Prepared for Presentation to Scottsdale City Council
and
Scottsdale Planning Commission by:

Community Planning Department
Environmental Management Office
Community Development Department
Economic Development Office
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Preservation Office

and
Scottsdale Environmental Quality Advisory Board
BACKGROUND

The striking natural beauty and ideal climate of Scottsdale have contributed to the increasing role golf has played in defining the community’s image and lifestyle, as well as its role in developing the local economy. Scottsdale’s golf courses are destinations for tourists from all parts of the world and provide recreational opportunities for an increasing number of Valley residents. Many of the new residential developments have incorporated golf as an amenity for their residents, and many local resorts rely on golf as a lure to attract buyers. As the attached “Golf in Scottsdale” report indicates, the economic impact of the golf industry in the Valley, and particularly in Scottsdale, is substantial.

At the same time, the desire for preservation of desert resources and environmental protection have prompted increased awareness for the need to maximize the environmental sensitivity of golf courses, and focused attention on the expectation of continuing a high standard of environmental performance from these facilities.

In three retreat sessions in the summer and fall of 1996, City Council and Planning Commission members discussed a number of issues related to the golf industry and asked that staff prepare a policy that could be used to guide the development of future golf courses in Scottsdale. Guided by the discussion of a subcommittee comprised of representatives of both City Council and Planning Commission, a number of issues were identified that are the focus of this policy. Although addressed separately, these key issues are interrelated and must be balanced with one another in the overall interest of the community. The issues are categorized as:

1. Environmental Issues
2. Land Use Issues
3. Economic Issues
4. Open Space Issues
5. Water Supply and Infrastructure Issues

Proactive planning, as envisioned by CityShape 2020, requires that all aspects of land use decisions be measured against a standard reflected in the Guiding Principles:

1. Preserve Meaningful Open Space
2. Enhance Neighborhoods
3. Support Economic Vitality
4. Seek Sustainability
5. Advance Transportation
6. Value Scottsdale’s Unique Lifestyle & Character

These principles have been integrated into the development of this policy. Achievement of “Character” and “Quality”, two overriding expectations of the community in all new development, have also been fundamental considerations in the development of this policy.
This report recognizes that golf courses are one of the many land uses that contribute to a well-balanced livable community. Many existing courses in Scottsdale have generally incorporated elements of “character” and “quality”, have met many of the policies, goals and strategies that follow. This policy is designed to elevate the discussion on these five issue areas in the public dialogue, formalize policies that have been developed incrementally over time in the development process, and to heighten the level of understanding on the role of golf in the community.

This report is structured to focus on the five issue areas outlined above. A summary overview has been included for each issue area, followed by one policy recommendation, one or more goals for each policy, and one or more strategies to help accomplish each goal. To fully implement the recommendations contained in this report, several additional actions would be required. These actions include:

1. Establishment of the criteria for Resource Management Plans
2. Amendment of the Environmentally Sensitive Lands Ordinance
3. Amend the General Plan
4. Amend the Zoning Ordinance
5. Develop a Recognition and Incentive Program
6. Study the large issue of a community Open Space Policy

A number of attachments have also been included with this policy to provide reference material if needed. The attachments consist of:

- Environmental Principles for Golf Courses in the United States
- Draft Outline of Natural Resources Management Plan Contents
- Analysis of “Meaningful Open Space” by Desert Preservation Task Force
- “Golf in Scottsdale” by City of Scottsdale Economic Development Office
- Consultant Report on Environmental Issues from Jones and Stokes, Inc.
I. Environmental Issues

Nationally, the golf industry has recognized that high standards of environmental performance are expected from golf courses, just as they have become expected of other industries. In response to this perception, the golf industry has worked to develop environmental standards and guidelines for golf courses and to encourage courses to demonstrate environmental leadership and vision. This effort has been designed to:

1. maximize environmental sensitivity throughout the life of a golf course, from initial design and construction and on through the operation and management practices of the course, and

2. encourage existing golf courses to upgrade and enhance their operating procedures so that environmental performance becomes a “continuous improvement” focus for the course.

The golf courses being developed in Scottsdale are among the best in the world. They attract international attention through events such as the Phoenix Open, Traditions, and Anderson Consulting World Championship of Golf tournaments. While the new golf courses being developed here are of extremely high quality, there remains the opportunity to work with golf course developers and superintendents to insure that they are models of environmental sensitivity, and that they contribute to the long-term environmental sustainability of the community.

This policy is designed to be a blueprint for environmental excellence in the golf industry. Many of the guidelines contained in this section are already being studied and addressed by golf courses now being developed, but could be even more consistently and effectively developed for discussion during the development process – allowing the vision of the course and its high environmental standards to be shared with the community and decision makers.

GOLF COURSE POLICY RECOMMENDATION – ENVIRONMENT:
Golf Courses should promote and contribute to the environmental sustainability of Scottsdale.

GOAL 1: Encourage high levels of environmental performance in the design and management of new golf facilities.

Strategy 1.1 – New Golf Courses in Scottsdale should be developed in conformance with the *Environmental Principles for Golf Courses in the United States*. These Principles have been developed by the Center for Resource Management and endorsed by more than two dozen golf industry and environmental groups, including the United States Golf Association, the United States Environmental Protection Agency, the
American Association of Golf Course Architects, the National Golf Foundation, the National Wildlife Association, and the Golf Course Superintendents Association of America (a copy of the Principles are attached to this policy).

**Strategy 1.2** – The applicant has flexibility in determining how these environmental principles are incorporated into the project. Criteria for environmental management should be incorporated into the project either by:

a. Private review and enforcement through a recognized golf course certification program approved by the city, such as the Signature Certification program offered by Audubon International (or approved equivalent), OR

b. Preparation by the applicant of a **Resource Management Plan** to guide design, development and management of the course.

**Strategy 1.3** – Should the applicant choose to prepare and submit a **Resource Management Plan** (Strategy 1.2(b)) the following issues should be addressed by the Plan:

- Site Evaluation/Constraints and Sensitive Areas
- Water Quality
- Water Conservation/Plant Palette
- Detention/Retention Management
- Integrated Pest Management
- Air Quality
- Agronomic Considerations
- Waste Reduction and Management
- Energy Conservation
- Public Education
- Wildlife Habitat/Ecological Considerations
- Native Plant Preservation
- Pesticide Safety
- Environmental Management/Continuous Improvement
- Integration with Other Land Uses

**Strategy 1.4** – Ongoing golf course management should incorporate sustainability principles and should follow the Resource Management Plan submitted and approved with the use permit or as directed by the certification program for Audubon International or other equivalent certification program.
GOAL 2: Encourage existing golf facilities to improve environmental performance.

**Strategy 1.1** – A program to assist existing courses to enhance environmental sensitivity should be developed. This program should include education on the environmental and economic benefits of an environmental focus to course management through such actions as water conservation and chemical and waste reduction.

**Strategy 2.2** – For existing courses, a recognition and incentive program should be developed to recognize and encourage environmental awareness and sensitivity.

**Strategy 2.3** – This program should include recognition of the continuous improvement in the following areas:

- Water Conservation
- Chemical Storage and Management
- Integrated Pest Management
- Air Quality
- Waste Reduction
- Public Education
- Ecological Enhancements

GOAL 3: Encourage environmental sensitivity and resource protection in every phase of course development and management.

**Strategy 3.1** - Identification of wildlife habitat areas and environmentally sensitive areas should occur early in the site evaluation process and protection of these areas should be a basis for site design of the course.

**Strategy 3.2** – Grading and drainage of golf courses should be compatible with and reflect the character of their immediate environment.

**Strategy 3.3** – Effective Integrated Pest Management should be utilized by all golf courses as a way to minimize pesticide and herbicide usage.

**Strategy 3.4** – Transit connections, shuttles, and alternative transportation opportunities with hotels, resorts, and other user groups should be encouraged and incorporated into the siting and design of the course.

**Strategy 3.5** – Equipment utilized in the maintenance of golf courses and associated development should take into consideration that Scottsdale is in a non-attainment area for air pollutants.
Strategy 3.6 – Golf courses should be designed to respect natural features such as boulder outcroppings, washes, natural terrain, specimen or rare native plants, and views and vistas off the course.

Goal 4: Develop and communicate effective communication on the environmental benefits of golf courses developed, improved, or managed consistent with this policy (both future and existing courses).

Strategy 4.1 – Economic development efforts to attract future visitors and businesses to Scottsdale should include recognition of the environmental benefits of environmentally sensitive golf course development and maintenance. Golf course development should serve to position the city as a national leader in sensitive and compatible environmental design.

Strategy 4.2 – Golf courses are encouraged to display information regarding the course’s Resource Management Plan and the steps being taken by the course to promote environmental sensitivity.

Strategy 4.3 – Courses developed in Scottsdale should be developed in concert with our natural environment and should be promoted as unique recreational resources that cannot be duplicated elsewhere in the world.
II. Land Use Issues

Golf courses in Scottsdale represent a relatively large use of land. The 26 courses currently in operation in the city comprise over 5,000 acres, or just under eight square miles of area. As with other types of land use, golf courses can be sited to maximize positive land use relationships and planned and designed to provide value both to adjacent land uses and to the overall community.

**GOLF COURSE POLICY RECOMMENDATION – LAND USE:**
*Future golf course locations should appropriately and positively relate to other land uses in the community.*

**Goal 5: Anticipate potential future golf course locations and integrate them with other open space linkages.**

**Strategy 5.1** – Golf course locations should be designated on the General Plan Land Use Map and Open Space Map as symbols rather than as specific course layouts as currently designated.

**Strategy 5.2** – The anticipated locations of future golf courses should be generally shown on the General Plan Land Use Map and Open Space Map subject to refinement by future planning activities.

**Strategy 5.3** – Future golf course locations should relate to an overall open space network so that:

a. course location and design provides functional and or aesthetic linkages between adjacent open spaces in the network

b. the open space network can be continued and connected in a meaningful pattern

**GOAL 6: Golf courses should be effectively integrated into surrounding land uses, and managed so as to provide the highest benefit to the community.**

**Strategy 6.1** – Where appropriate, golf courses should be designed to incorporate active physical and visual connection to adjacent land uses while mitigating any negative impacts.

**Strategy 6.2** – Landscape buffers for golf courses should be designed to be low-water using plants consistent with the indigenous plants communities in which the course is located.

**Strategy 6.3** – The landscape palette selected for courses should be natural and consistent in plant densities and diversity of its natural desert setting.
**Strategy 6.4** – Artificial barriers, such as physical obstacles or non-native screening that prevent conflict between use of the course and vehicles, pedestrians, and residential structures should be avoided and their need mitigated through appropriate golf course design.

**Strategy 6.5** – Night lighting for driving ranges or other facilities and the use of outdoor public address and sound systems are discouraged unless the course is within an active developed core area in which lighting for other similar uses are approved. If approved, they should be designed, installed and managed so as not to impact nearby residential areas. Lighting should mainly consist of the low bollard types or in-ground lighting.

**Strategy 6.6** – Golf course designs and locations should reinforce community and neighborhood identity and lifestyles.

**Strategy 6.7** – Golf courses should avoid artificially separating neighborhoods and blocking neighborhood connections.
III. Economic Issues

Economic Impacts of Golf in Scottsdale

The golf industry has a substantial impact on the local economy. The 25 courses in Scottsdale employ 1,025 workers with a combined payroll of $22.6 million per year. The direct economic impact of those 25 courses is conservatively estimated at $45 million per year, with revenues of almost $676,000 in sales taxes in 1995. It is the indirect economic impact from tourists enjoying golf in Scottsdale, that provides economic benefits to the entire community. In addition to playing golf, tourists stay in Scottsdale hotels and resorts, eat at local restaurants, and shopping at local businesses. The indirect revenues generated from golf can be four or five times the amount of direct revenues.

Recreation Impacts

The majority of play was enjoyed by local residents. Because golf can be played year-round, and because 43% of the Scottsdale courses are open to the public, golf is among the most popular sports activities among Scottsdale residents. It is estimated that 23,000 of Scottsdale residents play golf. While the recreational benefit of golf cannot be qualified, but it is certainly one of the activities and spectator sports for which Valley has become known. Each year, the Phoenix Open, Tradition, and World Championship of Golf collectively draw 200,000 spectators and national television attention to Scottsdale.

Tourism

Tourism accounted for 40% of all play on Scottsdale courses in 1995. 31% of tourists indicated that golf was one of the activities they participated in while visiting Scottsdale. Tourists supplied 66% of the revenues generated on resort/semi-private courses and 36% of revenues from public courses.

Trends

While nationally the growth in golf course development has leveled off, the Valley is expected to continue to grow as a desirable golf destination. Market projections for Scottsdale indicate even greater potential growth than for the Valley as a whole.

Development Impacts

Residential developments in Scottsdale often incorporate golf courses into development plans, both as an additional amenity for future residents and as a way to add value to residential properties along the golf course. Scottsdale’s private golf courses have contributed significantly
to Scottsdale’s image and reputation as one of the most desirable, attractive residential locations in the country. These courses generate high property values and tax revenues which contribute substantially to the city’s economy. While private courses developed in this way do not generate the sales tax revenues that resort and public courses generate, the additional value of these private courses promotes an exclusivity that generates activity in other sectors of the local economy.

**GOLF COURSE POLICY RECOMMENDATION – ECONOMIC:**

The economic return to the community of the golf course industry in Scottsdale should be maximized.

**GOAL 7: Maintain an appropriate balance between public and private golf courses in the community.**

**Strategy 7.1** – Golf course development in Scottsdale should be encouraged within the parameters established by this policy.

**Strategy 7.2** – The development of public courses and resort-related courses should be encouraged because of their financial return to the community.

**Strategy 7.3** – Continue to collect and evaluate data that provides insight on the impact of future golf courses on the long-term economic sustainability of the community.

**GOAL 8: Educate and inform the community, tourists, and spectators on the economic benefits derived from Scottsdale’s golf courses.**

**Strategy 8.1** – Accurate economic data should be collected and made available to the community on the achievements of golf courses developed consistent with this policy.

**Strategy 8.2** – The long-term impact of golf courses on the economic sustainability of Scottsdale should be projected and communicated.

**GOAL 9: Encourage golf as a continuing recreational opportunity for Scottsdale’s residents.**

**Strategy 9.1** – The development and operation of privately operated golf courses that are open to the public should be encouraged as a recreational amenity for city residents.

**Strategy 9.2** – The city should consider making the recreational opportunities of golf available to more residents through the operation of municipal golf courses.

**Strategy 9.3** – Opportunities to make golf more affordable for Scottsdale’s residents should be explored and discussed. Potential options include public/private partnerships, golf training facilities, and youth programs.
IV. OPEN SPACE ISSUES

Open space is a critical part of what many residents identify as the most important aspect of Scottsdale’s lifestyle and character. CityShape 2020 identified “preserving meaningful open space” as a Guiding Principle in future development, and Visioning proposed that the Sonoran Desert as a dominant theme in the city’s plans. Golf is an outdoor recreational activity which can incorporate a spectacular desert experience. Most new courses are integrated into a desert setting, and have utilized that setting to enhance the economic potential of the course, either through sales of residential lots, appeal to the playing public, or in association with a resort or other facility.

Less attention has been focused on the integration of golf facilities with other types of open spaces. Economic considerations have historically driven locational decisions for new courses, and the open space network has developed as a result of the locations chosen.

The Desert Preservation Task Force has developed definitions and descriptions of “meaningful desert open space” which will assist in applying this concept to new golf courses. Meaningful desert open space is defined in the Task Force Report as “open space that due to its size, function, visibility, accessibility, and/or its strategic location is a community amenity or resource. Meaningful desert open space is open space that the community can access or see. It is also open space that serves to protect a significant ecological area.” The report goes on to say that meaningful desert open space is divided into three categories: accessible desert open space, and desert character open space.

Future golf courses can provide a mechanism to evaluate efforts to integrate open space into the community’s vision for the future. The integration of golf courses into a community network of a variety of types of open spaces can ensure that ecological, environmental, and recreational goals can be achieved.

GOLF COURSE POLICY RECOMMENDATION – OPEN SPACE:
Golf Courses should be an integral part of the open space network of the community.

**GOAL 10: Encourage that golf courses be a part of, and contribute value and diversity to, a system of meaningful open space providing aesthetic, recreational, and environmental benefit to the community.**

**Strategy 10.1** – Golf Courses should be designed and maintained to provide aesthetic and/or functional linkages between other spaces to create an open space network throughout the community.

**Strategy 10.2** – Golf course locations encourage an open space relationship with other planned or existing regional open spaces should be encouraged.
Strategy 10.3 – Wildlife habitat and wildlife movement should be encouraged by connecting undisturbed open space and primary habitats between adjacent developments. Significant habitats should be preserved and integrated into the design of the course.

Strategy 10.4 – Where appropriate, golf courses should be designed to provide or allow for planned access by pedestrian and equestrian usage if existing or planned linkages on adjacent properties require a connection. This access could be provided 1) on the perimeter of the course and be buffered so as to prevent conflict with golf usage, or 2) on another portion of the development on which the course is located.

Strategy 10.5 – The Natural Area Open Space reduction for golf courses allowed in the Environmentally Sensitive Lands Ordinance should be amended so as to apply only to future golf courses that provide “meaningful open space” as defined in this policy.
V. WATER SUPPLY AND INFRASTRUCTURE ISSUES

Many observers assume that golf courses use proportionally more water than other types of land uses. Although that ratio depends upon what land use a golf course is being compared to, the turf areas of golf courses depend upon water to maintain the quality of play that visitors and residents alike expect on the courses in Scottsdale. Because of water use restrictions, costs associated with turf maintenance, and the amenities provided by “desert character” open space, new courses are now limiting the total amount of turf area.

Current City policy does not allow the use of local groundwater, potable water, or existing City water rights for new golf course construction. Golf courses are responsible for obtaining their own water rights for new golf course construction. Golf courses are responsible for obtaining their own water supply so that existing Scottsdale customers are not negatively affected. The availability of water to supply golf courses now and into the future is a critical consideration of the “sustainability” of golf as a land use in Scottsdale.

GOLF COURSE POLICY RECOMMENDATION – WATER SUPPLY AND INFRASTRUCTURE: Future golf courses will find alternative innovative water sources and not rely on groundwater, potable water, or city water rights to meet their water needs.

GOAL 11: Golf courses should develop a separate and distinct water supply and delivery system so as not to negatively impact service to the overall community or divert potable water available for citizen consumption.

Strategy 11.1 – The installation of individual water supply and delivery systems are discouraged within the City.

Strategy 11.2 – A cooperative delivery system separate from the City’s potable water system, similar to the existing Reclaimed Water Distribution System (RWDS) should be constructed for the delivery of non-potable water to future golf courses. This delivery system should be paid for by proposed golf courses, but should be owned and operated by the City.

Strategy 11.3 – New water rights adequate to supply future golf course demands shall be identified by proposed golf courses to the city as part of this new cooperative delivery system.

Strategy 11.4 – Water rights obtained for golf course irrigation, and the infrastructure needed to deliver that water shall be adequate to accommodate peak irrigation demand in the summer months or during overseeding periods.

Strategy 11.5 – All future golf courses must enter into a pipeline capacity agreement with the City that covers relevant infrastructure, water supply, water delivery, fee payment, and rate schedule issues.
Strategy 11.6 – Every new golf course shall establish an emergency potable back-up water supply through connection to the potable water system at the golf course” expense and by the payment of a Water Resources Development Fee according to the terms of the golf course” pipeline capacity agreement.

Strategy 11.7 – Any use permit for a golf course granted prior to water rights being obtained or a cooperative delivery system being in place shall be subject to stipulations requiring the golf course to obtain water rights and participate in the cooperative system. Agreements shall be established to clarify that the City has no obligation to provide water or construct a delivery system, and that the use permit can expire if these stipulations are not met.

Strategy 11.8 – New golf courses shall, whenever possible, utilize excess reclaimed effluent which is available from the City’s Water Campus Reclamation Facility and which is not being utilized by the Reclaimed Water Distribution System (RWDS) allottees.

GOAL 12: Continuous efforts to reduce water usage, in both existing and future golf courses, is encouraged.

Strategy 12.1 – Golf Courses must comply with all Arizona Department of Water Resources and City of Scottsdale water conservation requirements and shall make water conversation a critical priority in course design. This includes not only in layout of turf areas but in conservation-oriented turfgrass selection as well as plant palette, water conserving appliances, fixtures and systems in all course buildings and facilities.

Strategy 12.2 – The utilization of new and innovative technology, as well as the application of proven technology to decrease overall water use should be encouraged.
ACTIONS NEEDED TO IMPLEMENT
THE GOLF COURSE POLICY

Because this policy is not formally adopted and is intended to offer direction and guidance, it is not formally adopted as an ordinance or resolution. Some recommendations contained in this policy would require changes to some of the city’s procedures and ordinance language. The first five actions would be taken to implement the changes recommended in the policy, and the sixth action is recommended to continue the discussion of open space with the study of a more broad Open Space Policy.

1. **Establishment of the criteria for the Resource Management Plans** for future golf courses. This process has already begun, with representatives of the Arizona Golf Association, local course superintendents, and other interested parties participating.

2. **Amendment of the Environmentally Sensitive Lands Ordinance** to allow open space credit for turf only if the golf course meets the criteria for “meaningful open space” as defined by the Desert Preservation Task Force.

3. **Amendment of the General Plan** to 1) Designate golf courses as a symbol instead of the detailed graphics currently used, and 2) Show generalized locations of future courses.

4. **Amendment of the Zoning Ordinance** to include the submittal of the Resource Management Plan as a part of the Use Permit process and allow for approval either by the city or by a recognized and established certifying agency approved by the city.

5. **Develop a Recognition and Incentive Program** to encourage existing golf courses to continuously improve and enhance environmental performance.

ADDITIONAL ACTION RECOMMENDED:

6. **Study the larger issue of a community Open Space Policy** and the development of a policy to effectively create an open space network. This could include golf courses, parks, desert preservation open space, recreation areas, and other open spaces.