

# ARIZONA GOLF

## INSIDER

### The Future of Golf?

Arizona's Golf Industry United in Facing Water Challenges



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# More Than a Game

Golf Industry Continues to Conserve Arizona's  
Precious Water Resources

WORDS BY JEFF LOCKE

**G**olf is a vital part of Arizona's economy and lifestyle, with 700,000 Arizonans and millions of travelers contributing \$6 billion to the state's economy. Yet, despite the value, a small but vocal group within the state legislature would like to see the game die out entirely in the Grand Canyon State. Their reasoning stems from a misguided belief that golf is a waste of Arizona's water.

Instead – at only 2% – Arizona's golf industry has been maximizing every drop all along, and the Arizona Alliance for Golf (AAG) was recently formed to reinforce and communicate golf's commitment to sustainable environmental practices. This ensures the future health of the game in Arizona along with all of the positive benefits it offers, even to those who have never picked up a golf club.

## **Broad Coalition, Unified Voice**

"The game's many benefits support a vast and diverse group of Arizonans," said Gregg Tryhus, President of the Board of Directors for the AAG. "Our goal is to showcase golf's impact on their lives through tens of thousands of direct and indirect jobs in addition to recreation, socialization, health and wellbeing opportunities for everyone."

Groups include golf courses, nonprofits, and other regional and statewide organizations dedicated to growing the game, and local affiliates of national golf associations covering everything from agronomy to hospitality. Recognizing the water conversation was only going to become more challenging; issues affecting this natural resource drove the AAG's formation, with the purpose of unifying the industry's voice in discussions with regula-

tors, policymakers, and other influencers in the public and policy sphere.

“The AAG knows how important it is to tell our story of water leadership and actively educates policy makers at all levels of government on the positive impact the golf industry has on Arizona,” said AAG Executive Director, Katie Prendergast. “Golf needs to be at the table as important infrastructure and water augmentation solutions are developed, while continuing to lead on innovative technology and water management practices that have established the industry as a national leader in water conservation. In preparation for additional cuts to the Colorado River system and as the state grapples with growth and other big policy issues, it is more important than ever for the golf industry to unite as future water decision are made.”

#### **AAG Legislative Action**

Past AAG efforts with present implications include working with the Arizona Department of Water Resources (ADWR) during the development and solidification of the 5th Management Plan, which will guide Arizona’s groundwater use in 2025 and beyond. Throughout those conversations, a broad array of golf industry voices coalesced to successfully highlight the industry’s sustainability practices to ensure the future vitality and viability of the industry.

Additionally, the AAG engaged with federal, state, and local policymakers to garner broad support for water legislation important to the industry. From a state legislative perspective, the AAG supported the historic \$1 billion investment in water infrastructure and funding in 2022, as well as other priority legislation impacting golf. The alliance supported the fruitful efforts of Arizona U.S. Senators Kyrsten Sinema and Mark Kelly, as they worked to secure billions of dollars of federal funding for Arizona and the West to support drought planning and improve infrastructure – key steps toward solving the state’s current water challenges.

#### **AZ Golf Economic Impact: \$6 Billion with 2% Water**

“Former Governor Babbitt’s forward-looking 1980 Ground Water Act prompted Arizona golf to become a leader in water-usage efficiency and sustainability practices,” Tryhus said. “Today golf uses less than 2% of all water in Arizona. Yet, the industry knows it must continue to advance and do its share for long-term sustainable water resource allocation for everyone.”

The AAG commissioned a study released in January 2023, “The Economic Contribution of Arizona’s Golf Industry,” conducted by Rounds Consulting Group, which quantified the economic and environmental impacts directly and indirectly attributed to Arizona’s golf industry in 2021. It estimated Arizona’s golf industry produced \$6 billion in economic activity while using only 2% of daily statewide water to serve 16.6 million golf rounds in 2021. This economic output supported nearly 66,200 jobs, provided \$2.3 billion in wages, and generated \$518 million in state and local tax revenues.

“The positive financial impact to our community provided by the golf industry is good for everyone, even for those who don’t play,” said Joe Foley, Arizona Golf Association Executive Director and AAG executive committee member. “It’s one of the most impactful ways we give back, with many community-support organizations hosting their own golf fundraisers every year, as well as direct support from events like the WM Phoenix Open. And using 2% of the state’s water in the process plainly shows that the golf industry efficiently manages the vital resources we all depend on.”

Furthermore, a significant portion of the water used by the golf industry is renewable, recaptured water. How does this stack up? For context, the study found crop irrigation was the largest water use category, with 73.5% of Arizona’s total daily withdrawal. Public supply, which includes domestic and commercial water usage, accounted for 20.7%. Industrial and manufacturing used 2.6% of daily water use,



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and the “other” category, livestock, and aquaculture water accounted for 1.2% of Arizona’s daily water use.

#### **Conservation and Arizona Golf - Past and Present**

The golf industry’s current willingness to tighten its belt is simply a continuation of past cooperation and ongoing efforts to improve an already efficient industry.

As Tryhus mentioned, 40-plus years ago, the ground water act was adopted to address the growing need for better management of the state’s water resources amid an ever-growing population and economy. Five Active Management Areas were established where groundwater was in the

highest demand. Since then, aggressive management plans have rolled out progressively stringent requirements for agriculture, municipal and industrial use. This included golf courses, with each one in the state required to abide by the conservation system implemented as a result.

“The first and second management plans were a good start, and the third and fourth restrictions started to become tighter,” said Marc Snyder, now retired golf course superintendent for Scottsdale’s Desert Mountain Club, who was involved in the process at the time. “Among other standards, they set a per-acre limit based on calculation to sustain bermudagrass in the desert under normal conditions.”





In addition to the cap on water per acre, the total acreage of turfgrass allowed was set at 90. This spurred an already conservation-minded golf industry to tighten even more.

“It’s part of the nature of the game,” Snyder added. “Over the years, the industry has responded with a slew of new conservation practices and technologies to do more with less. Overseeding has declined dramatically over the years. We’re working on turf varieties that use up to 40% less water. Modern irrigation systems are lightyears ahead of where they were.”

#### Irrigation Tech and Toil

Expense and playing conditions already drive golf course agronomists like Snyder to use just enough water. Too much, and the club’s financial health suffers along with the golf experience. How do they figure out the right amount?

“We have an onsite weather station that gathers daily data to determine a number of things but one of the most important is the evapotranspiration [ET] rate,” said Ernie Pock, third-generation golf course superintendent, President of the Cactus and Pine Chapter of the Golf Course Superintendents Association of America, and Director of Agronomy at Grayhawk Golf Club, which is located down the road from Snyder. “This is the amount of water leaving the plant [turfgrass], soil and other surfaces.”

Pock explains that ET tells them how much water to put back: “no more, no less. The system even accounts for recent rainfall.”

Another cornerstone water conservation practice requires more hustle than science.

“We have two specialists per golf course that focus exclusively on irrigation,” Pock said. “They monitor, adjust, repair and replace the roughly 1,200 sprinkler heads and

PVC lines on each golf course. They do nothing else besides keeping the system tight.”

Other innovations include applying surfactants to make “water wetter” and harnessing the power of tiny microbiomes to cultivate healthy plants that require up to 25% less resources.

#### Positive Socioeconomic Impacts

The AAG-commissioned report also shows Arizona’s golf industry drives hundreds of millions of dollars in charitable fundraising for local non-profits such as Hospice of the Valley, Boys and Girls Clubs, and the Special Olympics, to name a few. The WM Phoenix Open, alone, raised \$10 million for local Arizona charities in 2022. And since 2012, it has raised a jaw-dropping \$110 million.

“Every child needs a champion, and we have that with the Arizona golf community,” said Torrie Taj of Child



Crisis Arizona. “Golfers are generous people. It’s incredible the amount of money they raised for Arizona kids and families. Just look at the WM Phoenix Open, the biggest charity moneymaker in the state. And that’s just one event. There are dozens of charity golf tournaments every week. I don’t know much about golf, but I do know that without it, there would be a lot more people in need.”

### Youth Development

A need, perhaps, even more important than money: Youth golf programs, which provide opportunities to learn, grow and maintain physical and mental health. It provides exercise, requiring four hours of significant walking, even with golf cart. And the social benefits of interacting with friends and family also provide proven mental health rewards.

With more than 150,000 kids participating annually through the school system, The First Tee of Phoenix teaches life skills to improve self-confidence and self-image. Taught through golf-related exercises, these skills also encourage problem solving, decision-making, and reinforce the importance of integrity, perseverance, and sportsmanship, empowering students to overcome the challenges they face both on and off the golf course. In addition, mentorship programs and scholarship opportunities encourage accountability and character development consistent with the foundational principles inherent in the game of golf.

A “proud member of The First Tee of Phoenix” for as long as she can remember, Ashley Shaw fell in love with the game shortly after her dad bought her a set of clubs and told her to “go have fun.” She now mentors the next generation of First Tee students, along the way instilling the tenets of the program such as accountability and respect, as she dreams big of playing professionally one day.

“We hope to solicit the personal time of any interested individual willing to help grow Arizona golf’s social fairness and inclusive outreach programs,” Tryhus said about the



WM Phoenix Open



Child Crisis Arizona



Child Crisis Arizona



need for mentors like Ashley to serve Arizona's thriving junior golf scene operated by Alliance member groups. "Teaching our youth golf's life lessons such as honesty, integrity, confidence, perseverance and respect not only protects the game, it protects the overall community."

#### Tourism Tug of War

With dozens of places worldwide to choose from for their next golf vacation, it's a win every time travelers pick Arizona. The dollars left behind are a critical driver for local economies.

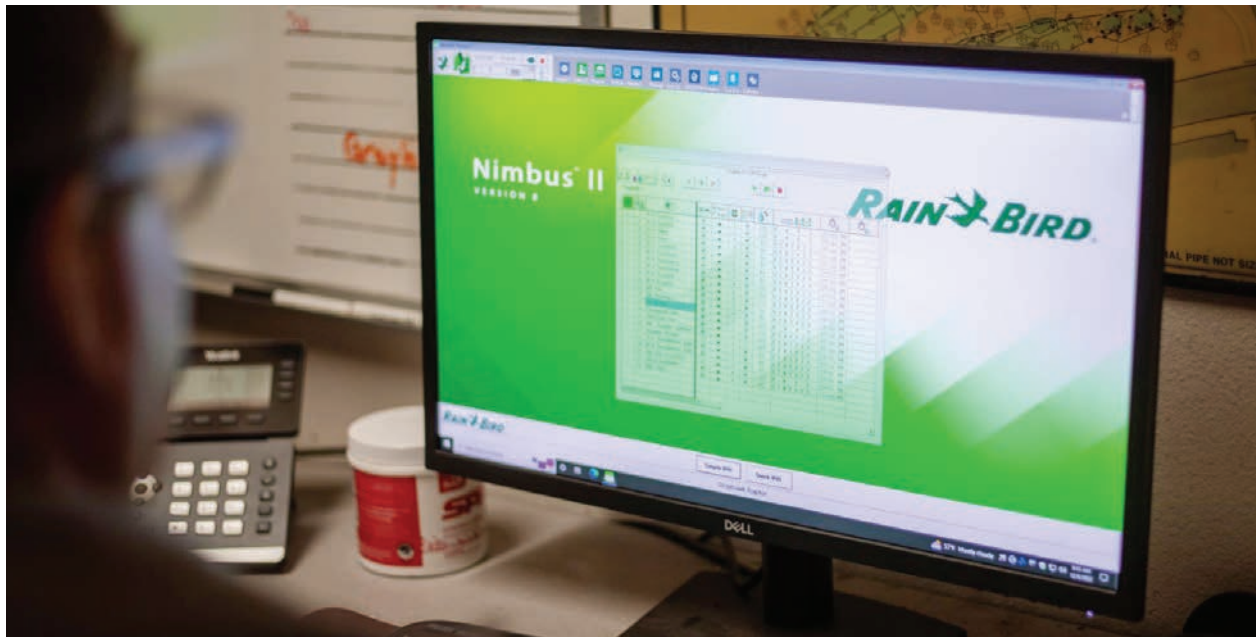
"An affinity for this sport is not a prerequisite to benefit from its reach," said Ron Price, President and CEO of Visit Phoenix and AAG board member. "Tourism is big business in Arizona. The quality and variety of golf courses here play a major role in helping the state attract millions of travelers each year. In 2021, the City of Phoenix welcomed more than 16 million who spent more than \$3.2 billion. This impacts a broad range of businesses, both small and large, throughout greater Phoenix and the state."

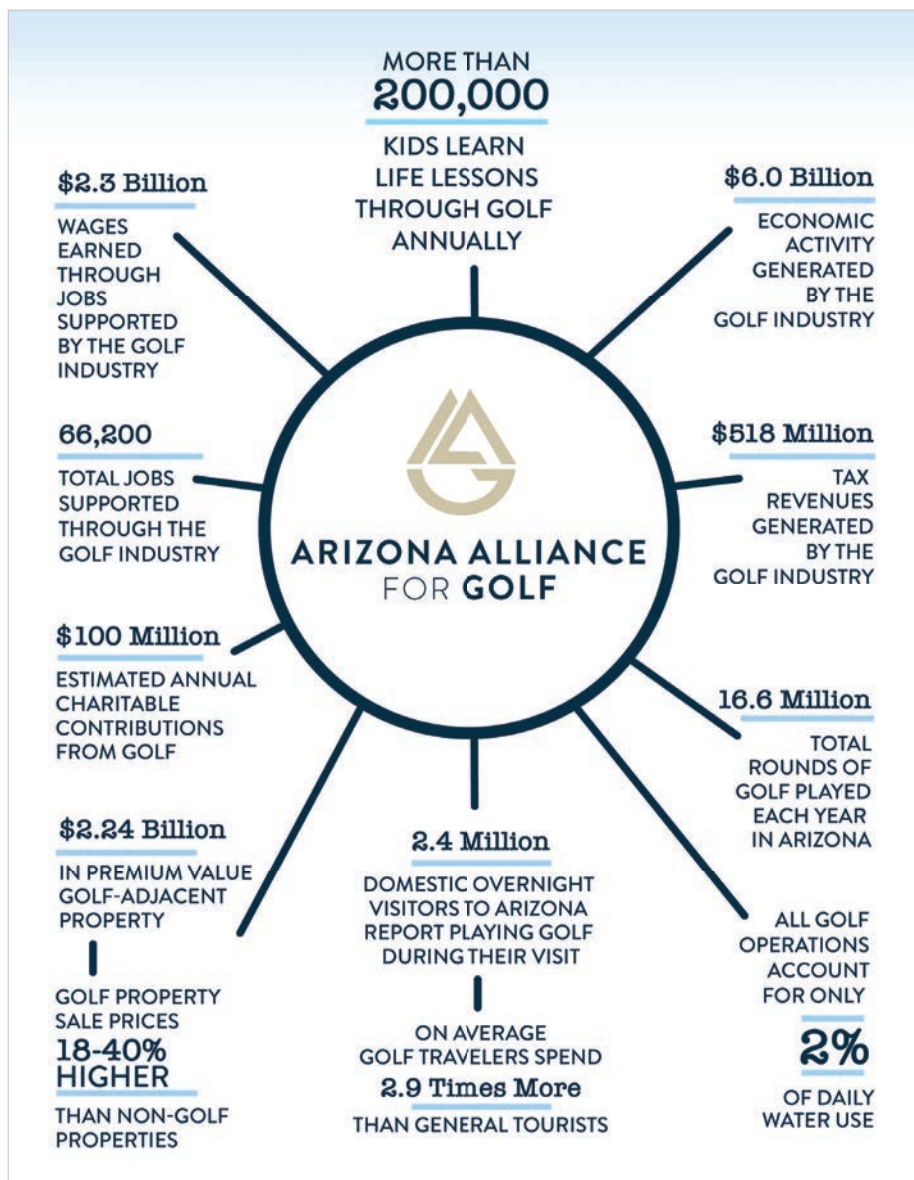
#### Halting the Heat Island Effect

Another environmental benefit revealed in the study, golf courses mitigate the urban heat island effect due to abundant tree cover and green spaces. Particularly severe in areas of extreme heat – like the "Valley of the Sun" – The Nature Conservancy estimates that without taking any mitigation measures in Maricopa County, the rising temperatures and increasing pollution will cost an estimated \$1.9 billion annually by 2050.

Enhancing tree canopy coverage and other vegetation is one of the most effective strategies to reduce the heat island effect. Maricopa County, City of Phoenix and City of Tempe are partnering with urban forestry groups to achieve 25% tree canopy coverage. The Urban Climate Research Center reckons even a one-degree reduction in the average annual temperature would save Phoenix residents an estimated \$15 million annually for the reduced demand on the electrical grid.

Golf courses offer abundant tree cover and green spaces,





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and to achieve 25% tree canopy coverage throughout Maricopa’s urban areas, a total of 133,300 acres need to be covered, likely with the help of public/private funding. Existing golf courses effectively save future tree canopy programs an estimated \$500 million in publicly funded installation and maintenance costs.

**Proud to Sign the Scorecard**

A positive development to be sure, winter storms poured buckets of rain on Arizona’s deserts and buried the high country in snow, if not the drought along with it. While the respite is welcome, long-term solutions would be better. During the process, Arizona’s golf industry will continue to innovate and collaborate, just as it has for decades.

Arizona golf’s economic, socioeconomic and conservation “scorecard” is one every member of the industry should be very proud to sign, and as any golfer will attest, their caddie is a critical part of the winning team. We need you on the bag! It’s up to everyone who loves the game of golf to educate, communicate and even financially support the AAG’s efforts.

The vitality of Arizona’s golf industry is a serious and urgent matter, one the industry is confident through collective advocacy will be resolved to ensure a bright future for the community. Visit [AZAllianceForGolf.org](http://AZAllianceForGolf.org) to get involved today!