



CHAPTER 7

ENVIRONMENTAL PLANNING



Eastern Canal

Vision Statement

Gilbert recognizes its environmental stewardship and is committed to being in the forefront as it plans, manages and conserves resources.



Cosmo Park



INTRODUCTION

The Environmental Planning Element of the General Plan describes Gilbert’s efforts in the area of environmental sustainability and provides a framework for development that conserves resources and protects Gilbert’s residents. It is presented in the following sections:

- Existing Conditions
 - A. Water Resources
 - B. Water Conservation
 - C. Water Quality
 - D. Air Quality, Dust Control, Ozone, Land Use Practices, Trip Reduction Plan, Alternative Fuel Vehicle Program
 - E. Noise Attenuation
 - F. Stormwater Quality
 - G. Pollution Prevention
 - H. Cultural and Historic Resources
 - I. Hazardous Waste, Recycling and Sanitary Waste
 - J. Environmental Justice Awareness
 - K. Green Building
 - L. Urban Heat Island Effect
 - M. Fissure Identification and Mitigation

- Goals and Policies
- Planning Guidelines
- Implementation Strategies



ENVIRONMENTAL PLANNING

7.1 Existing Conditions

Gilbert is active in safeguarding the environment for current and future generations. The following sections describe current and planned efforts in key environmental areas:

A) Water Resources

The purpose of the water resources section of this element is to address the water supplies available to meet current and future demand in Gilbert. The physical and legal availability of water supplies will be described as well as the future direction of water resources planning in order to meet build-out demand as projected in the General Plan. Gilbert's plan to meet existing and future water demands is detailed in its Integrated Water Resources Master Plan which is periodically updated, with the last revision occurring in 2006, and should be referred to for additional information.

Current Water Use

Potable (drinkable) water production for the year 2011 totaled 47,595 acre-feet, which served a population of 212,084. The residential and non-residential sectors water demand was 70% and 30% respectively. Gilbert is divided into four water supply zones for the purpose of maintaining a consistent water delivery pressure of 60 to 70 pounds per square inch (psi) throughout the service area.

Gilbert Water Resources Facilities

Gilbert has a variety of water resource facilities, including two surface water treatment plants, two waste water treatment plants, multiple wells, and groundwater recharge facilities.

Surface Water Treatment Plants and Wells

Gilbert relied solely upon wells to meet the potable water demand until 1996, when the North Water Treatment Plant came on line. The plant was originally constructed to treat 15 million gallons per day (MGD), and in 2002, the capacity was

expanded to treat up to 40 MGD, with a more recent expansion allowing for the treatment of up to 45 MGD.

The SanTan Vista Water Treatment Plant, built in partnership with the City of Chandler, became operational in 2009. This plant is located in Gilbert's south planning area and will have the capacity to treat Gilbert's current full Central Arizona Project (CAP) allocation at build-out. (See "Colorado River Water" in the next section for more details.) Currently, the plant can treat 24 MGD, half of which is allocated to Gilbert. Planned expansion of the plant is up to 48 MGD, with half being allocated to Gilbert. Timing of the expansion will depend upon growth.

Gilbert currently has 18 potable wells located throughout the service area, which have the capacity to produce 41.6 MGD of potable water. A total of 25 potable wells are planned to help meet the water demand at build-out with an expected production capacity of 55 MGD.

Water Supply

Gilbert's planning area is comprised of approximately 45,000 acres. Approximately 11,600 acres have water rights from Salt River Project (SRP) and 20,815 acres have water rights from the Roosevelt Water Conservation District (RWCD). These rights are legally deemed appurtenant to the land, which means the water is "attached" to that portion of land and cannot be used elsewhere. The amount of water received by Gilbert is dependent upon the amount of lands within these service areas that have been urbanized, or taken out of agricultural production. The amount of water available to the SRP and RWCD lands is variable and will be addressed separately.

Salt River Project

Gilbert's lands located within SRP's service area are entitled to an allocation of surface water and groundwater that is quantified on an annual basis by SRP, taking into account the quantity of water stored and flows on the Salt and Verde River systems. During a normal precipitation year, this entitlement is comprised of two acre-feet of surface water and one acre-foot of groundwater per acre of land. (An acre-foot of water is equal to 325,851 gallons or enough to meet the average water demands for two families of four for one year).

Roosevelt Water Conservation District

Gilbert's lands located within RWCD's service area are also entitled to an allocation of surface and ground water. Gilbert only utilizes the surface water component of RWCD water, which during a normal water year varies from 0.2 to 0.6 acre-feet of water per acre of land. This water, as well as the surface water received from SRP, is

treated to drinking water standards at the North Water Treatment Plant and delivered to our customers.

Colorado River Water

Gilbert receives Colorado River water delivered through the Central Arizona Project (CAP) Canal which is operated by the Central Arizona Water Conservation District (CAWCD). This water is pumped from the Colorado River at Lake Havasu and delivered to Maricopa, Pima, and Pinal Counties. Colorado River water has many monikers, identifying it by legal right and priority, which is described in the Town's Integrated Water Resources Master Plan. Gilbert is entitled to Colorado River water labeled as sub-contract water, RWCD assignment water, Wellton-Mohawk lease water, and Salt River Pima Maricopa Indian Community (SRPMIC) lease water. Additionally, Gilbert entered into an agreement in 2008 with the White Mountain Apache Tribe (WMAT) for lease water obtained through an exchange of SRP and RWCD surface water. Once ratified by Congress, this water should be available by 2021. Gilbert also has access to excess CAP water when it is available.

Colorado River water is treated to drinking water standards at both the North and the SanTan Vista Water Treatment Plants, and can be used anywhere throughout Gilbert's planning area. Colorado River water can also be recharged at any of the recharge facilities which are described below for the purpose of earning Long Term Storage Credits.

Arizona Department of Water Resources (ADWR)

The 1980 Arizona Groundwater Management Act (GMA) requires that municipalities and other water providers located within an Active Management Area (AMA) reduce their groundwater consumption through the development of renewable supplies by the year 2025. The ADWR, which was created to implement the GMA, developed the Assured Water Supply (AWS) designation program for water providers, which requires a provider to prove an adequate supply of renewable potable water supplies to meet demand for 100 years. On September 29, 2010, Gilbert received its designation of AWS effective through year end 2025.

One of the founding principles of the GMA was to bring the State of Arizona into Safe Yield. Safe Yield is defined as the balance between groundwater withdrawal and natural and/or artificial recharge. As part of the AWS requirements, Gilbert continues to reduce groundwater pumping and develop alternative renewable supplies. Groundwater use is allowable if its use is consistent with the goal of Safe Yield, which allows for groundwater pumping to be "offset" by credits stored previously under the Long Term Storage Credits scenario. Gilbert also participates in

a recharge credit recovery program with SRP for groundwater pumping occurring on SRP lands.

Water Supply Summary

As of August 2010, Gilbert has been designated as having an adequate water supply through the ADWR's AWS program to meet the service area's water demands through 2025. Although ADWR has determined that Gilbert has adequate supplies to meet customer demands through 2025, a portion of those supplies are Long Term Storage Credits, which will be extinguished to offset future groundwater pumping. As this is a finite supply, Gilbert will continue to proactively seek additional renewable supplies in an effort to minimize the budget impact of acquiring such supplies.

Water Reclamation Facilities (WRF)

Gilbert currently operates two water reclamation facilities (WRF) that treat sewage and produce A+ quality reclaimed water, with a loss of approximately 8 to 10% of the influent total to sludge (solids) treatment. The Neely WRF has a treatment capacity of 11 Million Gallons per Day (MGD). The Greenfield WRF is a joint facility operated in partnership with the City of Mesa and the Town of Queen Creek. The plant capacity is currently 16 MGD, with 8 MGD of capacity available to Gilbert, and is planned to be expanded to treat up to 42 MGD, with Gilbert's share of the capacity at 16 MGD.

Reclaimed Water

For 2009, Gilbert produced 11.32 MGD of reclaimed water, which equates to 12,683 acre-feet at the WRF's. Gilbert reuses a portion of this water through direct delivery to customers such as HOA's, schools, parks, churches, golf courses and Town park facilities.

Recharge of reclaimed water is also an important component for Gilbert's water portfolio. Reclaimed water recharge credits are accumulated and are used to offset groundwater pumping in a recharge/recovery scenario, as well as for the development of Long Term Storage Credits. Gilbert recharged 8,553 acre-feet of reclaimed water in 2009 within its service area.

Recharge Facilities

In the early 1980's, Gilbert committed to reusing 100% of the reclaimed water produced through direct reuse and recharge. Reclaimed water is wastewater that has been treated at the WRF to a standard acceptable for recharge and reuse. Gilbert

recharges water for the purpose of accumulating Long Term Storage Credits, which are utilized to offset current and future groundwater pumping, as well as to firm up the Assured Water Supply (see section on ADWR). Gilbert recharges unused surface water from Salt River Project and CAP, as well as unused reclaimed water that is not directly delivered to a reclaimed water customer.

Recharge facilities consisting of percolation basins and injection wells deliver reclaimed water to the aquifer (natural underground water storage) through infiltration. Current recharge facilities and permitted recharge amounts include:

- The Neely Recharge Facility at 2.9 MGD (though it is currently limited to 800,000 GPD until the TCE contamination at a former industrial site nearby has been mitigated)
- The Riparian Preserve Recharge Facility at 8 MGD, and
- The South Recharge Site at 9 MGD (upon completion of construction of basins and addition of five (5) vadose zone injection wells)
- Two (2) vadose zone injection wells located at the municipal center are permitted to inject up to 1 MGD of reclaimed water directly into the ground. Three more injection wells will be constructed in the future at sites yet to be determined.

The Town also participates in water recharge at other facilities located throughout the Phoenix Active Management Area. Gilbert owns 3% of the capacity of the Granite Reef Underground Storage Project (GRUSP), which equates to approximately 3,000 acre-feet of recharge capacity per year. The Town also recharges CAP water at the Agua Fria and Tonopah Recharge projects, which are facilities owned and operated by the Central Arizona Water Conservation District (CAWCD).

Groundwater Savings Facilities (GSF) operated by irrigation districts, offer the Town additional recharge capability, and Gilbert is permitted to participate with Queen Creek Irrigation District, New Magma Irrigation District, Roosevelt Water Conservation District and Salt River Project.

Meeting Future Demand

Build-out demand is based upon Gilbert's assured water supply total system demand target goal of 220 gallons per person per day. Gilbert is divided into four (4) zones, see page 9 in this Chapter for a visual description, and the demand at build-out by residential and non-residential sector has been determined by zone. To meet this future demand, Gilbert intends to but is not necessarily limited to:

- Enter into short term and/or long term leases with local Native American tribes for additional CAP water
- Acquire additional CAP and other available water supplies
- Continue to earn Long Term Storage Credits by partnering with local GSF's and direct recharge facilities
- Continue to make beneficial use of reclaimed water through direct reuse, recharge and recovery and accumulation of annual storage credits through recharge.

A “safety margin” should be added to the projected future water demand at build-out to reflect unexpected needs for water that may occur.

Drought Planning

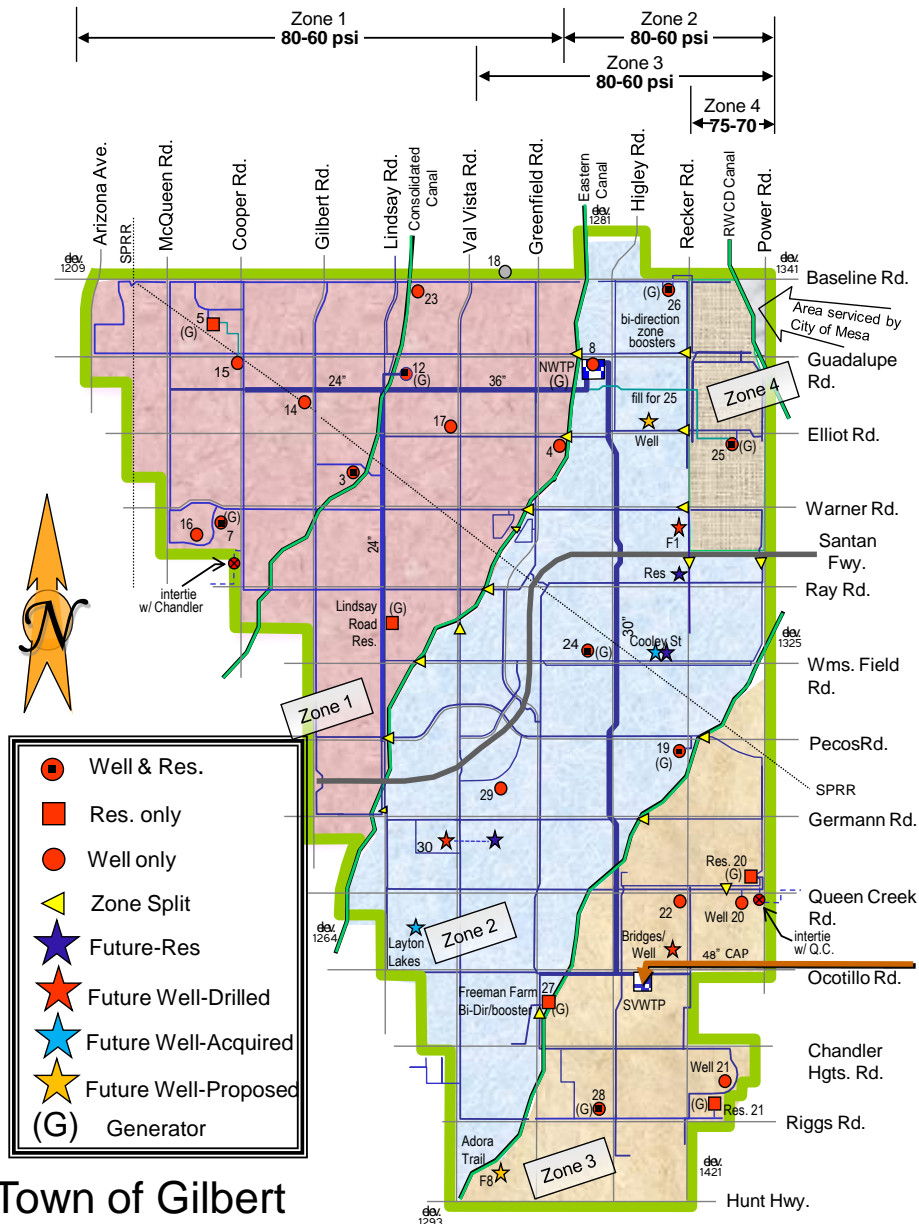
Surface water supplies, SRP and CAP, will be subject to occasional reductions due to decreased precipitation on the watersheds. The latest CAP system studies show the Colorado River has the possibility of shortages beginning around 2025, due in part to the Upper Basin States fully utilizing their full Colorado River allocation and less precipitation on the watershed.

The Arizona Water Banking Authority (AWBA) is tasked with firming up to 20% of the Municipal water entitlement through the recovery of previously recharged Colorado River water, which for Gilbert, equates to 1,447 acre-feet per year (7,235 acre-feet X 20%). CAWCD is continuing discussions on the development of a recovery plan in order to facilitate the AWBA's firming requirements.

During surface water supply shortages, Gilbert can submit a groundwater pumping exemption to the Director of ADWR. This action has the ability to exempt groundwater pumping from replenishment obligations, thereby allowing Gilbert to pump groundwater without having to extinguish an equal amount of accumulated Long Term Storage Credits.

In order to meet demand with occasional surface water shortages, Gilbert is developing water delivery system redundancy through well development to withdraw groundwater. The expectation is that at build-out, 80% of normal day demand could be met solely through well production if necessary.

To further ensure Gilbert has the ability to meet demand during shortages, Council approved the Water Supply Reduction Management Plan in June 2003. The Plan enables Town Management and Council to declare water shortage stages determined by a specific percentage reduction in surface water supply, with each stage requiring corresponding water conserving response actions.



Town of Gilbert Water System by Pressure Zones

May '10

Zone One includes the lands west of the Salt River Project's (SRP) Eastern Canal on the Eastern border and extends to the Town's Western border. These lands are identified as On-Project, or lands that have rights to Salt River Project water.

Zone Two is the land extending from the SRP Eastern Canal on the West side to the Roosevelt Water Conservation District (RWCD) canal on the Eastern border. This land has water rights to RWCD water.

Zone Three is the land between the Town's Eastern border and the RWCD canal on the Western border. This land has no surface water rights associated with it.

Zone Four is bordered on the North by Baseline Road, Warner Road on the south, Recker Road on the West, and Power Road on the East. This land lies within RWCD.

B) Water Conservation

The 1980 Arizona Groundwater Management Act (GMA) requires all municipalities within an active management area to implement water conservation programs. The Town of Gilbert is regulated by the Arizona Department of Water Resources (ADWR) Non Per Capita Conservation Program (NPCCP), which is comprised of a list of best management practices also known as Reasonable Conservation Measures (RCM's) that target residential and non-residential indoor and outdoor water uses.

Each current RCM is listed below. More information about how the Town is implementing the RCMs is available from the Water Resources Department.

1. Water Audit and Fixture Retrofit Program for the Existing Residential Customers
2. Ordinance for Water Efficient Plumbing Fixtures in New Residential Housing Units
3. Exterior Audit Program for Existing Residential Customers
4. Landscape Watering Advice Program for Existing and New Residential Customers
5. Ordinance for Model Homes in New Residential Developments
6. Prohibit the Creation of New Covenants, Conditions, and Restrictions Which Require the Use of Water Intensive Landscaping in New Residential Developments
7. Limit Turf and Other Water Intensive Landscaping in Common Areas of New Single Family and Multi-Family Developments
8. Combined Non-Residential Interior and Exterior Audit Program for Existing Non-Residential Customers
9. Ordinance for Water Efficient Plumbing Fixtures in New Non-Residential Facilities
10. Distribution of Conservation Information to all New Non-Residential Customers and Submittal of a Water Use Plan by New Large Facilities
11. Landscape Ordinance for New Non-Residential Facilities
12. Public Information and Education

C) Water Quality

The primary purpose is to ensure Town of Gilbert water quality meets all applicable federal and state water quality standards. In order to ensure Gilbert's water quality, implementation strategies are provided as described below, to meet the applicable rules and regulations:

1. Ground Water Rules (GWR):

EPA issued the Ground Water Rule (GWR) to improve drinking water quality and provide additional protection from disease-causing microorganisms. The GWRs apply to public water systems that serve ground water. The rule also applies to any system that mixes surface and ground water if the ground water is added directly to the distribution system and provided to consumers without treatment.

Final Requirements

The targeted, risk-based strategy addresses risks through an approach that relies on four major components:

1. Periodic sanitary surveys of systems that require the evaluation of eight critical elements of a public water system and the identification of significant deficiencies.
2. Triggered source water monitoring when a system (that does not already treat drinking water to remove 99.99 percent (4-log) of viruses) identifies a positive sample during its Total Coliform Rule monitoring and assessment monitoring (at the option of the state) targeted at high-risk systems.
3. Corrective action is required for any system with a significant deficiency or source water fecal contamination.
4. Compliance monitoring to ensure that treatment technology installed to treat drinking water reliably achieves 99.99 percent (4-log) inactivation or removal of viruses.

2. Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR or LT2 rule)

EPA has developed the Long Term 2 Enhanced Surface Water Treatment Rule (LT2 rule) to improve drinking water quality and provide additional protection from disease-causing microorganisms and contaminants that can form during drinking water treatment. Systems initially monitor their water sources to determine treatment requirements over a two-year period. The Town of Gilbert has completed

this monitoring of the North Plant in 2006 and has received Bin 1 classification and will face no additional requirements. A second required round of monitoring will occur six years after completing the initial round to determine if source water conditions have changed significantly. The initial monitoring of the Santan Vista plant will be completed by December 2011.

3. Stage 2 Disinfectants and Disinfection Byproducts Rule (DBP rule)

The Stage 2 DBP rule is intended to reduce potential cancer and reproductive and developmental health risks from disinfection byproducts (DBPs) in drinking water, which form when disinfectants are used to control microbial pathogens.

Under the Stage 2 DBP rule, systems will conduct an evaluation of their distribution systems, known as an Initial Distribution System Evaluation (IDSE), to identify the locations with high disinfection byproduct concentrations. These locations will then be used by the systems as the sampling sites for Stage 2 DBP rule compliance monitoring. If the DBP levels at these locations are too high the system will start to take corrective actions. These actions could range from simple, quickly implemented management or operational changes to major construction projects.

4. UCMR 2 Rule

Gilbert is also required to monitor its water supply under the Unregulated Contaminant Monitoring Regulation (UCMR 2). All required monitoring under this program has either been completed or is underway.

5. Arsenic Rule

Arsenic rule sets a Maximum Contaminant Limit (MCL) and monitoring requirements for arsenic, a contaminant shown to cause cancer and other health effects. The revised rule reduces the MCL from 0.05 mg/L to 0.010 mg/L.

6. Radionuclides Rule

The new rule maintains the current MCLs for radium-226, radium-228 and requires systems to monitor for the regulated radionuclides at each entry point to the distribution system. The radionuclides rule sets MCLs as well as monitoring, reporting and public notification requirements.

7. Radon Rule

The Radon Rule aims to reduce people's exposure to radon in drinking water and in indoor air. Under the proposed rule, states would have the option to develop a multimedia mitigation program to address radon in both indoor air as well as drinking water.

8. Consumer Confidence Report Rule

The CCR is required to keep consumers informed about the quality of their drinking water. A CCR is a report of water quality over the preceding year and includes health effects information on source water, contaminants found in the water and violations. This report is provided annually to Gilbert water users and is available on the municipal website.

D) Air Quality, Dust Control, Ozone, Land Use Practice, Alternative Fuel Vehicle Program, Trip Reduction Plan

1. Air Quality

In 1990, when the Federal Clean Air Act was revised, Maricopa County was listed as Moderate in terms of PM₁₀ pollution. The deadline for Maricopa County to come into compliance with national standards was 1994; Arizona failed to come into compliance and was elevated to Serious, the highest level of PM pollution.

The State is under federal mandate to reduce particulate pollution by 5% per year until attainment has been reached and has drafted a State Implementation Plan (SIP). In addition to the SIP, Arizona has drafted the 5% Plan, which states that the State will reduce PM by 5% each year until compliance is achieved. Through the 5% plan, the State has tasked Maricopa County as well as local municipalities with reducing particulate matter in the air.

2. Dust Control

Gilbert has enacted two ordinances to meet its obligations to the 5% Plan. Ordinance 1090 sets standards and enforcement for activity on vacant lots and Ordinance 1091 sets standards and enforcement for unpaved parking lots. Gilbert employees routinely practice dust control measures on Gilbert owned vacant property such as restricting access and applying a soil crust to maintain stability. Maricopa County has also passed ordinances having to do with residential wood burning, off highway vehicles, leaf blowers and vehicle idling restrictions.

3. Ozone

In 2008, the Environmental Protection Agency (EPA) revised the ozone standard and lowered the previous 8-hour standard from 0.08 parts per million (PPM) to 0.075 PPM. At the time this document was prepared, the State of Arizona was waiting for the EPA to respond to the Governor's recommendations for revising the boundaries of the ozone nonattainment area to address the new 2008 standard.

On January 6, 2010, EPA proposed to strengthen the primary 8-hour standard to a level within the range of 0.060-0.070 PPM and establish a secondary standard with a range of 7-15 PPM-hours.

4. Land Use Practice

Land use practices should be promoted that encourage alternative methods of transportation and reduce the types of emissions as noted above. Land use considerations should also include efforts to minimize driving times and distances from homes to place of employment. Infill development, mixed-use development projects, home-based businesses, walkable developments, dust control and implementation of fiber optics and other technological innovations also help reduce emissions by reducing commuting times and distances. A regional transportation system including a commuter rail link between ASU Polytechnic and the rest of Greater Phoenix is also encouraged.

5. Alternative Fuel Vehicle Program

While Gilbert does not currently have an official policy or procedure for alternate fuel vehicles, Gilbert is a member of Arizona Clean Cities and tracks movement and advancements in the alternative fuel industry and will continue to do so. A goal is to continue to explore opportunities and advancements in new technologies for economical, clean and fuel efficient vehicles.

6. Trip Reduction Plan

The 1988 Air Quality Bill (ARS 49-581 et seq.) mandated a Trip Reduction Program (TRP) for employers and schools in Maricopa County. The current county ordinances that resulted from this law affect employers and schools with 50 or more employees and/or driving-age students.

Maricopa County has asked employers and schools to reduce single occupant vehicle (SOV) trips and/or miles traveled to the work site by 10 percent a year for a total of five years and then 5 percent for three additional years or until a 60 percent rate of SOV travel is reached.

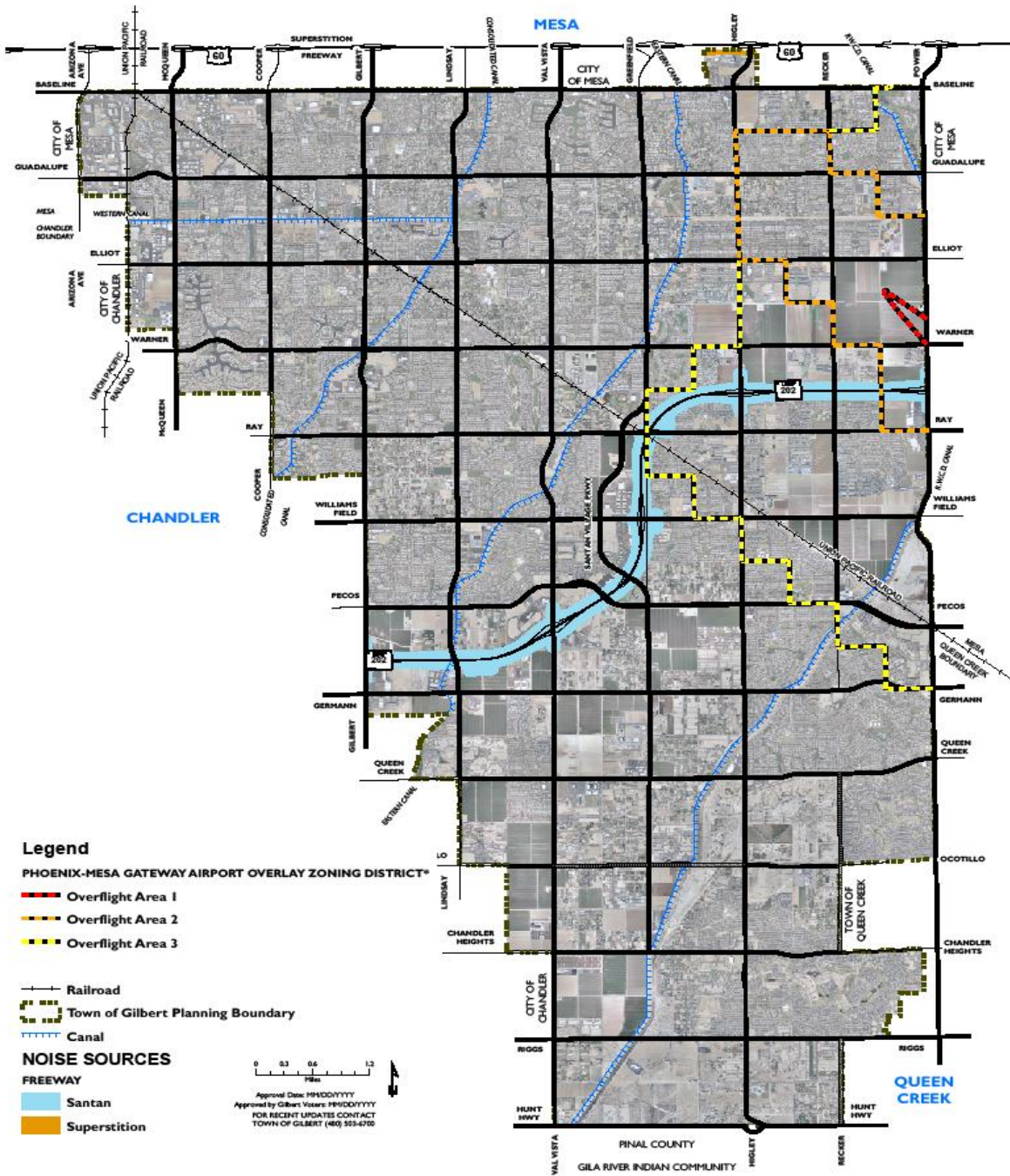
The Town of Gilbert has participated in the Maricopa County Trip Reduction Program for many years. Town of Gilbert distributes trip reduction surveys to the employees in four areas: Public Works North, Civic Center Complex, Public Safety Complex and the South Area Service Center. Approximately 85% - 95% of Gilbert employees return the completed surveys annually. Town of Gilbert offers incentives for employees to commute to work using alternate modes of transportation. Gilbert has also established specific carpool only parking spots at the four areas listed above.

E) Noise Attenuation

Noise or "unwanted sound" is generated by a variety of sources including freeways, arterial roads, railroad lines, airports and industrial and commercial uses. Noise sensitive areas and uses usually include residential areas, parks, schools, churches, hospitals, nursing homes, libraries and day care centers.

Generally, noise is generated from two types of sources: transportation sources and fixed sources. The Town has identified these sources which are shown on the Noise Exposure Map. In addition to arterial roads and railroads, the map identifies two noise related overlay areas: the Phoenix-Mesa Gateway Airport and the Loop 202 Santan Freeway. Mitigation measures include navigation easements for airport sources coupled with noise attenuation for construction near identified noise sources. Gilbert will pursue opportunities with railroads to reduce noise associated with operations and at railway crossings.

The Phoenix-Mesa Gateway Airport Overlay Zoning District establishes Overflight Areas 1-3, which limits the location of Noise Sensitive Uses and requires enhanced building insulation to mitigate noise to specified minimum levels. The Santan Freeway Corridor Overlay Zoning District provides that noise sensitive uses locating within 300 ft. from the edge of right-of-way complete a Neighborhood Environmental Design Analysis and construct an 8 foot tall noise barrier to achieve an exterior noise reduction. Building construction must also meet established, reduced interior noise levels.



NOISE EXPOSURE MAP



A full size version of this map is located in the exhibits.

F) Storm Water Quality

The Clean Water Act (CWA), among other things, regulates storm water and urban runoff to protect water quality. The regulations are intended to prevent sediment and pollutants from entering waters of the United States. The storm water program is part of the National Pollutant Discharge Elimination System (NPDES) permitting process. The Arizona Department of Environmental Quality (ADEQ) regulates storm water in Arizona.

As a regulated municipality, the Town of Gilbert has prepared and implemented a Storm Water Management Program that incorporates six required minimum control measures:

1. Public Education and Outreach
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Storm Water Runoff Control
5. Post-Construction, Development and Redevelopment
6. Pollution Prevention/Good Housekeeping for Municipal Operations

Construction impacts on storm water are also regulated by the state. Prior to site disturbance, construction owners/operators must file a Notice of Intent (NOI) form with ADEQ and prepare a Storm Water Pollution Prevention Plan which details the construction activities and storm water control measures that will be implemented at the construction site.

G) Pollution Prevention

Pollution prevention, the reduction or elimination of waste at the source, not only reduces pollution, but it can save money as well. Pollution prevention measures can also lead to a higher degree of environmental protection by reducing subsequent costs for disposal or cleanup of hazardous wastes and materials.

To support efforts to prevent pollution, Gilbert has an Environmental Coordinator to respond to accidents and uncontained spills of hazardous materials and chemicals and to coordinate with Maricopa County Air Quality Department, Arizona Department of Environmental Quality and the Environmental Protection Agency with the purpose of safety, containment and clean-up.

Other pro-active methods of pollution prevention include:

- Recycling
- Purchasing of “green” goods and materials
- Encouraging “green” construction practices for public and private projects

H) Cultural and Historical Resources

Gilbert’s cultural and historic resources consist of historic structures and agricultural implements. Most historic structures are located within the Heritage District and are a part of the Redevelopment Plan for that area. As additional structures are identified, they may be eligible for the National Register of Historic Places and should be analyzed to weigh the benefit of restoration and re-use.

Most archaeological remains that have been found, cataloged and analyzed to date have been determined to be insignificant by the State Historic Preservation Office. Since Gilbert has been a farming community, most of the land has been tilled on the surface layer. As land converts to other land uses greater care must be taken to address potential artifacts below this tilled surface layer. As artifacts are discovered, the State Historic Preservation Office must be notified and appropriate procedures followed. Incentives for redevelopment of areas to maintain historical or cultural significance may be considered.

Specific cultural resource issues expected to be of concern over the next twenty years include:

- Coordination with the State Historic Preservation Office on archeological findings
- Preservation of historic structures and artifacts, possibly including locations such as the Heritage District, Gilbert Museum, Water Tower, Gilbert School District Headquarters and Morrison Farmstead.

I) Hazardous Waste, Recycling and Sanitary Waste

1. Hazardous Waste

The Town of Gilbert operates a Household Hazardous Waste Collection Facility open to the residents of Gilbert. The facility provides residents with a way to properly dispose of household products such as bleach, pesticides, herbicides, motor oil, tires, electronic wastes and many other household products that may pose a

threat to human health or the environment. The program reduces the amount of hazardous material entering the sanitary sewer, storm drains and landfill and reduces illegal dumping of hazardous waste. Town Staff has worked with hazardous waste disposal contractors to ensure wastes are recycled to the best extent practical. In fiscal year 2009-2010, approximately 61% of the wastes collected were able to be recycled or used as alternative fuel.

With respect to large scale, commercial and industrial hazardous waste, Gilbert does not provide pick up or disposal service. Gilbert will, however, work with individuals, businesses and companies to identify private hazardous waste disposal sources.

Town Staff participates in various town-sponsored outreach events and posts information on the Town website and cable channel to encourage effective disposal of hazardous waste.

2. Recycling

The Town of Gilbert began its curbside recycling program in June 1992. Since then, every single family home has been issued blue (recycling) and black (trash) containers. For a fee residents may request additional black containers. Additional blue containers are available at no cost.

The Town of Gilbert promotes recycling through its Recycling Outreach Program. The Town, along with the Gilbert Unified School District, schedule recycling and storm water outreach education at many of the district schools. In addition, efforts to seek further outreach and partnerships with Chandler School District, Higley School District, private and charter schools, colleges, businesses and organizations are encouraged. Gilbert also participates in many community outreach events.

3. Sanitary Waste

Many Gilbert residential users, located on large residential lot and acreages, utilize on lot septic systems for disposal of septic waste. These residential users with individual septic systems are encouraged to connect to municipal sanitary sewer systems where available and economically feasible for the appropriate disposal of sanitary waste and for the opportunity for reclaimed water use purposes.

J) Environmental Justice Awareness

Environmental Justice is the fair treatment, equal opportunity and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. Fair treatment means that no group of people, including a racial, ethnic or a socioeconomic group should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal and commercial operations or the execution of federal, state, local and tribal programs and policies. Promoting awareness is a means of informing citizens of sustainability, wise use of resources, supporting environmental stewardship and involvement in the public participation process.

Gilbert's General Plan, zoning and plan review process is non-discriminatory, in that all construction plans are reviewed and inspected. Areas designated for industrial and commercial use are located along existing and planned traffic corridors. Some areas are currently undeveloped or used for agriculture. As residential development occurs, the provision by local developers of a mix of housing types is encouraged within the same development or area.

Gilbert hosts public meetings to involve local residents in the planning process for municipal operations such as the expansion of the South Wastewater Treatment Plant, lift stations and municipal parks and recreation facilities.

Gilbert believes that participation of all residents on planning matters through the public involvement and public hearing process adds to the quality and results in the improved outcome of all planning and development cases.

K) Green Building

Green Building

Green building (also known as green construction or sustainable building) utilizes environmentally responsible and resource-efficient techniques in the siting, design, construction and operation of a building in order to minimize impacts upon the environment and preserve natural resources.

Generally speaking, green building seeks the following environmental objectives:

- High levels of resource efficiency
- Energy efficiency
- Renewable energy use

- Water conservation
- Habitat preservation
- Stormwater management
- Recycling and use of recycled material
- Healthy indoor environments and
- Durability and flexibility of building design

Green building is a growing trend, bolstered by the public’s increased awareness of its environmental stewardship, the rising costs of energy and government regulations favoring sustainable building techniques. Various green building certification programs are in existence, including the Leadership in Energy and Environmental Design (LEED) certification developed by the United States Green Building Council. Other Green Building certification programs are also available. In addition, industry associations (such as homebuilders) as well as state, regional and local governments around the country have also developed standards, recommendations and/or certification programs to encourage green building techniques. Public debate around green building often centers upon the tension between the costs associated with increased building standards (in the context of what the market can bear) and the environmental benefits derived from developing such standards. An important consideration for Gilbert is the selection and use of “locally available” green building products, materials and techniques.

Green Building in Gilbert

While Gilbert does not currently require public or private construction to utilize green building techniques, developers are encouraged to evaluate environmental factors as part of the early planning and review stages, and whenever possible, incorporate environmentally friendly materials and techniques during construction and throughout the life cycle of the building or development.

Environmental factors to be considered in construction projects include:

- Site and transportation issues, including the accessibility to and use of public and/or alternative transportation
- Use of high efficiency heating, ventilation and air conditioning (HVAC) systems, lighting, automated building systems and a well insulated building envelope
- Efficient water use, in terms of both quantity and quality, in the building and landscaping

- Materials with recycled content, reused, contaminant-free materials and renewable sources
- Facility operation and maintenance training and appropriate diagnostic tools

Other Gilbert standards to promote green building and sustainability include:

- Mitigation techniques provided in the Land Development Code, including the Vertical Development Overlay and Design Guidelines
- Urban Heat Island policies outlined by the Cool Pavements Brochure
- Stormwater Management Program and retention policies
- The Non-Per Capita Water Conservation Program
- Solid Waste Recycling program and
- Regulations and Ordinances promoting reduction of particulate matter, which include Maricopa County Air Quality Department, Arizona Department of Environmental Quality and the Environmental Protection Agency (EPA)

Gilbert adopted the 2006 Energy Conservation Code that is applicable to commercial buildings. This was an important step to implement energy conservation standards in commercial buildings. Prior to that, Gilbert adopted a code for residential building that contained an initial level of energy conservation standards for residential development. One potential next step for Gilbert could be to incorporate the standards set forth in the 2009 Energy Efficiency code created by the International Code Council (ICC) for commercial and residential developments. This would raise the bar by 15-20% in terms of minimum energy efficiency standards.

L) Urban Heat Island Effect

Urban Heat Island Effect (UHI) is the occurrence of higher air and surface temperatures occurring in medium and large sized urban centers such as the Phoenix Metro area, due to the retention and emittance of mainly solar heat from roads, buildings and other built surfaces. The heat stored in pavements and buildings has the effect of maintaining higher temperatures in urban centers than surrounding rural areas. Rural areas cool faster after sunset and at night than urban areas because of this stored heat.

Higher temperatures in urban centers are a concern because they:

- Accelerate the chemical reactions that produce ground level ozone and smog that potentially threatens public health and effects comfort of residents

- Cause higher urban temperatures and amplify extreme weather events such as heat waves and impact residents with heat stroke, especially the elderly
- Result in increased cooling costs and associated use and generation of electricity

Gilbert recognizes the importance of cool and pervious pavements, urban forestry (shading of paved areas) and cool roofs (also known as white and green roofs) as examples of reducing the urban heat island effect. Gilbert seeks to promote, encourage and educate applicants for development projects and the public of the benefits of using these mitigating measures.

M) Fissure Identification and Mitigation

Fissures are naturally occurring, narrow breaks in the land's surface and are recognized to exist in some portions of the community. If located, efforts to avoid or mitigate fissures during the development process are encouraged to be considered, in compliance with State standards.



ENVIRONMENTAL PLANNING

7.2 Goals and Policies

Goal 1.0

Ensure a continuous and adequate supply of quality water that meets Assured Water Supply Designation (ADWR) requirements.

Policy 1.1 Maintain the physical and legal availability of current water supply sources to meet water demands.

Policy 1.2 Ensure the appropriate use of available water supplies.

Policy 1.3 Continue to pursue the development of additional renewable water supplies to meet future water demands.

Policy 1.4 Ensure Gilbert water policies – as outlined and/or referenced in the Integrated Water Resources Master Plan, Drought Policy and Vertical Growth Policy – remain current.

Policy 1.5 Aggressively seek ways to supplement the projected usage of ground water at build-out with additional sources of less costly surface water supplies.

Policy 1.6 Continue to ensure that each new project (public or private) that will use reclaimed water enters into a reclaimed water use agreement with Gilbert.

Policy 1.7 Discourage extension of new water services to developments in unincorporated areas unless Gilbert is able to recapture a portion of this water through sanitary sewer service, except on a temporary basis prior to annexation by Gilbert, or on an emergency basis.

Goal 2.0

Conserve water and encourage its beneficial use.

Policy 2.1 Continue to promote responsible and effective water stewardship to all sectors of the community.

Policy 2.2 Continue to notify all residential and commercial customers of available water conservation services and information on the most effective methods of using and conserving water.

Policy 2.3 Continue to educate and promote the use of native and drought tolerant plant materials, where appropriate, to conserve water in public parks, right-of-ways, HOA common areas and commercial/industrial developments.

Policy 2.4: Encourage practices that minimize the use of potable water for landscaping and water features.

Policy 2.5: Encourage practices that optimize the use of reclaimed water for landscaping and water features.

Goal 3.0

Ensure Town of Gilbert water quality meets all applicable federal and state water quality standards.

Policy 3.1 Water Quality Department will stay engaged with all appropriate federal, state and county agencies to keep up to date with changes, amendments and with new and upcoming water quality regulations

Policy 3.2 Perform timely and accurate sampling, analyses and reporting of all required water quality samples, to assure full compliance with regulatory requirements.

Policy 3.3 Use implementation strategies to meet and follow all applicable rules and regulations.

Goal 4.0

Encourage the use of dust control mitigation measures.

Policy 4.1 Provide public educational information as required by the Clean Air Act and Maricopa County dust mitigation policies. Encourage the public and businesses to be aware of their responsibilities for dust control.

Policy 4.2 Continue to work with Maricopa County Air Quality Department on dust compliance issues including requirements for dust free driveways, parking lots and storage and staging areas.

Goal 5.0

Promote land use practices and land use patterns that encourage alternative methods of transportation and reduce emissions.

Policy 5.1 Encourage compact development and mixed-use projects to shorten travel distance for employment and essential services.

Policy 5.2 Encourage each new project, public or private, to provide a written analysis of methods to be employed, including physical design, development and/or written policies, to reduce vehicle and other emissions.

Policy 5.3 Support Maricopa Association of Governments (MAG) and its proven air quality enhancement efforts.

Policy 5.4 Support regional air quality enhancement efforts that may include dust control methods during construction and the use of unpaved roads.

Policy 5.5 Encourage home occupations to reduce vehicle trips and commuting related emissions.

Policy 5.6 Encourage construction of cable, fiber optic and other telecommunication media utilities to enable more home-based employment opportunities.

Policy 5.7 Encourage development of infill parcels.

Policy 5.8 Encourage a regional transportation system including a commuter rail link from ASU Polytechnic/Cooley Station to ASU main campus and the Phoenix Metro area.

Policy 5.9 Encourage walkable developments and pedestrian connectivity in the planning and project review process.

Policy 5.10 Encourage maintenance and renewal of commercial centers to promote shopping and local commercial center vitality.

Policy 5.11 Promote smart traffic systems and multi-modal street patterns with bike lanes, trails, sidewalks and pedestrian ways with neighborhood connectivity that enable the use of non- motorized vehicles.

Goal 6.0

Encourage the purchase of fuel-efficient and alternate fuel Town vehicles.

Policy 6.1 Review Town vehicle purchases to buy the most efficient vehicle for the job assigned.

Policy 6.2 Encourage businesses, institutions and the public to buy and use clean and fuel efficient vehicles.

Policy 6.3 Include fuel-efficiency and air emissions as part of the vehicle selection justification.

Policy 6.4 Explore opportunities and new technologies for economical, clean, fuel efficient and alternate fuel vehicles.

Goal 7.0

Identify and attenuate noise sources and protect noise sensitive uses from high noise sources.

Policy 7.1 Encourage avigation easements for residential development in areas affected by over flights from Phoenix-Mesa Gateway and Chandler Municipal Airports within high noise contour areas.

Policy 7.2 Encourage noise-attenuation for all new construction adjacent to noise sources as required by the building code such as railways and the Phoenix-Mesa Gateway Overlay District.

Policy 7.3 Encourage noise attenuation from developers of noise sensitive uses as required in the Santan Freeway Overlay District.

Policy 7.4 Encourage acoustical analysis for new developments in locations where exterior and interior noise levels will be required by the building code.

Policy 7.5 Encourage the use of site planning and building materials/design as primary methods of noise attenuation.

Policy 7.6 Pursue opportunities with railroads to reduce noise associated with operations and railway crossings.

Policy 7.7 Minimize motor vehicle noise impacts from streets and highways through proper route location and sensitive roadway design.

Policy 7.8 Protect residential uses and other noise sensitive land uses from exposure to high noise levels and limit residential and other noise sensitive uses from encroachment into areas subject to high noise levels.

Goal 8.0

Comply with federal and state storm water regulations.

Policy 8.1 Consider implementing a Storm Water Management Plan.

Policy 8.2 Provide the public with storm water education and outreach materials.

Policy 8.3 Provide homeowners associations and the public with dry well management information.

Policy 8.4 Continue to update the Land Development Code to incorporate regulatory requirements and policies that encourage storm water management through onsite retention.

Policy 8.5 Support regional watershed approaches to municipal storm water management.

Policy 8.6 Utilize cool and pervious pavements as an opportunity to meet storm water retention requirements where a grading and drainage report can verify a reduction in storm water runoff has occurred.

Goal 9.0

Encourage pollution prevention, waste minimization and recycling in all sectors of municipal, business and institutional operations.

Policy 9.1 Provide outreach and education to promote pollution prevention, waste minimization and recycling and proper handling and disposal of broken or damaged CFC light bulbs.

Policy 9.2 Increase the acquisition of environmentally preferable green products and services.

Policy 9.3 Encourage taking environmental factors into account as early as possible in the planning and decision-making process.

Goal 10.0

Encourage the preservation and/or restoration of cultural/historic resources.

Policy 10.1 If a cultural resource is found during the development or construction process, prepare a report per the State Historic Preservation Office and submit findings to the State Historic Preservation Office.

Policy 10.2 Document historic structures that are not practical for preservation, redevelopment or restoration. Remove and preserve artifacts to benefit community education prior to any redevelopment.

Policy 10.3 Encourage the maintenance and redevelopment of the unique character of the downtown Heritage District (refer to Heritage District Redevelopment Plan).

Goal 11.0

Encourage Gilbert residents to properly dispose and recycle household hazardous wastes, and encourage the connection of homes with septic systems into the municipal sanitary water systems.

Policy 11.1 Continue to provide residents with a convenient method for proper disposal and recycling of hazardous waste.

Policy 11.2 Promote proper disposal of household hazardous wastes through education and outreach activities; including an outreach to schools, businesses and community organizations.

Policy 11.3 Continue to assist industries and businesses to identify private hazardous waste disposal sources.

Policy 11.4 Encourage Gilbert residential areas using individual on-lot septic waste systems to connect to municipal sanitary waste systems where available and where economically feasible for appropriate disposal and the opportunity for reclaimed water use purposes.

Goal 12.0

Continue to provide for fair treatment, equal opportunity and meaningful involvement of all Gilbert residents regardless of race, color, national origin or income in development and implementation of Town programs and policies.

Policy 12.1 Continue to provide residents with participation opportunities, including the encouragement of participation in Gilbert's public process.

Policy 12.2 Promote a mix of housing types in residential development areas.

Policy 12.3 Recognize and encourage Environmental Justice, which is the application of fairness and equal opportunity in the land use decision making process.

Goal 13.0

Encourage the use of green building techniques in public and private development projects and establish Gilbert as a leader in green building.

Policy 13.1 Ensure that new and remodeled municipal facilities have the same (or greater) green building standards and requirements as comparable privately developed facilities.

Policy 13.2 Develop and adopt user-friendly green building guidelines that draw from a variety of existing or future rating systems and that do not adversely and/or unfairly impact stakeholder groups and economic development efforts.

Policy 13.3 Evaluate the municipal staffing impacts of green building standards and determine if there is a need for internal and/or external reviewers or inspectors. Likewise, explore the review systems currently available from associations that provide green building standards and utilize such reviewers when economically advantageous.

Policy 13.4 Establish a green track permit process offering incentives (such as reduced fees and permitting times and public recognition awards) to encourage the voluntary use of specific green building techniques. Encourage the use of federal, state, utility company and other available incentives.

Policy 13.5 Encourage the business community (small, medium and large businesses) to implement and develop green building standards.

Policy 13.6 Encourage Gilbert businesses to develop innovative green building products, services and technologies.

Goal 14.0

Encourage the mitigation of the Urban Heat Island (UHI) effect by the use of urban forestry, white and green roofs and cool and pervious pavements.

Policy 14.1 Develop criteria to evaluate development projects that contribute to the UHI and identify mitigation techniques and measures to help mitigate the UHI effect.

Policy 14.2 Seek partnerships with other municipalities, educational institutions, utility companies, government entities and others to promote UHI effect awareness among landowners, developers, engineers and architects.

Policy 14.3 Encourage design concepts utilizing planned and engineered green space and urban forestry to maximize shading of paved areas and buildings to help mitigate the UHI effect.

Policy 14.4 Promote education and awareness of the public, designers and applicants for the development and use of materials and construction techniques to help mitigate the UHI effect.

Policy 14.5 Provide for a reduction of the stormwater retention requirements where a grading and drainage report demonstrates a reduced stormwater storage capacity results from the use of pervious pavements on a site.

Goal 15.0

Mitigate fissures when encountered in accordance with State regulations.

Policy 15.1 Encourage new projects located in areas recognized to contain fissures to conduct soil testing and analysis to identify potential geologic hazards.

Policy 15.2 Encourage the use of State fissure data such as that from the Arizona Geological Survey as a reference for owners, contractors and developers.

Policy 15.3 Establish construction standards, with compliance to State standards, to address fissure related construction matters.

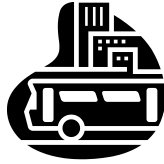
Policy 15.4 Include public notice for development proposals near recognized fissures.



Water for Agriculture



Riparian Area



ENVIRONMENTAL PLANNING

7.3 Implementation Strategies

The intent of the Environmental Planning Element is to provide a long-range plan for the development of the community in an environmentally sensitive manner compatible with planned land uses and expected community growth.

A. Water Resources	Responsible Entity	Complete By
1. Implement the recommendations of the most recent Integrated Water Resources Master Plan Update as the progress of development requires such implementation to ensure compliance with stated policy, goals, regulations and laws.	Water Resources Public Works	Ongoing
2. Continue to aggressively seek additional renewable water supplies that meet Assured Water Supply requirements.	Water Resources Public Works	Ongoing
3. Maintain and strengthen partnerships with water suppliers.	Water Resources Public Works	Ongoing
4. Develop policies based upon appropriate potable water use when necessary.	Water Resources Public Works	Ongoing
5. Develop an ordinance related to the provision of domestic water service in unincorporated areas.	Water Resources Public Works	Ongoing

B. Water Conservation	Responsible Entity	Complete By
1. Continue to develop programs to reduce overall demand of water resources. Programs shall meet the requirements of the Arizona Department of Water Resources.	Water Conservation Public Works Water Resources	Ongoing
2. Manage existing programs to ensure compliance with ADWR requirements.	Water Conservation Public Works Water Resources	Ongoing
3. Develop policies to continue the efforts of water demand management in order to maintain a Gallons per Capita per Day (PCD) of 220 gallons per person per day as Gilbert reaches build-out.	Water Conservation Public Works Water Resources	Ongoing
4. Develop programs to reduce overall consumption of water resources. Programs shall meet the requirements of the Arizona Department of Water Resources.	Water Conservation Public Works Water Resources	Ongoing
C. Water Quality	Responsible Entity	Complete By
1. Continue to ensure Gilbert’s water meets all applicable Federal and State water quality standards.	Public Works Water Resources Water Quality	Ongoing
2. Continue to comply with EPA Groundwater Rules to improve drinking water quality and safe water supplies.	Public Works Water Resources Water Quality	Ongoing
3. Provide ongoing sanitary surveys of the public water system obtained through monitoring. Implement corrective mitigation actions where required.	Public Works Water Resources Water Quality	Ongoing

4. Pursue advances in water monitoring technologies and make system upgrades as needed.	Public Works Water Resources Water Quality	Ongoing
5. Continue to meet and maintain drinking water standards and monitor and mitigate contaminant disinfection byproducts, arsenic, radon and radon.	Public Works Water Resources Water Quality	Ongoing
6. Produce an annual Consumer Confidence Reports on the status of water quality in Gilbert.	Public Works Water Resources Water Quality	Ongoing
D. Air Quality, Dust Control, Ozone; Land Use Practice, Alternative Fuel Vehicle Program and Trip Reduction Plan	Responsible Entity	Complete By
1. Continue to comply with Federal Clean Air Act, Arizona State Implementation Plan (SIP) and Maricopa County standards for airborne particulate matter (PM).	Environment and Safety Code Compliance	Ongoing
2. Enforce and maintain Gilbert Ordinances #1090 and #1091 regarding dust mitigation on vacant lots, unpaved parking lots and vehicle staging areas.	Environment and Safety Code Compliance	Ongoing
3. Continue efforts to meet EPA ozone standards and Arizona Initiative for the Phoenix Ozone Air Containment Area.	Environment and Safety Code Compliance	Ongoing
4. Promote land use practices to encourage alternate transportation methods to minimize vehicle emissions, minimize driving distances and promote infill and mixed- use developments and walk-able communities.	Environment and Safety Code Compliance	Ongoing
5. Continue to work as a member of Arizona Clean Cities to understand traffic patterns of the Phoenix Metro area's commuter shed and promote the use of low emission and alternate fuel vehicles.	Environment and Safety Code Compliance	Ongoing

6. Continue to meet State mandates for Trip Reduction Programs and the Maricopa County efforts to reduce the occurrence of single occupancy vehicle trips and the number of total vehicle miles traveled.	Environment and Safety Code Compliance	Ongoing
E. Noise Attenuation	Responsible Entity	Complete By
1. Continue to be aware of noise generation sources and seek to attenuate noise related conflicts through care in the placement of noise sensitive uses near recognized or potential noise generators including railways.	Planning Traffic	Ongoing
F. Storm Water Quality	Responsible Entity	Complete By
1. Continue to comply with the Clean Water Act and ADEQ standards regarding Natural Pollutant Discharge Elimination Systems (NPDES) to regulate water and urban runoff to protect water quality.	Environment and Safety Engineering	Ongoing
2. Pursue public education, outreach and involvement in identifying contaminants and reporting illicit discharge and dumping in order to promote water quality and pollution control efforts.	Environment and Safety Engineering	Ongoing
G. Pollution Prevention	Responsible Entity	Complete By
1. Pursue efforts to reduce and eliminate at-source wastes, reduce pollution and related adverse environmental impacts.	Environment and Safety Support Services Fire Household Hazardous Waste Public Works Purchasing	Ongoing

<p>2. Meet EPA, ADEQ and Maricopa County Air Quality Department standards for safety, containment and clean up practices for hazardous waste spills.</p>	<p>Environment and Safety Support Services Fire Household Hazardous Waste Public Works Purchasing</p>	<p>Ongoing</p>
<p>3. Pursue purchasing of green products.</p>	<p>Environment and Safety Support Services Fire Household Hazardous Waste Public Works Purchasing</p>	<p>Ongoing</p>
<p>H. Cultural and Historic Resources</p>	<p>Responsible Entity</p>	<p>Complete By</p>
<p>1. Continue to identify cultural and historic structures and assets as determined by the State Historic Preservation Office (SHPO).</p>	<p>Planning</p>	<p>Ongoing</p>
<p>2. Provide information to builders and developers regarding identification and reporting of artifacts to SHPO.</p>	<p>Planning Permitting and Plan Review</p>	<p>Ongoing</p>
<p>I. Hazardous Waste, Recycling and Sanitary Waste</p>	<p>Responsible Entity</p>	<p>Complete By</p>
<p>1. Provide additional information to residents about Household Hazardous Waste Collection Facilities.</p>	<p>Solid Waste Engineering Household Hazardous Waste</p>	<p>Ongoing</p>
<p>2. Promote recycling through Recycling Outreach programs for residents, businesses and schools.</p>	<p>Solid Waste Engineering Household Hazardous Waste</p>	<p>Ongoing</p>

3. Encourage Gilbert residents currently using onsite septic systems to connect to the municipal sanitary sewer system, where available and economically feasible.	Solid Waste Engineering Household Hazardous Waste	Ongoing
J. Environmental Justice Awareness	Responsible Entity	Complete By
1. Promote fair treatment, equal opportunity and meaningful involvement for all people of the community.	Planning	Ongoing
2. Continue to assure all land use decisions are equitable and consider the rights of all residents.	Planning	Ongoing
K. Green Building	Responsible Entity	Complete By
1. Promote green building in all aspects of construction in Gilbert.	Planning Permitting and Plan Review Building Engineering Environmental Programs Policy Task Force	Ongoing
2. Implement green building techniques, energy efficiency and alternative energy construction practices.	Planning Permitting and Plan Review Building Engineering Environmental Programs Policy Task Force	Ongoing

L. Urban Heat Island Effect	Responsible Entity	Complete By
1. Promote pervious, cool pavements, urban forestry (shading of paved areas) and cool roofs (white and green roofs) as a means to reduce the Urban Heat Island effect.	Planning Permitting and Plan Review Traffic and Circulation Engineering	Ongoing
2. Provide information to builders, developers and the public to encourage UHI effect mitigation methods.	Planning Permitting and Plan Review Traffic and Circulation Engineering	Ongoing
M. Fissure Identification and Mitigation	Responsible Entity	Complete By
1. Encourage builders, developers and residents to be aware of naturally occurring fissures in areas of the community.	Planning Engineering	Ongoing
2. Upon identification of fissures, report occurrences to State agencies and consider mitigation measures in conformance with State statutes.	Planning Engineering	Ongoing