

# Existing Conditions, Trends, and Projections in Outdoor Recreation



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## Executive Summary

This report compiles information regarding Colorado's changing demographics, externalities affecting the state's outdoor recreation opportunities and wildlife habitats, trends in outdoor recreation participation, public priorities and perceptions, and satisfaction with Colorado Parks and Wildlife (CPW). Conditions, trends, and projections presented here are intended to provide an objective picture of the landscape within which CPW operates. Highlights from the report are found below.

### State Demographics and Population Change

- Colorado is the seventh fastest growing state in the country and is projected to reach a population of 8.1 million people by 2050. Over 80% of the growth is expected to occur along the Front Range, an area spanning from Pueblo to Fort Collins. Given these projections, it is expected that an increasing number of outdoor recreationists will place additional pressure on parks, natural resources, and wildlife habitat, particularly across the Front Range.
- Colorado's population is younger than most other states, but the proportion of people age 55 and older is increasing. This trend is expected to continue.
- The population of Coloradans aged 65 years and older is expected to double by 2030 to 1.3 million people. This age group represents approximately 20% of the state's total projected population, with over one million of those residents residing along the Front Range.
- Colorado is becoming more racially and ethnically diverse. By 2020, the Colorado State Demography Office expects that 33% of the state's population will identify as non-white. Non-whites are projected to represent 37% of the state's population by 2030 and 45% of the state's population by 2050.
- Hispanics are the largest minority group in Colorado, projected to make up one-third of the state's minority residents by 2040. Many Hispanic individuals have different recreation patterns than other recreationists, including extended use of picnic sites by large groups, greater willingness to travel for outdoor recreation, and more average outdoor outings per year than other ethnic groups.

### Trends in Outdoor Recreation Participation

- The state's superior natural resources, access to public lands and outdoor recreation opportunities, and residents' desire to maintain a healthy, active lifestyle are often cited as top reasons why Coloradans live in the state. Findings from the 2018 public survey conducted as part of the 2019 Statewide Comprehensive Outdoor Recreation Plan (SCORP) indicated that 92% of Coloradans participate in some form of outdoor activity at least once every few weeks and 69% recreate between one and four times per week.
- In 2018, over 3.6 million Coloradans participated in trail- and road-related activities, making these the most popular forms of outdoor recreation in the state. Additionally, more than 1.7 million Coloradans participate in some form of water-based recreation.

- Fishing is the fourth most popular outdoor recreation activity in the state. The number of anglers declined between 1985 and 2000, but has been increasing ever since. As compared to hunting, participation in angling is high among younger adults, particularly among those between the ages of 22 and 37 years old.
- Most Coloradans recreate close to home; however, there is an increasing willingness among Coloradans to travel further to engage in outdoor activities.
- Colorado state park visitation has generally been increasing over the last 10-15 years.
- More than 98% of Coloradans have at least one state park within 50 miles of where they live, and more than half of the state's population (56%) lives within 50 miles of six or more state parks.
- The number of hunting licenses sold each year has remained relatively constant since 2002. Currently, the largest cohort of hunters is between 45 and 64 years old.

#### Public Opinion and Preferences for Natural Resource and Recreation Priorities

- Colorado state park users place a high level of importance on open lands and wilderness, and they value cleanliness and safety when they visit state parks.
- Wildlife viewing opportunities and dirt trails represent high priorities or essential investments for the public.
- Land conservation and preserving natural areas are among Coloradans' top priorities, specifically, protecting land, water, and wildlife resources. Additionally, maintaining existing facilities and public access are important priorities.

#### Public Satisfaction with CPW

- Generally, the public is satisfied with CPW. Most Coloradans are satisfied with the state park system and how CPW manages fish and wildlife populations throughout the state.
- Hunters are generally satisfied with their hunting experiences. Specifically, the proportion of hunters who rated their experience as somewhat-to-very satisfying outnumbers those indicating dissatisfaction by a margin of 2:1 for elk, deer, mountain lion and pronghorn.
- About two-thirds of residents and 80% of non-resident anglers rated their fishing experiences as somewhat-to-very satisfying. Being able to fish in a variety of waters and for a variety of species are frequently cited motivations among anglers.

## 1. Introduction

With an increasing, aging, and diversifying resident population, greater numbers of out-of-state visitors, evolving public perceptions and interests, and the unique wildlife habitats and ecosystems characteristic of Colorado, it is important to frequently assess the landscape in which CPW operates. Doing so provides a foundation from which the conservation of Colorado's natural and outdoor resources can be contemplated and aligned.

This report summarizes the best available information regarding changes in Colorado's demographics, trends in outdoor recreation participation, externalities impacting the state's recreation opportunities and wildlife habitats, public priorities regarding recreation opportunities and natural resource management, and public satisfaction with CPW.

## 2. State Demographics and Population Change

### 2.1 Population trends and projections

Colorado is a rapidly growing state. Between 2017 and 2018, Colorado experienced a population growth rate of 1.4% and was the seventh fastest growing state in the U.S.<sup>1</sup> Over 510,000 people moved to the state between 2008 and 2018, contributing to an increasing population, which grew from about 5 million residents to nearly 5.7 million residents during those ten years.<sup>2</sup> Steady growth is predicted to continue into the future, with the Colorado State Demography Office estimating that over 8 million people will reside in Colorado by 2050; 7.1 million people (or 82% of the state's total population) are expected to reside along the Front Range (Figure 1).<sup>3</sup> The Front Range includes the I-25 corridor from Fort Collins to Pueblo and is home to the majority of Colorado's most populated counties, including: El Paso, Denver, Weld, Adams, Arapahoe, Douglas, Larimer, Jefferson, Boulder, Broomfield and Pueblo.<sup>4</sup>

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<sup>1</sup> U.S. Census Bureau. 2018. "Nevada and Idaho are the Nation's Fastest Growing States."

<https://www.census.gov/newsroom/press-releases/2018/estimates-national-state.html> (Accessed 1/16/20)

<sup>2</sup> Colorado State Demography Office. 2019. Colorado Population Growth Components of Change, 1970-2021. Colorado Department of Local Affairs. <https://demography.dola.colorado.gov/births-deaths-migration/> (Accessed 1/16/20)

<sup>3</sup> Colorado State Demography Office. 2019. Colorado Population Growth Components of Change, 1970-2021. Colorado Department of Local Affairs. <https://demography.dola.colorado.gov/births-deaths-migration/> (Accessed 1/16/20)

<sup>4</sup> Colorado State Demography Office. 2019. Colorado Population Growth Components of Change, 1970-2021. Colorado Department of Local Affairs. <https://demography.dola.colorado.gov/births-deaths-migration/> (Accessed 1/16/20)

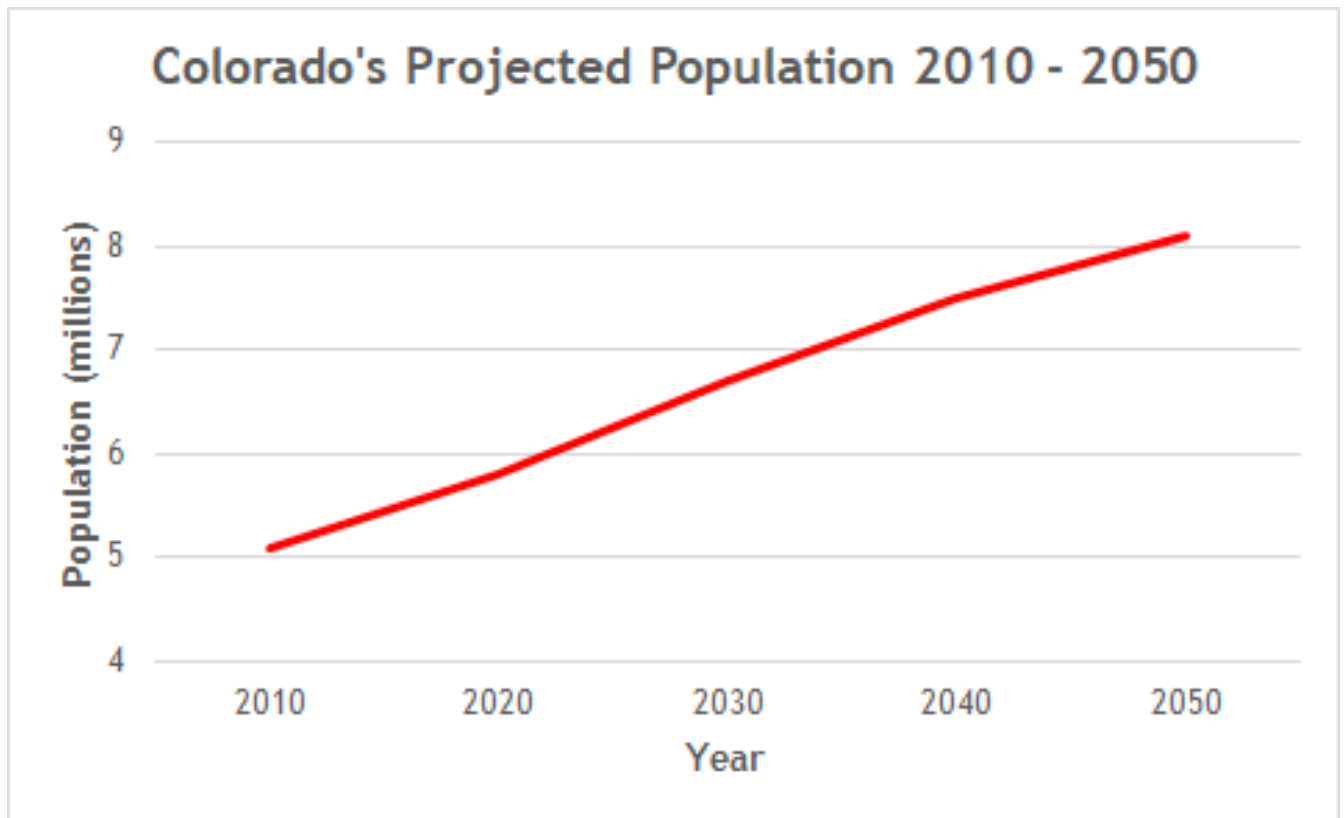


Figure 1. Colorado’s population projections between 2010 and 2050

Source: Colorado State Demography Office, 2019

Although not contributing significantly to the state’s overall population, many of the counties with the highest expected population growth rates between 2015 and 2020 will be in the western portion of the state and include: Mesa, La Plata, Elbert, Garfield and Eagle counties. Overall, the Colorado State Demography Office predicts that in-migration will continue to contribute to the majority of Colorado’s growing population, outpacing natural increase from current residents.<sup>5</sup>

Not all areas of the state are predicted to grow. In fact, the populations of twelve Colorado counties are expected to decrease between 2015 and 2030 (Figure 2).<sup>6</sup> Most of these counties are located in the eastern Plains and South Central regions of the state (with the exception of Jackson and Dolores counties) and include: Baca (-8.1%), Kiowa (-6.2%), Kit Carson (-6.9%) Jackson (-4.0%), Sedgwick (-3.8%), Otero (-2.4%), Bent (-2.0%), Dolores (-0.6%), Phillips (-1.5%), Prowers (-0.2%) and Rio Grande (-0.5%).<sup>7</sup> This shift is part of a continuation of the larger rural-to-urban migration trend, seen in counties across the United States over the

<sup>5</sup> Colorado State Demography Office. 2014. “Colorado Economic and Demographic Overview: Colorado Population Change.” Colorado Department of Local Affairs. <https://demography.dola.colorado.gov/demography/publications-and-presentations/> (Accessed 1/16/20)

<sup>6</sup> Colorado State Demography Office. 2019. Births, deaths, and Migration 2015-2030 - Interactive Map. Colorado Department of Local Affairs. <https://demography.dola.colorado.gov/ComponentsOfChange/#> (Accessed 1/16/20)

<sup>7</sup> Colorado State Demography Office. 2019. Births, deaths, and Migration 2015-2030 - Interactive Map. Colorado Department of Local Affairs. <https://demography.dola.colorado.gov/ComponentsOfChange/#> (Accessed 1/16/20)

last twenty years.<sup>8</sup> Increases and decreases in growth rates are magnified in counties with small populations as small changes in the number of residents can result in disproportionately large changes in county growth rates.

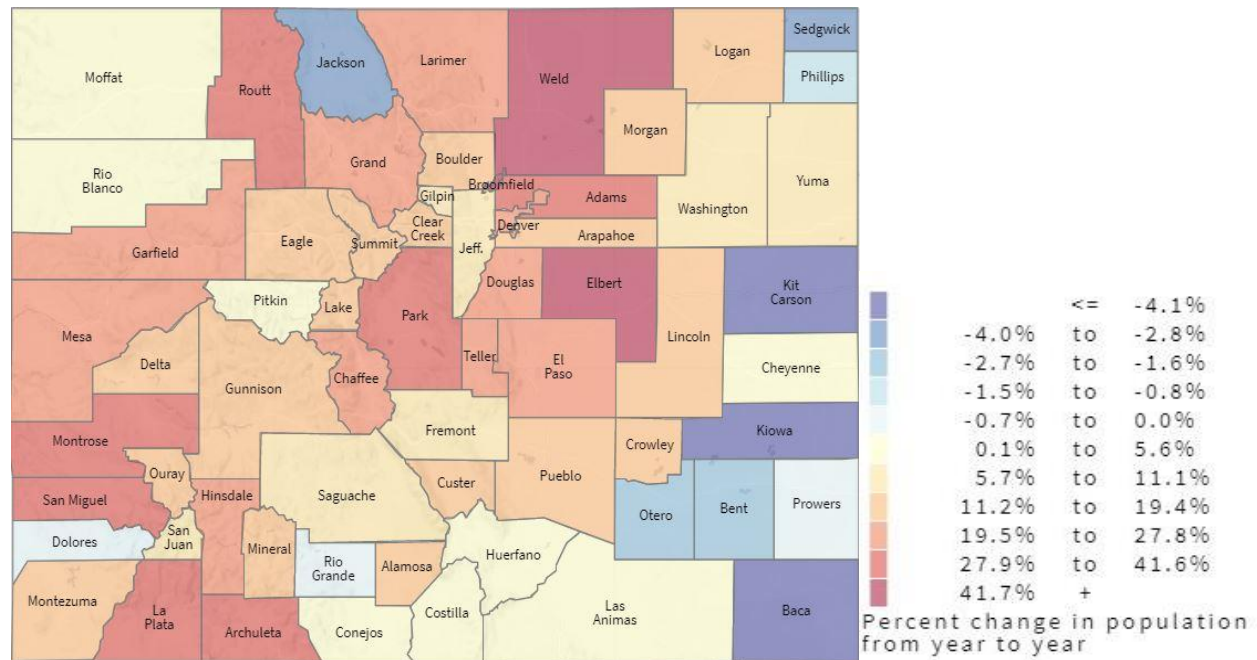


Figure 2. Percent population change in Colorado counties between 2015 and 2030  
 Source: Colorado State Demography Office, 2019

## 2.2 Aging of the population

Colorado’s population is slightly younger than the rest of the country. The state’s median age is 37.5 years,<sup>9</sup> whereas, the nationwide median age is 38.2 years.<sup>10</sup> However, between 2000 and 2010, Colorado experienced a 32% increase among its population aged 65 years and older, making it the state with the fourth fastest growing population of people in this age group.<sup>11</sup> Between 2010 and 2018, the state’s fastest growing age group, those aged 95 years and older, increased by 77% (3,662 individuals). The second fastest growing age group during the same time period was among persons aged 70 to 74 years, at a nearly 64% increase (82,827 individuals). The third fastest growing age group was persons aged 65 to 69 years, with an increase of 52% (95,912 individuals). The state’s overall population growth rate during that same time period was 13%.<sup>12</sup>

<sup>8</sup> Parker, Kim, et al. 2018. “What Unites and Divides Urban, Suburban and Rural Communities.” Pew Research Center. <https://www.pewsocialtrends.org/2018/05/22/what-unites-and-divides-urban-suburban-and-rural-communities/> (Accessed 1/16/20)

<sup>9</sup> Colorado State Demography Office. 2019. Age and Gender Population Data. Median Age. Colorado Department of Local Affairs. <https://demography.dola.colorado.gov/population/age-gender-population-data/#age-and-gender-population-data> (Accessed 7/25/19)

<sup>10</sup> The World Factbook. 2019. North America: United States. Central Intelligence Agency. <https://www.cia.gov/library/publications/the-world-factbook/geos/us.html> (Accessed 7/25/19)

<sup>11</sup> U.S. Census Bureau. 2011. The Older Population: 2010. U.S. Department of Commerce. <https://www.census.gov/prod/cen2010/briefs/c2010br-09.pdf> (Accessed 7/25/19)

<sup>12</sup> Colorado State Demography Office. Population by Single Year of Age - Region. Colorado Department of Local Affairs. <https://demography.dola.colorado.gov/population/data/sya-regions/> (Accessed 7/25/19)

In 2018, almost 80% of the state’s population aged 65 years and older lived along the Front Range, with the largest populations residing in Jefferson, El Paso, Arapahoe and Denver counties.<sup>13</sup> Outside of the Front Range, the Western Slope (Archuleta, Delta, Dolores, Eagle, Garfield, Grand, Gunnison, Hinsdale, Jackson, La Plata, Mesa, Moffat, Montezuma, Montrose, Ouray, Pitkin, Rio, Blanco, Routt, San Juan, San Miguel and Summit counties) and Central Mountains (Chaffee, Clear Creek, Custer, Fremont, Gilpin, Huerfano, Lake, Las Animas, and Park counties) regions had the highest populations of those over 65 years old.<sup>14</sup> From 2010 to 2018, the largest percent increase of residents aged 65 years and older in counties outside of the Front Range occurred in San Miguel (122.6%), Eagle (111.6%), Routt (106.1%), Elbert (92%), Summit (94.8%), Gilpin (99.2%), Park (97.0%), and San Juan (106.7%) counties (Figure 3).<sup>15</sup>

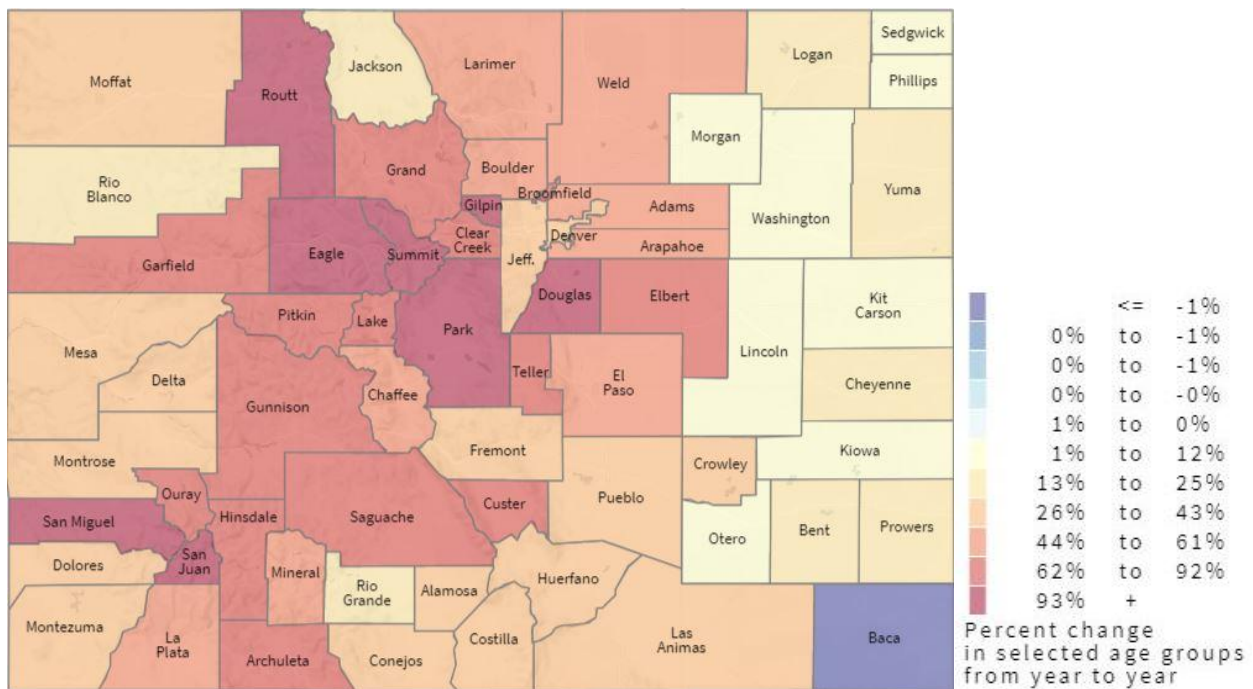


Figure 3: Percent change in Colorado’s 65+ population by county between 2010 to 2018  
Source: Colorado State Demography Office, 2019

In 2018, 14% of the state’s population was over 65 years old.<sup>16</sup> This segment, however, is expected to increase from 850,000 to 1.3 million people over the next 10 years.<sup>17</sup> This is almost exclusively due to the natural aging of the state’s 1.2 million Baby Boomers, who were

<sup>13</sup> Colorado State Demography Office. 2019. Population by Age Groups Interactive Map. Colorado Department of Local Affairs. <https://demography.dola.colorado.gov/AgeMap/> (Accessed 1/9/20) Parameters used: Age Group Population, 2018, 65+ selected.

<sup>14</sup> Colorado State Demography Office. 2019. Race by Age Forecast - Region. Colorado Department of Local Affairs. <https://demography.dola.colorado.gov/population/data/race-forecast-regions/> (Accessed 6/12/19)

<sup>15</sup> Colorado State Demography Office. 2019. Population by Age Groups Interactive Map. Colorado Department of Local Affairs. <https://demography.dola.colorado.gov/AgeMap/> (Accessed 7/25/19). Parameters used: Percent Age Group Change, 2010-2018, 65+.

<sup>16</sup> Colorado State Demography Office. 2019. Population by Single Year of Age - Region. Colorado Department of Local Affairs. <https://demography.dola.colorado.gov/population/data/sya-regions/> (Accessed 7/25/19)

<sup>17</sup> Colorado State Demography Office. 2019. Race by Age Forecast - County. Colorado Department of Local Affairs. <https://demography.dola.colorado.gov/population/data/race-forecast/#county-race-by-age-forecast> (Accessed 7/25/19)



aged 54 to 72 years in 2018,<sup>18</sup> as opposed to in-migration of older adults, which is relatively low. As of 2018, there were approximately 780,000 Baby Boomers between the ages of 54 and 64 years old living in Colorado. In general, the Baby Boomer generation is in better health, has higher levels of income, and are known to “work hard, play hard, and spend hard”<sup>19</sup> in outdoor recreation pursuits.

As the state’s population ages, individual households will see shifts in income, leisure time, and activity preferences, which will impact the outdoor recreation sector. In Oregon, aging recreationists took fewer visits to federal land backcountry areas, instead opting to recreate nearby or in easy-to-access locations most often provided by state and local agencies.<sup>20</sup> By 2030, one million Coloradans are expected to age out of the workforce.<sup>21</sup> A shift of this magnitude in the population is likely to have a significant impact on outdoor recreation demands. These individuals may change how they prioritize outdoor activities or begin to participate in different recreational opportunities altogether.

### 2.3 Diversification of the population

Colorado is an increasingly diverse state. According to Colorado State Demography Office estimates, in 2020, over 33% of the state’s residents will identify as a minority, which is an increase from nearly 29% in 2010. Diversity is expected to continue to increase in the coming decades with non-white minorities representing 37% of the state’s population by 2030 and 45% of the state’s population by 2050.<sup>22</sup> Hispanics represent the largest minority group in Colorado, comprising 22% of the population (1.22 million people) in 2015.<sup>23</sup> They are also the fastest growing ethnic group in the state. The Colorado State Demography Office predicts the Hispanic population will reach over one-quarter of the state’s total population (1.6 million people) before 2025 and nearly one-third of the state’s population (2.3 million people) by 2040 (Figure 4). Although the current majority (approximately 1 million of the 1.22 million people total) of Colorado’s Hispanic population lives along the Front Range, approximately 97,000 Hispanic individuals reside along the Western Slope and 39,000 Hispanic individuals reside in the Eastern Plains regions of the state.<sup>24</sup>

The Hispanic population in Colorado is generally young, with a median age of 27 years compared to the statewide median age of 37.5 years.<sup>25</sup> Between 2000 and 2010, the Hispanic

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<sup>18</sup> Colorado State Demography Office. 2019. Population by Single Year of Age - Region.

<https://demography.dola.colorado.gov/population/data/sya-regions/> (Accessed 7/25/19)

<sup>19</sup> Ziegler, J. 2002. “Recreating Retirement: How will Baby Boomers Reshape Leisure in their 60s?” *Parks and Recreation*, October. P. 56-61.

<sup>20</sup> Robinson, K. 2007. “An Aging Population: Relationships between Socio-demographics, Motivations and Participation.” *Proceedings of the 2007 Northeastern Recreation Research Symposium*.

<sup>21</sup> Colorado State Demography Office. 2016. Aging in Colorado Part 2: What Does it Mean for Our State?

<https://demography.dola.colorado.gov/crosstabs/aging-part-2/> (Accessed 1/9/20)

<sup>22</sup> Colorado State Demography Office. 2019. Population of Colorado’s Race and Ethnic Groups, 2000-2050. Colorado Department of Local Affairs. <https://demography.dola.colorado.gov/population/race-hispanic-origin/#race-and-hispanic-origin> (Accessed 12/30/19)

<sup>23</sup> Colorado State Demography Office. 2019. Race and Hispanic Origin - Forecasts. Colorado Department of Local Affairs. <https://demography.dola.colorado.gov/population/race-hispanic-origin/#race-and-hispanic-origin> (Accessed 7/25/19)

<sup>24</sup> Colorado State Demography Office. 2019. Race by Age Estimates - Regions. Colorado Department of Local Affairs. <https://demography.dola.colorado.gov/population/data/race-estimate-regions/> (Accessed 1/8/20)

<sup>25</sup> Pew Research Center. 2014. Demographic Profile of Hispanics in Colorado, 2014. <https://www.pewhispanic.org/states/state/co/> (Accessed 1/8/20)

population was the only ethnic group where the growth rate was greater for the proportion of the population under 18 years old (44% increase) than over 18 years old (39% increase).<sup>26</sup> Between 2017 and 2020, estimates suggest that Hispanics will comprise over 60% of the growth of the state’s working-age population.<sup>27</sup>

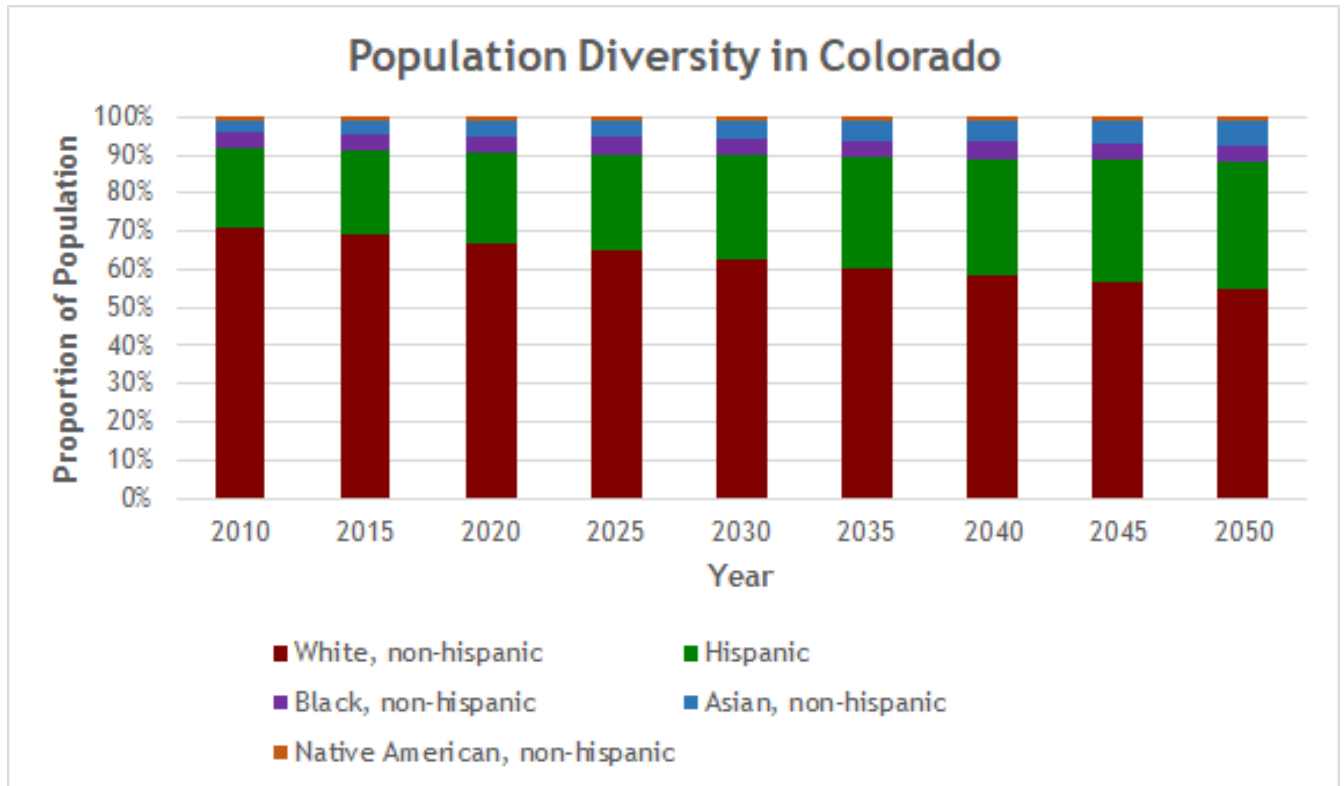


Figure 4: Colorado diversity projections 2010 to 2050  
 Source: Colorado State Demography Office, 2019

### 3. Externalities Impacting Outdoor Recreation and Wildlife Habitat

#### 3.1 Changes in agricultural land

Between 1997 and 2002, more than 1.26 million acres of agricultural land was converted for development, and another 3.1 million acres are expected to be converted by 2022.<sup>28</sup> As a result, Colorado’s unique ecosystems are decreasing in size. Important ecosystems at risk include: shortgrass prairie, sand sage, and greasewood. A 2006 report estimated that about 50% of shortgrass prairie remains in a natural state, and that much of the habitat loss is largely due to agricultural conversion.<sup>29</sup>

<sup>26</sup> Garner, E. 2011. *Demographic Trends: Understanding the Impact of a Changing Population on Colorado*.

<sup>27</sup> Bell Policy Center. 2018. *Demographics: A Changing Colorado*. <https://www.bellpolicy.org/wp-content/uploads/2018/01/Demographics-Guide-to-Economic-Mobility.pdf> (Accessed 1/8/20)

<sup>28</sup> Environment Colorado. 2006. *Losing Ground: Colorado’s Vanishing Agricultural Landscape*. <https://environmentcolorado.org/reports/coe/losing-ground-colorados-vanishing-agricultural-landscape> (Accessed 7/25/19)

<sup>29</sup> Neely, B. et al. 2006. *Central Shortgrass Prairie Ecoregional Assessment and Partnership Initiative*. The Nature Conservancy of Colorado and the Shortgrass Prairie Partnership. <http://hermes.cde.state.co.us/drupal/islandora/object/co%3A23216/datastream/OBJ/view> (Accessed 7/25/19)

### 3.2 Climate trends

Given Colorado's topographic diversity and the uncertainty of climate predictions, it is difficult to determine the specific impacts the climate will have on outdoor recreation opportunities and wildlife habitat. Changes in climate may decrease opportunities for some recreational activities while increasing interest in others. Threats to wildlife habitat may include loss of wetlands, increased occurrence of invasive species and diseases, and changes in precipitation patterns. Exploring current research on climate trends provides valuable insight into how outdoor recreation opportunities and wildlife populations may be impacted. A listing of additional resources on this topic is provided as an appendix to this report.

Between 1977 and 2006, Colorado's temperature warmed by 2° F. By mid-century, Colorado's climate is predicted to warm an additional 2.5° F to 5.5° F with summer months showing greater warming than winter months.<sup>30</sup> Summer temperature regimes will shift westward and upslope in the eastern portion of the state, with the Front Range experiencing temperature ranges similar to those that occur near the Kansas border today.<sup>31</sup> There are no conclusive trends regarding statewide precipitation, although higher temperatures will likely mean earlier snowmelt and lower runoff levels.<sup>32</sup> Table 1 explores potential challenges to outdoor recreation and tourism in Colorado, stemming from predicted climatic changes.

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<sup>30</sup> Gordon, E. and D. Ojima. 2015. Colorado Climate Change Vulnerability Study. University of Colorado Boulder and Colorado State University. [https://www.colorado.edu/climate/co2015vulnerability/co\\_vulnerability\\_report\\_2015\\_final.pdf](https://www.colorado.edu/climate/co2015vulnerability/co_vulnerability_report_2015_final.pdf) (Accessed 1/3/20)

<sup>31</sup> Gordon, E. and D. Ojima. 2015. Colorado Climate Change Vulnerability Study. University of Colorado Boulder and Colorado State University. [https://www.colorado.edu/climate/co2015vulnerability/co\\_vulnerability\\_report\\_2015\\_final.pdf](https://www.colorado.edu/climate/co2015vulnerability/co_vulnerability_report_2015_final.pdf) (Accessed 1/3/20)

<sup>32</sup> Gordon, E. and D. Ojima. 2015. Colorado Climate Change Vulnerability Study. University of Colorado Boulder and Colorado State University. [https://www.colorado.edu/climate/co2015vulnerability/co\\_vulnerability\\_report\\_2015\\_final.pdf](https://www.colorado.edu/climate/co2015vulnerability/co_vulnerability_report_2015_final.pdf) (Accessed 1/3/20)

Table 1: Potential challenges to Colorado outdoor recreation and tourism from predicted climatic changes<sup>33</sup>

| Observed and/or projected physical changes  | Potential vulnerabilities in Colorado   |
|---|---|
| Earlier snowmelt and runoff timing  | <ul style="list-style-type: none"> <li>• The commercial rafting industry is vulnerable to reduced season length due to shorter, faster runoff.</li> </ul>   |
| Climate conditions more favorable to "generalist" wildlife species than "specialists" | <ul style="list-style-type: none"> <li>• Wildlife viewing as a draw for Colorado tourism may be vulnerable as coyotes, elk, and raccoons become more common while marmot and pika become less common (National Park Service and Center for the American West 2007).</li> </ul>                                    |
| Rising stream temperatures and declining stream levels                                | <ul style="list-style-type: none"> <li>• Fly fishing, a popular activity across Colorado, could be vulnerable as rising stream temperatures and declining streamflows reduce habitat for coldwater trout species.</li> </ul>  |
| Continued interannual variability in precipitation and temperature                    | <ul style="list-style-type: none"> <li>• A number of activities, notably skiing and rafting, are vulnerable to continued large swings in temperature and precipitation from year to year, as well as the effects such swings can have on perceptions of tourism and recreation in Colorado.</li> </ul>            |
| Increased frequency and severity of wildfire  | <ul style="list-style-type: none"> <li>• Virtually all summertime recreation and tourism opportunities are vulnerable to wildfire, which can close roads, destroy trails and campgrounds, cause air quality problems, and result in potential out-of-town visitors deciding not to travel to Colorado.</li> </ul> |
| Shifting away from a snow-capped mountain aesthetic                                   | <ul style="list-style-type: none"> <li>• Visitors to Mesa Verde National Park and Rocky Mountain National Park may be less likely to see snow-capped mountains in the future (Saunders et al. 2009).</li> <li>• Glaciers in Rocky Mountain National Park may recede, changing the viewscape.</li> </ul>           |

Source: *Colorado Climate Change Vulnerability Study, University of Colorado Boulder and Colorado State University, 2015*

### *Snow impacts*

Despite predictions of decreased April 1 snowpack levels in the future due to warming, Colorado’s snow-based recreation is likely to be more resilient than in other states thanks to high elevations and cold temperatures. Model projections anticipate reduced snowpack at elevations below 8,200 feet; however, most of Colorado’s snowpack lies above this elevation.<sup>34</sup> As a result, there may be increased interest in Colorado’s snow-based recreation from out-of-state visitors as these opportunities decrease in other states. Higher average temperatures and changes in precipitation patterns including snowfall will enable some

<sup>33</sup> Gordon, E. and D. Ojima. 2015. Colorado Climate Change Vulnerability Study. University of Colorado Boulder and Colorado State University. [https://www.colorado.edu/climate/co2015vulnerability/co\\_vulnerability\\_report\\_2015\\_final.pdf](https://www.colorado.edu/climate/co2015vulnerability/co_vulnerability_report_2015_final.pdf) (Accessed 1/3/20)

<sup>34</sup> Gordon, E. and D. Ojima. 2015. Colorado Climate Change Vulnerability Study. University of Colorado Boulder and Colorado State University. [https://www.colorado.edu/climate/co2015vulnerability/co\\_vulnerability\\_report\\_2015\\_final.pdf](https://www.colorado.edu/climate/co2015vulnerability/co_vulnerability_report_2015_final.pdf) (Accessed 1/3/20)

invasive plant species to move into new areas and take advantage of plants weakened by drought, resulting in loss of food sources for wildlife.<sup>35</sup>

### *Forest Fires and Floods*

Increasing temperatures, longer growing seasons, and more arid conditions will likely result in more overall vegetation growth, leading to the possibility of more frequent and higher intensity forest fires.<sup>36</sup> More and larger wildfires may reduce access for outdoor recreation, damage infrastructure including roads, trails and buildings, and lead to closures in other areas in hopes of reducing the dangers of new human-caused wildfires. Additionally, smoke from wildfires can lead to road closures, reduced air quality and visibility, and deter out-of-state visitors from traveling to Colorado.<sup>37</sup> Similarly, flood events can cause severe damage to recreation-based infrastructure leading to reduced access and area closures.

### *Effects on Wildlife*

Changes in plant and animal behavior and distribution are expected to impact outdoor recreation opportunities for most related activities including hunting and wildlife viewing. Terrestrial habitat for game and non-game species is predicted to decline in suitability resulting from more frequent drought conditions. Conversion, degradation, and fragmentation of habitat due to human population growth and development are also significant concerns.<sup>38</sup> Extreme weather events and frequent, high-intensity forest fires destroy many of the key elements of wildlife habitat including abundant food sources, clean water, and shelter, causing wildlife to relocate to areas where resources are more readily available. As habitats change, generalist species such as coyotes, raccoons, and elk are more likely to adapt to the new conditions than specialist species (e.g., moose, marmots, pika).<sup>39</sup> Consequently, there will be fewer opportunities for wildlife watchers to see unique species and for hunters to experience successful harvest.

### *Impacts on Water-based Recreation, Angling, and Waterfowl*

With increased summer temperatures, demand for water-based recreation is predicted to increase as visitors take advantage of swimming, rafting, boating, paddling and other water sports opportunities. At the same time, the state will likely experience reduced levels in reservoirs and rivers resulting from greater evaporation rates and more demands on water resources from downstream users.<sup>40</sup> As a result, reservoir-based recreation may become more

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<sup>35</sup> The National Wildlife Federation. 2019. Climate Change. <https://www.nwf.org/Educational-Resources/Wildlife-Guide/Threats-to-Wildlife/Climate-Change> (Accessed 1/9/20)

<sup>36</sup> Williamson, S., M. Ruth, K. Ross, and D. Irani. 2008. *Economic impacts of climate change on Colorado*. The Center for Integrative Environmental Research.

<sup>37</sup> Gordon, E. and D. Ojima. 2015. Colorado Climate Change Vulnerability Study. University of Colorado Boulder and Colorado State University. [https://www.colorado.edu/climate/co2015vulnerability/co\\_vulnerability\\_report\\_2015\\_final.pdf](https://www.colorado.edu/climate/co2015vulnerability/co_vulnerability_report_2015_final.pdf) (Accessed 1/3/20)

<sup>38</sup> Kraft, Ben. 2018. "Big Thompson Deer Herd Management Plan." Colorado Parks and Wildlife. [https://cpw.state.co.us/Documents/Commission/2018/Aug/Item\\_16-Draft\\_Big\\_Thompson\\_Deer\\_HMP-PWCMtg\\_Aug2018.pdf](https://cpw.state.co.us/Documents/Commission/2018/Aug/Item_16-Draft_Big_Thompson_Deer_HMP-PWCMtg_Aug2018.pdf) (Accessed 1/17/20)

<sup>39</sup> Gordon, E. and D. Ojima. 2015. Colorado Climate Change Vulnerability Study. University of Colorado Boulder and Colorado State University. [https://www.colorado.edu/climate/co2015vulnerability/co\\_vulnerability\\_report\\_2015\\_final.pdf](https://www.colorado.edu/climate/co2015vulnerability/co_vulnerability_report_2015_final.pdf) (Accessed 1/3/20)

<sup>40</sup> Gordon, E. and D. Ojima. 2015. Colorado Climate Change Vulnerability Study. University of Colorado Boulder and Colorado State University. [https://www.colorado.edu/climate/co2015vulnerability/co\\_vulnerability\\_report\\_2015\\_final.pdf](https://www.colorado.edu/climate/co2015vulnerability/co_vulnerability_report_2015_final.pdf) (Accessed 1/3/20)

crowded and river-based activities could be negatively impacted. Additionally, the spring pulse (the increase of streamflow due to melting snow) is expected to shift to earlier in the season, while late-summer flows are expected to decrease over time.<sup>41</sup> These changes in flows and reduced season length will likely impact the commercial rafting industry.<sup>42</sup> Coldwater fish species, which are largely favored by anglers in Colorado, are anticipated to see a reduction in habitat in lowland areas with lower stream flows and increased temperatures.<sup>43</sup> A recent study observing the impact of warmer temperatures on wetlands found that changes in precipitation patterns alter the quantity and quality of water and habitat, impacting the migratory, wintering, nesting, and breeding habits of waterfowl.<sup>44</sup>

#### 4. Trends in Outdoor Recreation Participation

Colorado is known as an outdoor recreation hotspot, and Coloradans are an active group. Findings from the 2018 public survey conducted as part of the 2019 Statewide Comprehensive Outdoor Recreation Plan (SCORP), indicated that 92% of Coloradans participate in some form of outdoor activity at least once every few weeks and 69% recreate between one and four times per week.<sup>45</sup> The 2019 Conservation in the West poll notes that 73% of Coloradans view themselves as outdoor recreationists, and 73% also indicated that living near public lands was an important factor when choosing to live in the west. Additionally, 90% of Coloradans believe that the outdoor recreation economy, which includes the economic activity generated by recreationists and those who manufacture and sell outdoor recreation equipment, is important to the future of the state and the Western U.S.<sup>46</sup>

Over the past several years, industry and government reports have estimated that the outdoor recreation economy is growing faster than the national economy; the Bureau of Economic Analysis estimated that the outdoor recreation sector grew 3.9% in 2017, compared to 2.4% growth for the overall economy.<sup>47</sup> Also during 2017, outdoor recreationists in Colorado spent over \$36.8 billion on trips and equipment (direct expenditures).<sup>48</sup> When combined, hunting, fishing, and wildlife watching produce over \$5 billion of economic activity in the state, while state park visitation contributes \$1.2 billion.<sup>49</sup> These results highlight the significant role that outdoor recreation plays in the lives of Coloradans.

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<sup>41</sup> Lukas, J. et al. 2014. "Climate Change in Colorado a Synthesis to Support Water Resources Management and Adaptation." Colorado Water Conservation Board.

<sup>42</sup> Gordon, E. and D. Ojima. 2015. Colorado Climate Change Vulnerability Study. University of Colorado Boulder and Colorado State University. [https://wwa.colorado.edu/climate/co2015vulnerability/co\\_vulnerability\\_report\\_2015\\_final.pdf](https://wwa.colorado.edu/climate/co2015vulnerability/co_vulnerability_report_2015_final.pdf) (Accessed 1/3/20)

<sup>43</sup> Gordon, E. and D. Ojima. 2015. Colorado Climate Change Vulnerability Study. University of Colorado Boulder and Colorado State University. [https://wwa.colorado.edu/climate/co2015vulnerability/co\\_vulnerability\\_report\\_2015\\_final.pdf](https://wwa.colorado.edu/climate/co2015vulnerability/co_vulnerability_report_2015_final.pdf) (Accessed 1/3/20)

<sup>44</sup> Oregon State University. 2019. "Climate change negatively affects waterbirds in the American West." ScienceDaily. *ScienceDaily*: 18 March 2019. [www.sciencedaily.com/releases/2019/03/190318102420.htm](http://www.sciencedaily.com/releases/2019/03/190318102420.htm) (Accessed 1/9/20)

<sup>45</sup> Colorado Parks and Wildlife. 2019. Statewide Comprehensive Outdoor Recreation Plan. P. 23

<sup>46</sup> Colorado College. State of the Rockies Project. 2019. Conservation in the West Poll - Key Findings.

<sup>47</sup> Bureau of Economic Analysis. 2019. News Release: Outdoor Recreation Satellite Account, U.S. and Prototype for States, 2017. <https://www.bea.gov/news/2019/outdoor-recreation-satellite-account-us-and-prototype-states-2017> (Accessed 2/25/20)

<sup>48</sup> Colorado Parks and Wildlife. 2019. Statewide Comprehensive Outdoor Recreation: The 2017 Economic Contributions of Outdoor Recreation in Colorado. P. 3

<sup>49</sup> Colorado Parks and Wildlife. 2019. Statewide Comprehensive Outdoor Recreation: The 2017 Economic Contributions of Outdoor Recreation in Colorado. P. 3

#### 4.1 Colorado outdoor recreation participation and preferences

Across the state, walking, hiking/backpacking, picnicking, tent camping and fishing are the top five most popular outdoor activities, as determined by the number of Coloradans who participated in a given activity during 2018 (Table 2, left side).<sup>50</sup> When looking at the average number of *days* Coloradans participated in a given activity, walking, jogging/running outdoors, road biking, bird watching and team or individual sports are the top five activities (Table 2, right side). Overall, more than 3.6 million Coloradans participated in trail- or road-based recreation opportunities (e.g., walking, hiking, jogging, bicycling, off-highway vehicle use); 2.2 million Coloradans participated in wildlife-related recreation, including hunting, fishing, birdwatching and wildlife viewing; 1.7 million Coloradans participated in water-based recreation, such as boating, water skiing, and whitewater rafting; 1.7 million Coloradans participated in winter recreation, including skiing/snowboarding, snowmobiling, snowshoeing and cross-country skiing; and 3.0 million Coloradans participated in other forms of outdoor recreation including tent camping, picnicking, target shooting, rock climbing, team or individual sports, and playground activities.<sup>51</sup> A study conducted by Great Outdoors Colorado (GOCO) in 2014 found similar results. Specifically, over 60% of respondents participated in trail-based recreation activities, picnicking, water recreation, and wildlife watching.<sup>52</sup>

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<sup>50</sup> Colorado Parks and Wildlife. 2019. Statewide Comprehensive Outdoor Recreation Plan. P. 66

<sup>51</sup> Colorado Parks and Wildlife. 2014. Statewide Comprehensive Outdoor Recreation Plan. P. 116

<sup>52</sup> Great Outdoors Colorado. 2014. Great Outdoors Colorado Situation Analysis. P. 20

Table 2: 2018 Recreation activities ranked by number of respondents and the average number of days Coloradans engaged in a particular activity (only top ten activities provided)<sup>53</sup>

| Number of Coloradans who participated in a given activity* |  |           |                  | Average number of days per year Coloradans participated in a given activity* |  |        |
|--|--|-----------|------------------|--|--|--------|
| Rank   | Activities                                 | # People  | % of Respondents | Rank   | Activities                                 | # Days |
| 1  | Walking                                    | 3,193,283 | 74               | 1  | Walking                                    | 75     |
| 2  | Hiking/ backpacking                        | 2,257,282 | 52               | 2  | Jogging/ running (outdoors)                | 50     |
| 3**  | Picnicking                                 | 1,389,271 | 32               | 3  | Road biking                                | 35     |
| 3**  | Tent camping                               | 1,389,271 | 32               | 4**  | Bird watching                              | 32     |
| 4  | Fishing                                    | 1,266,888 | 29               | 4**  | Team or individual outdoor sports          | 32     |
| 5  | Playground activities                      | 1,248,757 | 28               | 5  | Playground activities                      | 30     |
| 6  | Jogging / running (outdoors)               | 1,228,360 | 28               | 6  | Horseback riding                           | 28     |
| 7  | Skiing / snowboarding                      | 1,205,697 | 27               | 7**  | Wildlife viewing (excluding bird watching) | 25     |
| 8  | Wildlife viewing (excluding bird watching) | 1,162,636 | 26               | 7**  | Hiking / backpacking                       | 25     |
| 9  | RV camping / cabins                        | 1,137,706 | 26               | 8  | Mountain biking                            | 23     |
| 10   | Team or individual outdoor sports          | 1,071,982 |                  | 9  | Fishing                                    | 17     |
|  |  |           |                  | 10   | Skiing / snowboarding                      | 14     |

\*Data are weighted based on U.S. Census Data

\*\*The activity had the same number of people participating or the same number of annual participation days and is therefore tied with another activity in ranking position.

<sup>53</sup> Colorado Parks and Wildlife. 2019. Statewide Comprehensive Outdoor Recreation Plan. P. 66



The Colorado Tourism Office (CTO) has developed a 7-region breakdown of Colorado counties based on regions where tourism and tourism spending are concentrated and visitation characteristics are similar (Figure 5). These regions provide a basis from which to compare outdoor recreation activity trends and geographic differences.

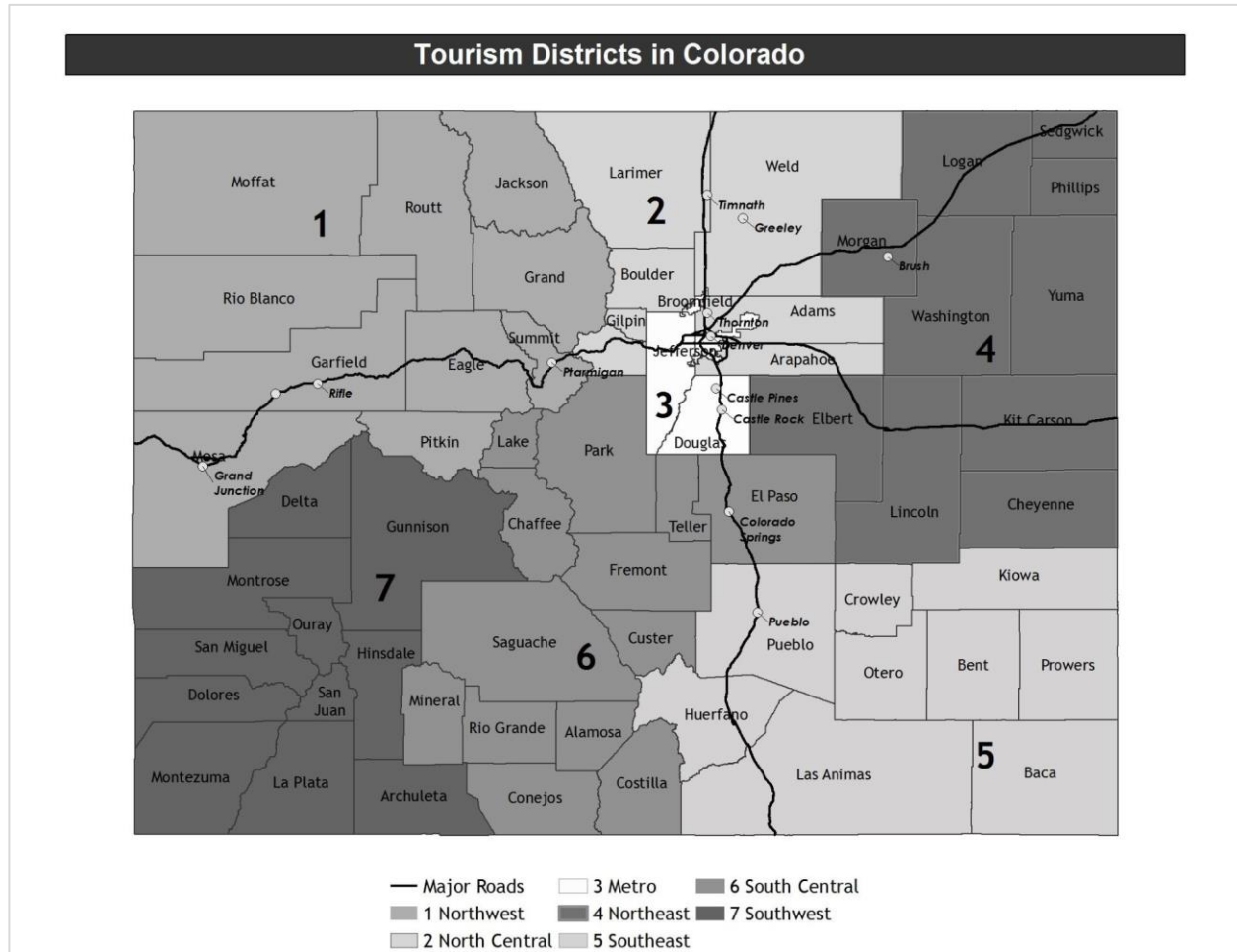


Figure 5: Map of Colorado Tourism Office regions<sup>54</sup>

Overall, walking was the most popular activity in all seven regions of the state (Table 3). Hiking/backpacking was the second most popular activity in all of the regions except the Northeast and Southeast, where hunting and RV camping/cabins were the second most popular activities, respectively. The third most popular activity differed substantially in each region, except for fishing, which ranked third in the Southeast, South Central, and Southwest regions.<sup>55</sup>

<sup>54</sup> Colorado Parks and Wildlife. 2019. Statewide Comprehensive Outdoor Recreation Plan. P. 65

<sup>55</sup> Colorado Parks and Wildlife. 2019. Statewide Comprehensive Outdoor Recreation Plan. P. 66

Table 3: Top three most popular activities by tourism district<sup>56</sup>

| Rank | Northwest               | North Central            | Metro                        | Northeast           | Southeast             | South Central          | Southwest              |
|------|-------------------------|--------------------------|------------------------------|---------------------|-----------------------|------------------------|------------------------|
| 1    | Walking                 | Walking                  | Walking                      | Walking             | Walking               | Walking                | Walking                |
| 2    | Hiking/<br>backpacking  | Hiking/<br>backpacking   | Hiking/<br>backpacking       | Hunting             | RV camping/<br>cabins | Hiking/<br>backpacking | Hiking/<br>backpacking |
| 3    | Skiing/<br>snowboarding | Playground<br>activities | Jogging/running<br>(outdoor) | Wildlife<br>viewing | Fishing               | Fishing                | Fishing                |

#### 4.2 National outdoor recreation trends

A recent nationwide survey conducted by the National Recreation and Park Association indicates that the following outdoor recreation activities are maintaining or growing in popularity: gathering at the park with family and friends for picnics, barbecues, and games (58%), going to the pool (48%), and walking or hiking along a local trail (45%).<sup>57</sup> The survey found that, compared to Americans overall, parents are most likely to gather with friends and family at the park (68% vs. 58%), go to the pool (66% vs. 48%) and go camping (42% vs. 30%).<sup>58</sup> The survey also found that young adults ages 22-37 years, or those born between 1981 and 1996 and commonly known as “millennials,” are particularly active outdoors compared to Americans overall, logging more participation than all Americans across every measured outdoor activity.<sup>59</sup> Specifically, millennial participation (39%) in camping outpaced camping participation by all Americans (30%); the same is true for attending community social events (41% vs. 38%), playing in team sports (20% vs. 12%), and participating in running/cycling races (17% vs. 10%), among other activities.<sup>60</sup> Millennials cited gathering with family and friends at the park (62%), going to the pool (61%), and walking or hiking along trails (52%) as their most preferred outdoor recreational activities.<sup>61</sup> Other popular activities among all American age groups include attending community social events (38%), attending outdoor performing arts events (32%), camping (30%), playing in team sports or leagues (12%), playing racquet sports (11%), and running/cycling races (10%).<sup>62</sup> Table 4 projects future outdoor participation in 17 of the most popular outdoor recreation activities through 2030.<sup>63</sup>

<sup>56</sup> Colorado Parks and Wildlife. 2019. Statewide Comprehensive Outdoor Recreation Plan. P. 66

<sup>57</sup> National Recreation and Park Association. “New Survey Reveals Americans’ Top Outdoor Recreation Activities.” <https://www.nrpa.org/about-national-recreation-and-park-association/press-room/new-survey-reveals-americans-top-outdoor-recreation-activities/> (Accessed 1/16/20)

<sup>58</sup> National Recreation and Park Association. “New Survey Reveals Americans’ Top Outdoor Recreation Activities.” <https://www.nrpa.org/about-national-recreation-and-park-association/press-room/new-survey-reveals-americans-top-outdoor-recreation-activities/> (Accessed 1/16/20)

<sup>59</sup> National Recreation and Park Association. “Who Doesn’t Like a Good Picnic?” <https://www.nrpa.org/publications-research/park-pulse/park-pulse-survey-who-does-not-like-a-good-picnic/>. Interactive Charts, characteristic selected: Generation (Accessed 2/13/20)

<sup>60</sup> National Recreation and Park Association. “Who Doesn’t Like a Good Picnic?” <https://www.nrpa.org/publications-research/park-pulse/park-pulse-survey-who-does-not-like-a-good-picnic/>. Interactive Charts, characteristic selected: Generation (Accessed 2/13/20)

<sup>61</sup> National Recreation and Park Association. “New Survey Reveals Americans’ Top Outdoor Recreation Activities.” <https://www.nrpa.org/about-national-recreation-and-park-association/press-room/new-survey-reveals-americans-top-outdoor-recreation-activities/> (Accessed 1/16/20)

<sup>62</sup> National Recreation and Park Association. “New Survey Reveals Americans’ Top Outdoor Recreation Activities.” <https://www.nrpa.org/about-national-recreation-and-park-association/press-room/new-survey-reveals-americans-top-outdoor-recreation-activities/> (Accessed 1/16/20)

<sup>63</sup> Eric M. White, et al. 2016. Federal outdoor recreation trends: effects on economic opportunities. Department of Agriculture, Forest Service, Pacific Northwest Station. P. 7. <https://www.fs.usda.gov/treearch/pubs/53247> (Accessed 1/21/20)

Table 4: Nationwide projected outdoor recreation activity participation through 2030

| Activity groups                 | Per capita participation |           |                | Adult participants (millions) |             |                | Days per participant |           |                | Total days (millions) |             |                |
|---------------------------------|--------------------------|-----------|----------------|-------------------------------|-------------|----------------|----------------------|-----------|----------------|-----------------------|-------------|----------------|
|                                 | 2008 rate                | 2030 rate | Percent change | 2008 number                   | 2030 number | Percent change | 2008 rate            | 2030 rate | Percent change | 2008 number           | 2030 number | Percent change |
| Visiting developed sites:       |                          |           |                |                               |             |                |                      |           |                |                       |             |                |
| Developed-site use              | 0.819                    | 0.825     | 0.7            | 192.7                         | 245.9       | 27.6           | 11.67                | 11.58     | -0.8           | 2,235                 | 2,830       | 26.6           |
| Visiting interpretive sites     | 0.669                    | 0.690     | 3.2            | 157.4                         | 205.7       | 30.7           | 7.81                 | 8.02      | 2.6            | 1,243                 | 1,666       | 34.1           |
| Viewing/photographing nature:   |                          |           |                |                               |             |                |                      |           |                |                       |             |                |
| Birding                         | 0.346                    | 0.361     | 4.4            | 81.4                          | 107.7       | 32.3           | 97.71                | 97.91     | 0.2            | 8,215                 | 10,889      | 32.5           |
| Viewing                         | 0.805                    | 0.814     | 1.2            | 189.4                         | 242.7       | 28.1           | 169.59               | 163.96    | -3.3           | 32,303                | 40,019      | 23.9           |
| Backcountry activities:         |                          |           |                |                               |             |                |                      |           |                |                       |             |                |
| Challenge                       | 0.107                    | 0.111     | 3.6            | 25.1                          | 33          | 31.3           | 4.77                 | 4.74      | -0.6           | 120                   | 156         | 30.5           |
| Equestrian                      | 0.070                    | 0.072     | 2.7            | 16.4                          | 21.3        | 30.1           | 16.28                | 16.48     | 1.2            | 262                   | 345         | 31.7           |
| Hiking                          | 0.333                    | 0.343     | 3.1            | 78.3                          | 102.2       | 30.5           | 22.89                | 23.41     | 2.3            | 1,826                 | 2,437       | 33.5           |
| Visiting primitive areas        | 0.383                    | 0.375     | -2.1           | 90.2                          | 111.8       | 24.0           | 13.22                | 13.08     | -1.1           | 1,233                 | 1,512       | 22.6           |
| Motorized activities:           |                          |           |                |                               |             |                |                      |           |                |                       |             |                |
| Motorized off-road use          | 0.204                    | 0.194     | -4.7           | 47.9                          | 57.8        | 20.7           | 21.65                | 21.04     | -2.8           | 1,048                 | 1,229       | 17.3           |
| Motorized water use             | 0.263                    | 0.270     | 2.5            | 62.0                          | 80.5        | 29.9           | 15.27                | 15.35     | 0.5            | 953                   | 1,244       | 30.6           |
| Motorized snow use              | 0.040                    | 0.036     | -10.4          | 9.4                           | 10.7        | 13.6           | 7.25                 | 7.16      | -1.3           | 68                    | 77          | 12.1           |
| Hunting and fishing:            |                          |           |                |                               |             |                |                      |           |                |                       |             |                |
| Hunting                         | 0.119                    | 0.105     | -11.6          | 27.9                          | 31.3        | 12.0           | 19.13                | 18.17     | -5.0           | 535                   | 570         | 6.4            |
| Fishing                         | 0.309                    | 0.301     | -2.6           | 72.7                          | 89.7        | 23.4           | 18.48                | 18.15     | -1.8           | 1,363                 | 1,651       | 21.1           |
| Nonmotorized winter activities: |                          |           |                |                               |             |                |                      |           |                |                       |             |                |
| Developed skiing                | 0.101                    | 0.108     | 6.7            | 23.7                          | 32.1        | 35.1           | 7.19                 | 7.42      | 3.2            | 171                   | 238         | 39.5           |
| Undeveloped skiing              | 0.033                    | 0.033     | -0.6           | 7.8                           | 9.8         | 25.9           | 6.58                 | 6.72      | 2.1            | 51                    | 66          | 28.6           |
| Nonmotorized water activities:  |                          |           |                |                               |             |                |                      |           |                |                       |             |                |
| Swimming                        | 0.609                    | 0.630     | 3.4            | 143.2                         | 187.5       | 31.0           | 23.98                | 24.12     | 0.6            | 3,459                 | 4,558       | 31.7           |
| Floating                        | 0.169                    | 0.162     | -3.9           | 39.8                          | 48.4        | 21.7           | 6.50                 | 6.53      | 0.5            | 261                   | 318         | 22.1           |

Source: U.S. Department of Agriculture, Forest Service, Pacific Northwest Station

An annual “churn rate” describes the number of outdoor recreation participants joining and leaving outdoor recreation in a given year. Nationally, outdoor recreation experienced a churn rate of 8.3% between 2016 and 2017, as depicted in Figure 6, indicating an overall increase in outdoor recreation participation among Americans.<sup>64</sup>

<sup>64</sup> Outdoor Industry Association. 2018. 2018 Outdoor Participation Report. P. 4 <https://outdoorindustry.org/resource/2018-outdoor-participation-report/> (Accessed 1/8/20)

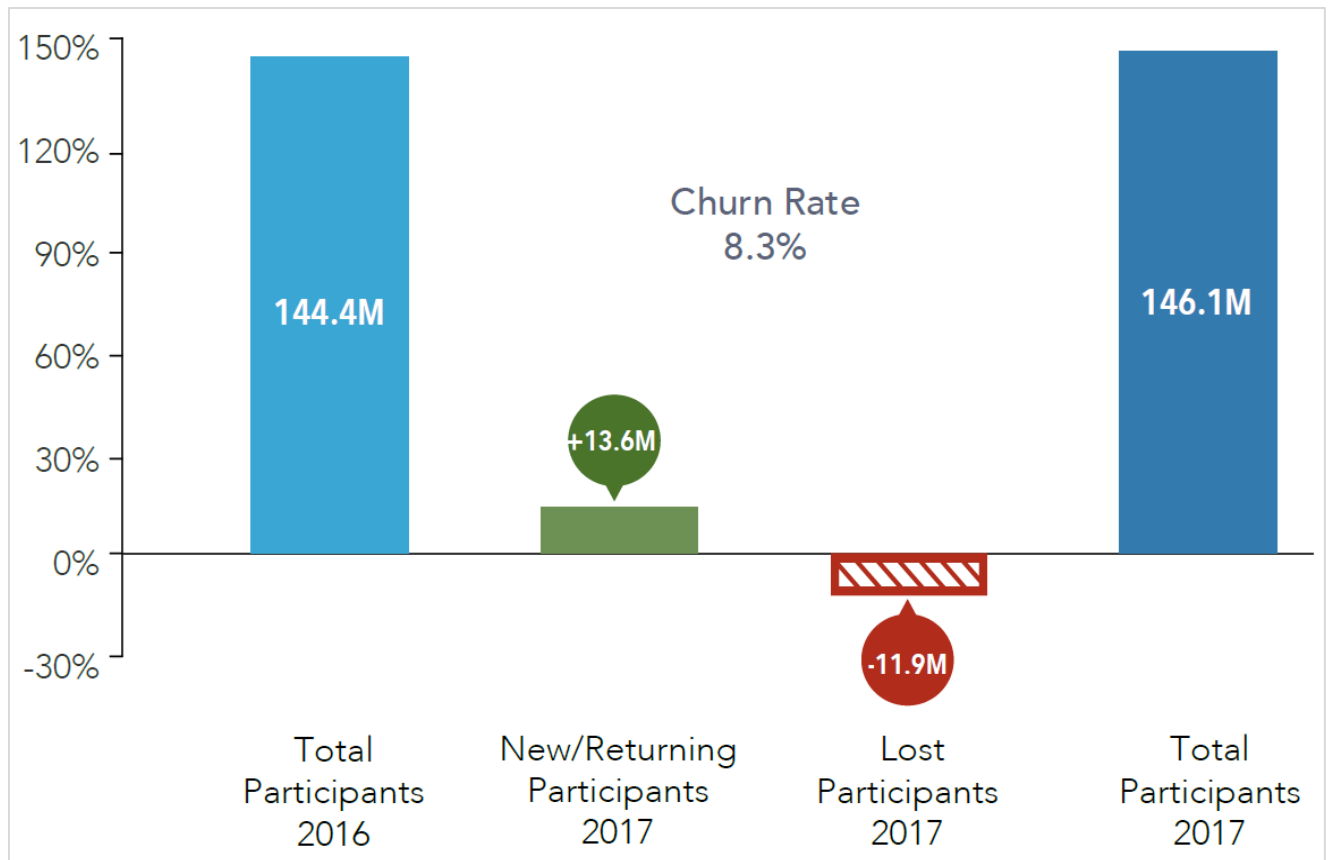


Figure 6: Outdoor recreation participation churn rate, 2016-2017

Source: Outdoor Industry Association, 2018 Outdoor Participation Report

In addition to understanding what motivates people to recreate outdoors, it is also important to understand the reasons people choose not to participate in outdoor recreation activities. According to a 2018 outdoor recreation report, the most frequently cited reasons not to participate in outdoor recreation include: being too busy with family responsibilities, outdoor recreation equipment is too expensive, not having anyone to recreate with, and lacking the skills or abilities.<sup>65</sup> Despite these reasons, 46% of Americans, or 69.8 million people, who did not participate in outdoor recreation, had a desire to start participating.<sup>66</sup> These data demonstrate the importance of programs and education efforts targeting first-time outdoor recreation participants.

#### 4.3 Outdoor recreation participation by age group and gender

Nationally, outdoor recreation participation among youth aged 6-12 and 13-17 years declined slightly between 2012 and 2017; in 2017, about 61% of youth between the ages of 6 and 12 years and 58% of youth between the ages of 13 and 17 years were participating in outdoor

<sup>65</sup> Outdoor Industry Association. 2018. 2018 Outdoor Participation Report. P. 15 <https://outdoorindustry.org/resource/2018-outdoor-participation-report/> (Accessed 1/8/20)

<sup>66</sup> Outdoor Industry Association. 2018. 2018 Outdoor Participation Report. P. 10 <https://outdoorindustry.org/resource/2018-outdoor-participation-report/> (Accessed 1/8/20)

recreation activities.<sup>67</sup> Young adult participation rates for 18-24 year olds was 57% in 2017.<sup>68</sup> Comparatively, people between ages 25 and 44 years have an outdoor activity participation rate of 56%, and people over the age of 45 have a 37% participation rate.<sup>69</sup> As people age, they are more likely to participate in outdoor activities if they had exposure to the outdoors as children. Thirty-eight percent of people who enjoy outdoor activities into adulthood had exposure to these activities as children.<sup>70</sup>

During 2017, participation in outdoor recreation by males in the 6-12 and 13-17 year old age groups was 64% (a decrease of one percentage point from 2016); while participation rates among males aged 18-24 years was 56% (a two percentage point increase from 2016).<sup>71</sup> Participation among females ages 6-12 years neither increased nor decreased between 2012 and 2017, remaining at 58% participation. Among females aged 13-17 years, participation also remained unchanged at 52%. Young adult females between the ages of 18 and 24 dropped by one percent to 55%.<sup>72</sup>

The most popular outdoor activities for youth ages 6 to 17 are bicycling (24%), fishing (23%), running/jogging/trail running (21%), camping (21%) and hiking (16%).<sup>73</sup> Youth aged 6-17 years spend the most days per year than other age groups engaging in running (67 average outings per runner), cycling (54 outings per cyclist), and skateboarding (31 outings per skateboarder), each of which has decreased slightly since 2013. For young adults (ages 18-24), the most popular activities are running (31%), hiking (18%), camping (15%), fishing (15%) and biking (15%). The frequency of participation by this age group in these activities varies with 90 average outings per runner per year, 56 outings per cyclist, 31 outings per angler, 17 outings per camper, and 16 outings per hiker.<sup>74</sup>

Focus group research conducted as part of the 2014 SCORP sought to understand how Colorado's youth participated in outdoor recreation and what influences their recreation choices. The most popular activities that youth identified during the study included team sports (e.g., basketball and soccer), cycling, skateboarding, and running; more traditional outdoor activities like hiking, camping, hunting, and fishing were mentioned less frequently. GOCO conducted additional focus groups with youth and identified several barriers to outdoor recreation participation, including: limitations on time and money for transportation, limited access to nearby natural areas, lack of information regarding activities, and the perception

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<sup>67</sup> Outdoor Industry Association. 2018. 2018 Outdoor Participation Report. P. 17 <https://outdoorindustry.org/resource/2018-outdoor-participation-report/> (Accessed 1/8/20)

<sup>68</sup> Outdoor Industry Association. 2018. 2018 Outdoor Participation Report. P. 17 <https://outdoorindustry.org/resource/2018-outdoor-participation-report/> (Accessed 1/8/20)

<sup>69</sup> Outdoor Industry Association. 2018. 2018 Outdoor Participation Report. P. 17 <https://outdoorindustry.org/resource/2018-outdoor-participation-report/> (Accessed 1/8/20)

<sup>70</sup> Outdoor Industry Association. 2018. 2018 Outdoor Participation Report. P. 1 <https://outdoorindustry.org/resource/2018-outdoor-participation-report/> (Accessed 1/8/20)

<sup>71</sup> Outdoor Industry Association. 2018. 2018 Outdoor Participation Report. P. 1 <https://outdoorindustry.org/resource/2018-outdoor-participation-report/> (1/8/20)

<sup>72</sup> Outdoor Industry Association. 2018. 2018 Outdoor Participation Report. P. 1 <https://outdoorindustry.org/resource/2018-outdoor-participation-report/> (Accessed 1/8/20)

<sup>73</sup> Outdoor Industry Association. 2018. 2018 Outdoor Participation Report. P. 21 <https://outdoorindustry.org/resource/2018-outdoor-participation-report/> (Accessed 1/8/20)

<sup>74</sup> Outdoor Industry Association. 2018. 2018 Outdoor Participation Report. P. 23 <https://outdoorindustry.org/resource/2018-outdoor-participation-report/> (Accessed 1/8/20)

that getting outdoors is difficult and inaccessible.<sup>75</sup> Being with family and friends is a top motivator for engaging in outdoor activities for youth ages 6-17; however, this factor becomes less important in adolescence (13-17) and young adulthood (18-24) when the motivation becomes more focused on exercise and being physically fit.<sup>76</sup> Barriers to overall Hispanic youth participation are largely similar to those identified by GOCO's youth focus groups with the addition that feeling unwelcome can limit willingness to participate in outdoor activities.<sup>77</sup>

#### 4.4 People groups and outdoor recreation participation

Nationally, Hispanic participation rates in outdoor recreation activities was 48%, Asian participation was 51%, African American participation was 33%, and White participation was 50% during the year 2016. Over a five year period, Hispanics, Asians, and African Americans realized increases in outdoor recreation participation rates, while Whites experienced a nearly 1% decrease.

Running, including jogging and trail running, was the most popular outdoor activity among Hispanics, Asians, and African Americans. Whites preferred angling slightly more often than running and hiking. The three primary motivations for participating in outdoor recreation included social, biophysical, and health-related experiences (e.g., to be with family and friends, and to be close to nature/experience nature, and to get exercise/be physically fit). Among these groups, African Americans and Hispanics, on average, had the most outdoor outings per participant at 88 outings per participant compared to Asians and Whites, who registered 77 average annual outings per participant.<sup>78</sup>

Research on Hispanic preferences and expectations regarding outdoor recreation reveal interesting insights. Hispanics indicated that spending leisure time with immediate and extended family is an important key to maintaining and strengthening family ties. They also reported having only one day off of work per week, which means that outdoor trips are usually just for the day. Studies on group sizes at outdoor recreation sites showed an average of 8 to 15 people per group, with some groups having more than 100 people. Picnics for Hispanic families may last between 6 to 10 hours as meals are prepared from scratch, resulting in long occupancy at picnic sites.<sup>79</sup> National research indicates Hispanics spend more time than non-Hispanics visiting beaches and historic sites, and cycling.<sup>80</sup>

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<sup>75</sup> Great Outdoors Colorado. 2015. Strategic Plan.

<sup>76</sup> Outdoor Industry Association. 2018. 2018 Outdoor Participation Report. <https://outdoorindustry.org/resource/2018-outdoor-participation-report/> (Accessed 1/8/20)

<sup>77</sup> Great Outdoors Colorado. 2015. Strategic Plan.

<sup>78</sup> Outdoor Industry Association. 2018. 2018 Outdoor Participation Report. <https://outdoorindustry.org/resource/2018-outdoor-participation-report/> (Accessed 1/8/20)

<sup>79</sup> Chavez, D.J. 2012. "Latinos and Outdoor Recreation." *Outdoor Recreation Trends and Futures*: P. 74

<sup>80</sup> Cordell, K. and Green, G. 2012. "National Association of Recreation Resource Planners." *U.S. Trends and Speculations about the Future*. [https://www.recpro.org/assets/Conference\\_Proceedings/2012\\_recent\\_trends\\_outdoor\\_rec\\_cordell-green.pdf](https://www.recpro.org/assets/Conference_Proceedings/2012_recent_trends_outdoor_rec_cordell-green.pdf) (Accessed 01/21/20)

## 5. Outdoor Recreation Priorities and Public Preferences

Land conservation, environmental protection, and preserving natural areas are important priorities for Coloradans. For example, 72% of survey respondents identified “protecting wilderness/open lands” as a high or essential priority.<sup>81</sup> In a similar effort, GOCO polled the public, stakeholders, and the Colorado Parks & Wildlife Commission about their funding priorities, and found that all three groups ranked “protecting land along lakes, rivers and streams,” “preserving open space and parks,” and “protecting habitat for watchable wildlife or threatened species” as their top tier priorities.<sup>82</sup> Sixty-nine percent of 2019 Conservation in the West Poll respondents consider themselves to be a conservationist. Respondents to this poll also believe it is important for states to use funds to protect and restore the health of rivers, lakes, and streams; manage forests to prevent significant wildfires; and to protect and conserve land corridors for wildlife migration within the state.<sup>83</sup> Recent evidence from the America’s Wildlife Values Colorado Report corroborates these findings. Specifically, results identified: “protecting and enhancing fish and wildlife that are currently at risk of becoming endangered,” “protecting high priority habitats to support many different types of fish and wildlife populations,” and “educating citizens” as the top three most important activities they would prefer Colorado Parks and Wildlife prioritize.<sup>84</sup>

### 5.1 Trail-based recreation

Trails and trail-based activities continue to be an important component of outdoor recreationists’ experiences. In 2008, 70% of survey respondents indicated having additional trails would increase how frequently they visited Colorado state parks.<sup>85</sup> Additionally, 55% of respondents indicated maintenance of existing trails as a top priority. In a separate inquiry conducted at state parks in 2009, 72% of survey respondents suggested that trails should be a top priority for future park changes.<sup>86</sup>

### 5.2 State park visitation and public preferences

According to findings from the 2018 public survey conducted as part of the 2019 SCORP, 85% of respondents recreated in state parks, forests or wildlife areas in the past 12 months.<sup>87</sup> Additionally, a survey conducted in 2008 found that over 98% of Coloradans have at least one state park within 50 miles of where they live, and more than half of the state’s population (56%) lives within 50 miles of six or more state parks.<sup>88</sup>

Visitation to Colorado’s state parks has increased during the last 15 years (Figure 7). While the number of visitors decreased slightly in FY 2011-12 and FY 2012-13, visitation rose steadily from FY 2013-14 through FY 2016-17, with large increases of 8% in FY 2015-16 and 7%

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<sup>81</sup> Colorado Parks and Wildlife. 2013. Outdoor Recreation Participation Public Survey Summary Report.

<sup>82</sup> Great Outdoors Colorado. 2014. Great Outdoors Colorado Situation Analysis.

<sup>83</sup> Colorado College 2019 State of the Rockies. 2019. Conservation in the West Poll.

[https://www.coloradocollege.edu/other/stateoftherockies/documents/SotR%20Fact%20Sheets\\_CO.pdf](https://www.coloradocollege.edu/other/stateoftherockies/documents/SotR%20Fact%20Sheets_CO.pdf) (Accessed 1/21/20)

<sup>84</sup> Dietsch, A. et al. 2018. “America’s Wildlife Values Colorado State Report.” Western Association of Fish and Wildlife Agencies.

<sup>85</sup> Corona Research. 2008. Colorado State Parks Marketing Assessment: Public Survey.

<sup>86</sup> Corona Research. 2009. Colorado State Parks Marketing Assessment: Future Directions.

<sup>87</sup> Colorado Parks and Wildlife. 2019. Statewide Comprehensive Outdoor Recreation Plan. P. 64

<sup>88</sup> Corona Research. 2008. Colorado State Parks Market Assessment Survey.

in FY 2016-17. Visitation trends stabilized over the next two years with Colorado’s state parks recording around 14.7 million visitors annually. State park visitation in FY 2019-20 experienced an increase of over 15% from FY 2018-19, recording about 17.1 million visitors during the fiscal year.

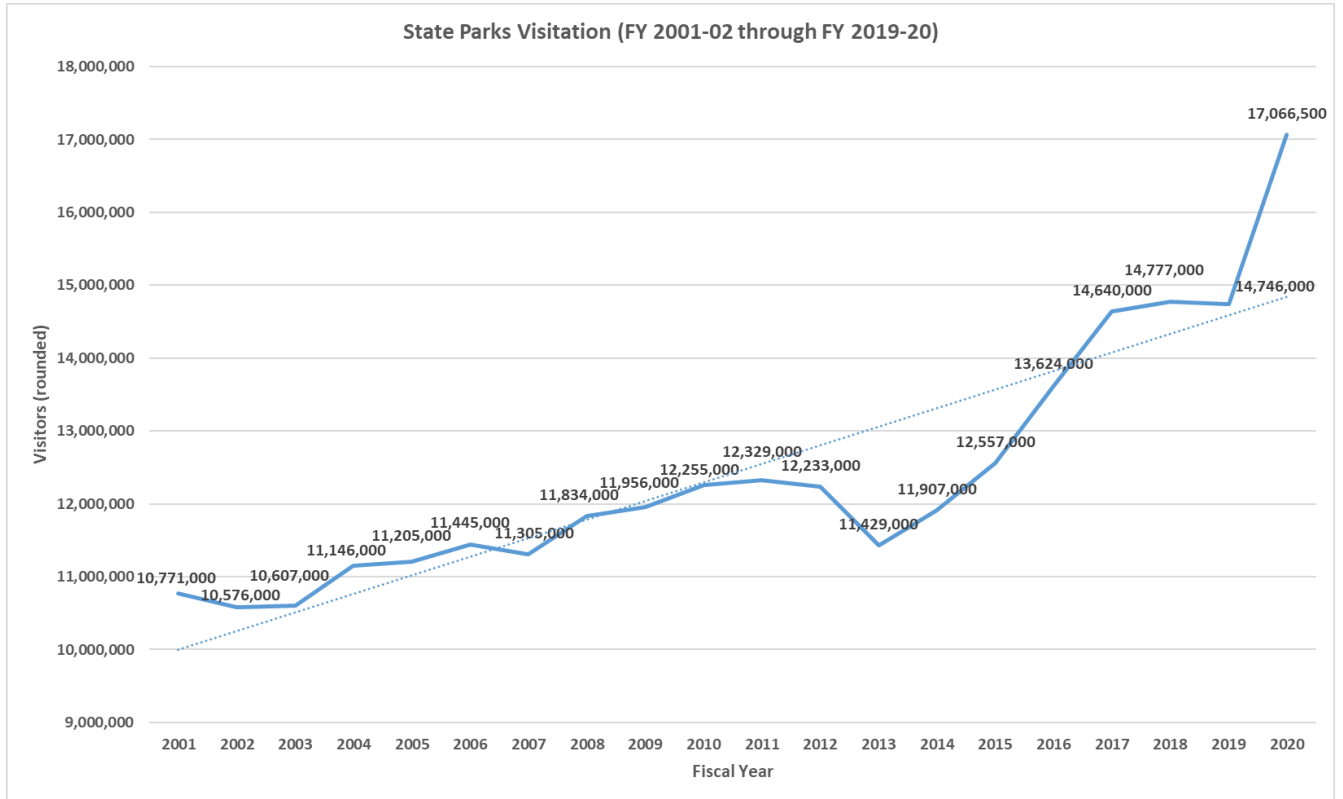


Figure 7: State parks visitation, FY 2001-02 through FY 2019-20

The number of annual state parks passes sold has remained relatively consistent since 2011, with a high of 158,102 passes sold in 2017. The sale of daily state parks passes has experienced a steady increase over the same time period (Figure 8). During the first half of 2020, the number of both daily and annual state parks passes sold increased significantly over the number of passes sold during the same six-month time period in 2019, with a 30% increase in annual passes sold and a 40% increase in daily passes sold. This increase in pass sales volume is likely due to the occurrence of the COVID-19 pandemic, as more people are driven to recreate outdoors where the risk of contracting the virus is reduced.



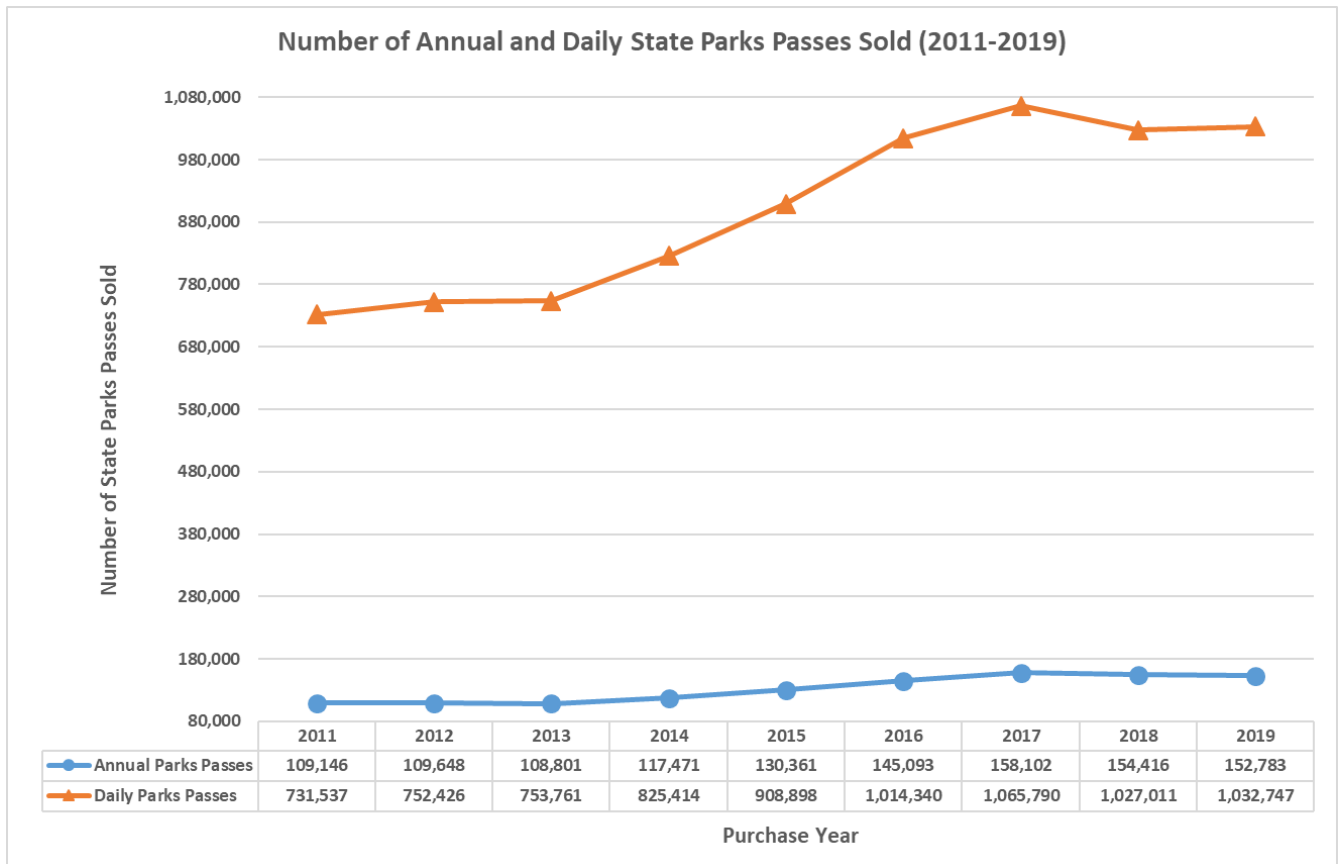


Figure 8: Number of Annual and Daily State Parks Passes Sold, 2011-2019

Focus group research conducted in 2008/2009 on visitors’ attitudes about Colorado’s state parks showed that respondents believe the primary purpose of state parks is to preserve natural resources and provide outdoor recreation opportunities. Survey research identified hiking, fishing, camping, boating, and biking (e.g., mountain, road) as the top five recreational activities at state parks.<sup>89</sup> More than 26% of park visitors reported that hiking was one of their most preferred activities when visiting a park. About 25% reported that fishing was their primary reason for going to a state park, while camping was only slightly behind. Other motivational factors also influenced people to visit state parks. For example, relaxation and learning activities were identified as important reasons to visit Colorado’s state parks, with a majority of respondents indicating that they had gone to a park to spend time with family or friends (86%), to sightsee (84%), or “just to relax” (79%). Respondents frequently combined types of activities, indicating the importance of both physical and relaxation activities when recreating outdoors.

The 2008/2009 survey also found that the main factors in choosing an outdoor recreation area were cleanliness and condition of park facilities. Time and distance to reach an area, entrance price, and other fees, like parking, influenced visitors’ decisions, but to a lesser

<sup>89</sup> Corona Research. 2008. Colorado State Parks Marketing Assessment: Visitor Intercept Survey.

extent. A personal lack of time and lack of information about parks were identified as the two primary reasons why respondents did not visit state parks.<sup>90</sup>

Regarding satisfaction with their experience at Colorado State Parks, visitors rank cleanliness, scenery and surroundings, safety, and facilities as the most important factors.<sup>91</sup> Visitors and non-visitors place high importance on facilities for camping. Specifically, non-visitors highlighted clean bathrooms, showers, picnic areas and tables, and paved parking lots and roads. Park visitors mentioned fire pits, developed and primitive campsites, and RV dump sites, in addition to clean bathrooms and showers.<sup>92</sup>

In 2019, CPW began pilot-testing a new research strategy for measuring state park visitor use, experiences and satisfaction beginning with eight state parks. The results of this initial study will be available in late 2020.

### 5.3 Fishing participation

When compared to other outdoor activities in the 2018 SCORP public survey, fishing ranked fifth in popularity. The number of fishing license holders has been increasing steadily over the past 15 years (Figure 9). In 2017, there were about 941,000 anglers who purchased fishing licenses in Colorado, which is an increase from about 713,000 in 2009 and about 630,000 in 2001.<sup>93</sup>

According to the most recent analysis of anglers in Colorado, which was conducted in 2012, the largest group of anglers in the state are between 46 and 61 years old; however, participation in angling is also high among young adults, particularly those aged 22 to 37 years old. Fishing participation slowly declines after age 65 until most participants are no longer fishing by age 80. Interestingly, adults aged 62 to 65 years comprise the majority of non-resident fishing license purchasers and this group is increasing in size, likely due to increased leisure time.<sup>94</sup> Additionally, while more urban counties, including Jefferson, El Paso, Adams and Larimer, had a larger total number of anglers, rural counties, including Rio Blanco, Dolores, Jackson, Mineral and Hinsdale, had the highest proportion of residents who purchased fishing licenses.<sup>95</sup>

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<sup>90</sup> Corona Research. 2008. Colorado State Parks Marketing Assessment: Public Survey.

<sup>91</sup> Corona Research. 2008. Colorado State Parks Marketing Assessment: Visitor Intercept Survey.

<sup>92</sup> Corona Research. 2008. Colorado State Parks Marketing Assessment: Visitor and Non-Visitor Perceptions.

<sup>93</sup> U.S. Fish and Wildlife Service. 2019. National Fishing License Data. U.S. Department of the Interior (adjusted for reporting year and additional free senior licenses).

<sup>94</sup> Lischka, S., T. King, S. Babcock, and B. Kurznel. 2013. Customer and Market Trends Report. Colorado Parks and Wildlife.

<sup>95</sup> Colorado Parks and Wildlife. 2013. CPW Customer and Market Trends Report. Policy and Planning Unit, Colorado Parks and Wildlife.

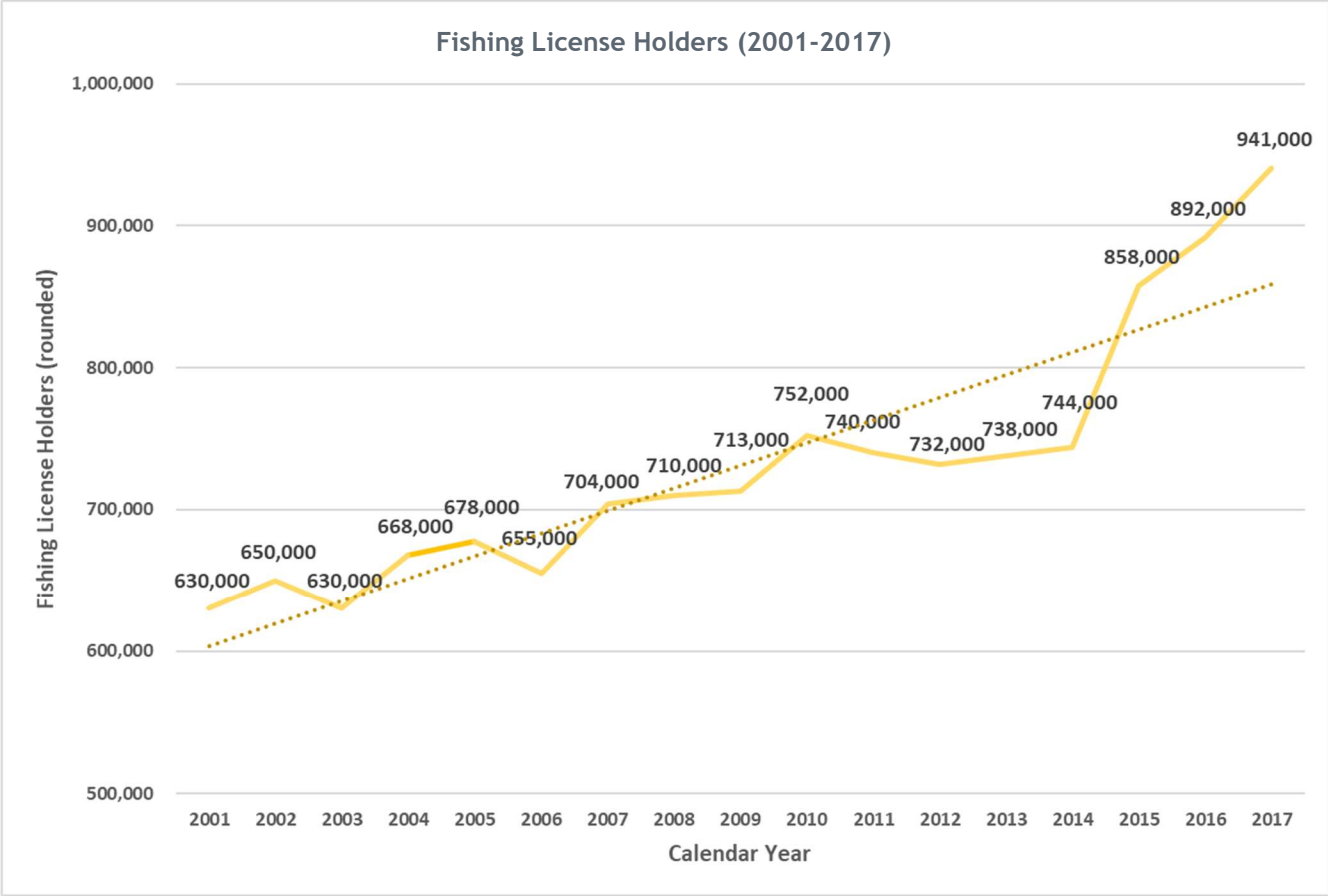


Figure 9: Number of individual fishing license holders, 2001-2017<sup>96, 97</sup>

5.4 Hunting participation

Over the past 15 years, the number of licensed hunters in Colorado has remained relatively stable, reaching a high of 319,000 hunters in 2004 and a low of 280,000 in 2012 (Figure 10). In 2017, there were around 299,000 people licensed to hunt in Colorado.

<sup>96</sup> U.S. Fish and Wildlife Service. 2019. National Fishing License Data. U.S. Department of the Interior (adjusted for reporting year and additional free senior licenses).

<sup>97</sup> This figure uses data reported to USFWS in the actual calendar year (not the USFWS reporting year, which reports on a two-year time lag). Resident senior annual fishing licenses were added in from 2006-2016, during which time they were free in Colorado and not counted in USFWS reporting.

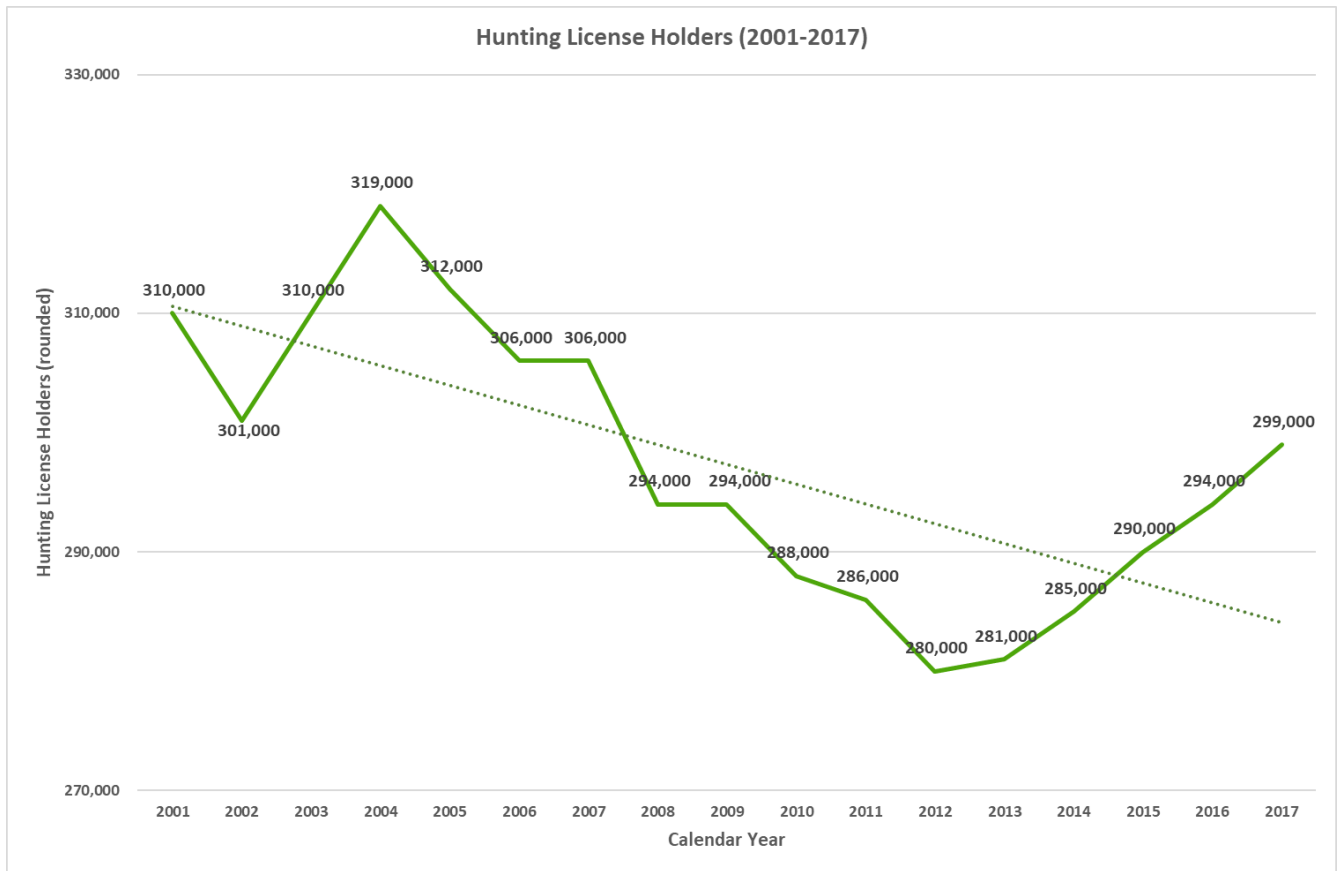


Figure 10: Number of individual hunting license holders, 2001-2017<sup>98</sup>

Big game hunting is the most popular form of hunting in Colorado for both Colorado residents and non-residents, with participants spending over 1.6 million total days hunting in 2017.<sup>99</sup> From 2002-2019, the number of big game hunting licenses sold in Colorado has fluctuated from a high of 395,245 in 2003 to a low of 330,230 in 2012, whereas, license sales in 2019 totaled 360,851. License sales closely track the pattern in license availability (quota) set by the Colorado Parks and Wildlife Commission to ensure robust herds (Figure 11). Over that same time period, the number of applications to hunt big game has generally increased from a low of 413,676 in 2003 to a high of 715,821 in 2018. Significant increases in license applications in 2018 and 2019, compared to 2017 and prior years, were the result of fee adjustments and changes to the limited license drawing based on implementation of the Hunting, Fishing, and Parks for Future Generations Act (Senate Bill 18-143). Specific changes included moving from a “pay to enter” big game hunting license draw model to a “pay if drawn” model in 2018, as well as the introduction of a qualifying license requirement to enter the 2019 big game draw.<sup>100</sup> Overall, the trend of increasing hunting license applications and relatively steady license sales indicates that the demand for big game hunting licenses

<sup>98</sup> U.S. Fish and Wildlife Service. 2019. National Fishing License Data. U.S. Department of the Interior (adjusted for reporting year).

<sup>99</sup> Colorado Parks and Wildlife. 2019. Statewide Comprehensive Outdoor Recreation Plan. P. 121

<sup>100</sup> Colorado Parks and Wildlife. 2019. Qualifying License Memo for Commission.

[https://cpw.state.co.us/Documents/Commission/2019/July/Item.18-Qualifying\\_License\\_Memo\\_for\\_Commission\\_FINAL-Katie\\_Lanter-DNR.pdf](https://cpw.state.co.us/Documents/Commission/2019/July/Item.18-Qualifying_License_Memo_for_Commission_FINAL-Katie_Lanter-DNR.pdf) (Accessed 7/9/20)

exceeds supply and the number of licenses sold is largely driven by license availability (quota).<sup>101</sup>

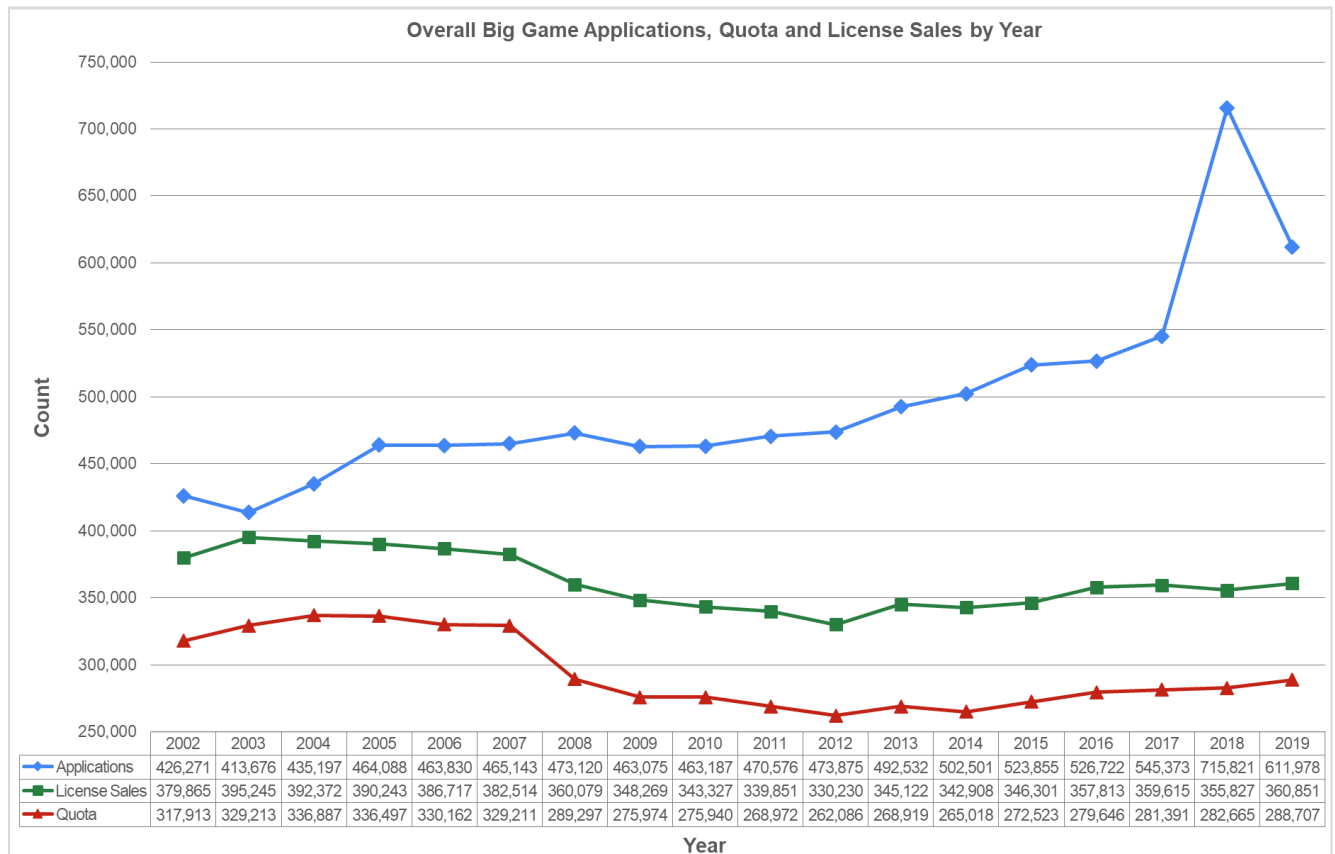


Figure 11: Big game applications, quota and license sales by year, 2002-2019

A recent demographic analysis of hunters indicates that persons aged 45 to 64 years make up the largest cohort of hunters in the U.S., contributing 46% of the nation’s hunters, while persons aged 65 years and older make up an additional 14% of the hunting population.<sup>102</sup> As this cohort has aged, they have begun to drop out of the big game hunter pool with fewer purchasing licenses each year. Longitudinal tracking shows the primary cohort of small game hunters is aging, though it is losing participants more quickly than big game hunters. Participation in most hunting activities drops nearly to zero after age 73, with an exception for small game hunting where participation continues past age 80, for some residents.<sup>103</sup>

According to the 2015 Big Game Attitude Survey, big game hunters feel that the sport is an important part of their recreation-based identities.<sup>104</sup> Approximately 40% of big game hunters indicated it was their most important recreational activity, and an additional 44% stated it

<sup>101</sup> Lischka, S., T. King, S. Babcock, and B. Kurzel. 2013. Customer and Market Trends Report. Colorado Parks and Wildlife.

<sup>102</sup> U.S. Department of the Interior, U.S. Fish & Wildlife Service. 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. P. 30 <https://www2.census.gov/programs-surveys/fhwar/publications/2016/fhw16-nat.pdf> (Accessed 1/13/20)

<sup>103</sup> Lischka, S., T. King, S. Babcock, and B. Kurzel. 2013. Customer and Market Trends Report. Colorado Parks and Wildlife.

<sup>104</sup> Lischka, S.A., and L. Mengak. 2014. 2014 Big Game Hunter Attitude Survey Technical Report.

was one of their most important recreational activities. Table 5 illustrates 2018 hunter participation rates by county and game type, in number of hunter days for that year.

Table 5: 2018 hunting participation by county in hunter days<sup>105</sup>

| County                             | Big Game | Small Game | Waterfowl |
|------------------------------------|----------|------------|-----------|
| <b><u>Northwest Region</u></b>     |          |            |           |
| Eagle                              | 62,791   | 7,730      | 1,603     |
| Garfield                           | 100,116  | 10,605     | 2,134     |
| Grand                              | 108,189  | 4,796      | 2,106     |
| Jackson                            | 61,277   | 3,296      | 976       |
| Mesa                               | 78,227   | 43,788     | 6,540     |
| Moffat                             | 97,687   | 25,868     | 1,790     |
| Pitkin                             | 22,788   | 1,448      | 51        |
| Rio Blanco                         | 92,870   | 2,897      | 799       |
| Routt                              | 111,277  | 8,264      | 548       |
| Summit                             | 25,015   | 4,494      | 154       |
| <b><u>North Central Region</u></b> |          |            |           |
| Adams                              | 4,481    | 3,561      | 7,089     |
| Arapahoe                           | 4,322    | 4,468      | 728       |
| Boulder                            | 10,473   | 9,399      | 5,878     |
| Clear Creek                        | 7,433    | 4,769      | -         |
| Gilpin                             | 4,978    | 1,222      | -         |
| Larimer                            | 66,552   | 14,183     | 14,983    |
| Weld                               | 12,038   | 32,236     | 47,506    |
| <b><u>Metro Region</u></b>         |          |            |           |
| Broomfield                         | 483      | -          | -         |
| Denver                             | 1,578    | 46         | 142       |
| Douglas                            | 7,850    | 1,284      | 694       |
| Jefferson                          | 18,481   | 3,170      | 121       |
| <b><u>Northeast Region</u></b>     |          |            |           |
| Cheyenne                           | 3,247    | 700        | -         |
| Elbert                             | 8,768    | 2,310      | 136       |
| Kit Carson                         | 4,096    | 10,260     | 194       |
| Lincoln                            | 7,863    | 4,161      | 113       |
| Logan                              | 5,641    | 21,592     | 8,781     |
| Morgan                             | 3,960    | 18,715     | 18,630    |
| Phillips                           | 480      | 9,429      | 105       |
| Sedgwick                           | 1,907    | 16,079     | 3,039     |

<sup>105</sup> Colorado Parks and Wildlife. 2019. Statewide Comprehensive Outdoor Recreation Plan. P. 141

|                                    |        |        |       |
|------------------------------------|--------|--------|-------|
| Washington                         | 2,936  | 11,059 | 375   |
| Yuma                               | 4,942  | 28,930 | 1,468 |
| <b><u>Southeast Region</u></b>     |        |        |       |
| Baca                               | 4,913  | 4,355  | 134   |
| Bent                               | 4,419  | 7,781  | 3,006 |
| Crowley                            | 2,231  | 697    | 766   |
| Huerfano                           | 21,803 | 619    | 162   |
| Kiowa                              | 4,010  | 1,115  | 602   |
| Las Animas                         | 28,726 | 2,178  | 1,845 |
| Otero                              | 4,352  | 6,980  | 2,985 |
| Prowers                            | 3,125  | 5,109  | 1,402 |
| Pueblo                             | 12,417 | 10,439 | 4,925 |
| <b><u>South Central Region</u></b> |        |        |       |
| Alamosa                            | 7,766  | 3,115  | 1,534 |
| Chaffee                            | 20,758 | 4,891  | 960   |
| Conejos                            | 25,244 | 3,086  | 142   |
| Costilla                           | 8,012  | 70     | 256   |
| Custer                             | 14,975 | 1,965  | 187   |
| El Paso                            | 17,046 | 4,653  | 592   |
| Fremont                            | 20,450 | 3,624  | 286   |
| Lake                               | 5,846  | 6,434  | 15    |
| Mineral                            | 11,696 | 404    | 41    |
| Park                               | 30,929 | 6,094  | 1,211 |
| Rio Grande                         | 17,725 | 5,762  | 1,454 |
| Saguache                           | 45,481 | 4,007  | 1,049 |
| Teller                             | 11,182 | 2,903  | 301   |
| <b><u>Southwest Region</u></b>     |        |        |       |
| Archuleta                          | 35,675 | 7,407  | 67    |
| Delta                              | 41,387 | 5,734  | 2,708 |
| Dolores                            | 25,665 | 1,724  | -     |
| Gunnison                           | 75,169 | 5,096  | 650   |
| Hinsdale                           | 16,776 | 132    | -     |
| La Plata                           | 34,073 | 5,695  | 481   |
| Montezuma                          | 21,619 | 2,924  | 128   |
| Montrose                           | 44,671 | 8,078  | 2,602 |
| Ouray                              | 14,979 | 278    | 21    |
| San Juan                           | 9,068  | 999    | -     |
| San Miguel                         | 23,675 | 2,311  | 46    |

## 5.5 Wildlife viewing

Viewing wildlife is an increasingly important recreational activity both nationally and in Colorado. Results from various survey efforts - spanning 2009-2019 - provide support for this idea. Findings from a 2009 survey of state park visitors found that nearly two-thirds of respondents would be pleased with additional wildlife observation areas and slightly more than half of respondents indicated that having “more wildlife viewing opportunities” would increase their state park visitation.<sup>106</sup> These findings were substantiated in 2013 when nearly half of survey respondents ranked wildlife viewing areas and opportunities as a high or essential investment priority for public lands.<sup>107,108</sup>

Results from a 2018 survey assessing Coloradans’ wildlife values as well as those from the 2018 SCORP public survey provide additional insight into the importance of and interest in wildlife viewing. Approximately 84% of respondents to the Wildlife Values in the West survey indicated being interested in wildlife viewing in the future, and of those individuals, about one-third participated in the activity during the 12 months prior to taking the survey.<sup>109</sup> Findings from the 2018 SCORP public survey also suggest that wildlife viewing (excluding bird watching, which is a separate category) is the eighth most popular outdoor recreation activity in the state.<sup>110</sup>

## 5.6 Recreation access and other land management priorities

During GOCO’s 2014 listening meetings, participants identified protecting “Colorado’s land, water, and wildlife” and “outdoor access for all” as their top priorities. Conversations with participants about increased access and recreational opportunities were often framed within the context of youth, low-income families, and Hispanic populations,<sup>111</sup> with solutions to these challenges ranging from maintaining current costs associated with park entrance fees to increasing user fees based on specific outdoor activities.<sup>112</sup> About two-thirds of participants expressed a desire to keep park entrance fees as low as possible to encourage low-income families to visit (or continue visiting) state parks.<sup>113</sup> Other participants discussed ways to implement an activity-based fee structure where campers, for example, would pay a higher rate for premium facilities or more developed campsites with the goal of offsetting lost revenue from maintaining lower entrance fees.

Of the 1,136 surveys collected during the 2008/2009 Corona study, 61% of participants indicated a willingness to increase park fees, but only if doing so directly resulted into upgraded facilities and better management of natural resources. About 20% of respondents believed that fees should stay the same, even if doing so meant a decline in facility and

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<sup>106</sup> Corona Research. 2009. Colorado State Parks Marketing Assessment: Future Directions.

<sup>107</sup> Colorado Parks and Wildlife. 2019. Statewide Comprehensive Outdoor Recreation Plan.

<sup>108</sup> Colorado Parks and Wildlife. 2014. Statewide Comprehensive Outdoor Recreation Plan.

<sup>109</sup> Dietsch, A. et al. 2018. America’s Wildlife Values Colorado State Report. Western Association of Fish and Wildlife Agencies. <https://content.warnercnr.colostate.edu/AWV/CO-WildlifeValuesReport.pdf> (Accessed 1/21/20)

<sup>110</sup> Colorado Parks and Wildlife. 2019 Statewide Comprehensive Outdoor Recreation Plan. P. 22 <https://cpw.state.co.us/Documents/Trails/SCORP/Final-Plan/2019-SCORP-Report.pdf> (Accessed 1/13/20)

<sup>111</sup> Great Outdoors Colorado. 2014. Great Outdoors Colorado Situation Analysis.

<sup>112</sup> Corona Research. 2009. Colorado State Parks Marketing Assessment: Future Directions.

<sup>113</sup> Corona Research. 2009. Colorado State Parks Marketing Assessment: Future Directions.



natural resource care.<sup>114</sup> Steady or rising park fees may or may not keep pace with the rising costs for operations and maintenance. However, results from the 2014 and 2018 SCORP public surveys indicate a consistent pattern with respect to Coloradans’ desires for public land. Specifically, survey results indicate that Coloradans are more interested in basic up-keep and maintenance of existing structures than they are in expanding upon them. In fact, “long-term planning and management” and the “operation and maintenance of existing infrastructure and facilities” were ranked as the top two preferences among Coloradans when asked what recreation providers should prioritize. Both of these priorities ranked higher than providing educational programs or visitor services, acquiring new parks or open spaces, and developing new facilities at existing sites in the 2014 and 2018 SCORP public surveys.<sup>115,116</sup>

## 6. Public Satisfaction with State Parks and Trust in Colorado Parks and Wildlife

Prior to 2020, the majority of data regarding public satisfaction came from surveys conducted for the Colorado Division of Parks and Outdoor Recreation (State Parks) and the Colorado Division of Wildlife (DOW), before the two agencies merged in 2011, forming what is now Colorado Parks and Wildlife (CPW). Survey results released in 2020 will provide additional insight regarding public awareness of CPW and its mission and trust in CPW.

### 6.1 Satisfaction with Colorado State Parks

Findings from a 2008 study show that, overall, Coloradans perceive the state park system as a benefit. For example, 97% of the general public survey respondents believed that state parks are “a good thing” for Colorado.<sup>117</sup> Similarly, about 61% of survey respondents’ impressions of the agency were very favorable and another 28% had a somewhat favorable impression.<sup>118</sup> In the same 2008 study, 80% of respondents believed that Colorado state parks were doing a good or very good job of managing natural resources within the park. State park visitors generally enjoyed their experiences at State Parks. Surveys given on-site at parks indicated that 92% of visitors rated their experience at state parks positively. Visitors’ interactions with park staff were also positive. Approximately 81% of visitors who came into contact with park staff had a good or excellent encounter. Among park features, visitors provided the highest ratings to: scenery, customer service, and safety.<sup>119</sup>

Concerns about increasing visitation, specifically, crowding within the state park system, were also identified through focus group discussions. Findings revealed that both state park users and non-users believed that Colorado’s state parks are more crowded now than they

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<sup>114</sup> Corona Research. 2009. Colorado State Parks Marketing Assessment: Future Directions. P. 1, 6, 28, Question 13d.

<sup>115</sup> Colorado Parks and Wildlife. 2019. Statewide Comprehensive Outdoor Recreation Plan.

<sup>116</sup> Colorado Parks and Wildlife. 2014. Statewide Comprehensive Outdoor Recreation Plan.

<sup>117</sup> Corona Research. 2008. Colorado State Parks 2008/2009 Marketing Assessment: Executive Summary of Findings and Recommendations.

<sup>118</sup> Corona Research. 2008. Colorado State Parks Marketing Assessment: Public Survey.

<sup>119</sup> Corona Research. 2008. Colorado State Parks Marketing Assessment: Visitor Intercept Survey.

were in the past. Despite increased visitation, users and non-users indicated feeling safe in parks and appreciated the presence of park rangers.<sup>120</sup>

It is important to note that efforts to measure Colorado state park visitors' motivations, recreation (activity) preferences, experiences and overall satisfaction are ongoing. A five-year research study beginning in the summer of 2019 is currently collecting data about state park visitors. This study will continue through 2023. During this time, CPW staff will collect data from visitors at all Colorado state parks.<sup>121</sup>

## 6.2 Trust in Colorado Parks and Wildlife

Public trust in state fish and wildlife agencies is critical. It indicates the extent to which the agency and its mission is relevant to constituents and provides insight into citizens' willingness to support the agency. The latter is often manifested through financial contributions or through verbal/written support (or approval) of agency policy or management decisions. One of CPW's 2015 Strategic Plan goals includes increasing awareness and trust for the agency through communication about CPW's mission, funding, and key programs; by providing opportunities for stakeholder and public involvement; and by increasing public awareness about the importance of wildlife management.<sup>122</sup>

Over the last 14 years, support for CPW's (previously DOW) efforts to manage fish and wildlife populations has remained constant. Results from a 2006 public survey indicated that Coloradans trust the agency to properly manage fish and wildlife populations across the state.<sup>123</sup> Results from the 2018 America's Wildlife Values survey confirm this finding.<sup>124</sup> Survey respondents were asked to rate their level of trust in the federal government, state government, and CPW. Seventy percent of respondents trust CPW to do what is right for fish and wildlife management in the state and 71% of respondents reported feeling that they share many of the same values regarding management of fish and wildlife as CPW.<sup>125</sup> This is notably higher than the 47% who trust state government to do what is right for Colorado and far exceeds the 23% who trust the federal government to do what is right for the country.<sup>126</sup> Similar to the public's trust in CPW, 80% of respondents thought CPW's overall performance was good or excellent. However, the study also revealed that the public wants to be consulted with respect to wildlife management. In fact, less than half of respondents trusted the agency to make wildlife management decisions without public input. Results from CPW's most recent public awareness study show positive support for CPW's mission, with 79% of respondents stating that they would be somewhat to very likely to

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<sup>120</sup> Corona Research. 2008. Colorado State Parks Marketing Assessment: Visitor and Non-Visitor Perceptions.

<sup>121</sup> Quartuch and Heiner. 2019. Visitor Satisfaction Study. Colorado Parks and Wildlife.

<sup>122</sup> Colorado Parks and Wildlife. 2015. Colorado Parks and Wildlife Strategic Plan. <https://cpw.state.co.us/Documents/About/StrategicPlan/CPWStrategicPlan.pdf> (Accessed 1/21/20)

<sup>123</sup> Teel, T.L., Dayer, A.A. and Bright, A.D. 2006. Wildlife Values in the West.

<sup>124</sup> Dietsch, A. et al. 2018. America's Wildlife Values Colorado State Report. Western Association of Fish and Wildlife Agencies. <https://content.warnercnr.colostate.edu/AWV/CO-WildlifeValuesReport.pdf> (Accessed 1/21/20)

<sup>125</sup> Dietsch, A. et al. 2018. America's Wildlife Values Colorado State Report. Western Association of Fish and Wildlife Agencies. <https://content.warnercnr.colostate.edu/AWV/CO-WildlifeValuesReport.pdf> (Accessed 1/21/20)

<sup>126</sup> Dietsch, A. et al. 2018. America's Wildlife Values Colorado State Report. Western Association of Fish and Wildlife Agencies. <https://content.warnercnr.colostate.edu/AWV/CO-WildlifeValuesReport.pdf> (Accessed 1/21/20)

support public policies related to conserving wildlife, water and public land.<sup>127</sup> The same study also found that respondents' top areas of trust in CPW include encouraging Coloradoans to responsibly care for wildlife and parks and sustainably managing wildlife opportunities.<sup>128</sup> Study participants were asked to describe CPW's mission and the results included themes such as care, maintain, and protect, indicating that the public sees CPW as the caretaker of Colorado's outdoors, wildlife, and parks; 87% of respondents value the services that CPW provides.<sup>129</sup>

Other recent efforts demonstrate a similar sentiment with respect to trust in CPW. Specifically, results from a survey of hunters suggest that the majority trust CPW to monitor and address issues related to chronic wasting disease (CWD). The results indicated that between approximately 75% and 79% of hunters were confident that CPW would "provide the best available information on CWD" and "provide truthful information about human safety issues related to CWD," respectively.<sup>130</sup> Furthermore, nearly three-quarters of respondents believed that CPW would make good deer herd management decisions regarding CWD and provide timely information about CWD issues.

In general, the majority of Colorado hunters express positive feedback about their hunting experiences. Findings from a 2014 survey of big game hunters found their experiences were somewhat to very satisfactory, outnumbering respondents who indicated being somewhat or very unsatisfied by a 2:1 margin for elk, deer, mountain lion, and pronghorn.<sup>131</sup>

Several factors contribute to hunters' perceptions about satisfaction. Resident hunters, for example, often cite the ability to hunt every year and harvesting an animal for meat as important factors in their overall satisfaction. Non-residents prefer hunting every 3-5 years and targeting more mature animals. They are slightly less interested in harvesting wildlife for meat than resident hunters.<sup>132</sup>

Anglers are similarly satisfied with fishing in Colorado. Approximately, 66% of Colorado residents and 80% of non-residents reported being somewhat to very satisfied with their experiences.<sup>133</sup> The most important factors influencing angler satisfaction are often having the opportunity to fish in a variety of waters and having a diversity of species to target. Being able to catch, keep, and consume fish is also important to anglers.

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<sup>127</sup> Cactus. 2020. CPW Awareness Study Insights Report.

<sup>128</sup> Cactus. 2020. CPW Awareness Study Insights Report.

<sup>129</sup> Cactus. 2020. CPW Awareness Study Insights Report.

<sup>130</sup> Quartuch, M.R. 2019. Hunter perspectives about chronic waste disease in Colorado. Colorado Parks and Wildlife, technical report.

<sup>131</sup> Colorado Parks and Wildlife. 2014. Big Game Hunter Attitude Survey.

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<sup>133</sup> Lischka, S.A. 2013. 2012 Colorado Angler Survey Report.

## Appendix: Climate Trends Resources

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