



City of Scottsdale, Arizona A Culture of Sustainability

Photo: Chris Brown

Scottsdale has long been recognized as an environmental leader and continually seeks ways to be more environmentally conscious. Sustainability in Scottsdale refers to the long-term social, economic and environmental health of the community. This document focuses on Scottsdale's environmental efforts.



Photo: Jerry Gollubier

“Scottsdale is committed to the effective management of its environmental, economic and social resources to ensure that they serve future needs.”

2001 Scottsdale General Plan

The City of Scottsdale’s General Plan was designed around six guiding principles developed by citizens to implement the City’s vision. One of those principles is to Seek Sustainability. This document describes the culture of environmental sustainability valued by our citizens and carried out by our City’s operational services.

OPEN SPACE AND PRESERVATION

Preserving open space is a priority for the citizens of Scottsdale. The city has an extensive natural and developed network of open space. One well known example is the Indian Bend Wash (IBW), where instead of building a concrete drainage channel, the city turned the entire IBW into an active green belt which runs through the heart of the city. As a component of 940 acres of developed open space within the city, the IBW provides numerous recreation opportunities while providing flood protection.

Scottsdale’s McDowell Sonoran Preserve

In 1995 and 1998, the citizens of Scottsdale voted to tax themselves to establish the McDowell Sonoran Preserve. To date the City has protected approximately 27,800 acres of pristine Sonoran desert. The City anticipates adding 2,400 acres in late 2013, and is well on its way to the planned 36,400 acres. The planned preserve will be equivalent to one-third of Scottsdale’s total land area and offers recreational activities such as hiking, biking and horseback riding. At its completion, the McDowell Sonoran Preserve will be one of the largest urban preserves in the United States.

The Scottsdale McDowell Sonoran Preserve is projected to be approximately 36,400 acres, larger in area than the City of San Francisco.

Environmentally Sensitive Lands

The Environmentally Sensitive Lands Ordinance (ESLO) is an effort to preserve pristine upper Sonoran desert and mountain areas in Scottsdale. Established in 1991, the ordinance

requires private development to permanently preserve a percentage of on-site natural area open space, ensuring that environmental features, including native vegetation, washes, boulders and mountain peaks are protected. Since its adoption, the ESLO has preserved over 9,000 acres of private native desert.

As a precursor to ESLO, in 1981 the city adopted the Native Plant Ordinance in an effort to protect indigenous large cacti and trees. This forward-thinking set of regulations was established to preserve the unique native character of the Sonoran Desert under a system of responsible development. Since the program began, over 40,000 native plants have been identified for salvage with a 90% survival rate.

Community Connectivity

Scottsdale residents enjoy an interconnected open space system that maintains visual and functional linkages throughout the City and region. These linkages include scenic corridors, trails and shared use pathways. The City features 119 miles of paved shared use paths, 290 miles of unpaved trails, 123 miles of bike lanes and paved shoulders and 112 miles of bike routes.

GREEN BUILDING

Private

In 1998, Scottsdale established Arizona’s first and the nation’s fifth Green Building Program. In addition, the city has adopted the 2012 International Green Construction Code (IgCC) as the core of Scottsdale’s voluntary Commercial Green Building Program. During the Green Building Design and Construction

By investing in community forestry and tree care, Scottsdale has been honored as a “Tree City USA” for over 30 consecutive years.

Scottsdale is a “Bicycle Friendly Community,” awarded the Gold Level by the League of American Bicyclists.



phases, the city issues green building permits, performs green building inspections and issues green Certificates of Occupancy (C of O's).

The City now requires that all new and renovated residential and commercial buildings meet the 2012 International Energy Conservation Code (IECC). Local realtors have indicated that green and energy efficient properties are popular and may have higher resale values and may spend less time on the market.

Municipal

In 2005, Scottsdale was the first city in the United States to adopt a LEED Gold standard for new city buildings and remodels. Today, the City has constructed nine LEED Certified civic facilities, four of which are LEED Platinum Certified.

Scottsdale constructed the first LEED Platinum certified fire station in the nation.



Education

The City's Green Building & Solar lecture series is a free resource provided to the community to encourage efficient, healthy and environmentally-responsible building practices.

WATER RESOURCES

Water Quality

The Scottsdale Water Resources Department is committed to providing the highest quality drinking water and the best service to its customers. The City performs hundreds of different tests on a regular basis to ensure the water our customers are drinking meets or exceeds the standards set by the Environmental Protection Agency (EPA). Water Resources staff works closely with the EPA, state and county officials to make certain all drinking water standards are met every time you open a tap at your home or business.

Water Supply

Historically, Scottsdale was 100% dependent upon groundwater for its water needs. Today, Scottsdale meets more than 80% of its customers' water demands primarily with surface water. In 2010, only 19% of the city's water was supplied by wells.

In the mid 1980's, the City began to assemble a diversified multi-faceted water resources portfolio intended to provide the community with a long-term sustainable water supply. This portfolio includes surface water supplies, groundwater resources and reclaimed water.

Water Recharge and Reclamation

By reducing the amount of water pumped from wells and increasing the amount of treated surface water recharged into the aquifer, the City has achieved what is known as a safe-yield (pumping less ground water than recharged). The City has maintained this status since 2006. This will ensure a reliable water supply for future generations.

Today the City treats and delivers over 26 billion gallons of drinking water each year. In addition, Scottsdale uses 2.3 billion gallons of treated reclaimed water to irrigate 23 local golf courses. The remaining reclaimed water produced is treated to high standards and combined with Central Arizona Project water and then also used to recharge the groundwater aquifer.

LANDFILL DIVERSION AND RECYCLING

Scottsdale pioneered residential automated solid waste collection with the introduction of "Godzilla" in 1969. Today, hundreds of cities across the country use single operator side load systems fashioned after the prototype developed by a Scottsdale Employee. "Godzilla" inventor and city employee Marc Stragier was elected unanimously to the Environmental Industries Association Hall of Fame in 2000.

The City's unique geography necessitated the construction of a solid waste transfer station in the northern part of the City. The transfer station saves the collection vehicles from traveling 420,000 miles each year and results in over \$400,000 in annual estimated fuel savings.

Landfill Diversion

Scottsdale began offering curb side residential recycling in 1996. Scottsdale's recycling programs successfully diverts over 20% or over 31,000 tons of municipal waste from the landfill annually, making Scottsdale a leader in landfill diversion. The City offers a variety of free events, such as electronics recycling and household hazardous waste collection days. These two programs alone divert

over 130 tons of waste each year. Scottsdale offers a move-in box pickup program, commercial recycling and educational programs.

ENVIRONMENTAL HEALTH

Air Quality

The quality of air we breathe directly affects our health, environment, economy and quality of life. Air quality is a regional issue, and together, regional and local governments are taking steps to improve our air quality. The City of Scottsdale coordinates with Maricopa Association of Governments to monitor and report on three air quality indicators: particulate matter, carbon monoxide and ozone.

Fleet Operations

In an effort to improve air quality, since 2004, 75% of the city's eligible vehicles (excluding Emergency Response vehicles) operate on alternative fuels, such as ethanol, compressed natural gas (CNG), electricity and biodiesel. The City continues to expand its fleet of CNG powered and hybrid waste collection vehicles.

Stormwater Re-mediation

Scottsdale's Stormwater Quality Program educates citizens on how to properly dispose of chemicals. Proper management prevents contaminated stormwater from entering the City's wastewater treatment plants, as well as our washes, rivers and lakes.

Access to Locally Grown Food

Scottsdale's Farmers Markets provide farm-fresh, locally-grown food, as well as arts and crafts to residents and visitors. The

City also promotes community gardening and encourages the incorporation small grocers near residential areas.

ENERGY

Traffic Control Signals and Roadway Lighting

During the past decade, Scottsdale has converted all traffic control signals to LED lamp technology. Compared to prior usage of incandescent lamps this conversion reduced the average energy usage by 90% and extended the lamp lifespan ten-fold.

In 2010 the City began replacing streetlight fixtures with energy-efficient LED light fixtures. Approximately 25% of the city's streetlight inventory is now LED. It is a standard now that when new streetlights are installed they are to be LED. The City of Scottsdale has also adopted a "net-zero" energy policy, as part of its streetlight program. This means that future energy demands for street lighting may not exceed current energy consumption. For every new streetlight that is installed, a proportionate number of streetlight fixtures must be converted to energy efficient lighting elsewhere in the City to ensure energy demand does not increase above current consumption levels. The City has been a leader in energy efficiency by participating in the Green Lights Initiative and City Lights program.

Solar

The City of Scottsdale produces energy through photo voltaic panels on multiple City facilities. Today, the City has a total solar power generation capacity of 570 kW producing approximately 951,775 kWh of annual electricity. This is equivalent to powering 68 homes (avg. 14,000 kWh per home) and reducing 999,365 pounds of power plant CO2 emissions per year.

SCOTTSDALE AT A GLANCE

Community Characteristics

2010 Population:	217,385
2010 Housing Units:	124,001
Median Household Income (2010):	\$71,564
Median Age (2010):	45.4
Planning Area:	182.4 sq. Miles
Annual Average Rainfall:	7.74 inches
Annual Sunshine Days:	314 days
Average Minimum Temp:	55.7°
Average Maximum Temp:	84.6°

Source: 2010 US Census, American Community Survey 2006-2010, Sites USA 2010

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(480) 312-7833 Revised 7/31/2013

