



GEO Certified®

GEO Certified® Report

TPC Las Vegas

Prepared by independent verifier William Fleming

Certified by GEO Foundation: 2024
Recertification due: 2027

“TPC Las Vegas is a course that allows the player to be immersed in the natural habitats of the desert. Water mitigation is a large part of creating a sustainable golf course in this type of environment, and TPC Las Vegas is currently restructuring about 6 acres of land to reduce maintained turf and decrease water usage. They are also testing an aquaponics system on several tee boxes that provides an enclosed watering system that has zero water waste through root zone watering. I look forward to seeing the future of these efforts as well as watching them create a sustainability plan that focuses on the community as well.”

William Fleming
(GEO accredited independent verifier)



Introduction

GEO Foundation is pleased to confirm that TPC Las Vegas has successfully achieved GEO Certified® status for its outstanding work to foster nature, conserve resources and support the community.

GEO Certified® is the most respected certification for golf, based on a credibly and transparently developed modern sustainability Standard of best practice.

TPC Las Vegas has:

1. Met the required certification criteria for sustainable golf operations
2. Successfully completed the official third-party verification process
3. Successfully passed the final evaluation by GEO Certification Ltd. (autonomous subsidiary of GEO Foundation)

GEO agreed with the conclusions of the official verification report, that, having achieved all mandatory criteria; and with specific Continual Improvement Points (CIP) set for the future and Critical CIP's (CCIPs) to be reviewed at recertification, TPC Las Vegas should be awarded GEO Certified® status.

For the certification period stated above, TPC Las Vegas can therefore claim a position as a leader in advancing sustainability in golf – making important contributions in protecting nature, conserving resources and strengthening communities.

The GEO Certified® Report that follows comments on the actions undertaken against the criteria, as observed by the independent verifier during the assurance process.

Certification is nearly always the result of a dedicated team effort resulting in many practical and valuable social and environmental results around the golf course, maintenance facility and clubhouse. These dedication and leadership qualities are an important part of ensuring the resilience of the golf facility and the golf industry into the future and also as part of society's wider effort to pull together for people and planet.

We congratulate all involved.

Jonathan Smith
Founder and Executive Director, GEO Foundation
GEO Certification Ltd. Board Member

Kelli Jerome
Executive Director, GEO Foundation

Carole Kerrey
Manager, Data and Reporting, GEO
Certification Ltd.



Verification and Certification

Verification

The official third-party audit was carried out by an independent verifier, accredited by GEO to undertake verifications of golf facilities applying for certification.

Verification involves reviewing practices and data, using the International Voluntary Standard for Sustainable Golf Operations as the guide to ensure comprehensive and consistent evaluation of performance. A detailed verification report is submitted for evaluation by GEO Certification Ltd, a subsidiary of GEO Foundation.

Certification

GEO Certification Ltd, an autonomous subsidiary of GEO Foundation [both not-for-profit entities], undertook a full review of all content submitted through the OnCourse® online platform and the report submitted by the verifier, ensuring:

- Comprehensiveness – that activities undertaken touched on all elements of the Standard
- Consistency – that the verification approach was balanced, well weighted and with consistent depth of evaluation across each theme
- Accuracy - matching the verification report with evidence submitted by the golf facility to ensure statements and claims were accurate

GEO Foundation is an international not-for-profit founded to advocate, support and reward sustainability in and through golf. Over more than ten years, the group has worked collaboratively with dozens of golf industry associations and government and non-government organisations around the world, to help golf become a sustainability leader, striving for a net positive social and environmental impact. In addition to managing and assuring GEO Certified®, GEO Foundation also provides a suite of credible, practical programmes for golf facility management, new golf developments and golf tournaments called OnCourse®, often delivered in partnership with national golf bodies. Find out more at www.sustainable.golf

Credibility

GEO Certified® is part of the ISEAL Alliance, a group of the world's foremost credible certification systems including Fairtrade, Rainforest Alliance, Forest Stewardship Council, Marine Stewardship Council and many others. GEO Foundation earned and retains full membership of the ISEAL Alliance global association following a rigorous evaluation against the ISEAL Codes of Credibility in Sustainability Standards and Certification. The ISEAL Codes cover standard-setting, assurance, and monitoring and evaluation. Find out more at www.isealliance.org



Verifier's Report

The Sustainability Agenda for golf covers the following themes and action areas:

THEMES	ACTION AREAS
Nature	• Habitats & Biodiversity • Turfgrass management • Pollution prevention
Resources	• Water • Energy • Materials
Community	• Partnerships & Outreach • Golfing & Employment • Advocacy & Communications

Included below are the observations made by the Independent Verifier against each item in the Standard.

NATURE			
N1 Habitats and Biodiversity			
Objectives	Requirements	Mandatory Practices	Verifier Notes
N1.1 Understand the site and surroundings	N1.1.1 Sound understanding of the nature and landscape value of the site	Map all habitats and vegetation types on the site; Regularly update landscape / biodiversity surveys	TPC Las Vegas is built on a desert landscape and incorporates a natural terrain throughout. The biodiversity and habitats within the course are recognized as standard for the region.
	N1.1.2 Knowledge of legal designations for protected areas, habitats and species	Understand legal responsibilities for protected landscapes and species; Record and monitor protected, endangered, or rare species found on the site	The club is unaware of any endangered species or land protection zone within this facility. CIP: Please try to connect with local groups to identify birds that could be migrating to the area and protected.
	N1.1.3 Understanding and respect for cultural heritage	Protect any archaeological, historical or cultural designations on the site	TPC Las Vegas is not home to any known archaeological or cultural heritage.
N1.2 Opportunities to naturalise the course	N1.2.1 Measures taken to identify and minimise the required area of managed turfgrass	Observe, track and / or monitor golfer play	This golf course has removed about 6 acres of maintained turn over the past 2 years. Additionally, it is currently mapping out the removal of 6-7 acres for 2025-2026. The planned efforts to remove the turf will improve their water usage significantly and put them below the target usage given by the local water municipality.
N1.3 Actively manage habitats for wildlife	N1.3.1 Projects to manage habitats in the best way for wildlife and golf	Regularly review and follow a habitat management plan; Prioritise native species when planting and landscaping	In connection with turf removal, land has been converted to natural desert. Additionally, due to city requirements this golf course has a specified amount of shade zones coverage down with indigenous plant life. This also allows for a reduction in irrigation needs.
N1.4 Conserve key species	N1.4.1 Practical conservation measures for priority species		Discussed ways the course can continue to encourage biodiversity for their local region. This is mainly around promoting the desert zones and natural terrains.
N2 Turfgrass			
	N2.1.1 Appropriate turfgrass varieties	Select appropriate grass species for climate	Grass throughout the course is one of three varieties; Bermuda for fairways, bent grass on greens, and over seeding with rye for the winter

N2.1 Maintain optimum turf and soil health	adapted to climatic and other geomorphological factors		months. Bermuda is the majority of grass on the course and is considered to have a low demand for water.
	N2.1.2 Practices to maintain good soil structure and condition		Standard maintenance practices are established for the aeration of all turfed areas. Hand weeding is done regularly at about 60% of the total impact. Chemical based weeding is only used in needed areas and consists of about 40% of the weeding efforts.
	N2.1.3 Careful and responsible fertiliser application throughout the year to avoid over-fertilisation	Undertake soil tests and nutrient analysis	Confirmed soil tests completed annually.
N2.2 Prioritise mechanical maintenance	N2.2.1 Non-chemical pest, disease and weed management	Sharpen mowing blades; Remove surface moisture; Hand weeding	Upon reviewing the course, no areas were found to have excessive water moisture or disease. Areas were well maintained, with proper drainage, weeding, and pest management.
N2.3 Use chemicals responsibly	N2.3.1 Application of chemicals only when necessary to prevent or cure defined / identified turf health issues	Establish patterns and levels of risk for pests and diseases; Scout the course daily for early signs of pests and disease; Accurate pest and disease identification; Map and track pest and disease hotspots; Establish pest and disease thresholds	Full course inspection done daily by their maintenance staff. This daily inspection is used to identify irrigation challenges, pest potential, and turf maintenance needs.
	N2.3.2 Application of chemicals with full safety precautions	Use only legally registered and approved products; Ensure staff are fully qualified and licenced to use pesticides; Regularly calibrate and test applicators; Use appropriate protective equipment; Dilute and dispose of leftover product on untreated areas of turf .	There are no local regulations for applicator licenses by each maintenance member. However, 2 crew members are certified and do hold proper training and practices. All PPE is inspected/replaced monthly to verify it meets usage standard. TPC Las Vegas also has a digital monitor near their job board. They identify the specific PPE for each job so that the crew can verify they have what is needed as they review their task for the day. Applicators are tested monthly, cleaned upon each use, granular calibration each time before use. Club provided a full 'Chemical Itemization' list that identified all products used.

N3 Pollution Prevention			
N3.1 Prevent pollution across the entire site	N3.1.1 Practical measures to ensure pollution risks are minimised from golf course operations	Document procedures for emergency spill responses; Maintain mowing buffer zones around water and all ecologically sensitive areas; Maintain spraying and spreading buffer zones around water and all ecologically sensitive areas; Create a map / aerial visual reproduction, drawing etc of the course showing buffer zones and no-spray, no-spread areas.	TPC Las Vegas only has one water feature on site. Buffer zone is 7 feet. Emergency spill response plan is available, with adequate supply of hazardous waste bins and materials.
	N3.1.2 Practical measures to ensure pollution risks are minimised from clubhouse operations	Ensure all hazardous materials are safely and securely stored; Ensure compliance with all required standards and systems for hazardous waste and wastewater discharge	There are two chemical storage units on site. One specific to herbicide, fungicide, and insecticide. While the other unit for other remaining chemicals. Each location has product above impermeable grounds. TPC Las Vegas runs a system that allows for chemicals to be properly stored, placed into the sprayer, and limits the risk of spillage or waste.
	N3.1.3 Practical measures to ensure pollution risks are minimised from maintenance facility operations	Ensure wash areas are on impermeable, leak-free surfaces; Mixing and loading of pesticides and fertilisers over an impermeable surface; Triple rinse pesticide containers and applicators	Maintenance equipment is washed on impermeable concrete where the water is then contained in a drainage storage tank. This fluid is then collected and properly disposed of annually.
N3.2 Safely manage hazardous substances	N3.2.1 Legal compliance in the storage, handling, application and safe disposal of all hazardous substances	Maintain a register of hazardous materials available to authorised staff; Safe storage in secure and ventilated concrete or metal building; Sufficient storage capacity; Impermeable flooring; Spill containment kits present; Emergency wash area; Fire extinguisher in the immediate area; Secondary containment for fuel, either externally constructed, or integrally manufactured; Regular inspection of storage tanks	All hazardous materials are properly stored and disposed of. Regular OSHA inspections have been performed with no warnings. TPC Las Vegas goes one step above with having a self-containment riser for chemicals stored in a 55-gallon drum. This reduces the risks associated with spillage from containment to slippage. CCIP: Please install an eye-wash station in chemical storage #2.
N3.3 Responsibly manage waste / storm water	N3.3.1 Appropriate wastewater usage and discharge licences	Wastewater discharge licence; Appropriate treatment of machinery wash water (impermeable surface, oil / grease / clipping separation)	Water discharge is controlled and operated by the city of Las Vegas. TPC Las Vegas was able to provide adequate documentation for wastewater discharge fees for the city and is in compliance with requirements.

RESOURCES

R1 Water

Objectives	Requirements	Mandatory Practices	Verifier Notes
R1.1 Minimise water demand	R1.1.1 Measures to reduce the need to consume water	Target irrigation to essential playing surfaces only	Irrigation practices are in alignment with turf utilized throughout the course, and consistent with recommended species for the area.
R1.2 Maximise water efficiency	R1.2.1 Practical measures to use water more efficiently on the golf course	Conduct regular irrigation performance checks; Provide staff training on efficient irrigation practices; Ensure effective application of water to target areas; Ensure irrigation schedules are informed by weather patterns and soil moisture analysis	The water supply for this club is from the local municipality per local requirements. The city of Las Vegas does not allow the club to collect rainwater, and therefore supplies all water for the club. Due to this, there are heavy restrictions on the amount of water per acre in the City of Las Vegas. In 2024, the city has limited the water usage from 6.3 to 4 acre-feet per irrigated acre per year. Highlight: This club is testing a process for growing grass more sustainably with less water usage. The system used is a style of aquaponics where water is supplied to the root zone from underneath, water is then pumped away from the roots and transferred to another zone. This system effectively allows for only 5 gallons of water per week on a single tee box. This pump for this system runs off of solar energy.
	R1.2.2 Practical measures to use water more efficiently in buildings	Audit water use regularly; Review bills frequently and look for irregularities; Encourage water-saving practices amongst staff and visitors; Categorise and track water consumption	No current practice in place to reduce water usage within clubhouse, restrooms, or other areas of the facility. Overall, the facility is employing a holistic approach to water usage per local requirements. CIP: Please explore measures to further reduce water consumption across the buildings at the facility.
R1.3 Source water responsibly	R1.3.1 Measures towards alternative, lower quality sources of water	Ensure appropriate water abstraction permit and reporting, as required	At this time, local requirements do not allow for alternative water sources.

R2 Energy			
R2.1 Reduce energy demand	R2.1.1 Measures to reduce the amount of energy consumed in course maintenance	Minimise areas of managed turf to reduce mowing, irrigation, and turf inputs	Golf course is currently reviewing their energy plan through solar, and LED lighting opportunities. CIP: Please review energy usage over the past 3 years, developing a plan to reduce consumption and introduce more renewable sources.
R2.2 Maximise energy efficiency	R2.2.1 Measures to use energy and fuels more efficiently in buildings	Audit energy use regularly; Regularly review bills; Categorise and track energy consumption	Currently, the club is not regularly reviewing their energy usage from a sustainability perspective. However, they are beginning the process for establishing an energy plan consistent with reducing energy demand. Additionally, they are considering to begin looking into solar power options for the clubhouse.
R2.3 Source energy responsibly	R2.3.1 Measures to source alternative, renewable forms of energy	Determine potential sources of renewable energy in the area and on-site, through renewable energy providers	Solar power panels are utilized at three points throughout the course. These panels run the water pumps for an aquaponics water system. Considerations are in place for increasing their solar footprint.
R3 Materials			
R3.1 Reduce materials demand	R3.1.1 Products and materials selection based on necessity, including opportunities for recycled, reused and locally sourced alternatives	Undertake a review of materials consumed	Golf course installed water refill stations throughout and utilizes local suppliers for raw materials. Additionally, they often transplant where necessary from their desert areas to the course as allowed by local regulation. CIP: Please try to remove single-use plastics and styrofoam materials from the course, specifically at the water refill stations.
R3.2 Purchase responsibly	R3.2.1 Practical use of an ethical / environmental purchasing policy	Adopt a sustainable, or ethical / environmental purchasing policy to maximise the use of locally sourced goods and goods made from recycled, recyclable and certified materials	TPC Las Vegas does not currently have a policy in place to encourage locally sourced goods. However, they are utilizing some local providers for raw materials, and looking to include more local suppliers for their restaurant.
R3.3 Reuse and recycle	R3.3.1 Waste stream separation for maximum recycling and re-use opportunity	Demonstrate waste separation, reuse and recycling; Track how much waste goes to landfill, or is reused / recycled	The City of Las Vegas does not have a recycle system in place at this time limiting the options available to TPC Las Vegas. The positive for this club is that they utilize all their grass clippings as raw fertilizer throughout the course limiting the need for disposal.

			CIP: Please identify other 3rd party providers for recycling and composting, as discussed.
R3.4 Demonstrate legal compliance	R3.4.1 Compliance with all local and regional waste management regulations	Use authorised waste and recycling contractor for general, hazardous, industrial and green waste	TPC Las Vegas currently utilizes local municipality for trash collection.

COMMUNITY			
C1 Outreach			
Objectives	Requirements	Mandatory Practices	Verifier Notes
C1.1 Diversify access and provide multi-functionality	C1.1.1 Social and recreational activities at the facility		Discussed the opportunities that the golf course has to engage in the local community and group event offerings.
C1.2 Provide for volunteering and charity	C1.2.1 Opportunities available for volunteering and support of charities and good causes		This club is associated with several groups; Birdies for good, Rounds for Research, PGA Hope, PGA Junior league.
C1.3 Establish active community partnerships	C1.3.1 Positive and constructive engagement with neighbours, the local community and other groups	Create a 'sustainability working group'	While the course is working towards limiting their impact on the environment through reduced maintenance and water usage, they do not have clear plans or policies in place for sustainability engagements with the local community. CIP: Please develop a way of working that incorporates your commitments to sustainability, your golfers, and local community. This can be done through annual sustainability tournaments, e-waste drives and more.
C2 Golfers & Employees			

C2.1 Improve health and wellbeing	C2.1.1 Benefits to human physical and mental health from golf and facility activities		This club offers employees the opportunity to play golf, but more can be done towards building a culture focused on employee physical and mental health.
C2.2 Be open and inclusive	C2.2.1 Inclusivity and diversity in membership and visitor policies	Demonstrate inclusive policies for members and visitors	TPC Las Vegas is a public course that is fully inclusive and available to everyone.
C2.3 Employ fairly and safely, and provide career opportunities	C2.3.1 Ethical and legal employment, working conditions and professional development	Follow all relevant national legislation and best practice for employment, health & safety etc	Upon review it is clear that TPC Las Vegas has ethical and legal employment, positive working conditions, and a professional atmosphere. This course also has an onboarding process for all employees. This training includes health and safety training.
C3 Communications			
C3.1 Engage golfers and members	C3.1.1 Communications activities that raise awareness and understanding amongst members and visitors	Provide information on the facility's sustainability commitments, actions, or achievements	When reviewing their Facebook presence and social media they consistently focus on positive mental health and support for the community. Creating posts that thank our military, congratulating employees, and encouraging the game of golf for mental health. CIP: Please create a sustainability page to better communicate what the golf course is accomplishing for the environment and community.
C3.2 Celebrate and promote sustainability	C3.2.1 Activities that raise awareness and engage people in the wider community	Provide evidence of external communications and community engagement	TPC Las Vegas is associated with GCSAA, PGA of America, PGA Junior Leage, local Fire & Police, DoD programs. They donate rounds to wounded warriors, make a wish, and birdies for the brave.

Golf and Sustainability

Among all sports, golf has a particularly close relationship with the environment and communities, golf facilities can bring many benefits to people and nature - from the protection of greenspace and conservation of biodiversity; healthy recreation for all ages; local supply chains; and jobs, tourism and other forms of economic value.

Adopting a more sustainable approach is also good for golf. It's about presenting a high-quality golf course and providing a memorable experience in natural surroundings. It's about being as efficient as possible. And it's about supporting the community in a range of ways that bring increased recognition, respect and contact.

At a broader level, it's important that golf credibly demonstrates its commitment, and its social and environmental value – strengthening the sport's image and reputation for the long term.

Golf facilities that participate in OnCourse®, an international sustainability initiative assured by the non-profit GEO Foundation, are taking a comprehensive approach and striving to be leaders in the community.

Find out more at www.sustainable.golf