# DON'T BET AGAINST MOTHER NATURE: THE CHANGING CLIMATE'S IMPACT ON THE UNITED STATES' GAMING INDUSTRY

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#### I. Introduction

The year was 2020 and all that was on anyone's mind was the COVID-19 pandemic. Lockdowns ensued, masks were required, and there was no toilet paper to be found. Little attention was paid to the outside world as we were all locked inside. While the lockdowns were intended to stop the spread of COVID, the impacts were far greater than we could have ever imagined. The pandemic slowed global commerce, which in turn led to "emissions of nitrogen oxides (NOx) — which create ozone, a danger to human health and to climate — decreas[ing] 15% globally, with local reductions in California as high as 50%." While we were all focused on our own health, the health of Mother Earth slipped from the minds of many. Yet, human activities have undeniably "warmed the atmosphere, ocean, and land," causing "widespread and rapid changes in the atmosphere, ocean, cryosphere, and biosphere . . . ."

The Earth's atmosphere continues to change, and the impacts of this are reaching farther than ever before. Climate change and its effects "are happening now, are irreversible for people alive today," and will worsen in the decades to come. Many world leaders have been discussing the changing climate, describing it as an "existential threat to human existence as we know it." Our continued

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<sup>&</sup>lt;sup>1</sup> Carol Rasmussen, *Local Lockdowns Brought Fast Global Ozone Reductions*, *NASA Finds*, NASA (June 9, 2021), https://climate.nasa.gov/news/3089/local-lockdowns-brought-fast-global-ozone-reductions-nasa-finds/.

<sup>&</sup>lt;sup>2</sup> How Do We Know Climate Change Is Real?, NASA, https://climate.nasa.gov/evidence/ (last visited Feb. 22, 2023).

<sup>&</sup>lt;sup>3</sup> The Effects of Climate Change, NASA, https://climate.nasa.gov/effects/ (last visited Feb. 26, 2023).

<sup>&</sup>lt;sup>4</sup> Somini Sengupta, Lisa Friedman, and Marc Santora, COP26 Climate Summit: Key Moments from Day 1 of the COP26 Climate Change Summit, N.Y. TIMES (Nov. 1,

disturbance of our planet without fear of the repercussions has caused the human population to begin "digging our own graves." Something must be done if we want to continue to survive, as "[h]umanity has long since run down the clock on climate change. It is one minute to midnight on that doomsday clock, and we need to act now."

The environmental impacts of the changing climate are widespread and varied, including wildfires, megadroughts, and hurricanes, just to name a few. For example, climate change has increased the risk of "hot, dry weather that is likely to fuel wildfires." Increased temperatures have led to severe droughts that previously would not have reached such serious levels. Lastly, while the changing climate may not lead to an increased *number* of hurricanes, it has been linked to an increase in the *intensity* of hurricanes. These environmental changes go far beyond just impacting the planet itself: there will be dramatic economic and social impacts as well.

One way in which the changing climate will impact our way of life is by transforming the United States' gaming industry. Gaming has been a part of human life since "the dawn of human history, [but] the earliest concrete evidence comes from Ancient China where tiles were unearthed which appeared to have

<sup>2021),</sup> https://www.nytimes.com/live/2021/11/01/world/cop26-climate-change-summit#boris-johnson-warns-that-its-one-minute-to-midnight-as-the-climate-summit-opens.

<sup>&</sup>lt;sup>5</sup> *Id*.

<sup>6</sup> *Id*.

<sup>&</sup>lt;sup>7</sup> Wildfires and Climate Change, CTR. FOR CLIMATE AND ENERGY SOLS., https://www.c2es.org/content/wildfires-and-climate-change/ ("Climate change has been a key factor in increasing the risk and extent of wildfires in the Western United States. Wildfire risk depends on a number of factors, including temperature, soil moisture, and the presence of trees, shrubs, and other potential fuel. All these factors have strong direct or indirect ties to climate variability and climate change.") (last visited Feb. 26, 2023); Daniel Manzo, 'Megadrought' in West Directly Linked to Climate Change, Experts Say, ABC NEWS (June 17, 2021, 4:22 AM), https://abcnews.go.com/US/megadrought-west-directly-linked-climate-changeexperts/story?id=78202024 ("Essentially, half of the severity of the ongoing megadrought has been attributed to warming temperatures alone and without that warming, the drought would arguably not be a megadrought at all, UCLA climate scientist Daniel Swain told ABC News."); Hurricanes and Climate Change, CTR. FOR CLIMATE AND ENERGY SOLS., https://www.c2es.org/content/hurricanes-andclimate-change/ ("Hurricanes are subject to a number of climate change related influences: warmer sea surface temperatures, sea level rise, areas affected by hurricanes are shifting poleward.") (last visited Feb. 26, 2023).

<sup>&</sup>lt;sup>8</sup> Jack Goodman & Jake Horton, Wildfires: How Are They Linked to Climate Change?, BBC NEWS (Aug. 11, 2021), https://www.bbc.com/news/58159451.
<sup>9</sup> Id.

<sup>&</sup>lt;sup>10</sup> Hurricanes and Climate Change, UNION OF CONCERNED SCIENTISTS, https://www.ucsusa.org/resources/hurricanes-and-climate-change (June 25, 2019).

been used for a rudimentary game of chance." This is of critical importance because gaming has not only been a source of entertainment throughout human history, <sup>12</sup> but also a valuable tool for economic growth. <sup>13</sup> There are many benefits of gaming, but the most common include "increased employment, greater tax revenue to state and local governments, and growth in local retail sales."<sup>14</sup>

The gaming industry is of particular importance in Nevada. Indeed, it is codified into Nevada law and declared, as a matter of public policy, to be "vitally important to the economy of the State and the general welfare of the inhabitants."15 Further, the state of Nevada has the highest gross gaming revenue in the U.S., totaling \$14.8 billion in gaming revenue in 2022. 16 In particular, the COVID-19 pandemic highlighted the importance of tax revenue from gaming and the casino industry to the state of Nevada.<sup>17</sup> Due to ongoing international travel restrictions, domestic travel in the United States increased throughout 2021. In 2021, Washoe County reported an astounding \$420.5 million in taxable room revenue,— a new record for a single calendar year. 19

While gaming revenue is increasing in Washoe County, the impending crisis of climate change looms overhead. There is a question of whether this increase is sustainable or merely a residual impact of the COVID-related lockdowns. Regardless, for revenue to be at all relevant, it is important to address the issue of climate change. Younger generations are very concerned with the environmental impacts our actions have; thus, they are more driven to address climate change issues.<sup>20</sup> For the gaming industry to continue to prosper, younger generations will expect casinos to be more focused on their environmental

<sup>11</sup> The History of Gambling, GAMBLING.NET, https://www.gambling.net/history/ (last visited Mar. 3, 2023).

<sup>12</sup> See id.

<sup>&</sup>lt;sup>13</sup> Thomas A. Garrett, Casinos and Economic Development: A Look at the Issues, FED. RSRV. BANK OF ST. LOUIS (Jan. 1, 2003).

https://www.stlouisfed.org/publications/bridges/winter-20022003/casinos-andeconomic-development-a-look-at-the-issues.

<sup>&</sup>lt;sup>14</sup> *Id*.

<sup>&</sup>lt;sup>15</sup> NEV. REV. STAT. § 463.0129(1)(a) (2019).

<sup>&</sup>lt;sup>16</sup> Will Yakowicz, Nevada Set a Gaming Revenue Record in 2022 with \$14.8 Billion, FORBES (Feb. 1, 2023, 6:00 AM),

https://www.forbes.com/sites/willyakowicz/2023/02/01/nevada-set-a-gamingrevenue-record-in-2022-with-148-billion/?sh=214bdbe11b30.

<sup>&</sup>lt;sup>17</sup> See Jason Hidalgo, Visitors Drive Reno-Tahoe Room Tax Revenue to Record Levels in 2021 Amid Pandemic, RENO GAZETTE J. (Jan. 28, 2022, 9:47 AM), https://www.rgj.com/story/news/money/business/2022/01/28/visitors-drive-renotahoe-room-tax-revenue-record-levels-2021/9247394002/.

<sup>&</sup>lt;sup>18</sup> See id.

<sup>&</sup>lt;sup>19</sup> *Id*.

<sup>&</sup>lt;sup>20</sup> Alec Tyson et al., Gen Z, Millennials Stand Out for Climate Change Activism, Social Media Engagement with Issue, PEW RSCH. CTR. (May 26, 2021), https://www.pewresearch.org/science/2021/05/26/gen-z-millennials-stand-out-forclimate-change-activism-social-media-engagement-with-issue/.

impact.<sup>21</sup> Climate change has damaged the health of our planet and, consequently, the gaming industry in the U.S.. The impacts of climate change have and will go far beyond the environment and seep into the social and economic sectors of our lives.

# II. THE CALDOR FIRE DEMONSTRATED HOW WILDFIRES AND THE ASSOCIATED SMOKE DAMPENED GAMING REVENUES

Wildfires and their pluming smoke are natural phenomena prevalent today. The changing climate has not only led to more fires, but larger fires resulting in greater burn areas.<sup>22</sup> The land in the Western U.S. has been particularly susceptible to increased fires because "[c]limate change has made the West much warmer and drier in the past 30 years and will continue to make weather more extreme and wildfires more frequent." The impact of the fires and smoke goes beyond the environmental impacts; it directly impacts the economy as well. Areas like Reno and Lake Tahoe rely on the gaming industry to support their economies. Increased fires result in less tourism, causing a decrease in gaming revenue.

# A. Wildfires Near Lake Tahoe Cause Casinos to Close and Lose Gaming Revenue

In past years, increased wildfires near Lake Tahoe have led to closures of the casinos and a fall in gaming revenue. For example, in August 2021, the Caldor Fire<sup>24</sup> started strong, with evacuation warnings soon becoming

<sup>&</sup>lt;sup>21</sup> See generally Bryan Horwath, When Las Vegas Casinos See Green Today, It's More than Just Money, L.V. Sun (Nov. 2, 2021, 2:00 AM), https://m.lasvegassun.com/news/2021/nov/02/when-las-vegas-casinos-see-green-today-its-more-th/ ("Millennials and Generation Z, we care a lot about the environment. As an employer, we think about our brand and what we stand for. People want to work for a company that espouses their same values in these areas. We can say that we're a green company and that helps to attract and retain talent.").

<sup>22</sup> Here's How Climate Change Affects Wildfires, Env't Def. Fund, https://www.edf.org/climate/heres-how-climate-change-affects-wildfires ("[N]ot only is the average wildfire season three and a half months longer than it was a few decades back, but the number of annual large fires in the West has tripled – burning twice as many acres.") (last visited Apr. 10, 2022).

<sup>&</sup>lt;sup>23</sup> Sam Metz et al., *All Lake Tahoe Casinos Suspend Gambling While Housing Firefighters; Weather Slows Wildfire, but Flames Keep Moving*, CDC GAMING REP. (Sept. 1, 2021, 10:58 PM), https://www.cdcgamingreports.com/all-lake-tahoe-casinos-suspend-gambling-but-house-firefighters-weather-slows-wildfire-but-flames-keep-moving/ [hereinafter *Housing Firefighters*].

<sup>&</sup>lt;sup>24</sup> Brian Duggan et al., Caldor Fire: Douglas County Issues Evacuation Warnings; Fire 186,568 Acres and 15% Contained, RENO GAZETTE J. (Aug. 30, 2021, 6:11

evacuation orders.<sup>25</sup> The fire approached Lake Tahoe as thousands of people rushed out of the area.<sup>26</sup> The highway near this area was soon jammed with people following the evacuation orders.<sup>27</sup> In August of 2021, an emergency order regarding the Caldor Fire was issued by the Governor of Nevada, which spurred some of the major casinos in South Lake Tahoe to close portions of their gaming systems.<sup>28</sup> The hotels then closed to the public, but were still used to "hous[e] firefighters and displaced employees."29

As the Caldor Fire neared containment, the evacuations were lifted and life began to return to normal.<sup>30</sup> When the fire "gobbled up pine trees and crossed the Sierra Nevada, South Lake Tahoe transformed into a ghost town."<sup>31</sup> But, this was not the first time fires had impacted the area's gaming:

> California and much of the U.S. West have experienced dozens of wildfires in the past two months as the warming, droughtstricken region swelters under dry heat and winds drive[] flames through vegetation. More than 14,500 firefighters were battling 14 active fires in the state on Monday, and since the year began more than 7,000 wildfires have devoured 3,000 square miles.<sup>32</sup>

There have been other fires in this region too.<sup>33</sup> The Caldor Fire caused a "weeklong shutdown of gaming and tourism operations," after which the casinos began

AM), https://www.rgj.com/story/news/2021/08/30/caldor-fire-south-lake-tahoepolice-begin-evacuating-residents/5647610001/; Caldor Fire, CALFIRE, https://www.fire.ca.gov/incidents/2021/8/14/caldor-fire/ (Feb. 16, 2023).

<sup>&</sup>lt;sup>25</sup> Duggan et al., *supra* note 24.

<sup>&</sup>lt;sup>26</sup> *Id*.

<sup>&</sup>lt;sup>27</sup> *Id*.

<sup>&</sup>lt;sup>28</sup> Howard Stutz, South Lake Tahoe Casinos Begin Closing Gaming Operations as Caldor Fire Intensifies, NEV. INDEP. (Aug. 30, 2021, 3:24 https://thenevadaindependent.com/article/south-lake-tahoe-casinos-begin-closinggaming-operations-as-caldor-fire-intensifies.

<sup>&</sup>lt;sup>29</sup> Sam Metz et al., Firefighters Make Progress on Caldor Fire Wednesday, but 'Fire Is Still Moving, RENO GAZETTE J. (Sept. 1, 2021: 4:05 PM), https://www.rgj.com/story/news/2021/09/01/caldor-fire-burns-closer-heavenly-skiresort-douglas-alert/5689837001/.

<sup>&</sup>lt;sup>30</sup> Sam Metz, Lake Tahoe Evacuation Orders Lifted, but Fire Threat Remains, Fox 26 NEWS (Sept. 7, 2021, 9:05 AM), https://kmph.com/news/local/lake-tahoeevacuation-orders-lifted-but-fire-threat-remains.

<sup>&</sup>lt;sup>31</sup> *Id*.

<sup>&</sup>lt;sup>32</sup> *Id*.

<sup>&</sup>lt;sup>33</sup> See Caldor Wildfire Smoke Impact Study Underway on Lake Tahoe's Health, THIS Is RENO (Sept. 27, 2021), https://thisisreno.com/2021/09/caldor-wildfire-smokeimpact-study-underway-on-lake-tahoes-health/ ("The Tamarack, Caldor, and Dixie fires burning near the Lake Tahoe basin have been impacting the air quality for weeks to months in the summer of 2021, and impacts may continue into the fall.").

to reopen in phases.<sup>34</sup> Once the fire subsided, the casinos decided to reopen their doors "in part to help... return to normalcy and simply get back to their daily routines."<sup>35</sup> The Caldor Fire was not yet fully contained when the casinos reopened, but it never came close to the shoreline.<sup>36</sup>

As the evacuations were lifted, questions of safety remained. Would lifting the orders encourage people to return to Lake Tahoe despite the fire not being fully contained? The threat from the fire remained as "containment doesn't mean [it was] extinguished."37 Representatives of the Hard Rock Hotel Casino in the area detailed that "if by opening their doors the Hard Rock can be a respite for others, especially the local Lake Tahoe residents, the property will be ready to welcome them." The casinos have been coined a "gateway drug" to the Tahoe area. The increase in gaming and return of post-evacuation tourism could lead to a "trickle-down effect to other businesses." In fact, the Tahoe area reported that after the Caldor Fire, "the casino win for Stateline was down 77% to \$5.6 million, the lowest take since the coronavirus lockdown ended in June 2020."41 Gaming revenue is a reflection of the room taxes raised throughout the casinos, 42 so without tourism, there are no room taxes. The lack of tourism on this holiday weekend had a lasting and large impact on gaming revenue for the casinos. Even after a busy summer, gaming revenue ended the quarter down 9.24%.43

# B. Where There Is Fire, There Is Smoke: The Impacts Smoke Has on the Gaming Industry

While the wildfires themselves present a grave danger to the surrounding areas, structures, citizens, and economies, the lingering smoke can lead to even more issues. Even once the Caldor Fire reached 100% containment,

https://thenevadaindependent.com/article/lake-tahoe-casinos-begin-reopening-as-caldor-fire-evacuation-orders-are-lifted.

<sup>37</sup> Robert Galloway, *Publisher's Perspective: Do Casinos Reopening Spur Concerns Over Visitor Activity?*, TAHOE DAILY TRIB. (Sept. 13, 2021),

https://www.tahoedailytribune.com/news/opinion/publishers-perspective-do-casinos-reopening-spur-concerns-over-visitor-activity-opinion/.

<sup>&</sup>lt;sup>34</sup> Howard Stutz, *Lake Tahoe Casinos Begin Reopening as Caldor Fire Evacuation Orders Are Lifted*, NEV. INDEP. (Sept. 8, 2021, 1:06 PM),

<sup>&</sup>lt;sup>35</sup> *Id*.

<sup>&</sup>lt;sup>36</sup> *Id* 

<sup>&</sup>lt;sup>38</sup> *Id*.

<sup>&</sup>lt;sup>39</sup> *Id*.

<sup>&</sup>lt;sup>40</sup> *Id*.

<sup>&</sup>lt;sup>41</sup> Kurt Hildebrand, *Caldor Fire Took Big Bite Out of Gaming Revenue*, TAHOE DAILY TRIB. (Oct. 28, 2021), https://www.tahoedailytribune.com/news/caldor-fire-took-big-bite-out-of-gaming-revenue/.

<sup>&</sup>lt;sup>42</sup> *Id*.

<sup>&</sup>lt;sup>43</sup> *Id*.

it was determined that "the fire will continue to creep and smolder within the fire area long into winter. The public can expect to see smoke."44 The smoke spread beyond the skies and entered the crystal blue waters of Lake Tahoe that bring many people to the area. 45 The casinos in Lake Tahoe are promoted as "worldclass casinos" and "the place to get your game on."46 The casinos also promote their "gorgeous views of Lake Tahoe and the Sierra [Mountains]."<sup>47</sup> Many people worry that the Caldor Fire "is an example that the bigger, more intense wildfires we are experiencing due to climate change are emerging as a new threat."48 The lingering smoke, and the possibility of continual fires, puts the future of Lake Tahoe's gaming industry in jeopardy. If the area is promoted to tourists as featuring a beautiful environment, will continued smoke, which impacts the air quality and the view, hurt tourism and, in turn, the gaming industry?

Not only did the smoke impact the waters of Lake Tahoe, but there appears to be a direct link to gaming and tourism as well. The Lake Tahoe area was "blanketed by smoke and ash, as wildfires have devastated the pristine alpine landscape and imperiled the future [of the area]."49 The area is a popular tourist destination surrounded by stunning pine forests, mountains encased in snow, and the lake itself with its topaz color and incredibly clear water. 50 So it was a stark contrast when, in the wake of the Caldor Fire, "thick smoke ha[d] enveloped the city . . . which is all but deserted at a time when it would normally be swarming with tourists."51 What will be the future of Lake Tahoe's gaming industry if the waters are no longer clear enough to entice tourists to the area? The long-term impacts on gaming operations cannot be estimated, but it no longer is just the water at stake. The economic future of the area is in question. The environmental impacts of wildfires and smoke in this region need to be addressed to prevent

<sup>&</sup>lt;sup>44</sup> Hazard Mapping System: Fire and Smoke, Caldor Fire, RENO GAZETTE J. (Oct. 15, 2021, 9:41 AM), https://data.rgi.com/fires/incident/7801/caldor-fire/.

<sup>&</sup>lt;sup>45</sup> Tony Barboza & Anita Chabria, Caldor Fire Smoke and Ash Are Clouding Lake Tahoe's Famously Clear Water, L.A. TIMES (Sept. 3, 2021, 5:00 AM), https://www.latimes.com/california/story/2021-09-03/caldor-fire-smoke-and-ashare-clouding-lake-tahoes-famously-clear-water. See also Wildfire Smoke, Ash May Leave Lasting Impact on Lake Tahoe, KOLO 8 NEWS (Oct. 4, 2021, 7:21 AM), https://www.kolotv.com/2021/10/05/wildfire-smoke-ash-may-leave-lasting-impactlake-tahoe/.

<sup>46</sup> Make a Bet!: Enjoy the Challenge of Gaming, https://tahoesouth.com/gaming/ (last visited Mar. 12, 2023).

<sup>&</sup>lt;sup>47</sup> *Id*.

<sup>&</sup>lt;sup>48</sup> Barboza & Chabria, *supra* note 45.

<sup>&</sup>lt;sup>49</sup> Meryl Kornfield, Before and After: Photos Show Once-Pristine South Lake Tahoe Smothered in Caldor Fire's Smoke, WASH. POST (Sept. 4, 2021, 8:24 PM), https://www.washingtonpost.com/nation/2021/09/04/south-lake-tahoe-caldor-fire/.

<sup>&</sup>lt;sup>50</sup> See Lisa Alexander, 10 Top-Rated Attractions & Things to Do at Lake Tahoe, PLANET WARE, https://www.planetware.com/high-sierra-area/lake-tahoe-us-calt.htm (Mar. 23, 2023).

<sup>&</sup>lt;sup>51</sup> Housing Firefighters, supra note 23.

such events from occurring again and to minimize the impact on the local gaming industry.

## C. The Destroyed Land and the Ensuing Media Coverage

The Caldor Fire burnt the surrounding area and had devastating effects on both Northern California and Nevada. The Caldor Fire alone tore through three counties, burned 221,835 acres, and resulted in confirmed damage to over 1,000 structures.<sup>52</sup> For sixty-seven days, the fire burned, leaving destruction in its wake.<sup>53</sup> The area would be rebuilt, and the region's trees would regrow. It would take patience, but "[Lake Tahoe] also has had the remarkable ability to recover over time."<sup>54</sup>

The economic loss to the area following the Caldor Fire was substantial. The south shore of Lake Tahoe casino win "was down 77.24[%]" during September 2021.<sup>55</sup> This area and its gaming economy took a huge hit because "the Caldor Fire forced evacuations" and the "highway didn't open for a month." The Gaming Control Board said this period constituted a "[revenue] decline of 69[%] from pre-pandemic September 2019." Other areas of Nevada did not experience losses of this extent. In fact, the Reno/Sparks area saw an increase in gaming revenue during this same time period. <sup>58</sup>

While the shutdown of the Tahoe casinos was only temporary, fear about the long-lasting impacts it would have on the area's gaming industry remained.<sup>59</sup> Prior to the Caldor Fire, gaming business and revenue in Tahoe were trending upward, with signs that this growth would continue.<sup>60</sup> The fear of the fire approaching Tahoe was justified; however, the Caldor Fire "never got closer than five miles" to South Lake Tahoe and the casinos situated there.<sup>61</sup>

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<sup>52</sup> Caldor Fire Incident, CALFIRE,

https://www.fire.ca.gov/incidents/2021/8/14/caldor-fire/ (last visited Apr. 10, 2022). <sup>53</sup> *Id.* 

<sup>&</sup>lt;sup>54</sup> Ryan Randazzo, Famously Beautiful – and Blue – Lake Tahoe Threatened by Raging Wildfires, AZ CENTRAL (Aug. 30, 2021, 8:05 PM),

https://www.azcentral.com/story/news/nation/2021/08/30/lake-tahoe-clarity-economy-threatened-raging-caldor-fire/5657221001/.

<sup>&</sup>lt;sup>55</sup> Paula, South Shore Lake Tahoe Gaming Revenue Plummets Due to Caldor Fire, SOUTHTAHOENOW.COM (Oct. 27, 2021, 2:22 PM),

https://southtahoenow.com/story/10/27/2021/south-shore-lake-tahoe-gaming-revenue-plummets-due-caldor-fire.

<sup>&</sup>lt;sup>56</sup> *Id*.

<sup>&</sup>lt;sup>57</sup> Howard Stutz, *With Fire Fears in the Past, South Tahoe Casinos Focus on Future*, N. NEV. Bus. WKLY. (Nov. 10, 2021),

https://www.nnbw.com/news/2021/nov/10/fire-fears-past-south-tahoe-casinos-focus-future/.

<sup>&</sup>lt;sup>58</sup> Paula, *supra* note 55.

<sup>&</sup>lt;sup>59</sup> See generally Stutz, supra note 57.

<sup>&</sup>lt;sup>60</sup> See generally id.

<sup>61</sup> *Id*.

There were fears about the fire harming the serenity of the area. In fact, the national media coverage of the fire appeared to "sensationalize[] the effect on the Tahoe region." Yet, while the fire damaged other areas, "Tahoe is just as beautiful as it ever has been" and "the fire never got near the lake." This media coverage worked to show the beauty of the area, emphasize the importance of the area's gaming systems, and, most importantly, highlight the need for increased safety measures to protect our environment. Lake Tahoe continues to be known for its beauty and its gaming.

These fires may just have short-term impacts on the gaming industry, with only the potential to cause long-term effects, but implementing prevention measures is still a worthwhile endeavor. Continued interventions and policies will work to improve the health of the environment, thereby supporting the foundation for the area's gaming to continue growing. Fires can cause temporary delays in the market, but collaboration will lead to triumph. Those working, living, or running businesses in the Tahoe area worked together to recover from the fire and boost the gaming market. Winter was coming, and the ski season soon ushered in more tourists to the area. He area around Lake Tahoe has other signs of hope too. Tahoe planned to open the Tahoe South Events Center in 2022 to bring new and different events to the area, which will ultimately help increase gaming revenue. In addition, new restaurants are being developed in the area to help attract more visitors. Despite the challenges associated with these fires, the Lake Tahoe area continues to grow and attract tourists.

# III. MEGADROUGHT LEADING TO CONCERNS OVER LONG-TERM IMPACTS ON THE GAMING INDUSTRY

Water is one of the most precious resources on the planet.<sup>67</sup> We need water to drink, grow crops, and survive. Unfortunately, 95% of the Western U.S. is in a drought.<sup>68</sup> The changing climate "makes historical drought patterns more intense by increasing temperatures and thus evaporation[,]"<sup>69</sup> which leads to

<sup>62</sup> Id.

<sup>63</sup> *Id*.

<sup>64</sup> See id.

<sup>65</sup> See Stutz, supra note 57.

<sup>&</sup>lt;sup>66</sup> See, e.g., Evan Haddad, Eldorado Chef Centemeri to Head Up New Italian Restaurant at Harrah's Lake Tahoe, RENO GAZETTE J. (Jan. 13, 2022), https://www.rgj.com/story/life/2022/01/13/new-restaurant-sapori-italian-kitchen-carano-caesars-empire-opens-harrahs-lake-tahoe/9187936002/.

<sup>&</sup>lt;sup>67</sup> See Water as a Precious Resource, LEARNZ, https://www.learnz.org.nz/water172/bg-standard-f/water-as-a-precious-resource (last visited Mar. 3, 2023).

<sup>&</sup>lt;sup>68</sup> Peter Sinclair, *Is Western U.S. Experiencing a 'Megadrought'?*, YALE CLIMATE CONNECTIONS (Aug. 15, 2021), https://yaleclimateconnections.org/2021/08/is-western-u-s-experiencing-a-megadrought/.

issues in areas where most of the water comes from surface water supplies.<sup>70</sup> Nevada is one such place, as it gets most of its water from its Colorado River Compact allotment.<sup>71</sup> Nevada, which is highly dependent on gaming revenue, could face long-term impacts to its gaming industry if there is a continued lack of water.

While drought and dry conditions are nothing new, there is concern about the Western U.S.'s ongoing megadrought.<sup>72</sup> A megadrought is "a period of extreme dryness that lasts for decades" and holds a "long-term grip" on the area.<sup>73</sup> The majority of the Western U.S. has experienced these drought conditions since 2000.<sup>74</sup> In the past, researchers found evidence of megadroughts by looking at the growth rings of trees.<sup>75</sup> Rings that are closer together signify less growth, a phenomenon generally caused by a lack of moisture.<sup>76</sup> The current conditions of the Western U.S., specifically the Southwest, are the "driest 20 year period since the last megadrought in the late 1500s, and the second-driest since the 800s."<sup>77</sup> There is no way to know how long these conditions will last, and all we can do is work to conserve the water that is available now.

## A. Drought Conditions in Las Vegas, Nevada

While much of the world is facing drought conditions, the drought conditions in Southern Nevada are particularly bleak.<sup>78</sup> In fact, as of February 25, 2023, 95.18% of Clark County, Nevada, the southernmost county in the state,

<sup>71</sup> Colorado River Compact, Water Educ. Found.,

https://www.watereducation.org/aquapedia-background/colorado-river-compact (last visited Feb. 25, 2023) (giving a brief introduction about the Colorado River Compact and the allocation of its water).

https://www.smithsonianmag.com/smart-news/the-western-us-is-experiencing-the-worst-megadrought-in-more-than-1200-years-180979590/ ("The current megadrought in the Western United States has broken previous records for the driest

megadrought in the Western United States has broken previous records for the driest 22-year period in the region since the year 800 C.E.").

<sup>&</sup>lt;sup>70</sup> *Id*.

<sup>&</sup>lt;sup>72</sup> Margaret Osborne, *The Western U.S. is Experiencing the Worst Drought in More than 1,200 Years*, SMITHSONIAN MAG. (Feb. 17, 2022),

<sup>&</sup>lt;sup>73</sup> Henry Fountain, *What Is a Megadrought*?, N.Y. TIMES (Aug. 19, 2021), https://www.nytimes.com/article/what-is-a-megadrought.html.

<sup>&</sup>lt;sup>74</sup> *Id*.

<sup>&</sup>lt;sup>75</sup> *Id*.

<sup>&</sup>lt;sup>76</sup> *Id*.

<sup>&#</sup>x27;' Id.

<sup>&</sup>lt;sup>78</sup> See Drought Conditions for Clark County, NAT'L INTEGRATED DROUGHT INFO. SYS., https://www.drought.gov/states/nevada/county/clark (last visited Feb. 25, 2023); c.f. Joe Moeller, How Much Has Wet Winter Weather Impacted Drought Conditions in Nevada?, KTNV L.V., https://www.ktnv.com/news/how-much-has-wet-winter-weather-impacted-drought-conditions-in-nevada (Mar. 20, 2023, 9:20 PM) (describing how the unusually wet winter of 2022-2023 has helped combat the drought conditions in Nevada).

is classified as being in "severe drought." These conditions decrease surface water levels and force wildlife into residential areas. 80 In addition, as of February 25, 2023, 7.89% of Clark County is classified as being in "extreme drought[,]" which brings increased fire activity and depletion of lakes and rivers.<sup>81</sup> Even worse, in the spring of 2022, 15% of Clark County was classified as having "exceptional drought" conditions, which causes wildlife populations to decline, threatens ecosystems, and decreases the amount of groundwater.<sup>82</sup> Water flow is greatly impacted during times of drought. This is exemplified by the fact that in 2022, 41% of streamflow sites in Nevada were below their normal levels. 83 These worsening conditions have caused impacts all throughout the area. With much of the Las Vegas economy relying upon gaming and tourism, declining water levels are a grave concern.

## B. How Las Vegas in Implementing Water Conservation Measures in Order to Benefit the Community

While drought conditions are prevalent in the Las Vegas area, measures have been taken to help with water conservation. The Colorado River Compact allots a certain amount of water per year to the states in the Southern Basin. To reduce water consumption, Nevada, California, and Arizona have agreed to reduce their allocation from the Colorado River Compact.<sup>84</sup> This agreement attempts to keep one-million acre-feet of extra water in the Lake Mead reservoir over the next two years (2022 and 2023). 85 The allocation amounts were granted based on flow data at the time the Colorado River Compact was signed, but these numbers now appear to be outdated and "don't account for the nearly [20%] decline in flow over the last 20 years."86 Water conservation needs to focus on changing water flows to help reduce water consumption and hopefully resolve long-lasting drought conditions.

Southern Nevada has implemented numerous measures to increase water conservation efforts. With Assembly Bill 356 (2021), the Nevada Legislature enacted a law to "[make] various changes relating to the conservation of water."87 This bill was designed to get rid of "nonfunctional turf" in Southern

<sup>&</sup>lt;sup>79</sup> Drought Conditions for Clark County, supra note 78.

<sup>&</sup>lt;sup>80</sup> *Id*.

<sup>&</sup>lt;sup>81</sup> *Id*.

<sup>&</sup>lt;sup>82</sup> *Id*.

<sup>&</sup>lt;sup>83</sup> *Id*.

<sup>84</sup> Kyle Dunphey, California, Nevada, and Arizona to Cut Colorado River Water Use – Utah Says It's About Time, DESERET NEWS (Dec. 16, 2021, 2:05 PM), https://www.deseret.com/utah/2021/12/16/22839896/california-nevada-arizona-cutwater-use-colorado-river-drought-lake-mead-powell-utah-spencer-cox.

<sup>&</sup>lt;sup>85</sup> *Id*.

<sup>&</sup>lt;sup>86</sup> *Id*.

<sup>&</sup>lt;sup>87</sup> AB 356, NELIS, https://www.leg.state.nv.us/App/NELIS/REL/81st2021/Bill/79 10/Overview (last visited Apr. 10, 2022).

Nevada.<sup>88</sup> It intended to help with water conservation by preventing water from the Colorado River from being used to irrigate nonfunctional turf.<sup>89</sup> The bill, which was signed by then-Governor Sisolak on June 4, 2021,<sup>90</sup> vested power in the Southern Nevada Water Authority (SNWA) to define the terms of the bill and enact a committee to regulate and enforce the provisions therein.<sup>91</sup> The SNWA defined "nonfunctional turf" as "[a]n integrated grass area not providing functional use."<sup>92</sup> Even though this law requires the removal of nonfunctional turf, it does not apply to homeowners' yards or grass that is used for recreational purposes at schools or public parks.<sup>93</sup> This bill requires the removal of such nonfunctional turf by January 1, 2027.<sup>94</sup> The hope is that by not allowing water from the Colorado River Compact to irrigate these areas, the overall consumption of water from Nevada's allotment will decrease, thus conserving the water for more beneficial purposes.

SNWA has also helped encourage water conservation through education, outreach, and incentive programs to reduce water waste. One such incentive program includes rebates for single-family homes that remove grasses on their properties. SNWA "will rebate single-family residential properties \$3 per square foot of grass removed and replaced with desert landscaping up to the first 10,000 square feet converted, and \$1.50 per square foot thereafter per property, per fiscal year." This program is designed to encourage the implementation of landscaping designs, such as xeriscaping, which are less water-dependent, therefore reducing water use in the area.

<sup>&</sup>lt;sup>88</sup> See id.

<sup>&</sup>lt;sup>89</sup> See generally id.

<sup>&</sup>lt;sup>90</sup> See id.

<sup>&</sup>lt;sup>91</sup> Assemb. B. 356, 2021 Leg., 81st Sess. (Nev. 2021), https://www.leg.state.nv.us/ Session/81st2021/Bills/AB/AB356 EN.pdf.

<sup>&</sup>lt;sup>92</sup> Restricting Outdoor Water Use, S. NEV. WATER AUTH., https://www.snwa.com/importance-of-conservation/restricting-outdoor-water-use/index.html (last visited June 8, 2022).

<sup>&</sup>lt;sup>93</sup> *Id*.

<sup>&</sup>lt;sup>94</sup> *AB 356*, NELIS, https://www.leg.state.nv.us/App/NELIS/REL/81st2021/Bill/79 10/Overview (last visited Apr. 10, 2022).

<sup>95</sup> S. NEV. WATER AUTH., 2020 WATER RESOURCE PLAN 19 (2020).

<sup>&</sup>lt;sup>96</sup> Water Smart Landscapes Rebate, S. NEV. WATER AUTH.,

https://www.snwa.com/rebates/wsl/index.html (last visited Apr. 10, 2022).

<sup>&</sup>lt;sup>97</sup> Xeriscaping, NAT'L GEOGRAPHIC,

https://education.nationalgeographic.org/resource/xeriscaping/ (last visited Mar. 12, 2023).

#### C. The Lack of Water and Its Impact on Gaming in Las Vegas

An overwhelming 90% of Southern Nevada's water comes from the Colorado River, which is currently facing drought conditions that have the potential to impact Las Vegas and its gaming industry. 98

The gaming industry does not just encompass the slot machines, tables, and card games people come to play. There also must be places for the players to stay, which is why casinos have hotel rooms to accommodate. Las Vegas contains roughly 150,000 hotel rooms.<sup>99</sup> The average guest in a hotel room typically uses 63.2 gallons of water per day. 100 This does not even account for the water used by Las Vegas hotels and casinos for things like landscaping, recreation, etc.

Despite this, Las Vegas casinos are really some of the most efficient water users in the valley. 101 The Venetian Casino has found a use for otherwise useless water and built a water treatment facility to treat nuisance water-water that cannot be used unless it is treated 102—that can be pumped from just twenty feet under the ground. 103 This water is treated and used to water plants before being pumped to the casino's cooling towers. 104 The Venetian's water conservation efforts do not end with this treatment facility, though. The Venetian upgraded its pool and spa filters, which allowed it to save "6-million gallons of water per year."105

When people think of the attractions that Las Vegas has to offer, one of the first that comes to mind is the Bellagio Fountains. This display features "more than a thousand fountains [that] sway in front of the hotel, enhanced by music

<sup>103</sup> *Id*.

<sup>104</sup> *Id*.

<sup>&</sup>lt;sup>98</sup> Where Your Water Comes From, L.V. VALLEY WATER DIST., https://www.lvvwd.com/water-system/where-vour-water-comes-from/index.html (last visited Apr. 10, 2022). See also Colorado River Basin, NAT'L INTEGRATED DROUGHT INFO. SYS., https://www.drought.gov/watersheds/colorado (last visited Mar. 12, 2023).

<sup>99</sup> Joseph Kriprop, How Many Hotel Rooms Are There in Las Vegas?, WORLD ATLAS (Nov. 7, 2018), https://www.worldatlas.com/articles/how-many-hotelrooms-are-there-in-las-vegas.html.

<sup>100</sup> Sam Bruketta, Note, A Study of Water Use by Casinos in Las Vegas, Nevada: The Transformation of a Desert into an Oasis, 11 UNLV GAMING L.J. 233, 245 (2020).

<sup>101</sup> See Sam Argier, How Las Vegas Resort-Casinos Are Leading the Way in Water Conservation | Water in the Desert, Fox 5 (Nov. 18, 2019),

https://www.fox5vegas.com/news/how-las-vegas-resort-casinos-are-leading-theway-in-water-conservation-water-in-the/article a3771206-0a40-11ea-8390-4b6b06ac7758.html.

<sup>&</sup>lt;sup>102</sup> *Id*.

<sup>&</sup>lt;sup>105</sup> *Id*.

and light."<sup>106</sup> This breathtaking display "spans more than 1,000 feet with water soaring as high as 460 feet into the air."<sup>107</sup> The display is "destined to romance your senses"<sup>108</sup> by being the "most ambitious, complex water feature ever conceived."<sup>109</sup> Not only is this display stunning to watch, but there are plenty of opportunities to witness this spectacle. The water show runs every thirty minutes from three in the afternoon until midnight, every single day.<sup>110</sup>

However, the Bellagio's majestic display does not come without criticism. Many people question the location of this water-intensive display in the middle of the Nevada desert. These fountains are often cited as an example of the "sort of wanton waste that got the West into water trouble in the first place," The referencing the water crisis on the Colorado River. Although the Bellagio Fountains contain a massive amount of water, the area is eight acres and is around eight feet deep. This water does not even come from Lake Mead or Nevada's allotment from the Colorado River, and even if all the water from the fountain was put into Lake Mead, the lake's surface would only rise by a hundredth of an inch. In fact, the Bellagio taps water from an underground aquifer and uses stormwater runoff from the hotel to keep this display up and running. The resort treats this otherwise unusable water using its own water treatment facility. The concern over the Fountains depleting Lake Mead or the underlying aquifers "is like believing that unplugging your cell phone will reverse global warming."

In fact, the Bellagio Fountains, and various other attractions around the Las Vegas Valley, largely impact the gaming industry. The Bellagio Fountains are a tourist attraction and continue to bring people, and their money, to the area. <sup>118</sup> Las Vegas hosts more than forty million visitors each year. <sup>119</sup> However, there is no precise data available concerning foot traffic within these resorts that

<sup>108</sup> *Id*.

<sup>&</sup>lt;sup>106</sup> Fountains of Bellagio Our Calling Card, BELLAGIO L.V., https://bellagio.mgmresorts.com/en/entertainment/fountains-of-bellagio.html (last visited Apr. 10, 2022).

<sup>&</sup>lt;sup>107</sup> *Id*.

<sup>&</sup>lt;sup>109</sup> *Id*.

<sup>&</sup>lt;sup>110</sup> *Id*.

<sup>&</sup>lt;sup>111</sup> See generally 'The Water Use Myth' in Las Vegas, LAS AGUAS (Oct. 18, 2012), http://saratabatabaie.blogspot.com/2012/10/the-water-use-myth-in-las-vegas.html. <sup>112</sup> DAVID OWEN, WHERE THE WATER GOES: LIFE AND DEATH ALONG THE

DAVID OWEN, WHERE THE WATER GOES: LIFE AND DEATH ALONG THE COLORADO RIVER 107 (Riverhead Books, 2017).

<sup>&</sup>lt;sup>113</sup> *Id.* at 108.

<sup>&</sup>lt;sup>114</sup> *Id*.

<sup>115</sup> Id. See also Argier, supra note 101.

<sup>&</sup>lt;sup>116</sup> Argier, *supra* note 101.

<sup>&</sup>lt;sup>117</sup> OWEN, *supra* note 112, at 108.

<sup>118</sup> Id

<sup>&</sup>lt;sup>119</sup> 41 Million Visitors, 24/7/365 Action: A Better Look at Las Vegas, By the Numbers, L.V. Sun (Aug. 17, 2015, 2:00 AM), https://lasvegassun.com/news/2015/aug/17/41-million-visitors-action-las-vegas-numbers/.

can provide accurate numbers of how many people visit specific sites each year. 120 The Bellagio, and its fountains, "attract[] musicians and actors from all over the world."<sup>121</sup> The Resort has been used in various movies, including Ocean's Eleven. 122 The fountains are even used for large-scale events such as the NFL Draft.<sup>123</sup> The Draft was supposed to occur in 2020, but was postponed due to COVID, and did not take place until April 28-30, 2022. 124 During this event, the fountains were "active all three days in some fashion[,]" ranging from "the red carpet on Thursday night" to hosting "additional activities that fans [could] see on the stage."125 For such attractions to function, it is necessary to have water accessible. Las Vegas has done a great job of efficiently using this precious resource. Sustainable practices, as exemplified by the Bellagio Fountains, balance the use of water with garnering tourist attention, all while being environmentally friendly.

To have a gaming industry, there must be people present who want to participate. The gaming industry is largely driven by tourism; thus, these attractions play a vital role. The gaming industry has recognized the need to reduce its impact on the changing climate and has begun the work to reduce its water usage to assist in this process. The concern over drought conditions in the Las Vegas area remains, but the casinos are working diligently to do their part to conserve this precious resource.

## IV. HURRICANES: FOCUS ON HURRICANE IDA AND THE HAVOC IT WREAKED ON THE GAMING INDUSTRY

Hurricanes are natural disasters that have the potential to negatively impact the gaming industry throughout the U.S. Hurricanes, also known as

<sup>&</sup>lt;sup>120</sup> Question of the Day – 02 December 2017, L.V. ADVISOR (Dec. 2, 2017), https://www.lasvegasadvisor.com/question/stratosphere-tower-visitor-statistics/ (referring to the Stratosphere and MGM Resorts International).

<sup>&</sup>lt;sup>121</sup> Elitsa Staneva, Fifteen Surprising Facts About the Bellagio Hotel in Las Vegas, TRAVEL (Jan. 1, 2020), https://www.thetravel.com/surprising-facts-bellagio-hotellas-vegas/.

<sup>122</sup> Id. See also Filming Location Matching "Bellagio Casino", IMDB, https://www.imdb.com/search/title/?locations=Bellagio%20Casino%20&%20Hotel %20-

<sup>%203600%20</sup>Las%20Vegas%20Boulevard%20South,%20Las%20Vegas,%20Nev ada, %20USA (last visited Feb. 23, 2023).

<sup>123</sup> Mick Akers, NFL Draft Plans for Vegas Still Include Stage over Bellagio Fountains, L.V. REV. J. (Feb. 2, 2022, 6:09 AM),

https://www.reviewjournal.com/sports/nfl-draft/nfl-draft-plans-for-vegas-stillinclude-stage-over-bellagio-fountains-2522341/.

<sup>&</sup>lt;sup>124</sup> Mick Akers, Here's How to Attend the NFL Draft in Las Vegas, L.V. REV. J. (Mar. 19, 2022, 8:24 AM), https://www.reviewjournal.com/sports/nfl-draft/hereshow-to-attend-the-nfl-draft-in-las-vegas-2548228/.

<sup>&</sup>lt;sup>125</sup> *Id.* (quoting Matt Shapiro, vice president of event strategy for NFL).

tropical cyclones, are "large, swirling storms" that produce winds of seventy-four miles per hour or higher. <sup>126</sup> Generally, hurricanes occur in "Hurricane Season" between June 1st and November 30th, but they can occur outside of this time frame as well. <sup>127</sup> Hurricanes are known for "produc[ing] strong winds, storm surge flooding, and heavy rainfall that can lead to inland flooding, tornadoes, and rip currents." <sup>128</sup> Throughout U.S. history, there have been many devastating hurricanes that left destruction in their wake. <sup>129</sup> However, these hurricanes do more than just damage land. They destroy the communities and economies of the affected areas. This paper's focus will be on the recent hurricanes in the Southern U.S.

The 2021 hurricane season was a noteworthy one. This season witnessed twenty-one named storms, making it the third most active hurricane year in history. The post-hurricane repair efforts will likely be considered the most expensive in Atlantic Coast history. This active hurricane season seemed to have been influenced by "climate factors, which include La Niña, above-normal sea surface temperatures earlier in the season, and above-average West African Monsoon rainfall." Not only did the changing climate impact the 2021 hurricane season, but the Intergovernmental Panel on Climate Change has also confidently reported that "the global proportion of tropical cyclones that reach very intense (category 4-5) levels, along with their peak winds and rainfall rates, are expected to increase with climate warming at the global scale." The increase in the intensity and number of hurricanes means more destruction to

<sup>&</sup>lt;sup>126</sup> What Are Hurricanes?, NASA (Sept. 3, 2014), https://www.nasa.gov/audience/forstudents/k-4/stories/nasa-knows/what-are-hurricanes-k4.html.

What Is a Hurricane?, NAT'L OCEAN SERV.,

https://oceanservice.noaa.gov/facts/hurricane.html (Jan. 20, 2023).

<sup>128</sup> Hurricanes, NAT'L OCEANIC AND ATMOSPHERIC ADMIN.,

https://www.noaa.gov/education/resource-collections/weather-atmosphere/hurricanes (May 1, 2020).

<sup>&</sup>lt;sup>129</sup> See Elisha Fieldstadt, Deadliest Hurricanes in U.S. History, CBS NEWS (Aug. 28, 2018, 6:17 PM), https://www.cbsnews.com/pictures/deadliest-hurricanes-worst-in-the-us-list/ (listing the thirty deadliest recorded hurricanes in U.S. history).

<sup>&</sup>lt;sup>130</sup> Bill Chappell, *The 2021 Atlantic Hurricane Season Ends as the Third Most Active Year Ever*, NPR (Nov. 30, 2021, 4:19 PM),

https://www.npr.org/2021/11/30/1060158141/2021-at lantic-hurricane-season-ends-third-most-active-year-ever.

<sup>&</sup>lt;sup>131</sup> *Id*.

<sup>&</sup>lt;sup>132</sup> *Id*.

<sup>&</sup>lt;sup>133</sup> The Intergovernmental Panel on Climate Change (IPCC) is "the United Nations body for assessing the science related to climate change" and "was created to provide policymakers with scientific assessments on climate change, its implication and potential future risks, as well as to put forward adaptation and mitigation options." *The Intergovernmental Panel on Climate Change*, IPCC, https://www.ipcc.ch/ (last visited Feb. 17, 2023).

<sup>&</sup>lt;sup>134</sup> Bill Chappell, *supra* note 130.

communities and more hardship on economies, including the gaming industry, in these locales.

### A. Hurricane Ida Causing Casino Closures and the Gradual Reopening Once the Coast Was Clear

In 2021, Hurricane Ida surged and led to significant destruction on the sixteenth anniversary of Hurricane Katrina. 135 The storm swelled to 125-mileper-hour winds and left more than 560,000 people in Louisiana without power. 136 The residents were told to "hunker down" and not go to hospitals or seek emergency services. 137

With this storm brewing, heading to the casinos was probably the last thing on anyone's mind, but the residents could not have gone even if they wanted to. In preparation for the coming Hurricane Ida, many casinos closed their doors on the Saturday prior to the storm hitting. 138 Once the storm hit, the casinos in this area were flooded with water; sandbags and tarps lined the doors of casinos in an attempt to keep the water out. 139 The first floors of the casino parking garages were flooded, leaving many cars submerged. 140 Outside of casino closures, Hurricane Ida had many other impacts, one of which was the massive power outage from toppled power lines. 141

These closures wound down after a few days. Some casinos reopened as soon as Monday, with all being open by Wednesday. 142 Taking extra precautions, the Mississippi Gaming Commission decided to send its staff to each of the casinos in the area to ensure that they were ready to reopen to the public. 143 By Tuesday, eleven of the twelve casinos were given the go ahead to reopen, with

<sup>135</sup> Hurricane Ida Makes Landfall as an 'Extremely Dangerous Major' Storm, N.Y. TIMES (Sept. 14, 2021), https://www.nytimes.com/article/tropical-storm-idahurricane.html.

<sup>&</sup>lt;sup>136</sup> *Id*.

<sup>&</sup>lt;sup>137</sup> Id

<sup>138</sup> Live: Coast Casinos Announce Closures Ahead of Hurricane Ida, WLOX, https://www.wlox.com/video/2021/08/28/live-coast-casinos-announce-closuresahead-hurricane-ida/ (WLOX television broadcast Aug. 28, 2021, 4:30 AM).

<sup>139</sup> Gerard Albert, Biloxi Casino Garages, Point Cadet Flood in Hurricane Idea Storm Surge, Videos Show, SUNHERALD, https://www.sunherald.com/news/weathernews/article253830898.html (Aug. 29, 2021, 12:42 PM). <sup>140</sup> *Id*.

<sup>&</sup>lt;sup>141</sup> Larry Henry, New Orleans Casinos Closed in Hurricane Ida's Aftermath, CASINO.ORG (Aug. 30, 2021, 12:02 PM), https://www.casino.org/news/new-orleanscasinos-closed-in-hurricane-idas-aftermath/.

<sup>142</sup> Mary Perez, Here's When MS Coast Casinos Will Reopen as Hurricane Ida Heads North, SUNHERALD, https://www.sunherald.com/news/weathernews/article253848798.html (Sept. 1, 2021). <sup>143</sup> *Id*.

the last one slated to open the following morning.<sup>144</sup> However, ensuring the casinos were safe to reopen was not the only obstacle that the gaming industry faced; many of the roads in these areas were "impassible" due to the storm, which prevented players from visiting the casinos.<sup>145</sup> It was necessary to balance the economic need of reopening the casinos with the safety of all those concerned.

## B. Delays in Legal Sports Betting Due to the Hurricane Relief Efforts

Hurricane Ida did more than just prevent people from entering physical casinos to gamble. In August 2021, the Louisiana Gaming Control Board announced that Louisiana's casinos could offer legal sports betting so long as they filed an application and were authorized to do so. 146 The first round of authorizations was expected to be announced in mid-September, but due to Hurricane Ida, these authorizations were delayed by ten business days. 147 Unfortunately, this was not the only delay in the process. Louisiana Casino Association executive Wade Duty announced that the authorizations were "not expected until mid-October." This further delay was due to "State Police Troopers [being] temporarily reassigned from their gaming division duties to respond to hurricane-affected areas just getting back to their regular duties." The relief efforts after Hurricane Ida forced the delay of this approval process.

Despite delays, sports betting in Louisiana eventually began. The onsite sports betting kicked off in October 2021, and the online sports betting option went live near the end of January 2022. In just two months, the onsite sportsbooks "had a total of 67.1 million total wagers and made nearly \$10.1 million [in revenue]." Additionally, in the same two months, the "sportsbooks"

Janae Jordan, Coast Casinos Reopen After Hurricane Ida, WXXV 25 (Aug. 31, 2021), https://www.wxxv25.com/coast-casinos-reopen-after-hurricane-ida/.
 Perez, supra note 142.

<sup>&</sup>lt;sup>146</sup> Carolyn Roy, Approval of First Applications for Legal Sports Betting in Louisiana Delayed Due to Hurricane Ida, 6KTALNEWS.COM (Sept. 8, 2021, 3:36 PM), https://www.arklatexhomepage.com/news/state-news/louisiana/approval-of-first-applications-for-legal-sports-betting-in-louisiana-delayed-due-to-hurricane-ida/.

<sup>&</sup>lt;sup>147</sup> *Id*.

<sup>&</sup>lt;sup>148</sup> Carolyn Roy, Sports Betting Delayed Once Again Due to Hurricane Ida Aftermath, 6KTALNEWS.COM (Sept. 27, 2021, 6:02 PM),

https://www.ktalnews.com/news/state-news/louisiana/sports-betting-delayed-onceagain-due-to-hurricane-ida-aftermath/.

<sup>&</sup>lt;sup>149</sup> *Id*.

<sup>&</sup>lt;sup>150</sup> Greg Hilburn, Louisiana Launches Mobile Sports Betting Friday; Here's What You Need to Know, Layfette Daily Advertiser (Jan. 26, 2022, 1:26 PM), https://www.theadvertiser.com/story/news/2022/01/26/louisiana-launches-mobile-sport-betting-friday-among-early-players-fanduel-draftkings-caesars-betmgm/9225005002/.

<sup>&</sup>lt;sup>151</sup> *Id*.

also brought in more than \$1 million in tax revenue." These numbers are only expected to increase as more time passes and the online sports betting option continues to grow in popularity. For all the obstacles surrounding its launch, the sports betting industry in Louisiana seems to be generating substantial revenue. The consistent utilization of cutting-edge technology and innovation is part of the reason the gaming industry has been successful for as long as it has been. This success is due to "[t]he way technology is evolving and is picking up," allowing "a technology enabled experience that's seamless across multiple experiences in a beautiful space." 153 It is important to continue improving the industry to attract new generations of customers. To that end, ensuring we have an environmentally responsible system of growth is vital to the continued success of the gaming industry.

## C. Initial Declines in Gaming Revenue and the Eventual Steady Increase

Hurricane Ida's impacts reached far beyond the destruction of Louisiana communities. Casinos were forced to shut down and gaming revenue was expected to decline. Analysts predicted a 19% decline in gross revenue for the month of August compared to data from 2019. 154

Despite this, September brought a slight increase in gaming revenue. The Louisiana Gaming Control Board released information showing that riverboat casinos in Baton Rouge actually saw a 2% rise in their winnings compared to September 2020. 155 The gambling halls in Louisiana brought in \$19.1 million in September 2021, compared to \$18.8 million in September 2020. 156 "Winnings at the [thirteen] riverboats, four racinos 157 and Harrah's were \$159.7 million in September [2021], compared to \$126 million in September

<sup>152</sup> William Taylor Potter, Louisiana Casinos See \$10 Million Boost from Sports Betting, Layfette Daily Advertiser (Jan. 25, 2022, 2:45 PM). https://www.theadvertiser.com/story/money/business/2022/01/25/louisianacasinos-make-10-million-ahead-online-sports-betting-launch/6531410001/.

<sup>&</sup>lt;sup>153</sup> Buck Wargo, Attracting Younger Generation to Casinos of the Future Is Focus of Casino Esport Conference in Las Vegas, CDC GAMING REP. (Mar. 23, 2022, 6:41 PM), https://www.cdcgamingreports.com/attracting-younger-generations-to-futurecasinos-the-focus-of-las-vegas-conference/.

<sup>154</sup> Richard N. Velotta, Analyst Sees Double-Digit Decline for Louisiana Casino Revenue, L.V. REV. J. (Sept. 7, 2021, 6:32 PM),

https://www.reviewjournal.com/business/casinos-gaming/analyst-sees-doubledigit-decline-for-louisiana-casino-revenue-2435386/.

<sup>155</sup> Timothy Boone, Baton Rouge Casino Revenue up, ADVOC. (Oct. 25, 2021, 2:42 PM), https://www.theadvocate.com/baton\_rouge/news/business/article\_bffe8eaa-35cb-11ec-9481-631a76153764.html.

<sup>&</sup>lt;sup>156</sup> *Id*.

<sup>157</sup> Racinos are defined as "a racetrack at which slot machines are available for gamblers." Racino, Merriam-

Webster Dictionary (11th ed. 2003), https://www.merriamwebster.com/dictionary/racino.

2020."<sup>158</sup> This accounted for a 27.7% increase in their winnings. <sup>159</sup> This increase happened even though the casinos were shut down for some time in September 2021 because of Hurricane Ida. <sup>160</sup>

Gaming revenue continued to increase throughout October 2021. Louisiana posted a 21.8% gain compared to October 2020. <sup>161</sup> The gambling halls themselves saw an increase from \$18.3 million in revenue in October 2020 to \$23.1 million in 2021. <sup>162</sup> While the 2020 data may have been influenced by the COVID-19 restrictions ("in October 2020 casinos were under restrictions put in to control the spread of COVID, which capped the number of customers at 50% capacity"), <sup>163</sup> increased revenue is a sign of resiliency. This gradual increase highlights the continued growth of gaming revenue within the state of Louisiana despite the regular occurrence of hurricanes. This is a source of hope moving forward. For now, natural disasters put the gaming industry on pause, but it is important that we work to improve the environment if we want the industry to continue to grow. Indeed, we need to work to prevent these temporary pauses from turning into permanent closures or disruptions.

# V. WHAT CAN WE DO MOVING FORWARD TO PROTECT THE ENVIRONMENT WHILE CONTINUING TO GROW THE GAMING INDUSTRY?

While there are concerns about what will happen to the gaming industry in the future given the uncertainty of the environment, there is hope. There are ways to help slow the changing climate, which in turn will protect and expand the gaming industry throughout the U.S.

# A. Younger Generations Leading the Way to an Environmentally Focused Gaming Industry

In general, younger generations "tend to place a high degree of importance on environmental issues." The younger generation is considered to be more "health-conscious, socially aware, and environmentally responsible,"

<sup>160</sup> *Id*.

<sup>161</sup> Timothy Boone, See How Baton Rouge Riverboat Casinos Performed in October, ADVOC. (Nov. 19, 2021, 11:30 AM),

<sup>&</sup>lt;sup>158</sup> Boone, *supra* note 155.

<sup>&</sup>lt;sup>159</sup> *Id*.

https://www.theadvocate.com/baton\_rouge/news/business/article\_665f5d42-495e-11ec-80f1-1361820f5420.html.

<sup>&</sup>lt;sup>162</sup> *Id*.

<sup>&</sup>lt;sup>163</sup> *Id*.

Horwath, *supra* note 21.

and therefore more likely to take the steps necessary to protect the environment. 165

For the gaming industry to continue growing, it needs to accommodate the views of the younger generation. This generation, and the ones that will follow, are "looking for brands to lead the way and want brands to create change with them, not just for them." 166 Casinos must lean into this phenomenon to attract new people and remain relevant in this world. The gaming industry's future growth depends on whether it will work to accommodate the wants and needs of future participants, and the industry must adapt to invite younger generations into the realm of gaming. It is important to understand the consumer's wants and needs to improve the overall gaming system. Specifically,

> [I]f [the casino industry is] to successfully develop the casino floor for the next generation, we have to figure out who those customers are and generate loads of stuff for them to do to meet their functional, emotional, and tribal needs . . . there's a huge upside for elevating to this next generation of customer. 167

With the younger generation representing the future, it is important to make sure the gaming industry reflects what this generation stands for. This concept is motivating the gaming industry to implement environmental projects to improve the state of the world. Moving forward, the combination of technological advancements and environmental work will attract a new generation of gamers.

#### B. Initiatives Across the United States to Improve the Environment

Many gaming companies are working to reduce their impact on the environment, as well as improve the communities in which their casinos are located. Throughout the U.S., Harrah's Entertainment has worked to improve its environmental sustainability. Harrah's Entertainment has invested "more than \$60 million in energy efficiency projects, reducing [its] annual energy use by approximately 163 million kilowatt-hours." Additionally, the company has "cut [its] annual water consumption by [a total of] 200 million gallons since 2005."<sup>169</sup> Specifically, at its New Orleans locations, Harrah's has CodeGreen

Alleeva Hassim, Why Younger Generations Are More Willing to Change in the Name of Sustainability, GREENBIZ (Jan. 26, 2021),

https://www.greenbiz.com/article/why-younger-generations-are-more-willingchange-name-sustainability.

<sup>&</sup>lt;sup>166</sup> *Id*.

Wargo, supra note 153.

<sup>168</sup> HARRAH'S ENT., ENVIRONMENTAL SUSTAINABILITY AND COMMUNITY ENGAGEMENT REPORT 3 (2010).

<sup>&</sup>lt;sup>169</sup> *Id*.

volunteers who work to "preserve critical cypress and mangrove forests." <sup>170</sup> This is important because these areas help protect and "stabilize barrier islands, improv[e] wildlife habitat, and provid[e] critical flood protection." <sup>171</sup> Harrah's is working to improve the environment and combat the changing climate. Protecting the environment is vital to ensuring the growth of the gaming industry. Casinos have a unique opportunity to step up and make a change.

Caesars Entertainment is also focused on using its substantial power to combat climate change. Caesars Entertainment describes being "committed to being a responsible corporate citizen and environmental steward through [its] PEOPLE PLANET PLAY framework." Pursuant to the "Planet" section of this framework, Caesars "commit[s] to taking care of the world we all call home." The company plans on doing so by reducing its carbon outputs, energy use, and waste made in its facilities. Consistent with these goals, Caesars has reduced its overall water withdrawal by 33%.

While progress has been made toward these goals, there is still a long way to go. This will be a continual process, but the work of Harrah's, Caesars, and other industry leaders represents a step in the right direction toward protecting our environment and allowing for the gaming industry to continue to grow.

# C. Nevada is Trailblazing the Path to Grow the Gaming Industry While Pursuing Greener Options

#### 1. Diversification is Needed for Continued Growth

Nevada's gaming industry is continuing to grow and advance its technology to keep up with new developments. In early 2022, the Nevada Gaming Commission allowed casinos to use cashless gaming and account programs. This means that "patrons can create their wagering accounts and upload a government document to verify their identities" online, and casino staff no longer has to verify patrons IDs. This new practice was established to allow "Nevada's gaming industry to leverage the best practices from across the financial-services industry to enhance customer security and the customer

<sup>172</sup> Caesars Ent., Caesars Entertainment: Corporate Social Responsibility Report 2020-2021 7 (2021).

<sup>&</sup>lt;sup>170</sup> *Id.* at 19.

<sup>&</sup>lt;sup>171</sup> *Id*.

<sup>&</sup>lt;sup>173</sup> *Id*.

<sup>&</sup>lt;sup>174</sup> *Id.* at 14.

<sup>&</sup>lt;sup>175</sup> *Id.* at 4.

<sup>&</sup>lt;sup>176</sup> Buck Wargo, *Nevada Approves Remote Registration for Cashless Gaming Accounts*, CDC GAMING REPS. (Jan. 21, 2022, 12:46 AM), https://www.cdcgaming reports.com/nevada-approves-remote-registration-for-cashless-gaming-accounts/.

<sup>177</sup> *Id*.

experience."178 This type of "innovation is critical to ensure Nevada stays at the forefront of gaming." 179 Not only is this new innovation expected to allow Nevada to remain the national leader in gaming, but users also tend to spend 12-18% more with cashless systems and tend to tip more as well. 180

Additionally, high-gaming areas are working to implement non-gaming opportunities to diversify their economies. For example, Reno has turned the closing of a casino into the beginning of a community revival. The Harrah's Reno Casino was closed after eighty-four years in business, but the property was used to create a mixed-use development setup, which included "[c]ommercial office space, restaurants, and retail offerings." This project was started to fill "a void in the marketplace" because "what Reno needs right now is people living and breathing in downtown." The project is an opportunity to use the outdoor lifestyle of Northern Nevada to get "a completely different set of eyes because you have new people coming [to Reno]."183 Although Reno casino revenue was 16.8% ahead of its 2019 figure by September 2021, diversification and a focus on non-gaming activities "will help revive downtown, attract additional developments and create a better market for current casino operators." <sup>184</sup> These diversification projects are not aimed at getting rid of gaming, but instead being used to bolster and increase gaming revenue in these communities.

## 2. How the Changing Climate is Pushing the Gaming Industry Toward Greener Options

The changing climate is one of the main factors fueling the vast forest fires occurring throughout the world. It is "setting the stage for hotter, drier summers, more flammable forests and, consequently, more frequent and damaging fires." 185 By October of 2021, wildfires had burned 6.5 million acres nationwide. 186 Experts suggest using prescribed burns and thinning the forests to prevent fires "in the height of fire season [that] are too big, too hot and too severe to help keep an ecosystem healthy." The process of thinning these forests and

<sup>&</sup>lt;sup>178</sup> *Id*.

<sup>&</sup>lt;sup>179</sup> *Id*.

<sup>&</sup>lt;sup>180</sup> *Id*.

Howard Stutz, Downtown Reno Rebirth Focuses on Non-Gaming Opportunities to Boost a Changing Economy, Nev. INDEP. (Oct. 31, 2021, 2:00 AM), https://thenevadaindependent.com/article/changing-dynamic-downtown-renofocuses-on-non-gaming-opportunities-to-boost-a-changing-economy.

<sup>&</sup>lt;sup>182</sup> *Id*.

<sup>&</sup>lt;sup>183</sup> *Id*.

<sup>&</sup>lt;sup>184</sup> *Id*.

<sup>185</sup> Kylie Mohr, Why Fire Experts Are Hopeful, HIGH COUNTRY NEWS (Nov. 1, 2021), https://www.hcn.org/issues/53.11/north-wildfire-why-fire-experts-arehopeful.

<sup>&</sup>lt;sup>186</sup> *Id.* 

<sup>&</sup>lt;sup>187</sup> *Id*.

implementing controlled burns faces many obstacles, such as federal and state regulatory barriers, lack of funding, and a mentality of fire suppression among citizens. Attempting to prevent such large fires from occurring and impacting our society is a daunting task for anyone to undertake, especially since "no solution will be fast, cheap, or smoke free." However, the "biggest risk we're taking right now is to continue kicking the can down the road."

To combat climate change and the impact it has on our forests, we need to proactively prevent such large and disastrous fires from occurring. We are "living in and literally breathing climate change through wildfires," <sup>191</sup> and this will continue to be the case until we do something about it. Without any added fire protections, the consequences will continue to grow and further harm our communities and the gaming industry within those communities.

The world we live in has become more attuned to our climate, which has brought the realization that changes need to be made to our way of life. Nevada has been working diligently to increase its renewable energy resources, as exemplified by SB 358. <sup>192</sup> This bill is a

Milestone piece of legislation [that] will also help reduce emissions that negatively affect the health and well-being of Nevadans. By using more clean energy, we'll reduce our carbon emissions and smog-forming pollution that comes from fossil fuels, decreasing use of pollution in the air that our children, our seniors, and everyone breathes every day. 193

By working to decrease pollution, Nevada is headed toward a better, healthier tomorrow. SB 358 was seen as a "major step toward combating climate change and furthering the goals of the 'Climate Alliance.'"<sup>194</sup> The Las Vegas casino and resort industry "has invested millions of dollars into responsible operations aimed at reducing greenhouse gases, carbon emissions, waste, single-use plastics and water consumption."<sup>195</sup>

Beyond the requirements of state legislation, Nevada casinos are driven to find alternative means of electricity. For example, many casinos have considered adding solar panels to their properties to both decrease electricity bills and bolster environmental consciousness since solar energy does not produce any

<sup>189</sup> *Id*.

<sup>&</sup>lt;sup>188</sup> *Id*.

<sup>&</sup>lt;sup>190</sup> *Id*.

<sup>&</sup>lt;sup>191</sup> Mohr, *supra* note 185.

<sup>&</sup>lt;sup>192</sup> Riley Snyder & Michelle Rindels, *Sisolak Signs 'Milestone' Bill Increasing Renewable Portfolio Standard to Fifty Percent by 2030*, Nev. INDEP. (Apr. 22, 2019, 3:47 PM), https://thenevadaindependent.com/article/sisolak-signs-milestone-bill-increasing-renewable-portfolio-standard-to-50-percent-by-2030.

<sup>&</sup>lt;sup>193</sup> *Id*.

<sup>&</sup>lt;sup>194</sup> *Id*.

<sup>195</sup> Horwath, *supra* note 21.

emissions. 196

Additionally, Wynn Resorts has announced its plans to "reduce or offset all carbon dioxide produced by the company by 2050 and increase renewable energy use to [50%] of consumption by 2030."<sup>197</sup> This initiative is driven by the idea that "decision-making with careful consideration to the impacts 20 or 30 years from now isn't just essential, it's an existential imperative. That is what the future demands of us." This program uses "scientific solutions to a wide range of environment and climate challenges" that are specifically crafted for each of the resorts operated by Wynn Resorts across the world. 199

Las Vegas casinos have various methods of reducing their waste and doing their part to protect the environment. For example, Caesars collects, sanitizes, and combines old bars of soap into new bars of soap to be donated to disadvantaged areas around the world. 200 MGM has created a 640-acre solar farm that is expected to supply 90% of the daytime energy needs for the eight MGM Las Vegas resorts.<sup>201</sup> These types of programs are the future. It is important to first realize there is an issue, and then work to better our methods. These changes will lead to a better environment moving forward, allowing the gaming industry to grow as the environment improves.

The Nevada resort industry has been described as "a world-class leader sustainability, environmental protection, and renewable energy development."<sup>202</sup> The Nevada gaming industry has been a pioneer when it comes to reducing its negative impact on the environment. Nevada should serve as a model for the entire world to follow. Many others can learn from Nevada's environmental efforts, and from other environmental initiatives across the country, to help reduce the impacts of the changing climate on the world as a whole, but particularly on the gaming industry.

#### VI. CONCLUSION

Our actions are causing the climate to change, impacting the world as we know it. Our actions have led to more fires, megadroughts, and severe hurricanes. The good news is that these are our actions, and we can work to remedy our wrongs. Not all hope is lost. Many initiatives have already been

<sup>196</sup> Major Las Vegas Casinos Plan to Depart from Nevada Energy and Use Alternative Energy Sources, Sol-UP (Oct. 22), https://solup.com/major-las-vegascasinos-plan-to-depart-from-nevada-energy-and-use-alternative-energy-sources/.

<sup>197</sup> Richard N. Velotta, Wynn Resorts Pledge to Meet Environmental Goals to Combat Climate Change, L.V. REV. J. (Sept. 21, 2021, 3:21 PM),

https://www.reviewjournal.com/business/casinos-gaming/wynn-resorts-pledges-tomeet-environmental-goals-to-combat-climate-change-2445098/.

<sup>&</sup>lt;sup>198</sup> *Id*.

<sup>&</sup>lt;sup>199</sup> *Id*.

Horwath, *supra* note 21.

<sup>&</sup>lt;sup>201</sup> *Id*.

<sup>&</sup>lt;sup>202</sup> *Id*.

implemented to help improve the environment and correct the harm we have done.

Climate change and natural disasters impact all areas of human life, including the U.S. gaming industry. Changing our ways today can make a positive impact on the future of our planet.

> While the effects of human activities on Earth's climate to date are irreversible on the timescale of humans alive today, every little bit of avoided future temperature increases results in less warming that would otherwise persist for essentially forever.<sup>203</sup>

The future is not completely set in stone. It may not be too late to avoid some of the long-term impacts of climate change. To respond to climate change, there must be a focus on both mitigation, "reducing the flow of greenhouse gases into the atmosphere[,]"<sup>204</sup> and adaptation, "learning to live with, and adapt to, the climate change that has already been set in motion."<sup>205</sup> These measures will allow the U.S. gaming industry to continue to improve and survive in the ever-changing environment we are faced with.

Many states and casinos have taken matters into their own hands to reduce their carbon footprint and improve their processes moving forward. Our past actions have consequences, and these consequences, in turn, have had a large impact on the gaming industry. Gaming is a part of our history as humans. It has led us to where we are today, and without it, many economies would fall. The gaming industry can continue growing while simultaneously working to reduce its impact on the changing climate. Many leaders within the gaming industry have already implemented measures to reduce their water usage or energy consumption. High-gaming communities have found ways to diversify their economies to rely on more than just gaming for their future. Many have worked to align their views with the environmentally-minded younger generations to attract new participants while working to better our environment.

These changes will make a difference. To keep the gaming industry strong and growing, we must address the underlying issue of climate change. Without a sustainable, healthy environment, there is no gaming. Living in this world is a gamble; we are only dealt one hand, Earth, so we must work to protect it.

<sup>&</sup>lt;sup>203</sup> Is It Too Late to Prevent Climate Change?, GLOB. CLIMATE CHANGE NASA, https://climate.nasa.gov/faq/16/is-it-too-late-to-prevent-climate-change/ (last visited Apr. 10, 2022).

 $<sup>^{204}</sup>$  *Id*.

<sup>&</sup>lt;sup>205</sup> *Id*.