coli as the etiologic agent were reported during that period.
Red Rock Canyon State Park receives its potable water from wells, with storage in a 10,000 gallon tank (Figure 3.29). As with all water supplies, there is the potential to be a host for waterborne disease through the drinking water provided on-site. Such a risk is no greater for a park visitor than would be true in a private residence. The major concern related to delivery of potable water to Red Rock Canyon State Park is associated with the placement and condition of the water tank on the eastern canyon wall. A leak from the tank has caused erosion, undercutting the support for the tank. As a result, potential destabilization of the water tank could present serious problems.

A new water well has been proposed, as have pressure tanks at the well location which would eliminate the need for the elevated storage tank. Removal of the existing water tank has not been included in capital projects proposed at this time.

**Operational Hazards**

Operational hazards include those vulnerabilities to park staff, the park system, or the state of Oklahoma that exist as a result of management or operation of the resource and application of policy. Management and operational decisions are made on a daily basis and are affected by budgets, prioritization within the state park system, staffing patterns, local and state politics, and other external influences.

At present, emergency fire service and other emergency services are provided by the volunteer fire department in Hinton. Emergency response time is estimated at one minute. The game warden for Caddo County provides law enforcement assistance, as does the Caddo County sheriff’s office. Emergency medical care is also available in Hinton with an approximate response time of 10 minutes.

As part of the data collection for the development of this RMP, the researchers conducted several on-site visits to Red Rock Canyon State Park. Common issues that could be dangerous for visitors include trails and stair-steps which utilize a variety of surfacing materials. Sections of some of the trails throughout Red Rock Canyon State Park show erosion and tripping hazards. In particular, several of the wood bridges are in need of repair.

By contrast, the newly installed playgroup in Red Rock Canyon State Park provides safe and accessible play opportunities for visitors. The surfacing and walkways associated with the playgroups in Walnut Grove and those added in 2013 is fully in compliance with ADA standards and guidelines appropriate to these up-to-date installations.
Weather-related events (e.g., thunderstorms, lightning, ice storms, and strong winds) in Oklahoma often result in tree and limb damage throughout the park. Although the canyon is somewhat sheltered, recent drought has stressed many trees resulting in disease, weakening, and death of many trees (Figure 3.28). Currently, Red Rock Canyon State Park does not have a formal limb management or tree replacement program; this is common throughout the state park system. Park management has been diligent with a planting program over the years, completely on a voluntary basis. The fuel load present on the canyon rim presents a serious potential for wildfire with associated risks for life and property. Most of the dead timber appears to be within park boundaries on the shallow soils at the top of the canyon.

Law Enforcement

For most Oklahoma State Parks, CLEET certified rangers and reserve-CLEET certified rangers are responsible for primary activity related to law enforcement within the boundaries of the park. At present under the staffing and management provided through Red Rock Canyon State Park, there are no CLEET certified rangers available for Red Rock Canyon State Park, although there were two CLEET officers until 2010 as shown in Table 3.10. As a result, enforcement of applicable laws at Red Rock Canyon State Park relies primarily on the authority of the park manager, with assistance from surrounding law enforcement personnel in other jurisdictions.

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>CLEET Certified</th>
<th>Reserve CLEET</th>
<th>Total ranger staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2009</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2010</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2011</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2012</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Citation records for Red Rock Canyon State Park were provided by park management. During the most recent time period, there have only been incidents and citations in each of the past three years. The number of reports has increased since 2009. Based on conversations and review of these incident reports, many of the records are associated with domestic issues, alcohol consumption, and vehicle operation within the park.

The numbers and types of incidents and citations at Red Rock Canyon State Park are fewer than those occurring in any of Oklahoma’s state parks.
Table 3.11 – Citation and Incident Reports at Red Rock Canyon State Park

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>Incident reports</th>
<th>Citations issued</th>
<th>Arrests</th>
<th>Combined total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2009</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2010</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2011</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>2012</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Policy-Related Exposures

Some aspects of management of hazard risk are incorporated into law enforcement. Park rangers are the law enforcement personnel for the Oklahoma Tourism and Recreation Department, although they frequently have cooperative (mutual aid) agreements with county sheriffs and the Oklahoma Highway Patrol. Law enforcement authority for Oklahoma State Park Rangers is authorized by state statute as follows (Title 74 § 2216, 2005):

> Park rangers, when commissioned, shall have all the powers of peace officers except the serving or execution of civil process, and shall have in all parts of the state the same powers with respect to criminal matters and enforcement of the laws relating thereto as sheriffs, highway patrolmen [sic] and police officers in their respective jurisdictions and shall possess all immunities and matters of defense now available or hereafter made available to sheriffs, highway patrolmen, and police officers in any suit brought against them in consequence of acts done in the course of their employment, provided, however, they shall comply with the provisions of Section 3311 of Title 70 of the Oklahoma Statutes.

In parks with CLEET certified or reserve certified personnel, written logs are maintained by park staff to document incidents. In addition to the regular log, staff members complete incident reports when notified of property damage or personal injury to visitors or staff. While the incident reporting form requires information regarding personal injury or property damage, the process does not appear to require follow-up with the reporting party.

In terms of wildlife, while a formal management plan does not exist, staff operates under an agreed-upon plan approved by the Oklahoma Division of Wildlife Conservation (ODWC). As an important natural resource in the park, the vulnerable and endangered species in the area lack a management plan other than classification by ODWC and USFWS.

Perhaps one of the most essential operational hazards related to the public is the concern that cell phones and radios have limited to sporadic service in rural areas, and possibly within the park. During the preparation of the RMP, research staff members were able to acquire and maintain cell phone signals at all locations within Red Rock Canyon State Park. Thus, in case of injury, illness, fire, or other emergency, park visitors with personal cell phones should be able to contact...
necessary emergency services. Those without personal cell phones or with inadequate signals must use a landline based telephone to call emergency personnel.

**Waste Management**

The relatively large and distributed area of development at Red Rock Canyon State Park requires multiple programs in waste management. There are two primary concerns related to waste management within the park: solid waste and liquid waste.

Solid waste is transported off-site under a multi-year contract with Republic Services. Dumpsters have been located at strategic points within the park. Visitors are expected to dispose of waste properly in these dumpsters.

Liquid waste is managed on-site through a septic system for the park residence with the remainder of the park facilities served by a lagoon. Park management indicated that some of the lift stations which pump to the lagoon system were installed in 2010. However, the lagoon is much older and does not have a liner. As a result, seepage of waste liquids is a possibility although there is no evidence of leakage. The lagoon is small for the estimated volume of sewage pumped to it.

The septic systems are older than the lagoon system. The park residence, the park office, the RV dump station near the office, the maintenance building, and the pool bathhouse are all on septic systems (tanks with lateral lines).

Park management did not express any other concerns or problems with waste management at Red Rock Canyon State Park. As with any area that is utilized by the public, some trash and litter is present within the park, although Red Rock Canyon State Park was remarkably free of litter. This solid waste presents a visual detraction, but presents limited problems other than clean-up of the area.

*Figure 3.31 – Entry to Red Rock Canyon with ornamentals*
Overview and Summary

In this Resource Management Plan, background is provided related to Red Rock Canyon State Park. When analyzed, this information raises several issues for consideration. These issues are presented in the following discussion with alternatives for management to consider. In each case, based on the available information a preferred alternative is identified.

Issues and Alternatives

Issue Statement 1: Qualification and branding as a state park

One of the central issues for consideration related to each of the properties being reviewed during the Resource Management Plan project is qualification and branding as a state park. That question may not be as apparent for Red Rock Canyon State Park as for other properties, but several aspects of management as a complex, developed park require resolution of this issue for this property.

What is a state park? Jordan and Caneday addressed this question in an earlier report for OTRD as a part of the state park visitor study in 2003 (Caneday and Jordan). As stated in that report –

The research team believes that the term “state park” should mean something specific. The term, “state park,” should identify a property distinctively through management practices, quality of experience and appearance to the public. The research team believes that visitors to Oklahoma “state parks” should know immediately that they are in a State Park because of the distinctive “branding” apparent to the visitor and deliberately intended by management. The research team believes that the Oklahoma Tourism and Recreation Department must jealously guard the use of the term “state park” in much the same manner as companies protect symbols of intellectual property.

An example of resource qualifications for specific classifications can best be demonstrated through the National Park Service. For a property to be classified as a National Park there must be (1) evidence of national significance for a natural, cultural, or recreational resource, (2) management of the property must be feasible, and (3) the property must be suitable within the mission, purpose, and system of the National Park Service.

By contrast, other classifications of National Park Service properties include National Monuments, National Recreation Areas, and National Preserves. National monuments must be significant natural, cultural, or recreational resources, but may be managed by entities other than the National Park Service. National preserves are limited to significant environmental resources and may vary in ownership and management of the resource. National recreation areas, including Chickasaw National Recreation Area in south-central Oklahoma, are managed for more intensive recreation in outdoor settings.
OTRD policy related to acquisition of property uses some of this language, thereby establishing a general pattern of resource qualification. These criteria include (1) state-wide significance for natural beauty, uniqueness, or other recreational and resource preservation purposes, and (2) sites which will improve the overall availability of public recreation facilities to the recreating public while possessing resource significance (Oklahoma Tourism and Recreation Commission, 1988).

In addition, branding and classification of properties within the Department has varied over the years. Minutes of the Oklahoma Planning and Resource Board (a precursor to the Oklahoma Tourism and Recreation Commission) from September 18, 1953 record the passing of a motion defining state parks, state recreation areas, state memorials, and state monuments. That variation in descriptive classification was changed by legislation during the 1980s.

Applying the national concepts to state parks in Oklahoma and utilizing the earlier definitions in Oklahoma, it could be concluded that a state park must (1) have a significant statewide natural, cultural, or recreation resource, (2) be feasible to manage by the agency, and (3) be suitable within the mission, purpose, and statewide system of state parks. If this set of qualifications is applied to Red Rock Canyon State Park, it could be concluded that:

1. Red Rock Canyon State Park offers historical, cultural, environmental and recreational resources of statewide significance. Red Rock Canyon State Park was developed under agreement by the state government, with strong local support aiding in acquisition of the original property. Red Rock Canyon State Park includes significant statewide historic resources associated with the California Road worthy of nomination and designation as a National Historic Site. Red Rock Canyon State Park encompasses a significant environmental resource as a publicly accessible canyon offering unique habitat and wildlife.

2. Red Rock Canyon State Park is feasible to manage within the agency and fits within the mission of Oklahoma State Parks. The property is owned by the state of Oklahoma. Red Rock Canyon State Park is truly a valuable property as a classic state park.

3. Red Rock Canyon State Park fits within the mission of OTRD and the park’s state purpose as a pre-eminent property with natural, cultural, historic, and recreational resources deserving of protection and management for the present and future generations.

As a result, the research team recognizes the value of Red Rock Canyon State Park as a state park.

Alternatives

A. Seek to sell the property at Red Rock Canyon State Park;
B. Seek to transfer Red Rock Canyon State Park to some other management agency;
C. Retain Red Rock Canyon State Park as an integral property in the Oklahoma State Park system.

Preferred alternative:

Alternative C: No change – continue management as it is. Retain Red Rock Canyon State Park as an integral property in the Oklahoma State Park system.
Issue Statement 2: Fire potential and fuel load

The drought of 2011 and 2012 has placed many trees along the canyon rim into such stress that the trees are dead or dying (see page 75). As a result and as discussed earlier, this fuel load is a serious hazard for the park and surrounding properties. A lightning strike or other point of ignition could have disastrous results.

Soils along the canyon rim are also quite thin – a condition that placed these trees at greater risk during the drought. Those thin soils are also subject to adverse impacts from wildfire and potentially from managed fires.

Alternatives

A. Seek advice from a forest expert and fire expert regarding possible controlled burns to reduce the fuel load;
B. Develop a vegetation management plan for the entire park;
C. No change – continue management as it is.

Preferred alternative:

Alternatives A and B: Seek advice from a forest expert and fire expert regarding possible controlled burns to reduce the fuel load; and develop a vegetation management plan for the entire park.

Issue Statement 3: Water tank and water supply

A 10,000 gallon water tank with a leak is presently the storage for potable water utilized within Red Rock Canyon State Park. As indicated in the RMP, this water tank is situated along the canyon wall on the east side of the park above portions of Canyon campground. Erosion under the water tank has the potential to destabilize the tank.

In addition, park management staff indicated that current capacity of the tank is stressed during high demand and high visitation within the park. A new water well has been tentatively scheduled to be drilled on the west side of the canyon. Discussions related to a new source of potable water have not included plans for removal of the older water tank.

Alternatives

A. Begin planning for removal of the old water tank;
B. No change – continue management as it is, leaving the water tank in place.

Preferred alternative:

Alternative A: Begin planning for removal of the old water tank.

Issue Statement 4: Latent demand for modern campsites

Presently there are three modern campsites in Walnut Grove. These campsites include sewer connections for occupants of the campsites. These campsites were continuously occupied during preparation of the RMP, verified in conversations with park management personnel. Following review of the original draft of the RMP, park management indicated there may be need for 50%
or more of the semi-modern campsites being upgraded to modern campsites. There appears to be latent demand for modern campsites at Red Rock Canyon State Park. Park management would prefer to add as many modern campsites as possible.

It is acknowledged that long-term campers prefer the convenience of sewer connections at their individual campsites. It is also recognized that long-term campers may have different expectations and different behaviors from those exhibited by short-term campers. Most of the campers at Red Rock Canyon State Park are weekend visitors. The actual level of demand has not been determined, but options for sewer connections within the park have not been available for several visitors desiring this amenity.

Research staff believes that, in general, Oklahoma is over-supplied with campsites in public parks – whether through the U.S. Army Corps of Engineers, Oklahoma State Parks, the U.S. Forest Service, the National Park Service, or other agencies. Occupancy rates are quite low as indicated in this RMP and some campsites in Oklahoma are rarely if ever used. In addition, current market price for camping does not cover the cost of construction and operation of campsites.

Alternatives

A. Install sewer connections to enhance several additional sites in Walnut Grove;
B. Ignore the latent demand for campsites with sewer connections;
C. No change – continue management as it is, while being vigilant for expectations of park visitors.

Preferred alternative:

Alternative C: No change – continue management as it is, while being vigilant for expectations of park visitors.

Issue Statement 5: Lagoon and waste management

A lagoon (stabilization pond) presently serves as the liquid waste management system for all facilities in the park that are not on septic systems (tanks with lateral lines). That lagoon does not have a synthetic liner for containment of liquid wastes in compliance with current standards and practices (see page 73), although such a liner is not required and may not be desirable. As a result, there is an increased potential for leakage from the lagoon, although there is no evidence of leakage.

The soils in Red Rock Canyon State Park are limited for septic system installation. A lagoon system is an appropriate waste management solution as are a few other modern technologies. However, the dated and unlined lagoon presents fairly serious environment risk with adverse effects beyond the park boundaries.

During initial preparation of the RMP, park management indicated the lagoon is adequate in capacity to meet present demand, but that the lack of a liner is a concern. Leakage from the lagoon has the potential to contaminate water supplies for persons outside the park boundaries. In communication following review of the initial draft of the RMP, the focus of concern was on the size of the lagoon presently in place. Since the lagoon system appears to be small in relation to the estimated volume of sewage being pumped to it, the logical assumption is that the lagoons
might be leaking. If they are leaking and a liner is installed, it will instead cause the lagoons to overflow. Based on standard use rates, and depending on the assumptions made in determining occupancy of campsites, the group camp, day use areas, pool backwash rates and other contributing sources, it is likely that the lagoon system would need to be at least double the surface area of the existing lagoon system. It should be noted, however, that estimated flows do not always match reality. If the estimates are correct, the real problem is the lack of a sewage disposal system with sufficient capacity. Due to the terrain, soil conditions, and lack of usable space, construction of a satisfactory lagoon system is not feasible, unless other alternatives prove to be less feasible. Pumping the sewage to the town of Hinton is currently being investigated as an alternative to the existing lagoon system.

Installing a liner in the existing lagoon has limitations of its own. Such installation may require closing the park for a period of time. Such installation will also require significant capital investment, although it is likely to be less expensive than a new system or costs associated with environmental harm from leakage.

Alternatives

A. Evaluate the feasibility of other means of treating liquid wastes from Red Rock Canyon State Park;
B. Install an appropriate liner in the existing lagoon;
C. No change – continue management as it is.

Preferred alternative:

Alternative A: Evaluate the feasibility of other means of treating liquid wastes from Red Rock Canyon State Park.

Issue Statement 6: Interpretive services at Red Rock Canyon State Park

Red Rock Canyon State Park has a story to tell in many locations. That story cannot simply be told from an interpretive heritage and nature center. That story should be told at Rough Horsetail Trail; it should be told at the Balancing Rock; it should be told in the group camp; it should be told in the park and in public schools. The interpretive message of Red Rock Canyon State Park should be told on property and off, to any interested audience, and to audiences yet uninformed.

Interpretive services are variously defined depending upon the source or the agency involved. The classic definition of interpretation was given by Freeman Tilden (1977) as “An educational activity that attempts to reveal meaning and relationships through the use of original objects, by firsthand experience, and by illustrative media, rather than to simply communicate factual information.”

William E. Brown (1971), in Islands of Hope, presented the role of parks in the interpretive process. His definition of interpretation encompassed technology as well as process, as
he stated that interpretation is “That body of communications, devices and facilities that conveys
environmental knowledge, stimulates discourse on environmental problems and results in
environmental reform.” Brown also indicated that interpretation has a distinct purpose, especially
in a sensitive natural environment. Brown argued that “Environmental interpretation not only
informs, it motivates to action – sometimes it is action. Even at the informing level, it ceases to
be innocent nature study or whitewashed history. It questions value systems, folk heroes, and
conventional wisdom.”

The National Association for Interpretation (2008) has developed a professional, contemporary
definition of interpretation that incorporates the theory from Tilden, the purpose from Brown,
and the mission of the agency delivering the service. “Interpretation is a mission-based
communication process that forges emotional and intellectual connections between the interests
of the audience and the meanings inherent in the resource.”

Red Rock Canyon State Park offers several resources with inherent meaning and interest for the
audience, allowing for forging of emotional and intellectual connections. The story includes the
people, the place, the organizations, the events, the geology, the habitat, the wildlife, and much
more.

Properly developed and delivered programming could be presented on a fee-for-service basis.
These programs could and should be delivered on-site and off-site at local schools, for seniors
groups, at community events, and similar venues. These programs become the educational
foundation and outreach for Red Rock Canyon State Park and the state park system more
broadly. This would require staff at a time when finances are limited for employing personnel.

Red Rock Canyon State Park could host one or two collegiate interns continually to create and
deliver interpretive messages. This would accomplish several goals for Red Rock Canyon State
Park: (1) it would bring creative and energetic personnel into the park system; (2) it would
achieve an educational goal for the park and the park system; (3) it would provide a link between
the park system and the formal college and university education system; and (4) it would provide
a message that Oklahoma’s state parks serve an educational role as well as a recreational role.

Alternatives

A. When finances permit, expand the interpretive programming within and beyond the park;
B. Encourage the development of internship agreements focused on interpretive services;
C. No change – continue management as it is.

Preferred alternatives:

Alternative A and B: When finances permit, expand the interpretive programming within and
beyond the park; encourage the development of internship agreements focused on
interpretive services.

Issue Statement 7: Green practices related to energy and conservation

Within the past few years Americans have begun to take conservation practices seriously. On
behalf of citizens and as a representative of the park and recreation profession, a field with a
strong connection to the environment, Oklahoma State Parks has initiated several practices
that are intended to conserve energy and other resources. This has been initiated with energy efficient
lighting in the lodge and office structures, and needs to be expanded to other management practices.

Among the many possible areas that would benefit from conservation practices are: (1) park policies related to mowing, maintenance, debris removal, and waste disposal; and (2) recycling opportunities for the entire operation and its guests.

At present, state laws do not encourage a state agency to recycle waste or trash products, especially when private citizens generate (and thereby ‘own’) those materials. Inventory management and accounting policies prevent the sale of, or revenue production from, recycled materials. However, volunteer groups, such as a possible “Friends of Red Rock Canyon State Park”, are permitted to serve as an agent for the collection and sale of recyclable materials. Another challenge to the establishment of a recycling program is the difficulty in finding a consistent market for the various products that might easily be recycled: glass, aluminum, and paper. However, proximity to Oklahoma City may be a benefit in this situation. These challenges do not lessen the desirability of establishing a recycling program in the state park system.

Red Rock Canyon State Park can have a significant role in modeling and educating other managers and guests regarding best management practices. One state park in Oklahoma, Keystone State Park, has been eco-certified. Red Rock Canyon State Park should be a leader in this effort as well.

Alternatives

A. Seek to change state accounting regulations to permit operation of the recycling program by park staff;
B. Encourage the development of a “Friends of Red Rock Canyon State Park” to create, implement, and evaluate a comprehensive recycling program throughout the park;
C. No change – continue management as it is.

Preferred alternative:

Alternative B: Encourage the development of a “Friends of Red Rock Canyon State Park” to create, implement, and evaluate a comprehensive recycling program throughout the park.

**Issue Statement 8: Environmental protection and the rappelling experience**

Rappelling and Red Rock Canyon State Park are strongly intertwined in the experiences of some park visitors. Rappelling has become part of the culture for the park and, without question, rappelling is a recreational draw for persons visiting the park. However, rappelling and its associated activities can have adverse impacts on the resources within the park.

As shown in several photographs, the visible effects of rappelling are distinctly visible in the canyon walls. These visible effects include erosive wear on the rock face, leaving rope channels along the top of the canyon. High use areas also show wear at the top of the wall and at the base of the wall caused by foot traffic.

Park management has identified specific areas for rappelling, while equally identifying and protecting other areas along the canyon walls. As the popularity of rappelling increases, so does the possible adverse impact on the environment. Park management should seek out the best way to fulfill its mission as a recreation provider and steward of the environment.
Alternatives

A. Work with the climbing and rappelling community to provide the best climbing and rappelling experience possible while protecting the park resources;
B. Ignore the growth and popularity of rappelling at Red Rock Canyon State Park;
C. Consider regulating and possibly eliminating rappelling at Red Rock Canyon State Park;
D. No change – continue management as it is.

Preferred alternative:

Alternative A & D: No change – continue management as it is while continuing to work with the climbing and rappelling community to provide the best climbing and rappelling experience possible while protecting the park resources.

Issue Statement 9: Pricing for instate and out-of-state guests

Presently OTRD operates under a policy of pricing a given good or service similarly for all guests. There is no distinction in pricing of goods and services between in-state residents who visit an Oklahoma State Park and out-of-state residents who visit and enjoy the same facilities and events. There is a distinction in that the in-state residents pay a significant tax burden which then subsidizes OTRD and the state parks. As a result, the in-state residents subsidize the recreation experience of out-of-state guests. It is readily acknowledged that the out-of-state guests benefit the local economy with their expenditures. However, if a guest at a local park resides outside the extent of the local economy, the dollars spent by a resident or an out-of-state guest have equal economic impact in direct measures, indirect measures, and induced measures.

Just as at Beavers Bend State Park and Lake Murray State Park on the southern border, Red Rock Canyon State Park enjoys visitation by a significant number of guests from out-of-state because of its location along Interstate 40, as well as those from within Oklahoma. This pattern of visitation is likely to occur at a number of other state parks near the interstate borders and for parks that offer attractions differing from what is available outside of the state of origin for the guests.

Many states have instituted a pricing differential to benefit in-state residents. For example, Texas requires vehicle permits for all vehicles entering its parks. Texas residents pay a lower price for the vehicle permits than do out-of-state residents, including Oklahomans who visit Texas.

Tourism is a business that includes intriguing interactions between the host community and its guests. OTRD must sustain a positive relationship between its parks, the staff in those parks, the surrounding community, in-state taxpayers, and guests, some of whom come from out of state. Pricing of goods and services is a sensitive variable in that relationship.

It is also true that day use visitors in Oklahoma State Parks do not make any other investment in state parks than their respective state tax burden. Approximately 80% of state park visitors are day visitors who provide little revenue to the state park, while the 20% of overnight visitors pay much higher prices for the additional services.

Some Oklahoma State Parks have received authorization to charge entry fees to the entire park (Natural Falls State Park) or to specific areas within the parks. Since Red Rock Canyon State Park has a controlled entry, such fees could be implemented.
Alternatives

A. Review the pricing of lodging and camping provided by Oklahoma State Parks with consideration for state of residence as a factor in establishment of those prices;
B. Consider implementing entry fees at premium locations within Red Rock Canyon State Park for all guests utilizing those locations;
C. No change – continue management as it is.

Preferred alternatives:

Alternative A for a system-wide consideration: Review the pricing of lodging and camping provided by Oklahoma State Parks with consideration for state of residence as a factor in establishment of those prices.

Alternative C for Red Rock Canyon State Park: No change – continue management as it is.

Recommendations beyond the Issues

Recommendation 1: OPDMD on park roads

Rule-making and interpretation of guidelines related to accessibility of trails in outdoor recreation settings took effect March 15, 2011 under the Department of Justice ruling that specified “other power-driven mobility devices” (OPDMD) could be used on trails and roadways by individuals with mobility limitations. At present, the expectation is that the operating entity shall “make reasonable modifications in policies, practices, or procedures to permit the use of other power-driven mobility devices by individuals with mobility disabilities, unless the public entity can demonstrate that the class of OPDMD cannot be operated in accordance with legitimate safety requirements that the public entity has adopted based on actual risks” (American Trails, 2011).

Policies related to operation of power-driven mobility devices in Red Rock Canyon State Park will have to be developed and published. Motorized maintenance vehicles have been utilized within the park and are utilized on some trails and the roadways. It is likely that these policies will have to address such OPDMD as golf carts, both electric and gas, and other personal motorized mobility devices.

These policies should have uniformity throughout the Oklahoma State Park system unless specific local conditions provide a basis for variation from the standard policy. At Red Rock State Park, the trails, roadways, and public access to those trails and roadways are highly desirable features of the park. As technology changes and rule-making progresses, the trails and roadways at Red Rock Canyon State Park will receive an increased variety of users.

Recommendation 2: Bridges throughout the park

The topography of Red Rock Canyon State Park requires that visitors cross the creek at several locations. These locations include various trails and access routes to picnic shelters and restrooms. Wooden bridges were developed over the years to bridge the creeks at several locations. Most of these bridges pre-dated ADA legislation and were not designed to be truly accessible. In addition, most of these bridges are now old and somewhat dilapidated. New
bridges are essential for accessibility and safety throughout Red Rock Canyon State Park. All new bridges constructed must meet accessibility laws in place at the time of construction.

**Recommendation 3: Consideration of historic resources**

As indicated in the RMP (page 31), Red Rock Canyon State Park includes the California Road, documented in literature by the Oklahoma Historical Society. The authors of the RMP were unable to locate a nomination of the California Road for the National Register of Historic Place. However, we believe the site within Red Rock Canyon State Park is appropriate for such nomination. Nomination and recognition would enhance the interpretive value for this site. Nomination and the necessary documentation should be suggested to an appropriate faculty member at one of the state’s universities, possibly Southwestern Oklahoma State University. This nomination process would be an excellent project for students, benefiting Oklahoma State Parks, the university, the students, and the people of Oklahoma.
References


Appendix A – Documents related to Property

1. #1777 - Special Warranty Deed, Kiwanis Club of Hinton to State of Oklahoma (Dec. 20, 1954)
2. #1775 - Special Warranty Deed, John Murphy to State of Oklahoma (Jan. 8, 1955)
3. #1776 - Special Warranty Deed, Town of Hinton to State of Oklahoma (Jan. 8, 1955)
4. #741 - General Warranty Deed, Clara DiBona (Baysinger) to State of Oklahoma (Jan. 31, 1959)
5. #5824 – Warranty Deed, Clara DiBona (Baysinger) to State of Oklahoma (Oct. 27, 1959)
7. #1631 – Warranty Deed, Kiwanis Club of Hinton to State of Oklahoma (Nov. 23, 1963)
8. #9539 – Warranty Deed, Bennie and Janice Lindley to State of Oklahoma (June 17, 1971)
SPECIAL WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS: That the Kiwanis Club of Hinton, Oklahoma, a Corporation, for and in consideration of the sum of One ($1.00) Dollar and other good and valuable considerations to them in hand paid by, the State of Oklahoma, the receipt whereof is hereby acknowledged, do hereby grant, bargain, sell and convey to the said The State of Oklahoma, subject however, to all conditions and reservations hereinafter set forth, all the following described real property and premises situated in Caddo County, State of Oklahoma, to wit:

A parcel and tract of land located in the Northwest Quarter (NW1/4) of Section Ten (10), Township Eleven (11), North, of Range Eleven (11), West of the Indian Meridian, which tract of land commences at the point where the present fence and boundary line running East and West between the Southwest Quarter (SW1/4) of Section Three (3) and the Northwest Quarter (NW1/4) of Section Ten (10), Township Eleven (11), North, of Range Eleven (11) West of the Indian Meridian intersects the East line of the abandoned Chicago, Rock Island and Pacific Railway Right of Way, which right of way ran North and South, and from said point of intersection, which is also the point of beginning South along the East line of the old abandoned Chicago, Rock Island and Pacific Railway Right of Way in a southerly direction 88.72 rods to a point now designated by a walnut tree, which walnut tree is growing in the canyon near the West wall of the canyon known as the Kiwanis Canyon in the said Northwest Quarter (NW1/4) of Section Ten (10) and, from said point where the East line reaches the said walnut tree, almost directly East and some South across the canyon eastwardly to the large elm tree on the East side of the said canyon and from said elm tree back in a northwardly direction along the East wall of said canyon, including the horse shoe bend on the East side with 200 feet around the top of the rim of the horse shoe bend, which horse shoe bend extends out on the East wall of said canyon and then North along the East wall of said canyon to the intersection of the boundary fence between the Southwest Quarter (SW1/4) of Section Three (3) and the Northwest Quarter (NW1/4) of Section Ten (10), which fence was herebefore referred to, then East along said boundary fence to the point of beginning. And it is the intent and purpose of this deed to convey all of the bottom of the Kiwanis Canyon Park between the points designated including any land between the West Wall of the said canyon and the East...
line of the abandoned Chicago, Rock Island and Pacific Railway right of way, which is a small strip of land in some places together with 200 feet back from the top of the rim of the horse shoe bend around the entire horse shoe bend.

The above conveyed tract contains approximately twenty acres, more or less. Grantor reserves for itself 1/2 of all oil gas and other minerals under said land, with right of ingress and egress real TO HAVE AND TO HOLD THE SAME unto the said The State of Oklahoma, subject to all the following conditions and reservations, to-wit:

...it is understood and agreed by and between the parties hereto that the lands hereby conveyed are to be used by the State of Oklahoma exclusively for the purpose of establishing and maintaining a state Recreation Area and if at any time said lands be abandoned, or the maintenance of said Recreation Area discontinued, then and in such event all of the right, title and interest of The State of Oklahoma in and to said lands shall immediately cease and terminate and said lands and all of the right, title and interest of The State of Oklahoma therein shall revert to the grantors, their successors and assigns.

The grantors herein will warrant and defend the Title to said lands against all claims arising by their acts and none other.

IN WITNESS WHEREOF, the grantors have hereunto set their hands and seals this the 20th day of December, 1954.

[Signatures]

KINMIS CLUB OF HINTON, OKLAHOMA, A CORPORATION

By:  

President

SECRETARY

BOARD

STATE OF OKLAHOMA, SS.
COUNTY OF CADDIO

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this 20th day of December, 1954, personally appeared G. A. Lyons, President, to me known to be the identical person who subscribed the name of the maker thereof to the foregoing instrument as its True President and acknowledged to me that he executed the same as his free and voluntary act and deed as the free and voluntary act and deed of such corporation, for the uses and purposes therein set forth.

[Signature]

By admission expires March 12, 1955.
SPECIAL WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS: That John E. Murphy of Hinton, Caddo County, Oklahoma, a single man, for and in consideration of the sum of One Dollar ($1.00) and other good and valuable considerations to him in hand

before me, the undersigned, a Notary Public, in and for said County and

paid by The State of Oklahoma, the receipt whereof is hereby acknowledged,

know, on this 8th day of January, 1955, personally appearing, John E. Murphy,

does hereby grant, bargain, sell and convey to the said The State of Oklahoma,

a single man, henceforth to be the identical person who executed the within

subject, however, to all conditions and reservations hereinafter set forth,

and hereunder described and intended to be that the same as

all the following described real property and premises situated in Caddo

County, State of Oklahoma, to-wit:

The East One-Half (E1/2) of the Southeast Quarter (SE1/4) of the

Northwest Quarter (NW1/4) of Section Three (3), Township Eleven

(11), North, Range Eleven (11) West of the Indian Meridian

in Caddo County, Oklahoma, subject, however, to an undivided

One-half Interest in mineral rights hereafter reserved by

J. K. Baker and Lillie A. Baker, the former owners of the said

real property;

TO HAVE AND TO HOLD THE SAME unto the said THE STATE OF OKLAHOMA,

subject to all the following conditions and reservations, to-wit:

It is understood and agreed by and between the parties hereto that the

lands herein conveyed are to be used by The State of Oklahoma exclusively

for the purpose of establishing and maintaining a State Recreation Area

and if at any time said lands be abandoned, or the maintenance of said

Recreation Area discontinued, then and in such event all of the right, title

and interest of The State of Oklahoma in and to said lands shall immediately

cease and terminate and said lands and all of the right, title and interest

of The State of Oklahoma therein shall revert to the grantor, his heirs,

executors and assigns.

The grantor herein will warrant and defend the title to said lands

against all claims arising by his acts and none other.

IN WITNESS WHEREOF, the grantor has hereunto set his hand and seal this

the 8th day of January, 1955.

John E. Murphy

STATE OF OKLAHOMA
CADDIO COUNTY

FILED FOR RECORD

APR 6 1990

S.M. WALL, Clerk
ACKNOWLEDGEMENT

STATE OF OKLAHOMA } ss.
COUNTY OF CADDYO }

Before me the undersigned, a Notary Public, in and for said County and
State, on this 8th day of January, 1955, personally appeared John E. Murphy,
a single man, to me known to be the identical person who executed the within
and foregoing instrument and acknowledged to me that he executed the same as
his free and voluntary act and deed for the uses and purposes therein set
forth.

Given under my hand and seal the day and year last above written.

[Signature]
Notary Public

By commission expires September 18, 1956.
1796

SPECIAL WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS: That The Town of Hinton, Caddo County, Oklahoma, a Municipal Corporation, for and in consideration of the sum of One Dollar ($1.00) and other good and valuable considerations to it in hand paid by The State of Oklahoma, the receipt whereof is hereby acknowledged, does hereby grant, bargain, sell and convey to the said The State of Oklahoma, subject, however, to all conditions and reservations hereinafter set forth, all the following described real property and premises situated in Caddo County, State of Oklahoma, to-wit:

All of that portion of the Southwest Quarter (SW¼) of Section Three (3), Township Eleven (11) North, Range Eleven (11) West of the Indian Meridian located East of the abandoned Chicago, Rock Island and Pacific Railroad Company right of way that formerly ran through said quartersection, approximately North and South near the center of said quartersection, and a strip of land Thirty (30) feet in width North and South, located along the North line of said quartersection commencing at the Northwest corner of said quartersection running East to said railroad right of way; and also another tract of land, same being the East One-Half (1/2) of the Northeast Quarter (NE¼) of the Northwest Quarter (NW¼) of Section Three (3), Township Eleven (11) North, Range Eleven (11) West, Indian Meridian, reserving, however, unto the grantor one-half of all oil, gas and other minerals in and under all of the two tracts of land above-described; together with all of the grantor’s interest in any and all easements of record providing access to the above-described property, and specifically that easement recorded in Book 85 at Page 171, Deed Records, Caddo County, Oklahoma;

TO HAVE AND TO HOLD THE SAME unto the said THE STATE OF OKLAHOMA, subject to all the following conditions and reservations, to-wit:

It is understood and agreed by and between the parties hereto that the lands hereby conveyed are to be used by the State of Oklahoma exclusively for the purpose of establishing and maintaining a State Recreation Area and if at any time said lands be abandoned, or the maintenance of said Recreation Area discontinued, then and in such event all of the right, title and interest of The State of Oklahoma in and to said lands shall immediately cease and terminate and said lands and all of the right, title and interest of The State of Oklahoma therein shall revert to the grantor, its successors and assigns.

The grantor herein will warrant and defend the title to said lands against all claims arising by its acts and none other.
IN WITNESS WHEREOF, the grantor has hereunto set its hand and seal this
the 8th day of January, 1955.

ATTEST:

E. Buford Green, Town Clerk of
said Municipal Corporation.

Mehler J. Miller, the President of the
Board of Trustees of said Municipal
Corporation.

CORPORATION ACKNOWLEDGEMENT

STATE OF OKLAHOMA
COUNTY OF CADDIO

ss.

Before me, the undersigned, a Notary Public, in and for said County
and State on this 8th day of January, 1955, personally appeared the President
of the Board of Trustees of said Municipal Corporation, to me known to be
the identical person who subscribed the name of the maker thereof to the
foregoing instrument as its President and acknowledged to me that he executed
the same as his free and voluntary act and deed and as the free and voluntary
act and deed of such corporation, for the uses and purposes therein set forth.

Given under my hand and seal of office the day and year last above
written.

Louis Thompson
Notary Public

My commission expires September 18, 1956.
GENERAL WARRANTY DEED

THIS INDENTURE, Made this 2/  day of January, A. D., 1959, between Clara A. Di Bona, a widow whose former name was Clara A. Baysinger, of Caddo County, in the State of Oklahoma, of the first part and the State of Oklahoma, of the second part.

WITNESSETH, that the said party of the first part, in consideration of the sum of ONE AND NO/100 ($1.00) DOLLARS, the receipt whereof is hereby acknowledged, does by these presents, grant, bargain, sell and convey unto said party of the second part, its successors and assigns, all of the following described real estate, situated in the County of Caddo and State of Oklahoma, to-wit:

A tract of land located in the North Half (N1/2) of the Southwest Quarter (SW1/4) of Section Three (3), Township Eleven (11) North, Range Eleven (11) West, Indian Meridian in Caddo County, Oklahoma, more particularly described by metes and bounds as follows, to-wit:

Beginning at a point located 2,670 feet South and 660 feet East of the common section corner of Sections Three (3) and Four (4) in Township Eleven (11) North, Range Eleven (11) West, Indian Meridian, Caddo County, Oklahoma, and Sections Thirty-three (33) and Thirty-four (34), Township Twelve (12) North, Range Eleven (11) West, Indian Meridian, Caddo County, Oklahoma; and from said point of beginning due East approximately 65 feet to a point located on the west boundary line of the former railroad right-of-way of the Chicago, Rock Island and Pacific Railroad Company (which is now abandoned), thence due North 30 feet to a point located on the North line of the North Half (N1/2) of the Southwest Quarter (SW1/4) of said Section Three (3); thence due East on the said North line of the North Half (N1/2) of the Southwest Quarter (SW1/4) of said Section Three (3) a distance of approximately 300 feet to the point where the East boundary line of the former railroad right-of-way of the Chicago, Rock Island and Pacific Railroad Company intersected the North line of the said North Half (N1/2) of the Southwest Quarter (SW1/4) of said Section Three (3); thence due South 240 feet; thence due West approximately 365 feet to a point located 210 feet due South of the original point of beginning; thence from this point due North 210 feet to the original point of beginning, containing approximately 2.22 acres, more or less;

However, reserving to the grantor, her heirs and assigns all of the oil, gas and other mineral rights in and under the herein conveyed land.

TO Have and to Hold the Same, Together and with all and singular the tenements, hereditaments and appurtenances thereunto belonging or in any wise appertaining forever.

And said party of the first part for herself and her heirs, executors or administrators does hereby covenant, promise and agree to and with said party of the second part, that at the delivery of these presents lawfully seized in her own right of an absolute and indefeasible estate of inheritance in fee simple, of and in all and singular the above granted and described premises, with the appurtenances; that the same are free, clear, discharged and unencumbered of and from all former and other grants, titles, charges, estates, judgments, taxes, assessments and incumbrances of what nature or kind soever; subject however, to all the oil, gas and other mineral rights reserved herein, and that she will warrant and forever defend the same unto said party of the second part, its successors and assigns against said first party, her heirs, and all and every person or persons whosoever, lawfully claiming or to claim the same.
IN WITNESS WHEREOF, the said party of the first part has hereunto set her hand the day and year first above written.

Clara A. Di Bona, a widow whose former name was Clara A. Baysinger.

INDIVIDUAL ACKNOWLEDGMENT

STATE OF OKLAHOMA )
COUNTY OF (Caddo ) ss:

Before me, the undersigned, a Notary Public, in and for the said County and State, on this 3/ day of 1959, personally appeared Clara A. Di Bona, a widow whose former name was Clara A. Baysinger, to me known to be the identical person who executed the within and foregoing instrument and acknowledged to me that she executed the same in her free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and seal the day and year last above written.

Notary Public


FEB 9, 1959
STATE OF OKLAHOMA
CADDIO COUNTY
FILED FOR RECORD
WARRANTY DEED
(INDIVIDUAL FORM)

KNOW ALL MEN BY THESE PRESENTS:
That CLARA A. DIBONA, nee Baysinger (a Widow)
now residing at 221 Northwest Fifth Street, Oklahoma City,
Oklahoma,

of Oklahoma

State of Oklahoma, part Y of the first part, in consideration of the
sum of THIRTEEN HUNDRED AND NO/100 ($1,300.00) DOLLARS
in hand paid, the receipt of which is hereby acknowledged, does hereby Grant, Bargain, Sell and Convey unto:

The State of Oklahoma ex rel the Oklahoma Planning and Resources Board
as joint tenants and not as tenants in common with all rights of survivorship, the whole estate, interest and title in the
said real estate described as of:
533 State Capitol Building, Oklahoma City, Oklahoma County,
State of Oklahoma,
parties of the second part, the following described real
property and premises situate in Caddo County, State of Oklahoma:
to wit:

Northwest Quarter of the Northwest Quarter of the Southwest Quarter of Section 3,
Township 11 North, Range 11 West in Caddo County, Oklahoma, which is bounded by a line described as beginning at a point 2670 Feet South and 660 Feet East of the Northwest Corner of said Section, thence due South 210 Feet, thence due East 610 Feet to a point on the East Boundary Line of Right-of-Way for State Highway No. 8, thence North along said right-of-way line 210 Feet, thence East 610 Feet to the point of beginning. All comprising 2.6 acres.

together with all the improvements thereon and the appurtenances thereunto belonging, and warrant the title to the
same, all mineral rights to be reserved by Party of the First Part.

TO HAVE AND TO HOLD said described premises unto the said parties of the second part, as joint tenants, and
to the heirs and assigns of the survivor, forever, free, clear and discharged of and from all former grants, charges, taxes,
judgments, mortgages and other liens and incumbrances of whatsoever nature.

Signed and delivered this 27th day of October, 1959

[Signature]

STATE OF OKLAHOMA
COUNTY OF OKLAHOMA

INDIVIDUAL ACKNOWLEDGMENT

Before me, the undersigned, a Notary Public, in and for said County and State on this 22nd day of October, 1959, personally appeared Clara A. Dibona, nee Baysinger, who executed the within and foregoing instrument and acknowledged to me that she
executed the same as her free and voluntary act and deed for the uses and purposes therein set forth.

I Grant under my hand and seal the day and year last above written.

My commission expires June 12, 1961

[Signature]
WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS:

That Frank Burkhalter of Caddo County, State of Oklahoma, party of the first part, in consideration of the sum of One Thousand One Hundred and Seventy-five Dollars ($1,175.00) in hand paid, the receipt of which is hereby acknowledged, does hereby grant, bargain, sell and convey unto the State of Oklahoma, of Oklahoma County, State of Oklahoma, party of the second part, the following described real property and premises situate in Caddo County, State of Oklahoma, to-wit:

All of that part of the Northwest Quarter (NW 1/4) of Section Ten (10) in Township Eleven (11) North of Range Eleven (11) West of the Indian Meridian, in Caddo County, Oklahoma, lying East of the East wall of Kiwanis Canyon, less and except 200 feet around the top of the East Wall where the said wall makes a horseshoe bend, commonly designated Horseshoe Bend; and also including a tract of land in the bottom of Kiwanis Canyon located near the middle of said Canyon where the said Canyon runs in a North and South direction through the said Northwest Quarter (NW 1/4) of Section Ten (10) in Township Eleven (11) North of Range Eleven (11) West of the Indian Meridian in Caddo County, Oklahoma, which tract of land in the bottom of the Canyon lies between that part of the bottom of Kiwanis Canyon deeded to Ottis Curry and Era Curry, pursuant to deed recorded in Volume 112 of Deed Records at Page 255 in the office of the County Clerk of Caddo County, Oklahoma, and that part of the bottom of Kiwanis Canyon deeded to the Kiwanis Club of Hinton, Oklahoma, a corporation, pursuant to deed recorded in Volume 114 of Deed Records at Page 45 in the office of the County Clerk of Caddo County, Oklahoma, the said tract of land in the Canyon being North of that part of the Kiwanis Canyon deeded to Ottis Curry and Era Curry and South of that part of the Kiwanis Canyon deeded to the Kiwanis Club of Hinton, Oklahoma, a corporation, and which tract of land is approximately 132 feet in width North and South and extends from the West wall to the East wall of the said Kiwanis Canyon where the said tract of land adjoins on to the land lying East of the East wall of the said Kiwanis Canyon, together with all the improvements thereon and the appurtenances thereunto belonging, and warrants the title to the same, exclusive of all mineral rights.

TO HAVE AND TO HOLD said described premises unto the said party of the second part, its heirs and assigns forever, free, clear and discharged of and from all former grants, charges, taxes, judgments, mortgages and other liens and incumbrances of whatsoever nature.

Signed and delivered this 29th day of August, 1962.

[Signature]

Page 1 of two pages
Warranty Deed from Frank Burkhalter

STATE OF OKLAHOMA  
COUNTY OF CADDIO  

Before me, the undersigned, a Notary Public in and for said County and State, on this 29 day of August, 1962, personally appeared Frank Burkhalter, to me known to be the identical person who executed the within and foregoing instrument and acknowledged to me that he executed the same as his free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and seal the day and year last above written.

[Signature]
Notary Public

My commission expires September 12, 1962

[Stamp]  
STATE OF OKLAHOMA  
CADDIO COUNTY  
FILED FOR RECORD  
SEP 6 1962  
J. W. Beltz, County Clerk
KNOW ALL MEN BY THESE PRESENTS:

That the Hinton Kiwanis Club of Caddo County, Oklahoma, party of the first part, in consideration of the sum of Five Thousand Dollars ($5,000.00) in hand paid, the receipt of which is hereby acknowledged, does hereby grant, bargain, sell and convey unto the Oklahoma Planning and Resources Board, an Agency of the State of Oklahoma, party of the second part, the following described real property and premises situate in Caddo County, State of Oklahoma, to-wit:

A strip or tract of land located in the bottom of the Kiwanis Canyon where said canyon runs North and South through the Northwest Quarter (NW 1/4) of Section Ten (10), Township Eleven (11) North, Range Eleven (11) West of the Indian Meridian being that part of the Kiwanis Canyon Seventy-two (72) rods North and South commencing at the South line of the said Northwest Quarter (NW 1/4) of Section Ten (10) and thence running directly North Seventy-two (72) rods with the East wall of said canyon being the East line of said tract and the West wall of said canyon being the West line of said tract, and also all of that strip of land that lies between the West line of the tract of land herein conveyed in the bottom of the Kiwanis Canyon and the East line of the abandoned Railroad Right-of-way, which strip of land between the canyon tract and the Railroad Right-of-way tract will be approximately Seventy-two (72) rods in length North and South, which canyon tract and the strip of land between the canyon tract and the abandoned Railroad-right-of-way tract contain approximately 16.64 acres of land, more or less,

... together with all the improvements thereon and the appurtenances thereunto belonging, and warrants the title to the same exclusive of all oil, gas and mineral rights, this deed of conveyance being for surface rights only.

TO HAVE AND TO HOLD said described premises unto the said party of the second part, its successors and assigns forever, free, clear and discharged of and from all former grants, charges, taxes, judgments, mortgages and other liens and incumbrances of whatsoever nature.

Signed and delivered this 23rd day of November, 1963.

[Signature]
HINTONKIWANISCLUB

ACKNOWLEDGMENT

STATE OF OKLAHOMA }
COUNTY OF CADDISCO

Before me, the undersigned, a Notary Public in and for said County and State, on this 23rd day of November, 1963, personally appeared Herman J. Waibbaum, to me known to be the identical person who signed the name of the maker thereof to the within and foregoing instrument as its President, and acknowledged to me that he executed the same as his free and voluntary act and deed, and as the free and voluntary act and deed of said Hinton Kiwanis Club, for the uses and purposes therein set forth.

Given under my hand and seal the day and year last above written.

My commission expires: May 9th, 1965.
No. 9539
STATE OF OKLAHOMA
CADDIO COUNTY
FILED FOR RECORD
OCT 27, 1971
RECORDED IN BOOK D PAGE 29
Jack VanDyke, County Clerk.

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS:

THAT Bennie Lindley and Janice Lindley, husband and wife, of Caddo
County, State of Oklahoma, parties of the first part, in consideration
of the sum of TWENTY-EIGHT THOUSAND AND NO/100 - - - ($28,000.00) - - DOLLARS
in hand paid, the receipt of which is hereby acknowledged, does hereby
Grant, Bargain, Sell and Convey unto Oklahoma Industrial Development and
Park Department of Oklahoma City, Oklahoma, party of the second part, the
following described real property and premises situate in Caddo County,
State of Oklahoma, to wit:

A tract of land, being the tract of land that was the former
railroad right of way, as heretofore located through and
across the Southwest Quarter (SW 1/4) of Section Ten (10),
Township Eleven (11), North of Range Eleven (11), West of
the Indian Meridian, Caddo County, Oklahoma, which former
railroad right of way was originally conveyed to the Eild and
Anadarko Railroad Company and which former railroad right
of way, after the said railroad was abandoned, was reconveyed
to Carl Gerdes by the Trustees of the Chicago, Rock Island
and Pacific Railway Company, as more fully described in the
deed of conveyance recorded in Book 86 of Deed Records at
Page 546 in the Office of the County Clerk of Caddo County,
Okalhoma, which said former railroad right of way is a
tract of land 300 feet in width East and West and the Center
of the said former railroad right of way is located 977 feet
due East of the Southwest corner of the said Southwest
Quarter (SW 1/4) of said Section Ten (10), and which said
former right of way meanders along the top of the west canyon
wall North and East to the North side of the said Southwest
Quarter (SW 1/4) of Section Ten (10) and on the North side
of the said Southwest Quarter (SW 1/4) of said Section
Ten (10) the center of the said former right of way is 1163
feet due East of the Northwest corner of the said Southwest
Quarter (SW 1/4) of said Section Ten (10); and another
contiguous tract of land, which said tract of land is all
that portion and part of the Southwest Quarter (SW 1/4) of Section
Ten (10), Township Eleven (11), North of Range Eleven (11),
West of the Indian Meridian, Caddo County, Oklahoma, lying
East of the former railroad right of way that ran approximately
North and South across the said entire Southwest Quarter (SW 1/4)
of said Section Ten (10), as heretofore more fully located and
described herein, and both of said contiguous tracts of land
contain a total of approximately 99 acres of land, more or less;

(The grantors are expressly reserving unto themselves all A.S.C.S.
crop allotments.)

together with all the improvements thereon and the appurtenances thereunto
belonging, except A.S.C.S. crop allotments that are reserved, and warrant
the title to the same.

Page One--Deed from Lindley, et al, Grantors to Oklahoma Industrial
Development etc., Grantee.
TO HAVE AND TO HOLD said described premises unto the said party of the second part, its successors and assigns forever, free, clear and discharged of and from all former grants, charges, taxes, judgment, mortgages and other liens and incumbrances of whatsoever nature.

Signed and delivered this 17th day of June, 1971.

Bennie Lindley

Janice Lindley

ACKNOWLEDGMENT

STATE OF OKLAHOMA ) ) ss.
COUNTY OF CADDIO )

Before me, the undersigned, a Notary Public in and for said County and State on this 17th day of June, 1971, personally appeared Bennie Lindley and Janice Lindley, husband and wife, to me known to be the identical persons who executed the within and foregoing instrument and acknowledged to me that they executed the same as their free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and seal the day and year last above written.

Notary Public