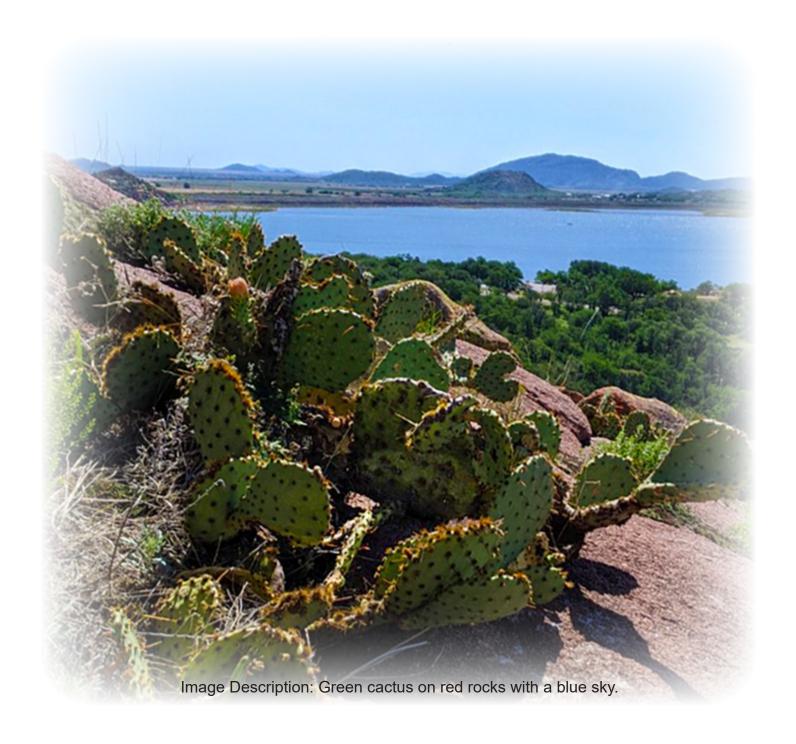
# OKLAHOMA SCORP

2023 - 2027



## Oklahoma SCORP

## Statewide Comprehensive Outdoor Recreation Plan

2023 - 2027





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December 12, 2022

Dear Fellow Oklahomans,

It is my pleasure to present Oklahoma's 2023-2027 Statewide Comprehensive Outdoor Recreation Plan entitled Saving the Day During Times of Social Stress. This plan is a guide for public agencies and private-sector organizations that provide outdoor recreation areas, facilities, and programs.

Oklahoma's SCORP closely examines existing resources and current needs of outdoor recreation in the state. The SCORP provides a plan for use of Land and Water Conservation Funds for the upcoming five years. I certify that opportunity for public participation has taken place in plan development. In this particular occasion, the plan also addresses the challenges and new trends of outdoor recreation caused by the COVID-19 pandemic.

The State of Oklahoma provides outdoor recreation resources for in-state and out-of-state visitors thanks to the great variety of its forests, mountain ranges, and ecosystems. Families and enthusiast groups benefit from outdoor recreation opportunities that increase people's quality of life by mitigating the stress of everyday life and connecting with nature.

Outdoor recreation is also an important contributor to the state's economy. According to the federal Bureau of Economic Analysis, in 2020, the total value added for outdoor recreation in Oklahoma was \$3.6 billion.

I encourage Oklahoma residents, local and state public agencies, as well as private businesses to consider the strategies and recommendations embodied in this plan for the benefit of our fascinating state.

Sincerely,

Governor J. Kevin Stitt

#### **ACKNOWLEDGMENTS**

The 2023-2027 Oklahoma Statewide Comprehensive Outdoor Recreation Plan has been a combined effort of many people in our community.

We want to thank the Land and Water Conservation Fund for financing this project through the Oklahoma Tourism and Recreation Department (OTRD). Through their support and resources, this project was completed in a timely manner.

Additional thanks to the following people:

Shelley Zumwalt, OTRD Executive Director Rhonda Moore, OTRD Federal Programs Manager

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We also want to express our gratitude to Dr. Jerel Cowan and Dr. Kevin Fink from the University of Central Oklahoma as well as their team for their assistance with the outdoor recreation enthusiast groups and to Dr. Lowell Caneday for his invaluable contributions to this project. We also thank the Oklahoma City Zoo for their contributions. Finally, we thank the OSU RMRT Graduate Assistance: Kristian Marshal, Brandt Brickell, Jungyu Lee, Brittany Dao, Brittany Mays, Anthony Boltz, and Michael Bruns.

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#### **PROLOGUE**

#### What is a SCORP?

A Statewide Comprehensive Outdoor Recreation Plan (SCORP) is required for a state every five years to be eligible for the Land and Water Conservation Fund (LWCF) State and Local Assistance program. LWCF was established in 1965 through an Act of Congress with bipartisan commitment. This federal program was created with the aim of safeguarding natural areas, water resources, and providing outdoor recreation opportunities for all people. The federal funds within the State and Local Assistance program are distributed through state agencies. In Oklahoma, these funds are distributed through the Oklahoma Tourism and Recreation Department (OTRD) to statewide and local programs throughout the state. This SCORP was researched, written, and designed to be used by all the providers of outdoor recreation in Oklahoma. When planning and preparing areas and facilities upgrades, updates, expansions, and accessibility, providers can use the data and plan to aid them in the process. Additionally, outdoor recreation providers can use this SCORP when considering LWCF proposals to OTRD.

The LWCF program is administered through OTRD to distribute the LWCF. Funds for statewide, municipal, and community outdoor recreation projects on a 50% reimbursement basis. The LWCF is funded by revenue from offshore oil and gas production on America's Outer Continental Shelf in addition to the Great American Outdoor Act which fully funded the LWCF in 2020.

The preparation of this SCORP is the 12th edition for Oklahoma. Since the beginning of the LWCF, grants to and through the State of Oklahoma have totaled over \$60 million supporting projects across the state. Much of this funding has gone directly to local outdoor recreation providers utilizing the funds for the majority of LWCF funded projects in the state.

The goals of the LWCF State and Local Assistance program are:

- Meet state and locally identified public outdoor recreation resource needs to strengthen the health and vitality of the American people
- Increase the number of protected state and local outdoor recreation resources and to ensure their availability for public use in perpetuity
- Encourage sound planning and long-term partnerships to expand the quantity and to ensure the quality of needed state and local outdoor recreation resources (LWCF SAP, 2021)

State participation in the LWCF requires a SCORP within the specifications of law and requires approval from the National Park Service. The SCORP, once approved, is the principal determinate in eligibility for grant funds from the federal government to the state, and within the state in distribution of the funds. The LWCF requires that the SCORP includes:

- The identity of the state agency having authority to represent and act for the state in dealing with the Secretary of the Interior for the purposes of the LWCF Act of 1965
- An evaluation of the demand for and supply of outdoor recreation resources and facilities in the state
- A program for implementation of the plan
- Certification by the Governor that ample opportunity for public participation has taken place in the development of the plan
- Other necessary information as may be determined by the Secretary of the Interior. This includes:
  - A description of the process and methodologies chosen by the State to complete the SCORP
  - Ample opportunity for public participation involving all segments of the state's population
  - Comprehensive coverage of the issues of statewide importance, demand, or preferences for public outdoor recreation resources, and supply of outdoor recreation resources and facilities
  - An implementation program that identifies the state's strategies, priorities, and actions for apportionment of the LWCF monies
  - A wetlands priority component consistent with Section 303 of the Emergency Wetlands Resources Act of 1986

Oklahoma State University contracted to prepare this SCORP with the OTRD as the state agency with authority to represent and act for the State of Oklahoma regarding the LWCF. This SCORP was prepared in compliance with the law. The intended audience includes resource managers, outdoor recreation providers, governmental decision makers, outdoor recreation enthusiasts, and all residents of Oklahoma. For more information about SCORP requirements or the LWCF, see <a href="https://www.nps.gov/subjects/lwcf/lwcf-manual.htm">https://www.nps.gov/subjects/lwcf/lwcf-manual.htm</a>.

In preparing the SCORP, research was conducted via multiple surveys and observations to gather public data and input. These methods included statewide surveys (Appendix B), outdoor recreation enthusiasts' survey (Appendix D), outdoor recreation providers' survey (Appendix C), and observations (Appendix E&F).

Eligibility for requesting and receiving LWCF monies include cities, towns, counties, school districts, state agencies, community agencies, and tribal governments. The language in this document should be incorporated into funding proposals. It is recommended to highlight projects alignment with the findings, themes, and elements of the culminating plan of this SCORP. Additional guidance for funding proposals can be found within the OTRD, the National Park Service, and The Society of Outdoor Recreation Professionals.

Figure 1. SCORP Development Process

Data Collection & Draft Final Report Proposal Draft **Analysis** Submission to Submission Submission Writing **OTRD** From November 2021 December July 2021 May 2022 October 2022 to April 2022 2022

#### SCORP 2023-2027 EXECUTIVE SUMMARY

The State of Oklahoma has a wide array of outdoor recreation opportunities, areas, and facilities across the six diverse geographic regions that have provided the citizens of the state the ability to participate in outdoor recreation before and during the pandemic, and will continue to do so well into the future.

#### The Regions:

- Northwest
- Northeast
- Central
- South Central
- Southeast
- Southwest

#### Outdoor Recreation and Park Use During the Pandemic:

- Outdoor recreation provided a variety of benefits to participants during the pandemic
- The outdoors never closed during the pandemic
- Oklahomans did not stop recreating outdoors and many increased their outdoor recreation participation

#### Outdoor Recreation and Parks Changes Due to Pandemic:

- More people participating included continuation of regular users, new users, and renewed users
- Providers of outdoor recreation areas and facilities were resourceful so that there
  were very few closures or cancellations
- Increases as noted by practitioners were a big change the State Parks had a 25% increase in visitors, almost 50% increase in tent campers, and approximately 30% increase in RV campers during the pandemic

#### Oklahoma's Future with New, Renewed, and Emerging Outdoor Participants:

- People 65+ years old are the largest growing age segment of the population
- Like the overall US trend, Hispanic/Latino residents were the group with the largest increase in the state
- Oklahoma has one of the largest Native American populations of any state (9.4%)
- White/Caucasian population is the predominant group in the state (74%)
- Native American and White/Caucasian groups are the highest percent user groups of outdoor recreation - 93% of each group reports to be regular outdoor recreation participants

#### Outdoor Recreation Areas and Facilities Needs:

- Maintain, upgrade, update, and enhance spaces/areas/facilities utilized for outdoor recreation
- Acquire/reacquire land for outdoor recreation
- Information, education, and management upgrades
- Provide areas and facilities for enhancing participation engagement and safety during engagement

#### INTRODUCTION



The State of Oklahoma comprises 77 counties and has a land area of 68,577 square miles and a water area of 1,302 square miles. It is bordered by Missouri, New Mexico, Kansas, Texas, Colorado and Arkansas. Oklahoma has four mountain ranges: Ouachita, Arbuckle, Wichita and Ozark (Census.gov, 2021).

Oklahoma welcomes tourists from all over the world and offers a variety of recreation attractions and outdoor adventures that go from artistic festivals and cultural events to hiking trails and scenic roads. This is a legacy that Oklahomans have procured and will pass on to future generations. The state is geographically divided in six regions, each region with distinctive traits and charming landscapes.

Cimarron Texas Beaver Harper Woods Alfalfa Grant Kay Osage Washington Ottawa Washington Osage Washington Osage Washington Osage Region (2)

Northwest Region (2)
Southeast Region (3)
Southwest Region (4)
South Central Region (5)
Central Region (6)

Cimarron Texas Beaver Harper Woods Alfalfa Grant Kay Osage Nowata Craig Ottawa Washington Osage Region (6)

Woodward Mior Garfield Noble Pawnee Region (7)
Carried Noble Pawnee Creek Affair Caddo Osage Washington Osage Washington Osage Pawnee Region (7)
Comanche Garfield Noble Pawnee Region (8)
Comanche Creek Affair Caddo Okfuskee Sequoya McClaim Pontotoc Comanche Garvin Pontotoc Coal Stephens Coal Stephens Carte Love Marshall Bryan Choctaw McCurtain Love Marshal

Figure 2. Map of the Six Regions in the State of Oklahoma

#### **Northwest Region**

The Northwest Region encompasses the Northwest region of the state and the Panhandle. Tourists can visit the Little Sahara State Park sand dunes in Waynoka, the Beavers Dunes in Beaver, and the gypsum caves at Alabaster Caverns, among other attractions. It includes the counties of: Cimarron, Texas, Beaver, Harper, Woods, Alfalfa, Grant, Kay, Ellis, Woodward, Major, Garfield, Noble, Dewey, Blaine and Kingfisher.



Image Description: A gravel trail surrounded by trees.

#### **Northeast Region**



Image Description: A lake framed by green trees.

The Northeast region is in the Northeast area of the state, bordering parts of Arkansas and Kansas. This region includes the city of Tulsa with its many outdoor spaces including the mega park, The Gathering Place. Additionally, this region includes 16 major lakes It includes 18 counties: Pawnee, Osage, Washington, Nowata, Craig, Ottawa, Delaware, Mayes, Rogers, Creek, Tulsa, Wagoner, Cherokee, Adair, Sequoyah, Muskogee, Okmulgee and McIntosh.

#### **Central Region**

The Central Region includes what was once part of the Great American Frontier. The Central Region is located in the center of the state and encompasses 12 counties: Canadian, Cleveland, Grady, Hughes, Lincoln, Logan, McClain, Okfuskee, Oklahoma, Payne, Pottawatomie and Seminole.



Image Description: Tall yellow grasses bordering a river.

(Travelok.com, 2022)

#### **Southeast Region**

The Southeast region is in the southeastern part of the state and includes 10 counties: Coal, Atoka, Bryan, Choctaw, McCurtain, Pushmataha, Le Flore, Latimer, Haskell & Pittsburg.



Image Description: A sidewalk leading to a wooden pavilion.

#### **South Central Region**



Image Description: A paved road framed by green trees.

The South Central region is in south central Oklahoma and includes 7,468 square miles and the 13 counties: Grady, McClain, Garvin, Pontotoc, Stephens, Carter, Murray, Johnson, Jefferson, Love, Marshall, Bryan and Coal. This region encompasses the boundaries of the Chickasaw Nation.

#### **Southwest Region**

The Southwest Region is the southwest region of the state, extending eastward from the Texas border and consists of 14 counties including: Roger Mills, Custer, Beckham, Washita, Caddo, Kiowa, Greer, Harmon, Jackson, Comanche, Tillman, Cotton, Stephens, and Jefferson.



Image Description: A creek with a muddy bed and trees.

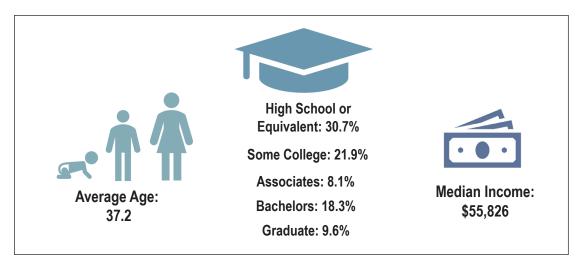
(Travelok.com, 2022)

#### **Population of Oklahoma**

Oklahomans are known as welcoming and friendly people combining old and new cultures and traditions. Included in the Oklahoma population are descendants of 67 different Native American tribes. This is the largest percentage of persons identifying as Native American of any state.

Between 2010 and 2020, Oklahoma's population increased 5.5% to 3,959.353 people, a pace lower than the national growth rate of 7.4%. Additional comparisons between Oklahoma and the nation include: 25.5% of Oklahomans have a Bachelor's degree or higher compared to 32.1% nationally; Oklahoma has a higher percentage of persons with disabilities, 11.5%, compared to the national statistics of 8.6%; persons with no health insurance in Oklahoma is 6.6% higher than nationally; and Oklahoma's median income in Oklahoma is almost \$10,000 less than nationally (Centers for Disease Control and Prevention [CDC], 2022; Census, 2022).

Figure 3. Oklahoma Population Snapshot



(Census.gov, 2021)

Comparing race and ethnicity changes in Oklahoma to national statistics notes that in 2020 the percentage of Indigenous People/Native Americans/Alaska Natives in Oklahoma remains considerably higher than that at the national level. Changes in people reporting as White/Caucasian did not change in Oklahoma while decreased nationally by 10%. People reporting as African American and Asian continues to remain lower in Oklahoma than nationally. People reporting as Hispanic, Latino, or Spanish Origin increased in Oklahoma, but continues to remain below the national percentages (see Table 1).

Table 1. Population by Race/Ethnicity in 2010 And 2020				
	2010		2020	
Race & Ethnicity	Oklahoma	United States	Oklahoma	United States
White/	72.2%	72.4%	74%	61.6%
Caucasian				
Black/African	7.4%	12.6%	7.8%	12.4%
American				
American Indian	8.6%	0.9%	9.4%	1.1%
or Alaska Native				
Asian	1.7%	4.8%	2.4%	6%
Native	0.1%	0.2%	0.2%	0.2%
Hawaiian/Other				
Pacific Islander				
Two or More	5.9%	2.9%	6.3%	10.2%
Races				
Hispanic, Latino,	8.9%	16.3%	11.1%	18.7%
or Spanish				
Origin				

(Census.gov, 2021)

#### **Health of Oklahomans**

The 2018-2022 Oklahoma SCORP revealed the Oklahomans' health aspects that needed attention (Soltani & Caneday, 2017). Despite a few improvements in some measures, there remain many health challenges still to be addressed.

America's Health Rankings provide a comprehensive look at the health of the population at the national and state levels using a wealth of reputable data sources. Oklahoma ranks 23rd out of the 50 states in number of people with cancer.

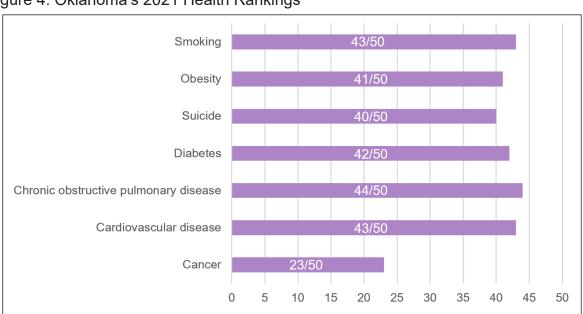


Figure 4. Oklahoma's 2021 Health Rankings

(United Health Foundation, 2021)

According to the Centers for Disease Control and Prevention (CDC), the elderly and people who have health pre-conditions are more susceptible to be severely affected by COVID-19. In considering residents 65+ years old, Oklahoma has an overall higher rate of persons in this age group with multiple chronic conditions. This can lead to more people being severely affected by COVID-19 compared with the U.S. as a whole (see Tables 2 and 3). Whether the classifications are by Gender or Race and Ethnicity, the percentages of Oklahomans 65 and older with multiple chronic conditions are higher than those at the national level in almost every category with the exceptions of Asian/Pacific Islander and Hispanic/Latino (CDC.gov, 2022).

Table 2. Multiple Chronic Conditions (Ages 65+) By Gender			
	Oklahoma	United States	
Females	44.8%	40.8%	
Males	44.5%	41%	

(CDC.gov, 2022)

Table 3. Multiple Chronic Conditions (Ages 65+) By Race And Ethnicity			
	Oklahoma	United States	
White/ Caucasian	44.4%	40.8%	
Black/African American	48.6%	47.2%	
American Indian	51.4%	43.1%	
Asian/ Pacific Islander	33.6%	39%	
Hispanic/Latino	37.7%	40.8%	

(CDC.gov, 2022)

#### The COVID-19 Pandemic and Impact

The COVID-19 pandemic disrupted many ways that people conducted their daily lives including their recreation and outdoor recreation. The World Health Organization classified COVID-19 as a pandemic on March 11, 2020 (Spence et al., 2021). In Oklahoma, the first COVID-19 case was reported on March 7, 2020 and case reports continued to be reported as COVID-19 spread across the state (see Table 4).

Table 4. Coronavirus Cases Report Updated September 2022			
	Oklahoma	United States	
Total Cases	1,192,429	95,795,378	
Total Deaths	14,786	1,050,631	

(CDC.gov, 2022; OK.gov, 2022)



In an effort to avoid the spread of the virus, many restrictions such as social distancing and mask mandates were imposed; many public places and businesses either closed or shorten service hours. Due to these measures, economic activity was affected in a variety of businesses and industries. As the International Monetary Fund (2022) indicated, the pandemic caused an unprecedented contraction of the global economy of 3.5% in 2020. The pandemic may have impacted some groups more than others. Groups such as youth, women, and workers with lower education levels indicated more impact financially and on daily activities in comparison to older and more affluent population groups.



During 2021, there was still uncertainty about the global economy primarily due to the pandemic, however a recovery of 6% was expected due to the fiscal-support policies implemented, adaptability of economies to find different ways of working, and the effects of the vaccine among other aspects. In order to alleviate the negative economic impact caused by the pandemic the United States implemented tax measures and economic stimulus among other incentives (IMF. org, 2021) (KPMG, 2020) (Yetati & Filippini, 2021).



#### Oklahoma's Recreation Resources

Oklahoma has over 2,930,000 acres of land and water designated as available for public outdoor recreation (Congressional Research Service, 2020). Additionally, there is privately owned property that is used for outdoor recreation, but it is at the discretion of the property owner and can change at any time.

For comparison, private ownership of land in Oklahoma is over 90%. Nationally, the percentage is 58%. Thus, public lands are significantly more limited in Oklahoma compared to other states. This has implications for the need to maintain the public recreation spaces to the best of the state's ability.

However, not all of the 2,930,000 acres of public land and water are owned and/or operated by the state. Of the total, approximately half of the acreage is state property. The other half is owned by the federal government (1,124,100 acres) and local cities and counties (28,180 acres).

The federal agencies that own public land in Oklahoma include:

- Army Corps of Engineers
- Bureau of Reclamation
- Department of Defense
- National Park Services
- · U.S. Fish and Wildlife Service
- U.S. Forest Service

The state agencies that manage public lands in Oklahoma are:

- Grand River Dam Authority
- Department of Wildlife Conservation
- Tourism and Recreation Department
- School Land Office
- State Regents for Higher Education

#### **Summary of Oklahoma's Resources**

Oklahoma is a landscape dominated by private property ownership (Lund, A., & Smith, A., 2021). The percentage of property owned and managed by the federal government in Oklahoma ranks 42nd (Congressional Research Service). However, the federal and state agencies within Oklahoma are managing and protecting some of the premier grassland, forest, and water resources in the state. Included in these areas are: Hackberry Flats Wildlife Management area, Talimena National Scenic Byway, Sequoyah National Wildlife Refuge, and Natural Falls State Park.

#### Oklahoma's Wetlands

Oklahoma is not typically considered to be a state in which wetlands are a major feature. Wetlands are defined as "areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation adapted for life in saturated soil conditions." Using that definition, approximately 733,000 acres within the state are freshwater wetlands. In contrast to traditional public perception, Oklahoma ranks among the top ten states in the nation in total acres enrolled in the Wetlands Reserve Program. The Wetlands Reserve Program (WRP) is a voluntary program offering landowners the opportunity to protect, restore, and enhance wetlands on their private property. The Natural Resources Conservation Service and state agencies provide technical and financial assistance to aid those landowners in restoration of wetlands. Oklahoma currently has 60 active WRP projects with another 40 projects in the application phase.

Oklahoma supports many distinct types of wetlands, such as playa lakes, riparian wetlands, swamps, bogs, marshes, oxbow lakes, closed depressions, and cypress swamps.

The Oklahoma Conservation Commission has developed a comprehensive plan for Oklahoma's wetlands. That plan has been updated on several occasions with principal communication through online resources. The comprehensive plan acknowledges the importance of wetlands for a variety of environmental benefits and human benefits, including recreation.

The Oklahoma SCORP utilizes the inventory provided by the Oklahoma Conservation Commission as the authoritative state inventory of wetlands. In addition, the SCORP supports the priority plan provided by the Commission for protection, restoration, acquisition of, and education about wetlands in Oklahoma.

Oklahoma's Wetland Program Plan has the latest update encompassing 2020-2025. The full plan can be found at <a href="https://www.ok.gov/wetlands/Projects/Wetland\_Program\_Plan/index.html">https://www.ok.gov/wetlands/Projects/Wetland\_Program\_Plan/index.html</a>

The 2020-2025 plan includes the following highlights:

- Condition and monitoring:
  - Objective: Develop a sensible monitoring and assessment strategy to serve as the foundation for tracking local and statewide trends in wetland health and extent, prioritizing and tracking restoration activities, and guiding compensatory mitigation projects
    - Progress continues on characterizing the wetlands resources in Oklahoma
    - Significant progress has been made in condition-based wetland rapid assessment
    - Coordination and collaboration with tribal partners continue to make progress

- · Regulation:
  - Objective: Promote greater understanding of the scope of the program in wetlands
    - Providing comments to the Tulsa District Mitigation and Monitoring Guidelines through the Oklahoma Wetlands Technical Workgroup
    - Continue to utilize the wetlands registry to promote restoration opportunities
- Voluntary Restoration and Protection:
  - Objective: Clearly and consistently establish integrative wetland restoration, enhancement, creation, and protection goals
    - Continued development to integrate wetlands restoration into watershed planning
    - Move forward with improving marketing of wetlands restoration opportunities through the Wetlands Program website, Wetlands Registry, and development of online interactive map of potential historic wetlands
- Water Quality Standards:
  - Objective: Develop wetland-specific water quality standards
    - Developing mechanisms for listing impaired wetlands
    - Utilizing the Oklahoma Wetlands Technical Work Group to determine how to report and restore impaired wetlands
- Education and Outreach:
  - Objective: Provide landowners, land-users, resource-managers, and policy-makers with the necessary information regarding the importance of wetlands
    - Develop educational materials tailored to specific target populations (including children)
    - Create a website (or section of the existing website) that can be utilized as a clearinghouse for all agencies and organizations involved in Oklahoma wetlands identification, rehabilitation, education, and protect

Information for this section of the SCORP was from Oklahoma's Wetland Program Plan 2020-2025, prepared by The Oklahoma Conservation Commission and the Oklahoma Wetland Technical Work Group (Oklahoma Wetlands Project Plan, 2022).



Image Description: Three pictures showing a dock, a grass covered lakeside, and a river.

#### OKLAHOMA RESIDENTS' SURVEY RESULTS



Image Description: People hiking on boulders at the top of a mountain with two lakes in the background.

#### What Oklahomans Are Saying

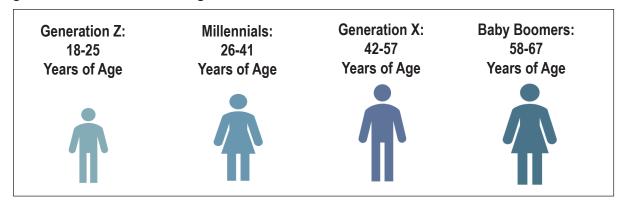
An on-line questionnaire was designed to gather information regarding the outdoor recreation habits of Oklahoma residents as well as potential impact of COVID-19 on residents' outdoor activities. The residents/citizen survey was open and distributed 1-12-2022 to 6-4-2022 and collected 591 responses. Residents were asked about the conditions of the outdoor facilities usually visited and input on how to improve those facilities. The complete survey responses are found in Appendix B. During May of 2022, the OSU SCORP team also conducted on site observations of parks located in the six geographical regions, see Appendix E. The 2023-2027 SCORP sought input from park related social media accounts that provided interesting findings, see Appendix F.

The OTRD divides the state of Oklahoma in six geographical regions. Therefore, survey responses as well as observations and social media platform analysis were collected from the six regions of the state: Northeast, Northwest, Central, South Central, Southeast, Southwest.

#### **Profile of Residents**

Five hundred and ninety-one residents responded to the request for comments through the online survey instrument. The majority of the respondents were female, (72%). The majority of respondents reported as White/Caucasian, (71%). The age range of the resident participants varied from 18 to 75 years of age, with a median of 48 years of age. Fifty percent of the resident participants could be categorized as Generation Z and Millennials, 35% as Generation X and 15% were Baby Boomers.

Figure 6. Generational Categories



#### **Generations and Their Outdoor Recreation Habits**

The responses of Oklahoma residents were categorized by generations to be able to compare and contrast their different recreation habits. According to some studies, Generation Z is especially sedentary; members prefer to spend leisure time using smartphones and a very few meet the recommended levels of physical activity (NRPA. org, 2022).

Millennials have similar habits such as the high usage of their smartphones and social media, however, more members of this group engage in physical activity than their Generation Z counterparts. According to the 2021 National Recreation and Park Association (NRPA) Engagement with Parks Report, 45% and 34% of Generation Z and Millennials respectively express that one of their top activities is playing sports with friends and/or family. Seventy percent of Generation X and Baby Boomers report using local open spaces such as parks or playgrounds during their leisure time (NRPA.org, 2022).

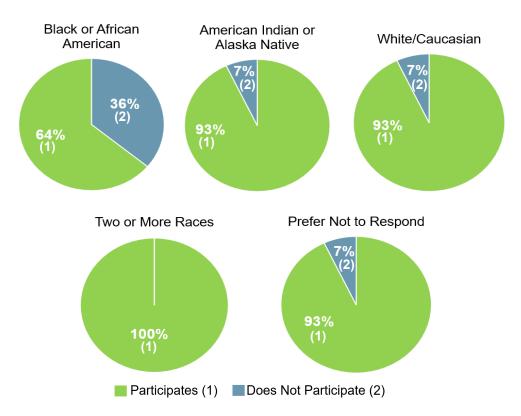
Since 2016, National Recreation and Park Associate (NRPA) has published monthly Park Pulse reports. One of the questions asked of people addresses how places they visit are used for related health benefits of being in nature. A look at how respondents reported places used revealed that 56% of Americans visit lakes, riverfronts or beaches; 55% visit local parks or picnic areas. Among the respondents, 89% of Millennials claimed to visit outdoor areas to experience health benefits of being in outdoor spaces with 82% of Generation X and 77% of Boomers reporting similar activities (NRPA.org, 2022).

#### **Engagement in Outdoor Recreation**

A majority of the respondents of the residents' survey (92%) indicated that they usually engage in outdoor recreation. Fifty-nine percent of the respondents are willing to travel 121 miles or further to visit a park; 22% travel between 61 and 120 miles and 17% travel between 1 and 60 miles. Forty one percent spend between 2 and 3 hours per visit, 28% spend 4 hours or more, and 21% report willingness to stay overnight at the parks.

Included in the analysis of respondents, it can be noted that White/Caucasian and American Indian or Alaska Native are the most likely to participate in outdoor recreation. Additionally, those who report as two or more races and those who preferred not to identify as a particular race responded with high outdoor participation.



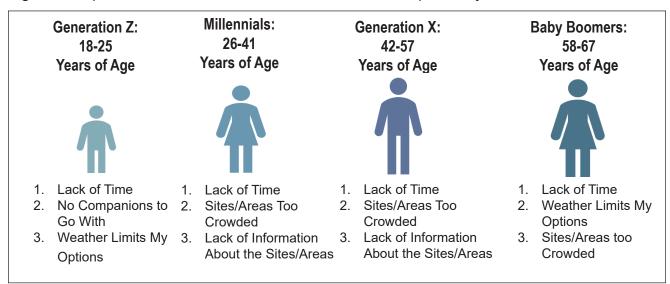


#### **Barriers to Participating in Outdoor Recreation:**

- Lack of Time is the # 1 across all interviewed
- Recreation areas are too crowded
- Weather conditions
- Lack of knowledge about the areas
- Not having companions to go with
- Poor conditions of the facilities

Individuals who do not usually participate in outdoor recreation reported that they do not engage for a number of reasons including lack of time, lack of interest, and general fear of the environment. The Outdoor Enthusiasts reported similar concerns.

Figure 8. Top Three Barriers to Outdoor Recreation Participation by Generation



In order to encourage and motivate more participation in outdoor recreation activities, it is important to learn about the reasons why people engage in outdoor recreation. Thus, respondents were asked to list the top five reasons they engage in outdoor recreation. Both the residents and the outdoor recreation enthusiasts responded with a similar list:

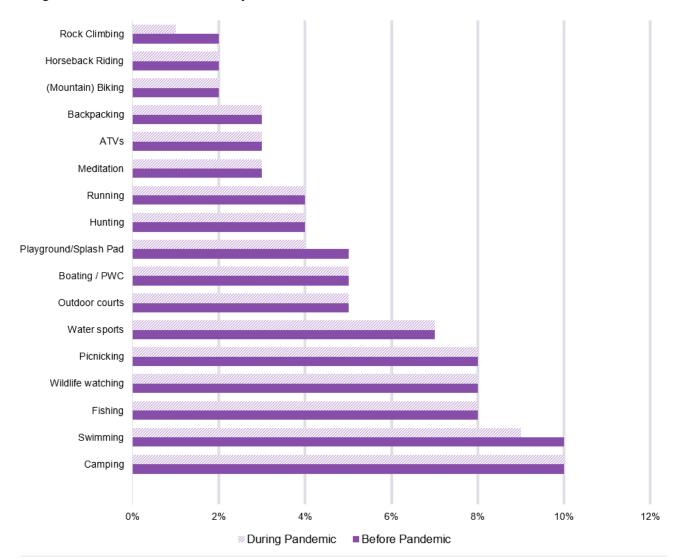
Motivation to Participate in Outdoor Recreation:

- Relax
- Connect with nature
- Release from work
- Release from personal pressure and stress
- Stay fit

Participants of the survey were asked to rate the importance of outdoor recreation. Forty-one percent of their responses fall in the category of very important, 33% extremely important and 24% moderately important. Only 2% rated outdoor recreation below moderately important.

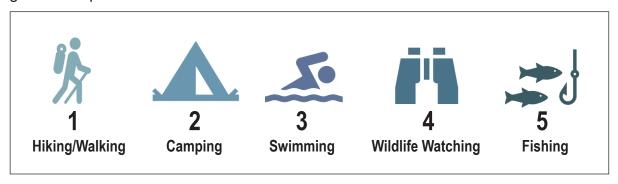
The state of Oklahoma offers a great variety of outdoor activities. Of the activities listed in the questionnaire, the respondents noted that their level of participation in outdoor recreation before and during the pandemic changed very little. Those who participated in any particular outdoor recreation activities tended to continue those activities. The top 5 activities reported include: hiking/walking, camping, swimming, wildlife watching, and fishing.

Figure 9. Activities Identified by Residents



In addition to what activities are popular, the size of the group was reported during the observations by the OSU SCORP team during their visits to parks across the regions of the state. As observed, a highest percentage of people were in groups of 3-5 people indicating that Oklahomans are more likely to participate in outdoor recreation in groups.

Figure 10. Top Five Resident Outdoor Recreation Activities



An analysis of social media provided information regarding user engagement in social media platforms used by providers of outdoor recreation areas. The social media platforms reviewed included Facebook, Instagram, Twitter, and any other platforms Identified on a providers' website. The majority (77%) of likes or comments on any post was between 0-20. However, some posts received over 100 comments or likes. While this might seem to be a low number of average comments and likes per post, it should be noted that likes and comments were counted for all posts for a number of locations (see Appendix F).

77% (1) - 0-20 (1) = 21-40 (2) = 41-60 (3) = 81-100 (5) = 101 + (6)

Figure 11. Average Likes and Comments on Parks' Social Media Platforms by Residents

#### Residents' Facilities Satisfaction

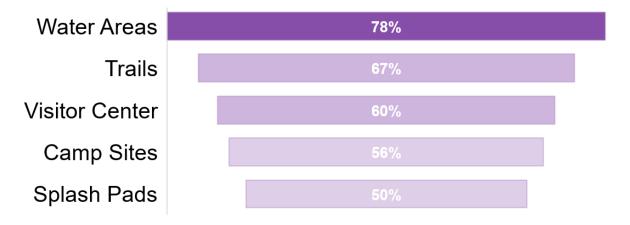
The conditions of the facilities were rated by the respondents. Overall, the respondents considered the facilities of the state outdoor recreation locations as being in good condition. However, the respondents noted that, in general, restrooms and cabins were less than good.



Figure 12. Top Five Facility Conditions Rated as Good by Residents

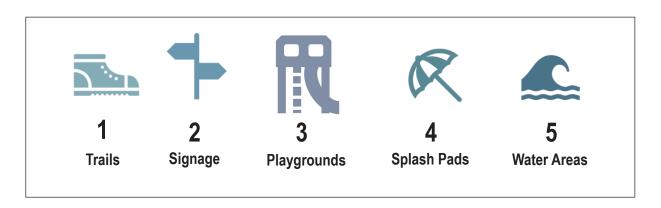
While the residents of Oklahoma who responded to the survey identified facilities and amenities as good, the OSU SCORP team who made observations of areas and facilities in the six regions noted that many of the facilities were very good. Trails, water areas, visitor centers, and campsites were marked as "Very Good" by over 50% of observers. Restrooms, parking, and outdoor courts were observed as some areas needing maintenance and/or upgrading.

Figure 13. Top Five Facilities with Highest Ratings by Observers



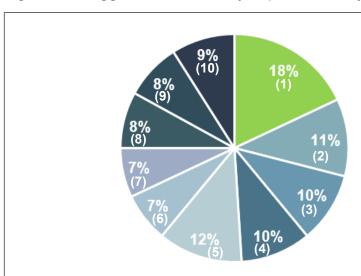
The OSU SCORP team should be noted as having rated all facilities higher than the general resident respondents and the social media evaluations. In reviewing the social media platforms, posts, and comments, the only noted items in the "Very Poor" categories were trails and water areas with less than 5%. The majority of the posts noted facilities as good. Restrooms and roadways had 50% or higher comments/posts as neutral.

Figure 14. Top Five Facility Conditions Rated as Very Good/Good on Social Media



With the general public survey, there was an area for identifying needs and improvements to enhance outdoor recreation options and opportunities. The top identified item was to improve/enhance existing parks and recreation areas. Investment in new parks and recreation areas and acquiring more lands, recreation areas, and open spaces were the next most noted improvements. Other top items included building bike and pedestrian pathways between places of work/school/shopping/neighborhoods, and increased outdoor recreation opportunities for children, and better security for facilities.

Figure 15. Suggestions for Facility Improvement by Residents



- Improve/enhance existing parks and recreation areas (1)
- Invest in new parks and recreation areas (2)
- Acquire more lands and recreation areas and open spaces (3)
- Build bike and pedestrian pathways between places of work/school/shopping/ neighborhoods (4)
- Increase outdoor recreation opportunities for children and youth (5)
- Better security within facilities (6)
- Increase accessibility for people with disabilities (7)
- Increase outdoor recreation opportunities for senior citizens (8)
- More opportunity to participate in organized activities/programs (9)
- Build sidewalks within the communities (10)







Image Description: A multicolor playground with a ramp. A wood cabin. A lake front with chairs.

#### **Residents' Participation During Pandemic**

It is important to acknowledge the impact that the COVID-19 pandemic may have had on outdoor recreation, thus, the survey contained several questions regarding residents' views on this matter, specifically, how the pandemic did or did not impact their outdoor recreation pursuits. Of the respondents, 92% identified as usually participating in outdoor recreation. Of this group of people, many did indicate that they changed their outdoor recreation participation during the pandemic. While some decreased and some increased participation, the overall effect was a steady outdoor recreation participation level through the pandemic, according to the residents' survey. However, the 31% participating more may provide new participants to some activities and/or areas.

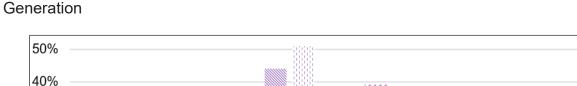
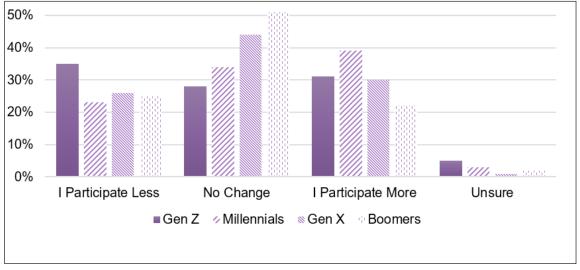
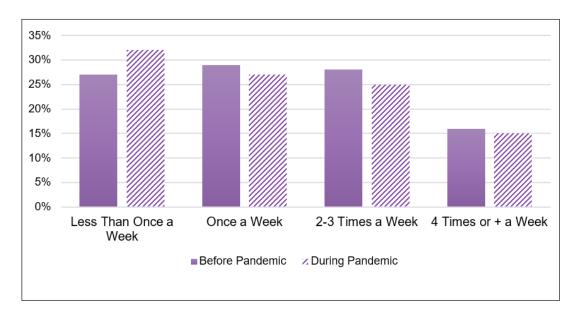


Figure 17. Resident's Response to Participation Change During Pandemic by



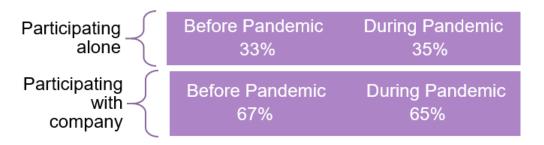
Of the 8% of respondents who said they do not engage in outdoor recreation regularly, 28% reported having stopped altogether due to COVID-19. At the onset of the pandemic, many people across the country may have expressed concern with being around others due to the ongoing pandemic and the unknowns related to COVID-19. However, outdoor recreation seems to have a different concern level, at least in Oklahoma. Of the resident responses, 85% answered "no concern" when asked about their level of concern when participating in outdoor recreation. When asked to compare their frequency of participation in outdoor recreation before and during the pandemic, the 92% of respondents who did participate in outdoor recreation in general averaged much the same level of response to both before and during the pandemic. There was a 2% difference across all frequencies of participation.

Figure 18. Frequency of Participation Change in Outdoor Recreation Before and During the Pandemic according to Residents' Responses



The survey sought clarification related to outdoor recreation social patterns of participation patterns group or individual before and during the pandemic. The results indicate that very little change occurred in social participation patterns from pre-pandemic to during the pandemic.

Figure 19. Social Participation Patterns Changes During Pandemic



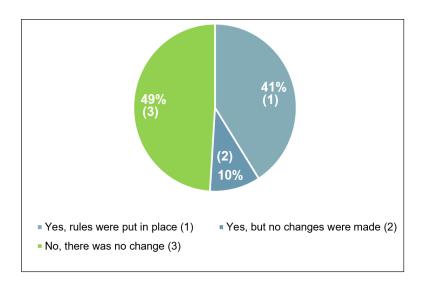
Whether recreating outdoors alone or with others, the CDC recommendations included social distancing from those not in the same group and staying at home if ill. While the residents of Oklahoma did not change much in the size of the recreation group, they were reminded through multiple avenues to follow the guidelines provided. NRPA used its platform to encourage people to recreate alone or with others outdoors while following the CDC guidelines.



(NRPA.org, 2022).

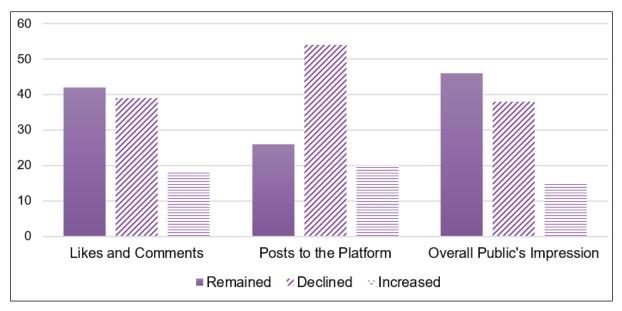
Residents were asked if they observed any pandemic guidance on the social media platforms of the outdoor recreation organizations and agencies they frequented. Just over 40% responded that posts were made about pandemic rules put into place. Just under 50% noted no specific notices were seen.

Figure 20. COVID-19 Addressed on Outdoor Recreation Agencies' Social Media Platforms



In reviewing the social media platforms for agencies/organizations, researchers did note that engagement with social media tended to remain the same or decreased during the pandemic. Posts on 54% of platforms decreased during the pandemic, while only 18% showed an increase in posts. Likes and comments tended to remain the same for 42% of platforms posts, while 39% showed a decline.

Figure 21. Resident Engagement on Agencies' Social Media Before and During Pandemic



To aid in assessing agencies/organizations provision of COVID-19 information and management strategies, on-site observations included identifying specific management practices related to COVID. The observers were asked if the agency/organization information included:

- COVID-19 information displays
- Limited carrying capacity notices
- Mask requirements
- Sanitization stations
- Social distancing practices and/or information

Only one observer identified a sanitization statement in one area of the Red Carpet region. No other management strategies were reported.

#### RECREATION ENTHUSIASTS' SURVEY RESULTS



Image Description: Three photos of people playing on a court, rock climbing, and kayaks on a beach.

#### **Perceptions of Outdoor Recreation Enthusiasts**

The State of Oklahoma provides a wide variety of opportunities to engage in outdoor recreation. Thus, outdoor recreation enthusiasts have organized themselves based on affinities and preferences. Data was collected by targeting and interviewing groups of enthusiasts to learn about their outdoor recreation perceptions, personal experiences, and the effects of COVID-19 in their routine recreational activities.

#### **Profile of Outdoor Recreation Enthusiasts**

A total of 320 enthusiasts who regularly engage in outdoor recreation activities within a group, participated in the online survey distributed through their organizations. Of these enthusiast respondents, 52% identified as female and 47% identified as male. Their ages ranged from 18 to 80 years old with a median age of 50 years old. The majority of enthusiast respondents reported their race as White/Caucasian (87%). The education completion of the enthusiast respondents includes 30% having some college completed, 43% having earned a BA or BS, and 24% report having completed a post baccalaureate degree. The income level of the enthusiast respondents notes 14% makes less than \$50,000/year, 36% earning between \$50,000-\$100,000/year, 16% having an annual income between \$100,000-\$125,000/year, and 165 having an income of more than \$125,000/year. The majority of the enthusiast respondents report having a full-time job (68%), with 6% being employed part-time, 9% reported as being self-employed, and 13% are retired.

#### **Engagement in Outdoor Recreation**

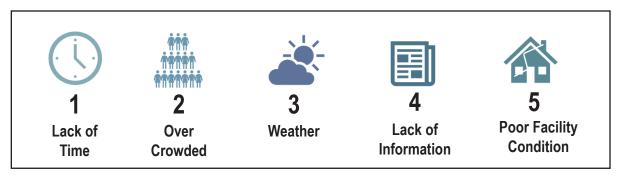
A majority of enthusiast respondents considered participating in outdoor recreation activities to be extremely or very important (89%), and 71% are willing to travel over 120 miles to visit their preferred destinations. Only 8% spend an hour or less in their activity per outing, while 45% spend on average 2-3 hours per visit. Twenty-five percent spend 4 or more hours per participation event and 22% prefer to spend the night at their chosen activity destination.

However, even a dedicated enthusiast cannot always participate in their chosen activity.

The top 5 barriers to participation include:

- · Lack of time
- Site/area too crowded
- Weather limiting options
- · Lack of information about sites/areas
- Poor condition of facilities

Figure 22. Top Five Barriers to Enthusiast Participation



There are different motivations that encourage individuals to participate in outdoor activities. Therefore, enthusiasts were asked to list all reasons why they decided to participate in OR. The top 5 reasons are: 1) Relax, 2) Connect with Nature, 3) Release from work or other pressures, 4) Release from personal pressures and stress and 5) Stay fit. It can be important to learn whether the pandemic had an effect on the enthusiasts' recreational activities. Based on their responses, it can be said that the types of activities that enthusiasts engaged either before or during pandemic kept constant and are listed according to the number of answers received: 1- Hiking/Walking, 2 - Camping, 3 - Water Sports, 3- Wildlife Watching and 4- Fishing.

# **Facilities Satisfaction**

Enthusiasts were asked to rate the conditions of the recreation facilities and to provide suggestions on how the facilities may be improved. City/municipal parks were the top-rated facilities with 62% responding very good or good. Restrooms were the worst rated with 37% responding poor or very poor.

After rating facilities, enthusiasts were asked to identify priorities, for area and facility improvements. They were able to identify as many priorities as they wanted. The one category that far surpassed the others was to improve/enhance existing areas and facilities. Enthusiasts did have priorities of acquiring more land and facilities. However, enthusiasts were far more interested in upgrading what already exists.

Figure 23. Mean Rating of Facilities by Enthusiasts

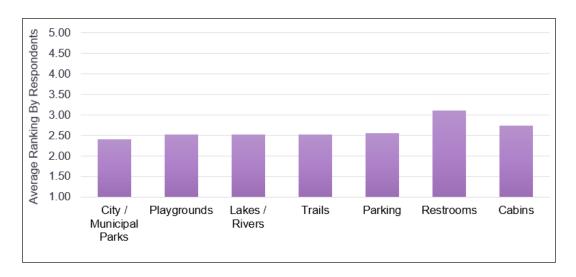
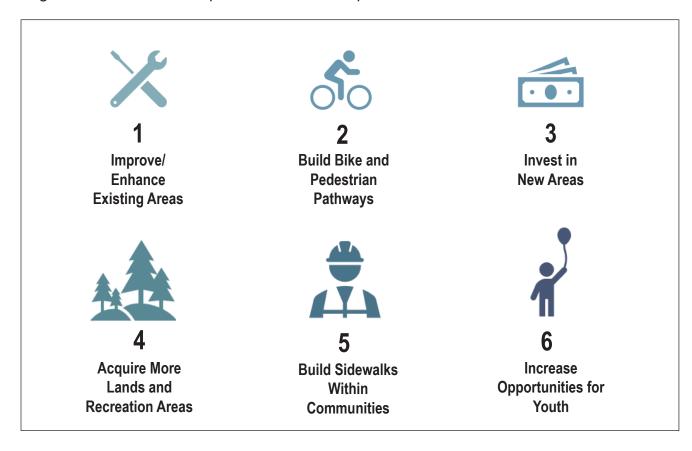


Figure 24. Enthusiasts' Top Six Priorities for Improvements



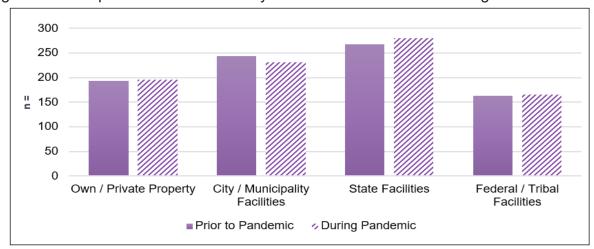


Figure 25. Comparison of Use Areas by Enthusiasts Before and During Pandemic

# Participation Changes due to COVID-19

Enthusiasts were asked if they engaged in outdoor recreation alone or with others and if their participation changed due to COVID-19. Based on their responses, there was only a slight increase in participating alone. Otherwise, the outdoor recreation Participation habits of enthusiasts had little change due to the pandemic. This could be explained by 95% of enthusiasts responding that they were not afraid of getting COVID-19.

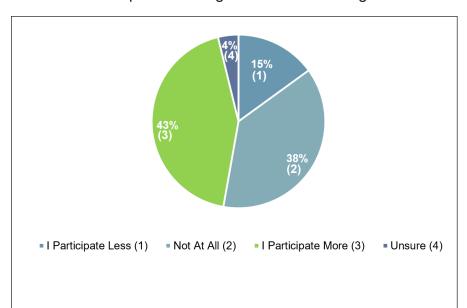


Figure 26. Enthusiasts Participation Change Before and During Pandemic

Enthusiasts reported not being afraid of being infected (95%) by the virus and 45% of them (or their families) do not have any preexisting conditions that may severely affect their health versus 35% of them (or their families) who do have a health condition that might put their health at risk.

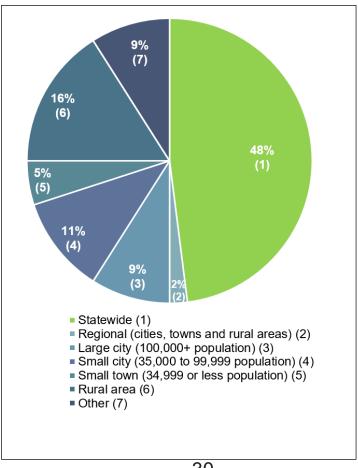
# **RECREATION PROVIDERS' SURVEY RESULTS**



Image Description: Photos of people providing recreation.

In addition to learning what the residents of Oklahoma have experienced through the pandemic, it may also be imperative to discover the practitioners/providers of outdoor recreation have experienced. The provider survey was directly emailed to identified providers, as well as posted on professional association web pages and social media platforms. The full provider survey can be found in Appendix D. Of the respondents, 48% indicated they worked in a location that served the statewide population.

Figure 27. Community Types Served by Providers' Agencies



# **Level of Concern in their Organizations**

Recreation providers were asked to indicate their level of concern at the time of the survey. The providers showed the highest concern in the following topics:

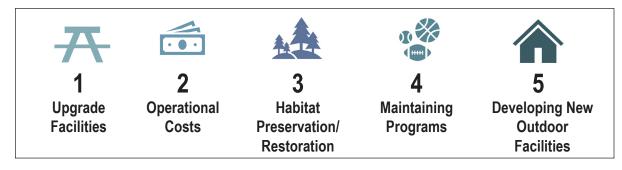
- 1. Opportunities for diverse populations to participate in outdoor recreation (including an aging population and persons with disabilities)
- 2. Maintenance of existing outdoor recreation infrastructure and resources
- 3. New opportunities for new users to participate in outdoor recreation,
- 4. City funding for municipal resources
- 5. Maintain and enhancing visitor safety

# **Funding Use Preference**

With limited resources, it can be complicated to prioritize and determine how funds could be allocated within an agency/organization or across the state as a whole. When asked to rate funding use preferences, providers rated:

- 1. Upgrading existing facilities (i.e. adding pathway lights) 91% rated as extremely or very high priority
- 2. Operating costs for existing facilities 84% rated as extremely or very high priority
- 3. Habitat preservation and restoration 79% rated as extremely or very high
- Maintaining existing levels of recreation and interpretive education programs - 77% rated as extremely or very high

Figure 28. Top Five Providers' Funding Priorities



## **Recreational Use Conflict**

When there are several groups of people with diverse interests, some conflicts related to the use of the facilities may emerge.

One avenue for providers to use to determine needs and priorities is recreation use conflict. When asked, providers identified the top 3 recreation use conflicts as:

- Conflict between traditional and new recreational use
- Conflict between motorized and non-motorized uses
- Overcrowding/overuse of recreation areas

Figure 29. Top Three Recreation Use Conflicts as Reported by Providers

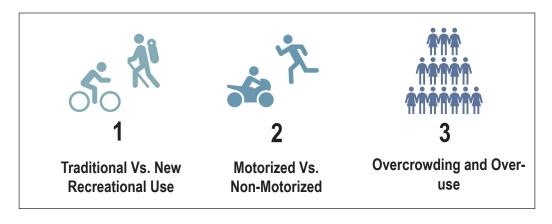


Image Description: Metal signs displaying information about the park.



# Safety Issues and Use Impact

Recreation providers were asked to rate the level of agreement with statements related to safety, security, and use impact:

- 1. Too much trash or litter impacts visitor enjoyment
- 2. There is a need for user education of laws and regulations regarding recreation activities
- 3. Vandalism is an issue in parks and recreation areas

Figures 30. Top Three Providers' Concerns Related to Safety and Security



### **Resource Protection**

Providers were asked to identify the level of agreement of the agency/organization mission and actions for resource protection. The top three items reported by providers included:

- 1. One of the goals of my agency is sustainability of natural and cultural resources
- 2. My agency has adequate laws or policies to protect natural and cultural resources
- 3. My agency limits recreation development to protect natural and cultural resources

Figure 31. Providers' Top Three Resource Protection Ratings



# **Helpfulness of Resources Available**

Agency/organization providers were asked to rank the level of helpfulness of several available resources for the short and long term. The "most helpful" and "helpful" items identified by the providers are: funding and grants, friends and volunteer groups, and political support.

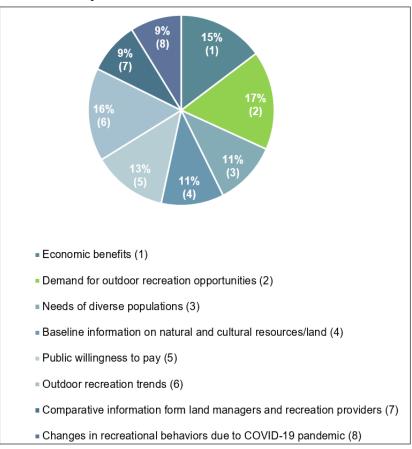
Figure 32. Top Three Providers' Rated Helpful Resources



# **Data Types Requested to Understand Public Needs**

Providers were asked what information they needed to assess the needs of the public so that the public is to best be able to participate in outdoor recreation. Interestingly enough, there was no clear top choice. The providers' responses included all options as having some importance. All options ranked between 8-17% for top choice of responses (See Figure 33).

Figure 33. Information Need by Providers to Address Public Outdoor Recreation Needs



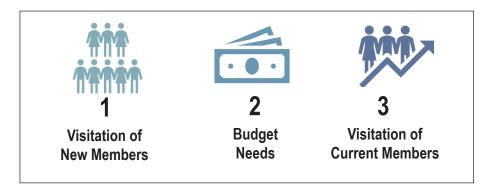
# **COVID-19 Management within Agencies/Organizations**

The providers were asked to reflect on changes at their areas/facilities during the pandemic. Given a sliding scale of -100 to +100, providers reported on several issues and how much positive or negative change they experienced. Zero = "remained the same"; -100 = a complete decline/decrease; and +100 = a total incline/increase.

Visitation of current members / annual pass holders / regular attendee

- Mean +37.71 increase
- New visitation of new members / annual pass holders / new regular attendees
  - Mean +45.33 increase
- Staff shortages
  - Mean +20.95 increase
- Safety restrictions
  - Mean +21.09 increase
- · Budget needs
  - Mean +43.65 increase
- · Staff fear of getting sick/infected
  - Mean +32.71 increase

Figure 34. Providers' Identified Top Three Most Increased During Pandemic



# DISCUSSION



Image Description: Photos of a wood cabin, people hiking, and a buffalo.

During the COVID-19 pandemic when other forms of recreation were canceled, outdoor recreation proved to be an alternative that many people took advantage. Several studies have shown a connection between natural area exposure and good physical and mental health (Grima et al., 2020; Hansen, 2021). Hence, outdoor activities became a good option for them to keep the connection with the outside world and turning parks in an escape from stress and confinement (Volenec, Abraham, Becker, & Dobson, 2021) thus avoiding isolation (Samuelsson, Barthel, Colding, Macassa, & Giusti, 2020).

Oklahoma State Parks supports the idea that more people utilized outdoor recreation during the pandemic. As the pandemic began to cause changes during the late spring and early summer 2020 in Oklahoma, and continued through all of 2021, the increased use of state parks marked a significant increase. Tent camping during 2021 at Oklahoma State Parks almost doubled from the previous year, and RV camping increased by a third.

Within the state of Oklahoma, OTRD reported an increase in the number of park visitors between 2020 and 2021. Tent camping at state parks increased by almost 50% and RV camping increased by approximately 30% (see Appendix D).

While the residents surveyed indicated that some people participated more and others less, with the end result being sameness in the amount of outdoor recreation Participation in Oklahoma, the enthusiasts indicated an increase and the numbers portray a different picture. At outdoor recreation locations that track attendance and participation, like the Oklahoma State Parks, it is clear that people participated in outdoor recreation more in 2021 than in years prior.

The COVID-19 pandemic undoubtedly brought multiple challenges for outdoor recreation due to the restrictions imposed, the fear of being infected, or the uncertainty that it produced worldwide. Nevertheless, it prompted new and renewed interests in outdoor recreation.

### **Themes**

### Sub-theme 1:

## Trends from Outdoor Recreation and Park Use Due to the Pandemic

From the information gathered from the individuals surveyed, a review of literature, and information reported by government agencies it can be said that:

- Outdoor recreation can be a critical factor in the economy and was, in some areas, deeply affected by the pandemic
- There are countless benefits that outdoor recreation can bring to everybody including stress relief
- Since the onset of the pandemic, there has been new and renewed interest in outdoor recreation
- Outdoor Recreation providers showed great adaptability for change in uncertain times
- The pandemic evidenced a need for park infrastructure funding
- Oklahoma state parks reported a higher number of users during pandemic
- Many state residents did not change their outdoor recreation habits during the pandemic, few participated less, and many participated more

During the pandemic, public parks and green spaces have played an important role and may be seen as a source of resilience to overcome the negative physiological and psychological effects of the pandemic (Geng et al., 2021). Furthermore, public parks and green spaces play a critical function for everyone, but play a specific role for low-income people who may not be able to afford access to private recreation services. This is particularly important in outdoor recreation since there is not enough diversity among the participants and there is a need to become more inclusive so that the benefits may expand.

### Sub-theme 2:

# Outdoor Recreation and Park Responses to the Changes Due to the Pandemic

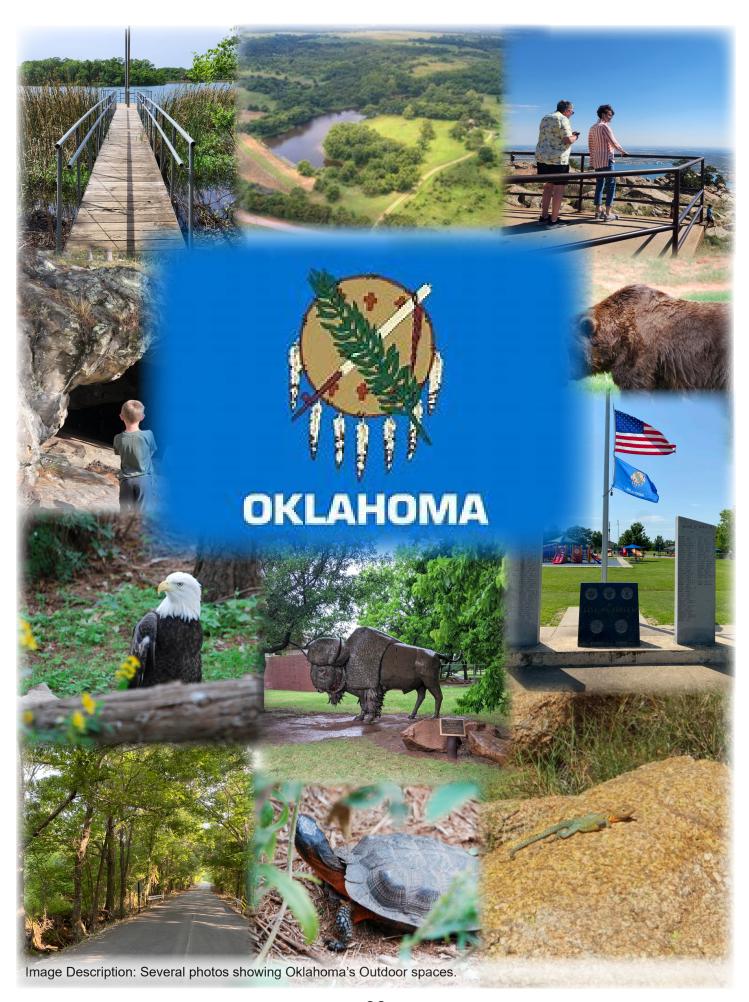
Outdoor recreation participation increased but the resources to provide for these participants remained the same or were reduced.

- More people came to recreation, but staffing did not increase
- In many cases, places had staff shortages due to staff illness requiring quarantining
- OTRD had a 25% overall increase in park visitors and a 50% increase in tent campers

- Area workers devised a number of options to remain available to participants while trying to reduce the COVID spread: implementing one-way trails, changing program locations to allow for social distancing, and additional cleaning of facilities (Dolesh, 2021)
- Regular users combined with new and renewed users have highlighted areas and facilities that need maintenance, updating, and upgrading
- Oklahoma outdoor recreation providers held up during the pandemic with few closures, few cancellations, and an increase in outdoor recreation participation

# Sub-theme 3: The Future with New, Renewed and Emerging Users

- Oklahoma increased in population by 6% between the 2010 and 2020 census
- Increases in urbanization has occurred with more people migrating to the Oklahoma City and Tulsa metro areas
- The White/Caucasian population of Oklahoma decreased by 4.8%, but is still the largest segment of the population
- The White/Caucasian and the Native American/American Indian/Alaska Native populations continue to be the largest groups engaging in outdoor recreation
- The largest increase in population groups is the Hispanic/Latino group who have a national trend toward increased outdoor recreation engagement (Flores & Sanchez, 2020)
- The largest age group increase in the state is the 65+ group (Baby Boomers) with a 3% population increase



# OKLAHOMA STATEWIDE COMPREHENSIVE OUTDOOR RECREATION PLAN

Through the process of observations, investigations, and data collection from residents, enthusiasts, and providers, a few elements have emerged as having more priority before, during, and after the pandemic. It should be noted, the increases in outdoor recreation participation during the pandemic have enhanced these priorities. Additionally, elements from the 2017 Oklahoma SCORP are included as ongoing components.

Providers of outdoor recreation in Oklahoma can use the 2023-2027 SCORP when considering and planning projects for outdoor recreation areas, facilities, and programs. The following priorities derived from the data are designed to guide providers when applying for LWCF grants from OTRD.

**Topic #1** – Maintain, upgrade, update, and enhance existing spaces/areas/facilities utilized for outdoor recreation

- Update and upgrade bathrooms to include additional access and availability, improve conditions, include more accessible options at all possible locations
- Maintain and upgrade walkways, paths, and trails to include multiple-use options and more options targeted at, and suited for, specific activities (trail running, horseback riding, mountain biking, and AVT/UTV)
- •Enhance existing areas and facilities with additional elements to expand multiple-use options, such as adding trails, picnic tables, playground equipment, disc golf courses, fishing access, and hunting
- •Maintain and enhance local outdoor recreation and open spaces so that all residents of the state have local access to high-quality outdoor recreation areas, facilities, and programs
- Maintain and improve local parks and playgrounds, specifically in underserved areas

Priorities ranked **HIGH** for local and state LWCF projects:

- Maintain and improve existing areas and facilities
- Upgrade bathrooms
- Enhance outdoor recreation areas and facilities in underserved areas and with underserved population groups

# **Topic #2** – Acquire/reacquire public land for outdoor recreation

- •Utilize professional and organizations within the state to assist in locating and acquiring land to extend existing areas or create new areas to promote outdoor recreation (Oklahoma Municipal League, Oklahoma Recreation and Park Society, city managers, local park and recreation departments, community organizations, and enthusiast groups)
- Maintain public outdoor recreation access to as much open space as possible
  by creating avenues to reach neighborhood locations, specifically in fast-growing
  urban areas, rural areas/smaller communities that need access to quality
  playgrounds, underserved areas that do not have local access to high quality
  outdoor recreation and open spaces
- •Acquire land for habitat restoration within communities and in larger land areas
- Acquire and/or develop neighborhood space for green space/open space/parks/ outdoor recreation areas specifically in areas of underserved populations, rural communities, designed for families, and options for varying ability levels

Priorities ranked HIGH for local and state LWCF projects:

- Provide areas and facilities to underserved populations
- Provide local access to high quality outdoor recreation areas and facilities
- Provide high quality outdoor recreation opportunities for persons with varying abilities and older adult populations

# **Topic #3** – Information, Education Management

- Create and maintain signage such as area wildlife, geography, historical events, opportunities for outdoor recreation, area organizations related to activities, and information to aid participants in accessing areas/facilities/programs
- •Maintain and assist in developing resources and programs with local and state organizations/agencies to help citizens learn about outdoor recreation and its benefits, such as create partnerships with community organizations, local park and recreation departments, YMCA/YWCA's, Boys and Girls Clubs, Oklahoma Recreation and Park Society, Oklahoma Municipal League to maximize outreach and opportunity for citizens to learn about, participate in, and get involved with outdoor recreation
- •Enhance and/or create social media avenues for distribution of information and information sharing

- •Enhance and/or create pathways for walking and bicycles between areas (i.e. schools, neighborhoods, parks), development of connecting pathways within communities to offer accessible, maintained, outdoor recreation and connections to outdoor recreation areas and facilities and open spaces
- •Develop and enhance information and education materials to assist citizens in learning about outdoor recreation opportunities; create partnerships with community groups, clubs, local agencies, and organizations across the state to educate and encourage outdoor recreation participation

Priorities ranked **HIGH** for local and state LWCF projects:

- Create and maintain signage for interpretation, management, and education
- Develop partnerships to provide programs, resources, and education
- Develop and maintain connecting pathways

**Topic #4** – Provide areas and facilities for enhancing safety and safe participant engagement of all persons

- Update and upgrade safety features such as lighting, guard rails, hand rails, and pathway surfacing
- •Enhance and upgrade accessibility access, areas, and facilities

Priorities ranked **HIGH** for local and state LWCF projects:

- Update safety features
- Create and/or enhance accessibility so that citizens of all abilities can participate in outdoor recreation

# **Topic #5** – Continuation and ongoing recommendations

Previous Oklahoma SCORPs included a number of recommendations and priorities. Included were water quality and quantity and a statewide trails plan. As these recommendations continue to hold importance to outdoor recreation opportunities in the state, they are included in this SCORP as continued priorities and recommendations. Additionally, data collected for the current SCORP continues to indicate the need for water access for outdoor recreation and a trail plan for maintenance, improvements, and acquisition of trails across Oklahoma.

Water Quality and Quantity:

Water quality and quantity has been a concern in several recent generations of SCORPs for Oklahoma. Water rights and the value of freshwater for recreation and tourism as well as other uses, will continue to be increasingly sensitive topics. Oklahoma developed a water plan in 2012 and has implemented that plan over the past years. The public has become much more aware of the value of water through warnings regarding quality of surface water, hazards of recreation activity in surface water, public education by various groups. However, water quality and quantity will continue to be extremely sensitive topics.

- •Recommendation 1 Laws and regulations are in place regarding water usage and run-off. However, public recreation managers should be premier examples of proper resource management. Best Management Practices (BMPs) should be implemented on all state and municipal properties regarding water use, disposal, and run-off
- •Recommendation 2 Recreation resource managers must be present at and active in discussions regarding water quality, quantity, and allocation as the water plan is implemented
- •Recommendation 3 Recreation resource managers must take an active role in educating the public regarding the effect of personal and recreation behavior on water quality and quantity. This includes introduction and transport of invasive species and adverse impact on water quality through everyday activities (Soltani, F., & Caneday, L., 2017).

#### Statewide Trails Plan

The Oklahoma Recreation Trails Plan is dated and no longer reflects needs or expectations of the population. Urbanization of populated areas has produced some local trails showing coordination through local councils of government. However, the state lacks recreation trails or a plan for trails to link communities or populations to outdoor recreation resources. The diversity of interest related to trails – hikers, joggers, bikers, equestrians, ATV riders, ORV riders, canoeists, kayakers, and more – continue to grow and will likely expand. Technology of alternative transportation has changed, as have the standards related to accessibility, specifically related to "other power-driven mobility devices" (OPDMD)

•Recommendation 1 – The Oklahoma Trails Advisory Board and the Oklahoma Tourism and Recreation Department should develop a new statewide recreational trails plan. That planning process must include the range of recreation resource managers (Soltani, F., & Caneday, L., 2017)

**Open Project Selection Process (OPSP)** – The OPSP is utilized by OTRD as the avenue for applying for LWCF grants. This application process can be accessed online in the "get-involved" section of the OTRD website. Utilizing the following link, click the LWCF Grants and then the application link at the bottom of the LWCF Grant information: https://otrd.travelok.com/about-otrd/get-involved/

- •While the instructions are clear once located, it can be challenging to locate the application and/or the section of the OTRD website with LWCF Grant information.
  - It is suggested to evaluate the OPSP electronic pathway for ease of access by interested parties
  - It is recommended that more separation of the websites and internet language for travelok and OTRD become more clear so that participants can continue to easily find travelok materials and practitioners can more readily locate OTRD materials

# REFERENCES

- Centers for Disease Control and Prevention. Key Health Indicators. Retrieved from https://www.cdc.gov
- Congressional Research Service. (2020). Federal Land Ownership: Overview and Data. Washington D.C. Library of Congress.
- Dolesh, R. J. (2021, December 16). Top trends in parks and recreation 2021: An analysis of the key topics and predictions that may impact the park and recreation field. *NRPA's Monthly Magazine*.
- Flores, D., & Sanchez, J. J. (2020). The changing dynamic of Latinx outdoor recreation on national and state public lands. *Journal of Park and Recreation Administration*, 38(4), 58-74.
- Geng, D., Innes, J., Wu, W., & Wang, G. (2021). Impacts of COVID-19 pandemic on urban park visitation: a global analysis. *Journal of Forestry Research*, 32(2), 553-567. doi:10.1007/s11676-020-01249-w
- Grima, N., Corcoran, W., Hill-James, C., Langton, B., Sommer, H., & Fisher, B. (2020). The importance of urban natural areas and urban ecosystem services during the COVID- 19 pandemic. *PLOS ONE, 15(12)*, e0243344. doi:10.1371/journal.pone.0243344
- Hansen, J. (2021). Missoula Parks and Rec looks to future after busy year through pandemic. Missoulian.
- International Monetary Fund. (2021). World Economic Outlook. Retrieved from https://www.imf.org/en/Publications/WEO/Issues/2021/03/23/world-economic-outlook-april-2021
- Klynveld, Peat, Marwick, Goerdeler International. (2022, July18). KPMG 2022 CEO Outlook. http://www.home.kpmg/xx/en/home.html
- Land and Water Conservation Fund State Assistance Program. (2021). Federal Financial Assistance Manual, Volume 71. Washington D.C.: National Park Service.
- Lund, A., & Smith, A. (2021). Featured map: Land ownership types across the U.S. College Station, TX: Natural Recourses Institute.
- National Recreation and Park Association. Find Health Benefits at Your Local Park. *Park Pulse*. Retrieved from https://www.nrpa.org/
- Oklahoma Government. Retrieved from https://oklahoma.gov/
- Oklahoma Government. Governor's Executive Orders regarding COVID-19. Retrieved from https://www.ok.gov/okdocc/News Media/Governor's Executive Orders regarding COVID-19/index.html.
- Oklahoma Tourism and Recreation Department (2022, July 18). http://www.travelok.com
- Oklahoma Wetlands Project Plan. http://www.ok.gov/wetlands/Projects/Wetland Project Plan/index.html
- Samuelsson, K., Barthel, S., Colding, J., Macassa, G., & Giusti, M. (2020). Urban nature as a source of resilience during social distancing amidst the coronavirus pandemic.
- Soltani, F., & Caneday, L. (2017). Oklahoma's State of Health: *The People, The Economy, and the Environment*. Oklahoma Tourism and Recreation Department.
- Spence, J. C., Rhodes, R. E., McCurdy, A., Mangan, A., Hopkins, D., & Mummery, W. K. (2021). Determinants of physical activity among adults in the United Kingdom during the COVID□19 pandemic: The DUK-COVID study. *British Journal of Health Psychology, 26(2)*, 588-605. doi:10.1111/bjhp.12497
- U.S. Census Bureau. (n.d.). U.S. Census Bureau Retrieved from https://www.census.gov
- United Health Foundation. (2021). Annual Report. Retrieved from https://www.americashealthrankings.org/
- Volenec, Z. M., Abraham, J. O., Becker, A. D., & Dobson, A. P. (2021). Public parks and the pandemic: How park usage has been affected by COVID-19 policies. *PLOS ONE, 16(5),* e0251799-e0251799. doi:10.1371/jour nal.pone.0251799
- Yetati, E. L., & Filippini, F. (2021). Social and economic impact of COVID-19. *Brookings*. Global Working Papers. Retrieved from https://www.brookings.edu/research/social-and-economic-impact-of-COVID-19/

# APPENDIX A OKLAHOMA'S OUTDOOR RECREATION RESOURCES

# OKLAHOMA'S OUTDOOR RECREATION RESOURCES

Oklahoma's population as of July 2021 had grown to 3,986,639, showing an approximate 5% increase between the 2010 and 2020 census. However, the population is increasingly urbanized, focused on the Oklahoma City and Tulsa Standard Metropolitan Statistical Areas (SMSAs). While Oklahoma is perceived as a rural state, 56.3% of the population lives in cities of 5,000 population or greater. Table 5 shows the detail of land and water acreage in Oklahoma available for public recreation.

Table 5. Oklahoma's Public Recreation Estate by Acreage Local, State, And Federal Recreation Property						
Level of Government and Managing Agency Land Water Total						
	Acreage	Acreage				
Local Governments Cities	28,175	51,530	79,705			
Counties	14	0	14			
State Government Colleges/Universities/State	14,870	4,212	19,082			
Regents Grand River Dam Authority	57	69,050	69,107			
Oklahoma Dept. Of Wildlife Conservation*	765,238	2,120	767,358			
Oklahoma Tourism and Recreation Dept.*	68,443	Na	68,443			
School Land Office*	756,018	Na	756,018			
Federal Government Army Corps of Engineers*	79,680	432,337	512,017			
Bureau of Indian Affairs	54	Na	54			
Bureau of Land Management Bureau of	320	Na	320			
Reclamation*	23,552	34,890	58,442			
National Park Service	7,416	2,346	9,762			
U.S. Fish and Wildlife Service	140,814	Na	140,814			
U.S. Forest Service*	249,010	91	249,101			
Totals	2,133,661	596,576	2,730,237			

(Soltani & Caneday, 2017, p. 46)

Availability of public recreation space is an important consideration in provision of outdoor recreation activity. While private properties provide opportunities for some to participate in recreation, those properties are typically limited by personal choice of the property owner or by proprietary operation, thus limiting access to certain segments of the population. The public domain is "everyone's property," managed to encourage use by the public and, in the case of parks, these properties are managed for recreation. As such, public parks are essential in the supply of opportunities for outdoor recreation for the majority of Oklahomans.

In contrast to Table 1 which showed the public recreation estate, Table 2 reports the land ownership pattern for all properties in Oklahoma. There is a much higher percentage of private land ownership in Oklahoma than is true on a national average across the United States. This ownership pattern influences such opportunities as access to resources for hunting, linkages and corridors that may serve as trails, and available parks and playgrounds – especially within cities.

Table 6. Oklahoma's Land Ownership by Percentage of Area				
Ownership of Property	Acreage	Total	Oklahoma	National
	by	acreage	percentage	percentage
	agency			
Private properties		41,720,290	93.17%	58.0%
Private owners	40,328,341		90.07%	
Native American lands	1,391,949		3.10%	2.0%
Federal government		1,118,459	2.50%	33.0%
Army Corps of Engineers	512,017			
Bureau of Reclamation	58,442			
Department of Defense	148,323			
National Park Service	9,762			
U.S. Fish and Wildlife Service	140,814			
U.S. Forest Service	249,101			
State government		1,124,109	2.51%	4.5%
Grand River Dam Authority	82			
Dept. of Wildlife Conservation	300,046			
Tourism and Recreation Dept.	24,942			
School Land Office	756,018			
State Regents, other state	43,021			
agencies				
Local government		28,182	0.06%	2.5%
Cities	27,442			
Counties	740			
Water (with public access)	783,360	783,360	1.75%	
Totals		44,774,400	100.00%	100.0%

(Soltani & Caneday, 2017, p.47)

As stated earlier, location of these public lands in relationship to population centers is a consideration for individuals seeking outdoor recreation experiences. Figures 5 and 6 show the distribution of these public lands and waters across Oklahoma. The larger public holdings are in the eastern part of Oklahoma and somewhat distant from the population centers of the state.

While it is evident that the ecosystems of Oklahoma affect the recreation opportunities available, it is also evident that the ecosystems of Oklahoma affect the recreation patterns of the people. The body of Oklahoma, with the exception of the panhandle and a small portion of Osage County, is located in a humid subtropical climate characterized by hot, muggy summers. These summers feature frequent thunderstorms, whereas winter precipitation is usually rain, but may include occasional snow. The panhandle of Oklahoma is a mid-latitude steppe climate offering deficient precipitation for much of the year. A small portion of Osage County is classified as having a humid continental climate. This zone includes warm to hot, muggy summers in which most precipitation is associated with thunderstorms, whereas the winter precipitation is frequently snow.

Precipitation and terrain influence the watersheds in Oklahoma. Three major river systems dominate Oklahoma, with each of the rivers flowing in an east-southeast direction. The Arkansas River originates in Colorado and flows through Kansas before entering Oklahoma and then exits into Arkansas. Numerous tributaries flow into Arkansas including the Cimarron, the Verdigris, the Grand (combining the Neosho and Spring rivers), and the Illinois rivers. The Canadian River systems (North and South) also flow into the Arkansas River and drain much of the central portion of Oklahoma. The third major river system in Oklahoma is the Red River forming the southern border with Texas, originating in Colorado, draining 65,590 mi2, and emptying into the Gulf of Mexico.

With a total area of 69,903 square miles, Oklahoma includes 1,224 square miles of water or approximately two percent of the state's area as surface water. It is asserted by several authorities that Oklahoma has more miles of shoreline than the Atlantic and Gulf coasts combined. This shoreline would include that of numerous lakes impounded on Oklahoma's rivers and streams. Oklahoma has no natural lakes, but has been enriched with numerous impoundments – many of which provide outdoor recreation opportunities.

Despite the state's stereotyped reputation as flat and dry, Oklahoma has four mountain ranges distributed across the state. The Ouachita Mountains are located in the southeastern portion of the state and generally extend in east-west ridges. The foothills of the Ozark Mountains extend into east central Oklahoma and drain into the Illinois River on the Oklahoma side of the border. The Arbuckle Mountains are located in south-central Oklahoma and have been called "the oldest mountain range in the United States." In the southwestern part of Oklahoma, the Wichita Mountains provide the environment for a major national wildlife refuge.

Approximately 24% of Oklahoma is forested, with considerable diversity in the composition of those forests. Much of the central portion of Oklahoma is dominated by the Cross Timbers ecosystem, synonymous with the Post Oak-Blackjack forests extending from Kansas to Texas. The Ozark foothills show a considerably different forest of oak-hickory, while the Ouachita Mountains are dominated by Oak-Southern pine forests. Due to their east-west ranges, the Ouachita Mountains frequently show very different ecosystems on the north facing slopes from that on the south facing slopes.

River valleys in the eastern portion of the state have more traditional bottomland hardwood forests. Although prairie and plains extend across much of western Oklahoma, the extreme northwest corner of the state includes Pinion pine-juniper forests that extend west toward the Rocky Mountains.

The Oklahoma environment is a natural playground. The geography, ecology, biology, and botany of the state provide wonderful resources for residents and visitors. Experience has shown that climate, temperature, precipitation, and seasonality are major factors in determination of outdoor recreation for Oklahomans. Additionally, economic and employment conditions are important factors. This is evident in patterns of behavior related to hunting and fishing. It is even more evident in patterns of visitation to Oklahoma's parks and lakes.

# **Municipal Provision of Recreation**

Oklahoma has 612 incorporated towns and cities scattered statewide, many of which include designated parks.

To demonstrate the provision and availability of public recreation space at the municipal level, the following list documents the ten largest cities in Oklahoma by population. These ten cities represent 45.7% of the population of Oklahoma, focused on three metropolitan areas: Oklahoma City/Norman/Edmond and surrounding cities; Tulsa/Broken Arrow and adjoining cities; and Lawton. Each of the cities are "hyperlinked" to their respective web pages related to provision of park and recreation facilities, followed by a brief summary of these resources.

- 1. Oklahoma City (population: 681,054) > estimated 1 park per 3,995 residents supplemented with over 90 miles of trails
- 2. <u>Tulsa</u> (population: 413,066) > 135 parks encompassing more than 6,500 acres with 57 miles of trail
- 3. Norman (population: 123,471) > 64 community and neighborhood parks with 5 recreation centers
- 4. <u>Broken Arrow</u> (population: 109,171) > over 800 acres of public land with 41 parks
- 5. <u>Edmond</u> (population: 93,127) > parks, trails, Arcadia Lake, golf, tennis center and more
- 6. <u>Lawton</u> (population: 92,859) > managed through five city divisions with oversight of Lake Lawtonka and Lake Ellsworth
- 7. <u>Moore</u> (population: 62,103) > more than 300 acres in 13 parks, plus trails, recreation centers, pools, and more
- 8. <u>Midwest City</u> (population: 57,325) > 8 parks plus trails, skate park, recreation centers, and senior facilities
- 9. <u>Stillwater</u> (population: 50,391) > 22 parks including Lake McMurtry and Stillwater 500 Motorcycle Park
- 10. <u>Enid</u> (population: 49,585) > more than 30 parks encompassing 400+ acres with trails, lakes, a railroad, splash pads and more

Public access to parks, recreation programs, trails, community centers, senior centers, swimming pools, splash pads, and a great variety of other facilities and services enhance the quality of life for all citizens. These spaces are particularly important in urbanized environments. Beyond these more populated cities, incorporated towns and communities across Oklahoma provide parks, trails, playgrounds, swimming pools, play fields, and other recreation space. In addition to community parks and recreation offerings, two "mega parks" have been developed in Oklahoma: Scissortail in the OKC area and The Gathering Place in the Tulsa area. These "mega parks" are high-profile, community-wide park and recreation facilities.

### Other Public Providers of Recreation

## School and Educational Institutions

The K-12 public schools within many Oklahoma communities provide locations and occasionally programming for outdoor recreation. Most Oklahoma K-12 schools have outdoor tracks and areas that are open to the public.

In addition to public schools, the higher education institutes within the state offer areas, facilities, and some programming engaging the public in outdoor recreation.

# **County Provision of Recreation**

Counties across the state are increasing cooperation and collaboration efforts. Many are forming partnerships with community and other levels of government recreation resources.

Tulsa County has formalized this through Tulsa County Parks Department providing parks and recreation services, with other area recreation facilities and service providers.

### **State Provision of Recreation**

There are three major providers of outdoor recreation properties and opportunities through the State of Oklahoma: (1) the Oklahoma Department of Wildlife Conservation (ODWC), (2) the Oklahoma Tourism and Recreation Department (OTRD), and (3) the Grand River Dam Authority (GRDA).

ODWC receives no general state tax appropriation, but is supported by revenue from hunting and fishing license fees, and Wildlife and Sport Fish Restoration Program taxes. ODWC manages more than 65 public hunting areas, four state fish hatcheries, and several lakes. Property designations include Wildlife Management Areas (WMA) and Wildlife Refuges (WR). ODWC provides numerous educational and informative programs throughout the year, including a well-attended Wildlife Expo.

The Oklahoma Tourism and Recreation Department is a state agency with multiple divisions including a film and music office, Oklahoma Today magazine, travel promotion, and state parks. Oklahoma State Parks operates 34 state parks, six state lodges, and seven state golf courses.

During the past decade, Oklahoma State Parks has made significant investment in capital improvements in state parks, increased efficiency with a focus on covering operations from generated revenue, modernized planning and mapping for all state parks utilizing geo-referenced data, and completed resource management plans for each property.

Among the important actions in recent years, contractual management of Quartz Mountain State Park was returned to Oklahoma State Parks following almost 20 years under the Oklahoma State Regents for Higher Education. The transfer of Quartz Mountain State Park, with its lodge and other amenities, returned one of the state's original seven state parks to agency management.

The Grand River Dam Authority (GRDA) was established in the 1930s with primary responsibility for generation of electricity and management of generating plants along the Grand River. Over the years, GRDA has managed water resources and leased properties for outdoor recreation. Grand Lake o' the Cherokees includes a recreation management plan as part of the licensed operation under the authority of the Federal Energy Regulatory Commission (FERC). The expanded scope of GRDA now includes recreation resources in northeastern Oklahoma. The responsibilities include: 1) properties within Grand Lake o' the Cherokees, Lake Hudson, and adjoining river valleys; 2) the area below the Pensacola dam which has become a rock-crawling, and ORV destination; and 3) the Illinois River and its tributaries, which are principal canoe and float streams in Oklahoma.

### **Federal Provision of Recreation Resources**

Oklahoma has a much smaller presence of federal land management agencies than other states. However, that presence is significant for outdoor recreation, resource management, and the economy.

# **U.S. Army Corps of Engineers – Tulsa District**

While the Tulsa District of the U.S. Army Corps of Engineers (USACE), a division of the Department of Defense, extends from southern Kansas, across the panhandle of Texas and portions of north Texas, into a small portion of western Arkansas, the primary properties for USACE through the Tulsa District are in Oklahoma. There are 28 lakes in Oklahoma under the responsibility of the USACE. Most of these lakes include multiple recreation locations, some of which are managed by the Corps while others are contracted to other management units. Several of these properties, including over 17,700 acres of lakefront, are contracted to and managed as Oklahoma State Parks: Lake Eufaula State Park, Cherokee Landing State Park, Great Salt Plains State Park, Hugo Lake State Park, Keystone State Park, Lake Texoma State Park, Lake Wister State Park, Sequoyah State Park, Sequoyah Bay State Park, and Tenkiller State Park.

## **U.S. Forest Service**

The U.S. Forest Service (USFS), a division in the United States Department of Agriculture, manages two types of property in Oklahoma. On the eastern border, the Ouachita National Forest includes three ranger districts in Oklahoma, while the headquarters for the forest are located in Hot Springs, Arkansas. Within the Ouachita National Forest are several management units including the Upper Kiamichi River Wilderness and a small portion of the Black Fork Wilderness. Other management units include the Kerr Arboretum, game management units, Billy Creek, Winding Stair, and Cedar Lake Recreation Areas. These areas include camping, hiking, and other outdoor pursuits and recreation amenities.

The Ouachita National Recreation Trail provides the longest continuous hiking trail in Oklahoma at 192 miles. This lengthy trail winds from Talimena State Park, through portions of the Ouachita National Forest, through the Upper Kiamichi River Wilderness before exiting the state on the east and continuing well into Arkansas.

A second unit of the USFS, Cibola National Forest manages the Black Kettle National Grassland and the Rita Blanca National Grassland. Black Kettle National Grassland is located in the far western portion of the state near Cheyenne, OK, although it is managed out of the USFS in New Mexico. Black Kettle National Grassland includes three campgrounds, plus numerous trails, and undeveloped areas. Rita Blanca National Grassland, also managed out of New Mexico, is located in the panhandle of Oklahoma. In the Oklahoma portion of Rita Blanca National Grassland, there are picnic areas, trails, and hunting opportunities.

# **National Park Service**

The Department of the Interior's National Park Service is active in Oklahoma at a number of locations and under a variety of management units. Four locations are identified as "national park properties", including Chickasaw National Recreation Area, the Washita Battlefield National Historic Site, and the Santa Fe National Historic Trail. Chickasaw National Recreation Area is situated near Sulphur, OK, whereas Washita Battlefield National Historic Site is in the Black Kettle National Grassland. Santa Fe National Historic Trail crosses the Oklahoma panhandle, northeast to southwest, in far west Cimarron County. In addition, the Oklahoma City National Memorial is an NPS designated site in the Oklahoma City metropolitan area.

Over 1200 locations in Oklahoma are on the National Register of Historic Places managed through the National Park Service. Three locations are identified as National Natural Landmarks and 21 additional locations are National Historic Landmarks. There are an estimated 1.2 million visitors annually to the various National Park Service sites in Oklahoma. These sites and their visitors have an economic benefit to the state over \$17 million annually.

# **Bureau of Reclamation**

Another Department of Interior bureau is active in Oklahoma. While not technically a recreation agency, the Bureau of Reclamation has seven projects in Oklahoma managed under the oversight of the office in Austin, Texas with local support offices. All of these projects, focused on impoundments of rivers, include some recreational provision, while six of the lakes include state parks covering over 23,500 acres of land and water managed under lease to the State of Oklahoma. As a result, recreation access at lakes such as Lake Altus-Lugert, Thunderbird, Foss, Fort Cobb, Tom Steed, and McGee Creek is provided by and managed by Oklahoma State Parks. On Lake of the Arbuckles, the recreation access is managed by the National Park Service as a unit of Chickasaw National Recreation Area.

# U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service, within the Department of the Interior, operates nine wildlife refuges in Oklahoma: Optima, Salt Plains, Washita, Deep Fork, Ozark Plateau, Sequoyah, Wichita Mountain, Tishomingo, and Little River. These refuges extend across the diverse ecosystems in Oklahoma. All of the refuges include some outdoor recreation opportunities. Wichita Mountains Wildlife Refuge offers the greatest level of development and recreation support with campgrounds, a nature center, climbing areas, and numerous opportunities for wildlife viewing.

Several of the refuges are adjacent to state parks allowing easy access from one unit to another and protecting critical environmental features and elements. The proximity of these wildlife refuges to other recreation resources enhances the recreation experiences and environmental quality for many of the state parks.

# **Provision of Recreation by Other Agencies**

There are a number of other agencies that provide opportunities for outdoor recreation in Oklahoma. Certainly, many private and non-profit businesses and organizations supplement the delivery of public recreation. However, there are other governmental agencies that are important partners in the provision of recreation.

The Federal Highway Administration, the Oklahoma Department of Transportation, and the Oklahoma Turnpike Authority provide transportation services supporting tourism and outdoor recreation. In particular, these agencies provide rest areas, trails, maps, and numerous other services that permit the public to access the recreation resource. Funding for alternative transportation corridor development and enhancements for highways is also coordinated through the Oklahoma Department of Transportation.

The Oklahoma Historical Society, a state agency that serves through a membership organization, was established by Title 53, Oklahoma statutes, during territorial days in 1895. The Historical Society manages museums and historical sites around the state, providing destinations, education, and recreation for residents and tourists. Another important component of the Oklahoma Historical Society is the State Historic Preservation Office (SHPO).

The River Parks Authority was created by the City of Tulsa and Tulsa County to develop the riverfront through the various jurisdictions, cities, and towns along that corridor. Today, River Parks includes over 800 acres of land, Turkey Mountain – an "urban wilderness," and 26 miles of trails. The River Parks Authority is a prime example of public and private partnerships with the ratio of public funding to private funding at 49/51. Among the projects coordinated by the River Parks Authority is the Gathering Place. The Gathering Place, a project of the George Kaiser Family Foundation and has transformed approximately 100 acres of Tulsa's Arkansas River waterfront into a dynamic and active park.

Oklahoma City Riversport is active in the Oklahoma City area along the Oklahoma River – that portion of the North Canadian River through the metropolitan area. In the Boathouse District south of downtown, OKC Riversport is expanding opportunities for rowing, kayaking, biking, and other outdoor recreation. Whitewater rafting and competitions, rowing, festivals, events and adventure are available through the resources and businesses along the Oklahoma River.

Several of the American Indian nations are increasingly active in provision of outdoor recreation. Many have developed campgrounds and sports facilities on tribal lands. The Chickasaw and Choctaw nations have contracted for management of the former Boggy Depot State Park. The Osage nation has contracted for management of several USACE properties on Skiatook Lake, as well as Wah-Sha-She on Copan Lake. The Cheyenne-Arapaho nation has contracted for management of properties on Canton Lake. The Cherokee nation is managing tourism centers and other facilities, as is the Chickasaw nation with a new tribal cultural center.

### Oklahoma's Water

The Oklahoma Water Resources Board (OWRB) has updated detail regarding groundwater and surface water in the state of Oklahoma. Oklahoma has 23 major groundwater basins containing 300 million acre-feet of water, of which only half may be recoverable. From a recreation perspective, surface waters may be of greater immediate importance.

With improved mapping and data management, OWRB has updated details related to Oklahoma's surface waters. With 55,646 miles of shoreline along lakes and ponds, Oklahoma has more shoreline than is included in the Atlantic and Gulf Coasts combined. These lakes and ponds have a surface area of 896,640 acres.

In addition to the lakes and ponds, Oklahoma has approximately 167,600 miles of rivers and streams. This array of drainage is shown below. Interestingly, approximately 10.5 million acre-feet of water flows into Oklahoma annually while 36 million acre-feet of water flows out of the state annually. It is the surface water and its accompanying shoreline that serve as invaluable resources for outdoor recreation in Oklahoma.

Water use is allocated and reported by the OWRB, with public water supply (41% of total use), irrigation (32%), and livestock and aquaculture (12%) identified as the major beneficial uses of water.

Currently recognized beneficial uses for some or all of the waters in Oklahoma include public and private water supply, agriculture, navigation, fish and wildlife propagation, primary body contact recreation (swimming and diving), secondary body contact recreation (boating and fishing), and aesthetics (OWRB). Outdoor recreation may rely on and co-exist with several of these beneficial uses.

Oklahoma's Water Quality Standards are established under statutory authority of the OWRB under 82 O.S. § 1085.30. It is the intent of the Oklahoma Water Resources Board to assign as many beneficial uses as are attainable. For water bodies with quality standards that exceed those required to protect beneficial uses (e.g. Scenic Rivers, some lakes, and critical habitat for endangered species) the Water Quality Standards include an anti-degradation policy statement. The OWRB then works with the Oklahoma Department of Environmental Quality (ODEQ) in monitoring those standards. DEQ develops draft National Pollutant Discharge Elimination System permits for the control and abatement of municipal and industrial pollution and participates in monitoring and permit compliance.

In order to determine the attainment of Primary Body Contact Recreation (PBCR) beneficial use, samples must be taken at a point of a drinking water intake from a body of surface water. Detailed standards are established for fecal coliform, Escherichia coli (E. coli), and Enterococci, in addition to other factors. These standards include specifics related to dates of sampling, number of samples, number of colonies per milliliter, and other details. Sampling must occur during the principal recreation period from May 1 through September 30. Attainment for the Secondary Body Contact Recreation (SBCR) beneficial use is identical in methodology to that for PBCR, but permits five times the numerical criteria and screening levels of contaminants that is used for PBCR.

In addition to the reduction in recreation opportunities, there are significant adverse economic impacts from the environmental conditions of Oklahoma's surface waters. Most of these warnings occur between Memorial Day and Labor Day affecting the prime outdoor recreation season. While water quality is a significant concern related to outdoor recreation, water quantity and allocation are also topics of concern. Oklahoma waters are managed under compacts with surrounding states as shown below.

During preparation of the 2007 SCORP, 2012 SCORP, and again of the 2017 SCORP, water allocation was an issue. As documented in each SCORP, there was a moratorium on water sales out-of-state, resulting in a lawsuit. As Oklahoma prepared a new water plan, additional proposals for instate allocation led to additional disputes.

In 1974, the Oklahoma Legislature enacted 82 O.S. §1086.2(1) requiring the Oklahoma Water Resources Board (OWRB) to develop a 50-year strategic plan for the State's water resources. The Oklahoma Comprehensive Water Plan was first published in 1980 and updated in 1997. Then, in 2006, the Oklahoma Legislature appropriated funds for a second update as a five-year study. That planning process has been underway with numerous local meetings, additional regional meetings, workshops, and special town halls. The ultimate responsibility for writing the Oklahoma Comprehensive Water Plan resides with the OWRB. The current plan was approved in 2012 with efforts toward preparation of a 2025 plan.

# APPENDIX B RESIDENTS' SURVEY RESPONSE RESULTS

# **RESIDENTS' SURVEY RESPONSE RESULTS**

Q1 - Are you a resident of Oklahoma?

Number of Residents Responding the Survey		
Answer	Percentage	Count
Yes	96%	594
No	4%	27
Total	100%	621

Q2 - Do you usually engage in any outdoor recreation activities?

People Engaging in Outdoor Recreation Regularly		
Answer	Percentage	Count
Yes	92%	546
No	8%	45
Total	100%	591

(If Yes, go to Question 3; if No, skip to Question 17)

Questions 3 to 16 only displayed for the 546 people who responded that they do engage in outdoor recreation on a regular basis.

Q3 - What is preventing you from visiting outdoor areas or participating in outdoor recreation? (Check all that apply)

Barriers to Outdoor Recreation			
Barriers	Percentage	Count	
Lack of time	25%	269	
Weather limits my options	11%	116	
Sites/areas too crowded	11%	113	
Lack of information about the sites/areas	10%	111	
Do not have companions to go with	9%	92	
Activities I am interested are not available	6%	63	
General fear of people	2%	16	
General fear of the environment (Bugs, Animals, Plants)	1%	15	
Areas have too many rules	2%	26	
Do not feel welcome	2%	20	
Poor conditions of facilities	7%	80	
Due to Covid-19 Pandemic	6%	64	
Do not have skills/equipment needed	4%	43	
Lack of Accessibility	2%	24	
Lack of interest	1%	8	
Lack of Transportation	1%	8	
Total	100%	1068	

# Q4 - How important is it for you to participate in outdoor recreation?

Importance of Engaging in Outdoor Activities		
Answer	Percentage	Count
Not at all important	1%	3
Slightly important	3%	13
Moderately important	24%	113
Very important	41%	194
Extremely important	33%	156
Total	100%	479

Q5 - How has your Outdoor Recreation participation changed since the COVID-19 pandemic?

Participation Change due to COVID-19		
Answer	Percentage	Count
Not at all	39%	189
I participate less	27%	129
I participate more	31%	148
Unsure	3%	13
Total	100%	479

Q6 - Were you afraid of being infected while engaging in outdoor recreation?

Afraid of Catching COVID-19		
Answer	Percentage	Count
Yes	14%	67
No	86%	412
Total	100%	479

Q7 - Do you or any member of your family have any preexisting conditions that make you/him vulnerable to serious complications associated with Covid-19 infection?

Health Preexisting Conditions		
Answer	Percentage	Count
Yes	38%	180
No	62%	299
Total	100%	479

Q8 - What areas/sites do you go to for outdoor recreation? (Check all that apply)

Areas Visited for Outdoor Recreation			
Location	Before the pandemic Count	During the pandemic Count	Total Count
State Facilities	381	356	737
Own/Private Property	309	322	631
City/Municipal Facilities	325	280	605
Federal /Tribal Facilities	264	239	503
Total	1279	1197	2476

# Q9 - What is the furthest you have traveled to visit a park for Outdoor Recreation?

Distance Traveled when Engaging in Outdoor Activities		
Answer	Percentage	Count
1-30 Miles	9%	44
31-60 Miles	8%	39
61-90 Miles	11%	55
91-120 Miles	12%	57
121 Miles +	59%	284
Total	100%	479

# Q10 - How often do you participate in outdoor activities?

Frequency of Participation				
Question	Before the pandemic Count	During the pandemic Count	Total	
Less than once a week	140	174	314	
Once a week	154	147	301	
2-3 times a week	145	137	282	
4 times or more a week	89	80	169	
Total	528	538	1066	

# Q11 - How much time do you usually spend in outdoor activities per visit?

Time Spent in Outdoor Activities		
Time spent	Percentage	Count
One hour or less	10%	48
2-3 hours	41%	195
4 hours or more	28%	136
Spent the night	21%	100
Total	100%	479

Q12 - Why do you participate in outdoor activities? (Check all that apply)

Reasons to Participate in Outdoor Recreation		
Items	Percentage	Count
Relaxation	16%	425
Connect with nature	15%	383
Release from work/other pressures	14%	351
Release of personal pressure and stress	13%	333
Stay fit	12%	301
It is affordable	11%	282
Make new friends/spend time with family	10%	253
Dog walking	5%	141
Develop skills	5%	124
Total	100%	2593

Q13 - What Outdoor Recreation activities do you participate in? (Check all that apply)

Resident Engagement in Types of Activities		
	Before	During
	pandemic	pandemic
Question	Count	Count
Hiking/Walking	388	398
Camping	274	259
Swimming	270	237
Wildlife watching	224	229
Picnicking	228	211
Fishing	222	212
Water sports (Skiing, Sailing, Kayaking, Canoeing)	202	195
Boating / PWC	132	126
Playground/Splash Pad	136	117
Outdoor courts (Basketball, Tennis, Golf)	129	122
Hunting	105	103
Running	103	98
Backpacking	92	94
ATVs	83	77
Meditation	72	82
Horseback Riding	64	42
(Mountain) Biking	62	58
Rock Climbing	49	38
Music/ Performances	2	0
Totals	2837	2698

Q14 - When participating in Outdoor Recreation do you participate alone or with company?

Company outdoors		
Question Before pandemic During pandemic Count Count		During pandemic Count
Alone	206	217
With company	428	402
Totals	632	619

### Q15 – Please rate the current conditions of the facilities in your neighborhood/city.

Rating of Facilities' Conditions					
Question	Very good	Good	Neutral	Poor	Very poor
City/Municipal parks	69	198	116	41	25
Playgrounds	54	196	96	51	19
Lakes/Rivers	57	227	103	53	9
Trails	54	201	115	47	17
Parking	39	181	163	59	20
Restrooms	29	91	151	120	51
Cabins	16	90	102	39	15

#### Q16 - How can the facilities/recreation areas be improved? (Check all that apply)

Facilities Improvement		
Answer	Percentage	Count
Improve/enhance existing parks and recreation areas	18%	364
Increase outdoor recreation opportunities for children and youth	12%	238
Invest in new parks and recreation areas	11%	225
Acquire more lands and recreation areas and open spaces	10%	208
Build bike and pedestrian pathways between places of work/school/shopping/ neighborhoods	10%	201
Build sidewalks within the communities	10%	195
More opportunity to participate in organized activities/programs	8%	168
Increase outdoor recreation opportunities for senior citizens	8%	159
Increase accessibility for people with disabilities	7%	153
Better security within facilities	7%	135
Total	100%	2046

### Questions 17 through 25 were displayed only for the 45 people responded that they do not engage in outdoor recreation regularly.

Q17 - What is preventing you from participating in outdoor recreation or visiting outdoor places?

(responses of the 45 people who "do not engage in outdoor recreation regularly")

Barriers to Outdoor Recreation Participation		
Barriers	Count	
Lack of time	32	
Do not have companions to go with	22	
Lack of interest	18	
Do not have skills/equipment needed	9	
Lack of information about the sites/areas	9	
General fear of the environment (Bugs, Animals, Plants)	8	
Activities I am interested are not available	6	
General fear of people	6	
Do not feel welcome	5	
Sites/areas too crowded	5	
Weather limits my options	3	
Lack of Transportation	2	
Areas have too many rules	1	
Lack of Accessibility	1	
Poor conditions of facilities	0	

Q18 - Did you stop participating due to COVID-19? (responses of the 45 people who "do not engage in outdoor recreation regularly")

Stop Participation due to COVID-19		
Answer Count		
Yes	12	
No	31	
Total	43	

Q19 - Were you afraid of being infected while engaging in outdoor recreation? (responses of the 45 people who "do not engage in outdoor recreation regularly")

Concern about being infected with COVID-19		
Answer Count		
Yes	7	
No 5		
Total 12		

Q20 - Do you or any member of your family have any preexisting conditions that make you/him vulnerable to serious complications associated with Covid-19 infection? (responses of the 45 people who "do not engage in outdoor recreation regularly")

Concern due to Preexisting Medical Conditions		
Answer Count		
Yes	6	
No	6	
Total	12	

Q21 - How often do you participate in outdoor activities before pandemic? (responses of the 45 people who "do not engage in outdoor recreation regularly")

Frequency of Participation in Outdoor Activities		
Question	Before pandemic	Count
Less than once a week	33%	4
Once a week	17%	2
2-3 times a week	50%	6
4 times or more a week	0%	0
Total	100%	12

Q22 - What Outdoor Recreation activities did you participate in before the pandemic? (Check all that apply)
(responses of the 45 people who "do not engage in outdoor recreation regularly")

Resident Engagement in Types of Activities		
Question	Before pandemic Count	
Hiking/Walking	3	
Music / Performances	2	
Outdoor courts (Basketball, Tennis)	2	
Fishing	1	
Running	1	
Wildlife watching	1	
Meditation	1	
Picnicking	1	
Hunting	0	
Shooting	0	
Horseback Riding	0	
Kayak / Canoeing	0	
Paddle Boarding	0	
Camping	0	
Backpacking	0	
Wakeboarding/ Water Skiing	0	
Boating / PWC	0	
Water/Jet Ski	0	
Cycling	0	
Mountain Biking	0	
Playground	0	
Swimming	0	
Splash Pad	0	
Rock Climbing	0	
Sailing	0	
ATVs	0	
Geocaching	0	
Disk Golf	0	
Skateboarding	0	
Foraging	0	
Totals	12	

Q23 - When participating in Outdoor Recreation do you participate alone or with company?

(responses of the 45 people who "do not engage in outdoor recreation regularly")

Company Outdoors		
Question	Count	
Alone	3	
With company	9	
Totals	12	

Q24 - Please rate the current conditions of the facilities in your neighborhood/city. (responses of the 45 people who "do not engage in outdoor recreation regularly")

Rating of Facilities' Conditions					
Question	Very good	Good	Neutral	Poor	Very poor
City/Municipal parks	1	7	2	2	0
Playgrounds	2	4	4	2	0
Lakes/Rivers	1	3	5	3	0
Trails	4	5	3	0	0
Parking	0	5	7	0	0
Restrooms	0	1	4	5	2
Cabins	0	3	2	2	1

Q25 - How can the facilities/recreation areas be improved? (Check all that apply) (responses of the 45 people who "do not engage in outdoor recreation regularly")

Facilities/Areas Improvement		
Answer	Count	
Improve/enhance existing parks and recreation areas	10	
Build bike and pedestrian pathways between places of work/school/shopping/ neighborhoods	7	
Better security within facilities	7	
Increase outdoor recreation opportunities for children and youth	6	
Invest in new parks and recreation areas	5	
More opportunity to participate in organized activities/programs	5	
Acquire more lands and recreation areas and open spaces	2	
Increase accessibility for people with disabilities	4	
Increase outdoor recreation opportunities for senior citizens	3	
Build sidewalks within the communities	0	
Totals	49	

### **Demographics of Residents Responding to the Survey**

Q26 - What is the 5-digit zip code for your permanent home?

Residents' Zip Codes  Zip Code Count by Each Zip Code Zip Code Count by Each Zip				
z.p couc	count by Each Lip code	2.5 code	Code	
74074	25	73008,74012,74136,74136	6	
74075	10	73071,73078,73132,74006,74019,74427,	-	
	18	74432,7 4578	5	
73099		73012,73020,73064,73107,73521,73772,		
	15	74037,74055,74070, 74133,74135	4	
		74426,74447,74601,74701		
74464		73003, 73025,73068,73069,73401,73505,		
	12	73750, 73942,74011,74066,74114,74132		
	12	74137, 74361,74434,74437,74604,74651,	3	
		74962		
74501		73034,73036,73038,73096,73106,73110,		
		73112,73115,73120,73127,73131,73135,		
		73139,73142,73439,73703,73724,73763,		
	11	74002,74033,74073,74077,74105,74112,	2	
		74115,74129,74131,74338,74352,74354,		
		74370,74401,74436,74462,74571,74820,		
		74834,74848,74857,74864		
73170,	10	30004,62520,73007,73010,73016,73026,73040,		
74063	10	73051,73056,73061,73066,73070,73075,73089,		
73013,		73093,73095,73105,73105,73108,73118,73122,		
73160,	9	73150,73151,73162,73179,73430,73448,73458,		
74467		73501,73527,73533,73538,73550,73570,73644,		
		73701,73702,73717,73718,73726,73733,73735,		
		73754,73760,73768,73801,73838,73852,73933,		
		74003,74008,74020,74021,74041,74047,74048,	1	
		74053,74085,74104,74110,74120,74127,74128,	_	
		74344,74346,74403,74421,74423,74429,74435,		
	7	74441,74442,74465,74471,74502,74522,74523,		
		74547,74555,74561,74587,74637,74728,74735,		
73072,		74743,74764,74801,74825,74851,74854,74859,		
74014,		74868,74881,74902,74937,74948,74953,74956,		
74425,		74964,75002,75007,75072,76034,76244,76355,		
74960		78457,79081,		
TOTAL		518		

Q27 - What is your age?

Survey Respondents by Age			
Answer	Percentage	Count	
18-25	24%	122	
26-30	4%	22	
31-35	12%	62	
36-40	10%	51	
41-45	14%	72	
46-50	8%	43	
51-55	9%	49	
56-60	8%	41	
61-65	5%	27	
66-70	4%	21	
71-75	2%	8	
Total	100%	519	

Q28 - What is your gender?

Survey Respondents by Gender		
Answer	Percentage	Count
Male	26%	137
Female	72%	373
Third gender/ Other	0%	1
Prefer not to respond	2%	8
Total	100%	519

### Q29 - What is your race?

Survey Respondents by Race		
Answer	Percentage	Count
White	71%	368
American Indian or Alaska Native	17%	89
Prefer not to respond	6%	29
Two or More Races	4%	20
Black or African American	2%	11
Asian	0%	1
Native Hawaiian or Pacific Islander	0%	1
Total	100%	519

### Q30 - Are you of Hispanic, Latino, or Spanish origin?

Survey Respondents by Ethnicity			
Answer	wer Percentage Count		
Yes	4%	23	
No	96%	496	
Total	100%	519	

### Q31 - What is your highest level of education?

Survey Respondents by Level of Education		
Answer	Percentage	Count
Less than high school	1%	3
Some College	49%	255
BA or BS	29%	151
MA or MS	15%	78
PhD	2%	12
Prefer not to respond	4%	20
Total	100%	519

### Q32 - What is your current employment?

Survey Respondents by Employment Status		
Answer	Percentage	Count
Employed full time	53%	274
Employed part-time	13%	69
Unemployed	9%	49
Retired	9%	46
Self-employed	8%	41
Other	6%	32
Prefer not to respond	2%	8
Total	100%	519

Q33 - What is your annual household income level?

Survey Respondents by Income Level			
Answer	Percentage	Count	
Less than \$25,000	12%	60	
\$25,000 - \$49,999	15%	80	
\$50,000 - \$74,999	19%	97	
\$75,000 - \$99,999	16%	81	
\$100,000 - \$124,999	10%	52	
\$125,000 - or more	16%	84	
Prefer not to respond	13%	65	
Total	100%	519	

# APPENDIX C ENTHUSIASTS' SURVEY RESPONSE RESULTS

### **ENTHUSIASTS' SURVEY RESPONSE RESULTS**

Q1 - Are you a resident of Oklahoma?

# Residents Responding the Survey		
Answer	Percentage	Count
Yes	99%	409
No	1%	2
Total	100%	411

Q2 - Do you usually engage in any outdoor recreation activities?

People Engaging in Outdoor Recreation Regularly			
Answer	Percentage Count		
Yes	98%	397	
No	2%	11	
Total	100%	408	

(If Yes, go to Question 3; if No, skip to Question 17)

Questions 3 to 16 only displayed for the 397 people who responded that they do engage in outdoor recreation on a regular basis.

## Q3 - What is preventing you from visiting outdoor areas or participating in outdoor recreation? (Check all that apply)

Barriers to Outdoor Recreation			
Barriers	Percentage	Count	
Lack of time	29%	186	
Sites/areas too crowded	13%	87	
Weather limits my options	13%	83	
Lack of information about the sites/areas	11%	73	
Poor conditions of facilities	8%	51	
Do not have companions to go with	6%	38	
Activities I am interested are not available	6%	38	
Lack of Accessibility	4%	25	
Areas have too many rules	3%	17	
Do not have skills/equipment needed	2%	14	
General fear of people	2%	13	
Do not feel welcome	1%	7	
Due to Covid-19 Pandemic	1%	7	
Lack of Transportation	1%	6	
Lack of interest	0%	2	
General fear of the environment (Bugs, Animals, Plants)	0%	1	
Total	100%	648	

### Q4 - How important is it for you to participate in outdoor recreation?

Importance of Engaging in Outdoor Activities		
Answer	Percentage	Count
Not at all important	0%	0
Slightly important	1%	4
Moderately important	11%	37
Very important	40%	131
Extremely important	47%	154
Total	100%	326

Q5 - How has your Outdoor Recreation participation changed since the COVID-19 pandemic?

Participation Change due to COVID-19		
Answer	Percentage	Count
Not at all	38%	124
I participate less	15%	49
I participate more	43%	140
Unsure	4%	13
Total	100%	326

Q6 - Were you afraid of being infected while engaging in outdoor recreation?

Afraid of Catching COVID-19		
Answer	Percentage	Count
Yes	5%	15
No	95%	311
Total	100%	326

Q7 - Do you or any member of your family have any preexisting conditions that make you/him vulnerable to serious complications associated with Covid-19 infection?

Health Preexisting Conditions		
Answer	Percentage	Count
Yes	34%	112
No	66%	214
Total	100%	326

Q8 - What areas/sites do you go to for outdoor recreation? (Check all that apply)

Areas Visited for Outdoor Recreation			
Location	Before the pandemic Count	During the pandemic Count	Total Count
State Facilities	274	285	559
City/Municipal Facilities	248	234	482
Own/Private Property	198	200	398
Federal /Tribal Facilities	169	171	340
Total	198	200	398

### Q9 - What is the furthest you have traveled to visit a park for Outdoor Recreation?

Distance Traveled when Engaging in Outdoor Activities		
Answer	Percentage	Count
1-30 Miles	6%	18
31-60 Miles	5%	17
61-90 Miles	7%	23
91-120 Miles	11%	37
121 Miles +	71%	231
Total	100%	326

### Q10 - How often do you participate in outdoor activities?

Frequency of Participation			
Question	Before the pandemic Count	During the pandemic Count	Total
Less than once a week	95	74	169
Once a week	87	96	183
2-3 times a week	92	106	198
4 times or more a week	69	80	149
Total	343	356	699

### Q11 - How much time do you usually spend in outdoor activities per visit?

Time spend in Outdoor Activities		
Time spent	Percentage	Count
One hour or less	7%	24
2-3 hours	44%	145
4 hours or more	25%	83
Spent the night	23%	74
Total	100%	326

Q12 - Why do you participate in outdoor activities? (Check all that apply)

Reasons to Participate in Outdoor Recreation		
Items	Percentage	Count
Relaxation	16%	287
Connect with nature	15%	278
Release from work/other pressures	13%	246
Release of personal pressure and stress	13%	238
Stay fit	12%	227
It is affordable	10%	183
Make new friends/spend time with family	8%	152
Develop skills	7%	130
Dog walking	6%	107
Total	100%	1848

### Q13 - What Outdoor Recreation activities do you participate in? (Check all that apply)

Types of Activities Residents Engage in			
Question	Before pandemic Count	During pandemic Count	
Hiking/Walking	262	276	
Water sports (Skiing, Sailing, Kayaking,			
Canoeing)	152	165	
Camping	200	193	
Wildlife watching	153	157	
Fishing	153	145	
Picnicking	122	121	
Swimming	136	117	
Backpacking	71	78	
(Mountain) Biking	77	85	
Running	68	69	
Boating / PWC	75	67	
Outdoor courts (Basketball, Tennis, Golf)	71	64	
Hunting	71	59	
Meditation	49	61	
ATVs	52	45	
Playground/Splash Pad	65	49	
Rock Climbing	28	34	
Horseback Riding	31	19	
Totals	1836	1804	

Q14 - When participating in Outdoor Recreation do you participate alone or with company?

Company outdoors			
Question	Before pandemic Count	During pandemic Count	
Alone	164	176	
With company	277	278	
Totals	441	454	

### Q15 - Please rate the current conditions of the facilities in your neighborhood/city.

Rating of Facilities' Conditions					
Question	Very good	Good	Neutral	Poor	Very poor
City/Municipal parks	43	152	82	29	10
Playgrounds	30	117	74	36	6
Lakes/Rivers	30	148	77	46	7
Trails	39	141	69	50	10
Parking	29	145	93	42	9
Restrooms	12	95	84	76	39
Cabins	15	45	66	20	6

### Q16 - How can the facilities/recreation areas be improved? (Check all that apply)

Facilities Improvement				
Answer	Percentage	Count		
Improve/enhance existing parks and recreation areas	18%	255		
Invest in new parks and recreation areas	13%	181		
Build bike and pedestrian pathways between places of work/school/shopping/ neighborhoods	13%	181		
Acquire more lands and recreation areas and open spaces	12%	176		
Increase outdoor recreation opportunities for children and youth	10%	144		
Build sidewalks within the communities	10%	136		
Increase outdoor recreation opportunities for senior citizens	7%	103		
More opportunity to participate in organized activities/programs	7%	99		
Increase accessibility for people with disabilities	6%	91		
Better security within facilities	4%	54		
Total	100%	1420		

### Questions 17 through 25 were displayed only for 11 people who responded that they do not engage in outdoor recreation regularly.

Q17 - What is preventing you from participating in outdoor recreation or visiting outdoor places?

(responses of the 11 people who "do not engage in outdoor recreation regularly")

Barriers to Outdoor Recreation Participation		
Barriers	Count	
Lack of time	7	
Do not have companions to go with	3	
Lack of information about the	2	
sites/areas	۷	
Poor conditions of facilities	2	
Sites/areas too crowded	1	
Activities I am interested are not	1	
available	I	
General fear of people	0	
General fear of the environment	0	
(Bugs, Animals, Plants)	U	
Areas have too many rules	0	
Do not feel welcome	0	
Do not have skills/equipment	0	
needed	O	
Lack of interest	0	
Weather limits my options	0	
Lack of Transportation	0	
Lack of Accessibility	0	
Total	16	

Q18 - Did you stop participating due to COVID-19? (responses of the 11 people who "do not engage in outdoor recreation regularly")

Stop Participation due to COVID-19			
Answer Count			
Yes	1		
No	6		
Total	Total 7		

Q19 - Were you afraid of being infected while engaging in outdoor recreation? (responses of the 11 people who "do not engage in outdoor recreation regularly")

Concerns About Being Infected With COVID-19			
Answer Count			
Yes	1		
No 0			
Total 1			

Q20 - Do you or any member of your family have any preexisting conditions that make you/him vulnerable to serious complications associated with Covid-19 infection? (responses of the 11 people who "do not engage in outdoor recreation regularly")

<b>Concern due to Preexisting Medical Conditions</b>		
Answer Count		
Yes	1	
No	0	
Total 1		

Q21 - How often do you participate in outdoor activities before pandemic? (responses of the 11 people who "do not engage in outdoor recreation regularly")

Frequency of Participation in Outdoor Activities Before Pandemic		
Question Count		
Less than once a week	0	
Once a week	0	
2-3 times a week	1	
4 times or more a week	0	
Total	1	

Q22 - What Outdoor Recreation activities did you participate in before the pandemic? (Check all that apply)
(responses of the 11 people who "do not engage in outdoor recreation regularly")

Enthusiasts Activities Before Pandemic				
Question	Before pandemic Count			
Music / Performances	1			
Hunting	0			
Shooting	0			
Fishing	0			
Hiking/Walking	0			
Horseback Riding	0			
Kayak / Canoeing	0			
Paddle Boarding	0			
Camping	0			
Backpacking	0			
Wakeboarding/ Water Skiing	0			
Boating / PWC	0			
Water/Jet Ski	0			
Running	0			
Cycling	0			
Mountain Biking	0			
Playground	0			
Swimming	0			
Splash Pad	0			
Wildlife watching	0			
Rock Climbing	0			
Meditation	0			
Sailing	0			
ATVs	0			
Geocaching	0			
Disk Golf	0			
Picnicking	0			
Outdoor courts (Basketball, Tennis)	0			
Skateboarding	0			
Foraging	0			
Totals	1			

Q23 - When participating in Outdoor Recreation do you participate alone or with company?

(responses of the 11 people who "do not engage in outdoor recreation regularly")

Company Outdoors		
Question	Count	
Alone	0	
With company	1	
Totals	1	

Q24 - Please rate the current conditions of the facilities in your neighborhood/city. (responses of the 11 people who "do not engage in outdoor recreation regularly")

Rating of Facilities' Conditions					
Question	Very good	Good	Neutral	Poor	Very poor
City/Municipal parks	1	0	0	0	0
Playgrounds	0	0	0	0	1
Lakes/Rivers	0	0	0	1	0
Trails	0	0	0	1	0
Parking	0	0	1	0	0
Restrooms	0	0	1	0	0
Cabins	0	0	0	1	0

Q25 - How can the facilities/recreation areas be improved? (Check all that apply) (responses of the 11 people who "do not engage in outdoor recreation regularly")

Facilities/Areas Improvement		
Answer	Count	
Acquire more lands and recreation areas and open spaces	1	
Build bike and pedestrian pathways between places of work/school/shopping/ neighborhoods	1	
Improve/enhance existing parks and recreation areas	0	
Invest in new parks and recreation areas	0	
Increase outdoor recreation opportunities for children and youth	0	
Better security within facilities	0	
Increase accessibility for people with disabilities	0	
Increase outdoor recreation opportunities for senior citizens	0	
More opportunity to participate in organized activities/programs	0	
Build sidewalks within the communities	0	
Totals	2	

### **Demographics**

Q26 - What is the 5-digit zip code for your permanent home? N/A

### Q27 - What is your age?

Survey Respondents by Age				
Answer	Percentage	Count		
18-25	6%	19		
26-30	6%	21		
31-35	12%	41		
36-40	15%	49		
41-45	16%	52		
46-50	12%	38		
51-55	9%	30		
56-60	7%	23		
61-65	7%	22		
66-70	5%	15		
71-75	5%	17		
76-80	1%	2		
Total	100%	329		

### Q28 - What is your gender?

Survey Respondents by Gender						
Answer Percentage Count						
Male	47%	153				
Female	51%	168				
Third gender/ Other	1%	4				
Prefer not to respond	1%	4				
Total	100%	329				

### Q29 - What is your race?

Survey Respondents by Race				
Answer	Percentage	Count		
White	83%	274		
American Indian or Alaska Native	6%	19		
Two or More Races	5%	18		
Prefer not to respond	4%	13		
Asian	1%	3		
Black or African American	0%	1		
Native Hawaiian or Pacific Islander	0%	1		
Total	100%	329		

### Q30 - Are you of Hispanic, Latino, or Spanish origin?

Survey Respondents by Ethnicity					
Answer Percentage Count					
Yes	4%	12			
No	96%	317			
Total	100% 329				

### Q31 - What is your highest level of education?

Survey Respondents by Level of Education						
Answer Percentage Count						
Less than high school	1%	2				
Some College	30%	98				
BA or BS	43%	141				
MA or MS	19%	64				
PhD	4%	14				
Prefer not to respond	3%	10				
Total 100% 329						

Q32 - What is your current employment?

Survey Respondents by Employment Status						
Answer Percentage Count						
Employed full time	67%	222				
Retired	13%	42				
Self-employed	9%	29				
Employed part-time	6%	20				
Other	2%	7				
Prefer not to respond	2%	5				
Unemployed	1%	4				
Total	100%	329				

Q33 - What is your annual household income level?

Survey Respondents by Income Level						
Answer	Answer Percentage Count					
Less than \$25,000	4%	14				
\$25,000 - \$49,999	10%	32				
\$50,000 - \$74,999	18%	59				
\$75,000 - \$99,999	17%	57				
\$100,000 - \$124,999	17%	55				
\$125,000 - or more	27%	88				
Prefer not to respond	7%	24				
Total	100%	329				

## APPENDIX D PROVIDERS' SURVEY RESPONSE RESULTS

### PROVIDERS' SURVEY RESPONSE RESULTS

Q1. Please identify the type of agency or organization your responses represent:

Type of Organization Responding						
Type of organization Percentage Count						
City	23%	10				
County	0%	0				
State	63%	27				
Federal	0%	0				
Other	14%	6				
Total	100%	43				

Q2. What is the primary community your agency serves?

Type of Community served by Organization				
Community	Percentage	Count		
Statewide	48%	21		
Regional (cities, towns and rural areas)	2%	1		
Large city (100,000+ population)	9%	4		
Small city (35,000 to 99,999 population)	11%	5		
Small town (34,999 or less population)	5%	2		
Rural area	16%	7		
Suburb	0%	0		
Tribe(s)	0%	0		
Other (please specify)	9%	4		
Total	100%	44		

Q3 - Please provide the 5-digit zip code of your community, town or city office.

Providers' Zip Codes		
Zip Code	Count by Each Zip Code	
74441	7	
73026,73401	3	
73102,73102,		
73439,73749,	2	
74074,74728		
73034,73040,73055,		
73070,73083,73109,		
73142,73522,73566,		
73655,73737,74063,	1	
74114,74401,74435,		
74464,74525,74804,		
74962		
Totals	42	

Q4. How has your organization changed since the COVID-19 pandemic? Please check all that apply and indicate by what percentage it has decreased or increased. The scale goes from -100 (decreased), 0 (remained the same) to 100 (increased).

Change due to COVID-19			
Item	Mean	Std. Deviation	Count
Visitation of current members	37.71	44.86	42
New visitation of new members	45.33	42.86	43
Parking Availability	2.00	34.07	42
Programing offered	6.74	30.35	43
Cancellation of Programs	3.72	31.66	43
Staff Shortages	20.95	35.22	42
Safety Restrictions	21.09	39.93	43
Budget Needs	43.65	42.31	43
Staff fear of getting sick/infected	32.71	31.12	41

Q5. For the following items please indicate the level of concern for that topic within your community at this time.

Overall Level of Concern for Each Item					
Item	Extremely concern	Concern	Some concern	Limited concern	No concern at all
Visitors safety & amp; protection	7	10	10	14	2
Ability of the town or city to pay for parks and recreation services	8	12	12	8	3
Maintaining existing recreation infrastructure or resources	16	9	13	2	3
Providing access and opportunities for people with disabilities	4	19	8	8	4
Providing opportunities for an aging population	4	16	11	7	5
Providing opportunities for a diverse population	6	15	9	8	5
Providing opportunities for new users	9	16	8	5	6

Q6. If funding for parks and recreation areas were available, how would you prefer it to be used? Please rate them based on priority. The scale goes from 1 to 5.

Overall Fund Use Preference						
Funds	Extremely important	Very important	Moderately important	Slightly important	Not at all important	Total Count
Operational costs for existing facilities	18	18	4	2	1	43
Maintaining existing levels of recreation and interpretive education programs	14	19	7	3	0	43
Upgrading existing facilities (Adding pathway lights)	27	12	3	1	0	43
Habitat preservation or restoration	19	15	4	4	1	43
Training for staff, volunteers and friends groups	10	18	11	1	3	43
Monitoring of prehistoric & mp; historic sites	11	11	12	6	3	43
Developing new recreation and interpretive education programs	13	15	12	1	2	43
Environmental or cultural studies, clearances and permits	9	14	13	3	4	43
Developing new outdoor recreation facilities	11	20	7	5	0	43
Acquiring land for more parks, open space, natural areas and recreation areas	9	11	14	5	4	43
COVID-19 related expenses	4	8	15	8	8	43

## Q7. Please rate your level of agreement with the following statements regarding recreation use conflicts:

Statement	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Total Count
Overcrowding/overuse of recreation areas is a problem at the sites my agency manages	12	14	7	9	1	43
Conflicts between different recreation uses/activities is a problem at the sites my agency manages	7	12	12	10	2	43
Conflicts between motorized and non-motorized uses is a problem at the sites my agency manages	5	16	10	8	4	43
Conflicts between traditional recreational uses and new recreational uses is a problem at the sites my agency manages	6	17	11	6	3	43
Conflicts between residents/ homeowners and recreation users are a problem at the sites my agency manages	6	10	14	2	11	43
Conflicts between local recreation users and non- local (visiting) recreational users is a problem at the sites my agency manages	5	6	17	7	8	43

Q8. Please rate your level of agreement with the following statements regarding law enforcement and safety issues.

Overall Rating Organizations' Law Enforcement and Safety Issues					
Question		Somewhat Agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
There is a need for user education of laws and regulations regarding recreation activities on the parks and recreation areas that my agency manages	18	16	6	2	2
Vandalism is an issue in parks and recreation areas my agency manages	15	12	10	2	3
Too much trash or litter impacts visitor enjoyment in the parks and recreation areas my agency manages	17	16	5	1	2
Law enforcement for illegal activities is an issue in parks and recreation areas my agency manages	9	16	10	5	3
My agency adequately enforces the protection of park and recreation resources in the areas that my agency manages	11	12	11	7	2

Q9. To what extent do you agree or disagree with the following statements concerning resource protection?

Overall Organizations' Concerns about Resource Protection					
Item		Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
One of the goals of my agency is sustainability of natural and cultural resources	37%	37%	12%	9%	5%
My agency has adequate laws or policies to protect natural and cultural resources	14%	53%	23%	7%	2%
My agency limits recreation development to protect natural and cultural resources	14%	35%	37%	9%	5%
My agency limits recreation use to protect natural and cultural resources	12%	35%	35%	12%	7%
Natural and cultural resources are being degraded or impacted by recreational uses at the sites my agency manages	14%	26%	40%	16%	5%
My agency believes that providing for recreation use is more important than resource protection	12%	16%	37%	19%	16%
My agency believes that providing for revenue generation is more important than resource protection	14%	12%	40%	21%	14%

Q10. How helpful were the following assistance and resources available to you?

Overall Helpfulness of Resources Available to Organizations						
Resources	Most helpful	Helpful	Neutral	Not very helpful	Least helpful	Count
Funding and grants	24%	24%	33%	19%	0%	42
Cooperative efforts/collaboration	24%	38%	33%	2%	2%	42
Friends groups/volunteer groups	37%	28%	16%	16%	2%	43
Political support/lobbying	14%	16%	37%	21%	12%	43
Training and educational support	10%	38%	43%	10%	0%	42
COVID-19 related federal funding (CARES Act, FEMA)	7%	31%	45%	12%	5%	42
Other	0%	0%	80%	0%	20%	5

Q11. What types of data would be helpful to have to understand the outdoor recreation needs of the public? (Please check all that apply)

Overall Data Types Needed to Understand Public Needs						
Type of Data	Percentage	Count				
Economic benefits	14%	33				
Demand for outdoor recreation opportunities	17%	37				
Needs of diverse populations	11%	24				
Baseline information on natural and cultural resources/land	11%	24				
Public willingness to pay	13%	29				
Outdoor recreation trends	16%	36				
Comparative information form land managers and recreation providers	9%	20				
Changes in recreational behaviors due to COVID-19 pandemic	9%	19				
Other (please specify)	0%	0				
Total	100%	222				

Q12 - Please share any comments you have about: a) your agency's response to the COVID-19 pandemic b) the role parks & recreation is playing in your community due to the COVID-19 pandemic.

- 1. Keep people outdoors and help mitigate the stressors of the Covid -19
- 2. Written policies but not followed. b. Finding a place to escape Covid-19... only in mind and spirit
- 3. We remained open and were busy especially on the trails.
- 4. We provide a safe a spacious place to be.
- 5. The agency was not afraid to stay open and operated as normal as possible, great job.
- 6. Parks and recreation services have benefited our community during the COVID-19 pandemic. As the outdoors are "always open" parks and other natural areas provided people a place to escape lockdown, get fresh air, exercise, and enjoy various outdoor activities. In addition, our outdoor spaces have welcomed a record number of new outdoor recreationists during the COVID-19 pandemic, with more hunting and fishing licenses sold during 2020/2021 than recent years, and increased foot traffic on hiking trails, swim beaches, and campgrounds. All of this has been great for state agencies, as it has generated revenue that can go toward deferred maintenance projects, resource protection, and conservation projects. However, increased foot traffic has also led to several negative impacts to our natural and ecological areas. Vandalism, littering, trespassing, illegal OHV use, crowded hunting and fishing areas, and increased theft have been the greatest plague to parks, natural areas, and recreation facilities since the beginning of the COVID-19 pandemic. State and local agencies would be wise to do their due diligence and educate the public about the importance of natural areas, resource management, and conservation as we welcome a new generation of outdoor recreationists
- 7. Our role was basic. Be a light in our community. Show that we were still there offering programs with a twist but still offer them. We opened a facility during this time with the ability to strong depending cleaning procedures. Our response was we are and will do everything to keep you safe during these times. Instead of you coming to us, we can come to you.
- 8. Our outdoor facilities experienced a significant increase in attendance/usage during the Covid pandemic as people wanted to get outdoors and were tired of the confining regulations.
- 9. Our agency has seen a dramatic increase in visitation and use of state parks and the lack of additional funding has made it much harder to keep up with public use and demand of our facilities. Due to shrinking budgets for the last 20+ years, it has taken a toll on all our facilities and the legislature and public need to understand that we need more funding to maintain and/or replace current facilities for their enjoyment and use.
- 10. Marlow's response to COVID-19 was limited to adhering to and enforcing the Governor's mandates during the crisis with an emphasis of working with local business to achieve the greatest benefit with the least harm. Marlow does not take an active role in recreation. Marlow provides clean and safe spaces for which the public to use but does not provide programs.
- 11. Many parks within the OKC Parks system became inundated with returning and new volunteers, which allowed citizens a safe space during the pandemic. Many visitors continue to come now the pandemic has ceased.
- 12. A) We took every measure possible to ensure the safety of all our visitors. B) During the pandemic we have provided a place where people can come and have fun and still social distance and be safe.
- **13.** A. My agency did not care. B. Traffic has significantly increased and there are no new safety regulations being enforced.

### Additional information provided by OTRD related to the State Parks in Oklahoma:

Oklahoma Stat			
Year	Type	Counts	Increase
FY 2021	RV	312,028	81,202 = 26%
FY 2020	RV	230,826	01,202 - 2070
FY 2021	Tent	87,227	41,922 = 48%
FY 2020	Tent	45,305	41,922 - 40%

## APPENDIX E OBSERVATIONS' RESULTS

### **OBSERVATIONS' RESULTS**

Q1 - What is your location for the observation?

Q2 - Approximately how many people did you observe over a two-hour period?

Number of People Observed				
Range	Percentage			
0-10	42%			
11-20	12%			
21-30	4%			
31-40	0%			
41-50	4%			
51 +	38%			
TOTAL	100%			

Q3 - How large are groups that you observed?

Group Sizes Observed						
1 person	2 people	3-5 people	6 or more people			
64	99	152	70			

### Q4 - Approximately how many people were participating in the following activities?

Number of People Observed per Activity					
Type of Activity	Total # of people observed in each activity				
Camping	574				
Playground/splash pad	512				
Hiking/walking	292				
Fishing	257				
Picnicking	248				
Outdoor courts	225				
Cycling	129				
Boating/PWC	126				
Swimming	110				
Running	80				
Water sports	76				
Skateboarding	75				
ATVs	34				
Sailing	25				
Water/Jet ski	24				
Wildlife watching	21				
Horseback riding	13				
Shooting	10				
Mountain biking	9				
Backpacking	2				
Rock climbing	0				
Hunting	0				

Q5 - What is the condition of the park?

Rating Conditions of the Park						
Facility	Very Good	Good	Neutral	Poor	Very Poor	
Trails	67%	17%	0%	6%	11%	
Signage	42%	25%	8%	13%	13%	
Restrooms	30%	35%	20%	0%	15%	
Road Ways	43%	35%	17%	4%	0%	
Visitor Center	60%	30%	0%	0%	10%	
Camp Sites	56%	11%	11%	22%	0%	
Parking	25%	42%	17%	8%	8%	
Playground	43%	35%	4%	17%	0%	
Splash Pads	50%	17%	33%	0%	0%	
Outdoor Courts	29%	47%	6%	18%	0%	
Sidewalks	40%	40%	5%	10%	5%	
Water areas	78%	6%	6%	6%	6%	

Q6 - Did you notice any of the following related to COVID-19?

COVID-19 Measures Observed					
Measures	Number of Observations				
Sanitization stations	1				
COVID-19 informative displays	0				
Limited capacity	0				
Masks required	0				
Social distancing	0				

 $\mbox{Q7}$  - What other notes do you feel are important to mention?  $\mbox{\sc N/A}$ 

# APPENDIX F SOCIAL MEDIA'S RESULTS

### **SOCIAL MEDIA'S RESULTS**

Q1 - What website/social media page will be discussed in this form?

Q2 - Approximately how many "Likes and Comments" were left on posts by the parks and recreation centers?

Activity on Parks' Social Media				
Range	#Likes/Comments			
0-20	60			
21-40	4			
41-60	3			
61-80	0			
81-100	3			
101 +	8			
TOTAL	78			

Q3 - Generally, what is the public impression of the parks and recreation center social media platform?

Satisfaction of Park's Social Media Platform				
Answer	Percentage	Count		
Awesome	13%	10		
Good	30%	23		
Bad	0%	0		
Awful	0%	0		
Neutral	57%	44		
Total	100%	77		

Q4 - Approximately how many people were posting about participating in the following activities?

Engagement in Outdoor Recreation			
Type of activity	Total # of posts per activity		
Outdoor courts	901		
Wildlife watching	647		
Playground/splash pad	503		
Horseback riding	353		
Water sports	317		
Hiking/walking	310		
Fishing	199		
Swimming	190		
Running	134		
Camping	123		
Sailing	104		
Cycling	77		
Mountain Biking	66		
Picnicking	46		
Backpacking	45		
Boating/PWC	28		
Rock climbing	23		
Hunting	22		
Skateboarding	14		
ATVs	12		
Shooting	0		
Water/Jet ski	0		

Q5 - Were there comments about any of the following? If so what are the impressions.

Overall Rating of Park Conditions					
Facility	Very Good	Good	Neutral	Poor	Very Poor
Trails	4	12	5	0	1
Signage	2	8	4	0	0
Restrooms	0	1	8	1	0
Roadways	1	2	6	2	0
Visitor center	0	2	2	0	0
Camp sites	0	7	6	0	0
Parking	0	6	2	3	0
Playground	5	12	5	0	0
Splash pads	4	8	4	0	0
Outdoor courts	2	8	4	0	0
Sidewalks	0	5	3	1	0
Water areas	6	12	9	1	1

Q6 - Was the COVID-19 pandemic addressed on the platform?

COVID-19 on Platform				
Answer	Percentage	Count		
Yes, rules were put in place to address it	41%	31		
Yes, but no changes were made	9%	7		
No, there was no difference	49%	37		
Total	100%	75		

Q7 - Looking through the post was there a change in public participation?

Public Participation Change due to COVID-19						
	Remained	Declined	Increased	Total Count	Mean	Std Deviation
Likes & Comments	28	26	12	66	1.76	0.74
People making posts to the organizations' platform	17	35	13	65	1.94	0.68
Over all public's impression	30	25	10	65	1.69	0.72

Q8 - What other notes do you feel are important to mention? N/A

