

Environmental/Sustainability Element



NARRATIVE

The City seeks a healthy & sustainable environment. A sustainable environment is not one that is necessarily free of development, but develops with consideration to economic, social, and environmental issues. The Bruntland Commission defined sustainable development as development “that meets the needs of the present without compromising the ability of future generations to meet their own needs.” Sustainability in an urban environment is as much about managing adverse environmental affects as it is about improving the livability and quality of a place. It is a comprehensive, continuous, and dynamic endeavor. Foundational principles in the City’s approach to sustainability and the environment are balance and stewardship.

other needs and goals. Sustainability is known as a three-legged stool supported by environmental, economic, and social concerns. Sustainable urban environments are developed with consideration to all three. Monetary costs should not be the only costs considered in both city practices and private development, neither should all economic use be denied. Development must consider its environmental impacts, with respect to its natural function (ecological value) and its value to that function. The intent is to achieve land use and development practices that enhance the community, are considerate of the environment and natural processes, and are fiscally responsible. Development practices that are both practical and sustainable (green roofs, pervious surfaces, etc) are encouraged.



A sustainable balance must also be sought in other areas. The jobs/housing balance is important to maintain as a member city in a larger region. Local food production provides the benefits of fresh food for local residents and resource management efficiency for the region. The City is supportive of local gardening, produce sharing, and family food production. Landscaping needs should also consider a balance between benefits (local, regional, global) and water use.

FOUNDATIONAL PRINCIPLES

Balance The protection and improvement of the environment must be balanced with

Stewardship The city promotes and practices principles of sustainable development. Development can have a negative affect on the natural environment and systems. Impervious

surfaces change the natural flow of water. Wildlife habitats may be displaced. Larger cities create 'heat islands.' Resources (land, water, energy) can be wastefully consumed. One of the purposes of the General Plan is to mitigate these impacts, as well as promote strategies that:

- promote responsible and sensitive development
- protect the watershed
- manage resources efficiently
- enhance fiscal responsibility
- contribute to the region
- prevent public health hazards
- improve the urban environment

All of which increases sustainability.

The City is given the authority to regulate land use and the responsibility to implement and enforce many state and federal statutes. In this role the City becomes a steward over the local environment and resources (including land). Principles of low-impact development, smart growth, and sustainable development are encouraged to meet that responsibility. Programs that encourage responsible and conservative resource consumption (Energy Star, LEED) should be essential to City practices and promoted in development and construction.

IMPLEMENTATION

There are many tools available to the City in meeting its responsibilities as a resource steward. Incentives may be offered that encourage voluntary measures to mitigate impacts. Regulations may be used as an involuntary means. Programs may be developed to assist in the use of various

tools. A sustainability committee should be established to review city practices, approve construction and development practices, and to implement new technologies.

Development should be avoided in sensitive, critical, and irreplaceably important areas, unless it can be accomplished in a manner which: assures public health and safety, improves overall environmental conditions, is compatible with the existing natural environment, prevents significant erosion or degradation, assures long-term slope and soil stability, provides assurance that future repairs and maintenance will be performed. On-site, in-kind mitigation is generally preferable to off-site and out-of-kind mitigation.



As the sustainability element is implemented through incorporation in regulations, sustainability and stewardship principles should be encouraged and allowed at the level of the individual. New technology is increasingly available to homeowners. Solar, wind, and thermal technologies are now available and affordable to homeowners. While traditional nuisance concerns and aesthetics can not be discarded,

homeowners must be allowed to seek ways for individual sustainability.

Sustainable practices available to homeowners:

- Geothermal heating and cooling (air, water)
- Active solar hot water heaters and electrical production
- Passive solar home design
- Wind turbines
- Food production
- Water collection and other water saving techniques
- Higher efficient appliances
- Recycling
- Water efficient landscape systems and designs

OPEN SPACE

Open space is an important component to the social, economic, and

environmental aspects of sustainability. As South Jordan becomes more urbanized, the amount of active and passive space will become increasingly valuable. Open space contributes to natural ecological systems, provides reprieve from the built environment, and allows for a wide range of activities. Agricultural open space is also a fundamental component of South Jordan's character and history. South Jordan has been active in protecting and preserving natural open space along the Jordan River and has a range of open space types. South Jordan should both require and facilitate open space dedication from development. It is essential that the City continues to obtain, protect, and develop open space in order to maintain its level of service and ensure that open space will continue to be an integral part of and a defining characteristic of South Jordan.

Goals & Policies

Goal E-1 Create an integrated City-wide effort to identify and carry out sustainable development practices.

Policy E-1.1 Create an environment of sustainability (defined by the Brundtland Commission, 1987 as: *...meeting the needs of the present, while ensuring that future generations have the same or better opportunities*) within the City in regards to identifying, encouraging, and implementing sustainable development practices which protect and enhance the natural environment.

Policy E-1.2 Establish appropriate committees to address issues of sustainability, beautification, tree planting, and green programs within the City.

Energy Production and Conservation

- Policy E-1.3 Encourage residential and commercial energy efficiency, i.e., energy star appliances and energy systems, programmable thermostats, energy saving lighting, insulation techniques.
- Policy E-1.4 Promote and incentivize energy efficient building construction and LEED (Leadership in Energy and Environmental Design) certifications for commercial, industrial, and major residential projects, i.e. additional building height for green roofs, building permit and/or impact fee reductions.
- Policy E-1.5 Set the example for implementation of 'green' building methods and LEED certification by considering such in new City buildings and in retrofitting existing buildings and facilities.
- Policy E-1.6 Include passive solar review, building lot layout and building orientation during the development review process.
- Policy E-1.7 Develop lower cost utility strategies, including provisions to accommodate home energy production, including wind, solar, and geothermal.
- Policy E-1.8 Monitor home energy technology changes and help implement such when they can be shown to have minimal impact on adjoining properties.
- Policy E-1.9 Incorporate additional and suitable wind energy systems into City regulations as technology allows such systems to be better integrated into residential architecture and scale.
- Policy E-1.10 Encourage landscape design and deciduous tree specie placement that shades structures and hard surface areas and evergreen species which create strategic windbreaks.
- Policy E-1.11 Implement re-cycling and waste reduction policies for all City-owned buildings.
- Policy E-1.12 Encourage on-site residential re-cycling and composting in order to reduce the impact to the landfill.
- Policy E-1.13 Encourage mixed-use zoning districts in appropriate areas of the City, designed with a mix of goods and services to reduce vehicle trips and to improve air quality, walkability and resident convenience.

Water Quality and Conservation

- Policy E-1.14 Require water conserving landscape designs and irrigation systems for commercial, industrial, and multi-family site plans.
- Policy E-1.15 Consider and encourage other water saving techniques, i.e. rain water harvesting, re-use of grey water, and installing low-flow fixtures.
- Policy E-1.16 Encourage rain gardens and other storm water collection and retention systems.
- Policy E-1.17 Investigate the possible use of porous ‘paving’ materials to improve soil permeability and to avoid costly storm drainage systems.
- Policy E-1.18 Investigate alternate methods to improve the quality of ground water supplies as potable water.
- Policy E-1.19 Continue to study and evaluate the possibility of more cost effective secondary water systems in appropriate areas of the City.
- Policy E-1.20 Require the developers of large lot developments to provide suitable secondary water systems.
- Policy E- 1.21 Consider amending the General Plan Land Use Map to allow smaller lot development when appropriate secondary water systems are not feasible or practical.

Micro-Climate

- Policy E-1.22 Help minimize the urban heat island effect by increasing the canopy of the City’s urban forest, through tree plantings along major streets, within parks, and other public spaces, and by encouraging tree planting by City residents.
- Policy E-1.23 Help minimize the urban heat island effect by encouraging lighter color building materials for rooftops, parking lots, roadways, pathways, etc.
- Policy E-1.24 Minimize the size of parking lots and necessary paving and continue to require parking lot landscape and tree cover.
- Policy E-1.25 Encourage and incentivize ‘green’ rooftops for commercial, industrial, and multi-family projects, i.e. additional building height, increased density.

Food Production

- Policy E-1.26 Encourage local family food production to further regional ‘locavore’ (*eating food grown locally and in season*) food system independence.

- Policy E-1.27 Encourage local markets, gardens, and nurseries for the distribution of locally grown produce and landscape plants.
- Policy E-1.28 Re-evaluate ordinances that regulate where and how locally grown produce can be sold or distributed to the public.
- Policy E-1.29 Encourage neighborhoods, religious and social groups, and other organizations to promote the sharing of ‘excess’ garden produce during the growing season.
- Policy E-1.30 Encourage community garden plots within required opens space areas for residential development projects.
- Policy E-1.31 Consider allowing limited number of smaller farm animals (i.e. chickens) on smaller sized residential lots with standards that will minimize impact on neighborhood properties, i.e. prohibiting roosters.

Goal E-2 **Preserve desirable open space and natural open space areas within the City.**

- Policy E-2.1 Continue efforts to maintain and enhance Jordan River wetlands through public ownership, private donation and dedication, federal regulation, and conservation easements.
- Policy E-2.2 Coordinate efforts with Salt Lake County and adjoining communities to implement Plan Elements of the Blue Print Jordan River Plan and to protect the corridor as natural open space.
- Policy E-2.3 Discourage development in the Jordan River corridor, except for a limited recreational/commercial focus near 10600 South that is compatible with the goals of the Blue Ribbon Jordan River Plan and that provides needed services for the Jordan River Parkway trail users.
- Policy E-2.4 Prioritize and implement a City-wide parks and trails plan (see Parks & Recreation Element).
- Policy E-2.5 Investigate possible areas within the City where existing farmland, or other significant open space, can be protected in order to help preserve rural lifestyle, promote an ‘historic village’ look, and/or protect historic resources.
- Policy E-2.6 Create and adopt a Rural Open Space Conservation Development (ROCD) floating zone for possible preservation of rural and/or historic resources.
 - Apply the floating zone in selected zoned areas of the City when appropriately requested by property owners.

- Include a provision for a high percentage of open space by clustering residential development.
- Implement appropriate alternate development standards to enhance a rural feel, i.e. parkstrip swales, ribbon curbs, cottage style architecture.

Policy E-2.7 Adopt an Open Space (OS) Zone and a Natural Open Space (NOS) Zone to help protect currently designated open space and to apply to future open space preservation.

Goal E-3 *Address natural hazards in land use and development plans.*

Policy E-3.1 Limit development along known fault lines, high liquefaction areas, flood plains, and other natural hazard areas, unless appropriate mitigation measures can be implemented.

Policy E-3.2 Require adequate review and mitigation of natural hazards as part of the development review process.

Policy E-3.3 Require proper site and building construction mitigation in natural hazard areas.

Policy E-3.4 Consider ‘cut and fill’ requirements in the City’s land disturbance ordinance that will encourage new development to better match existing terrain.

Policy E-3.5 Require adequate notice of hazards to public, i.e. public notification, document recordation, subdivision plat and site plan notations.

Policy E-3.6 Prohibit habitable structures within 100 year flood plains.

Policy E-3.7 Update and implement the current storm water master plan.

Policy E-3.8 Implement alternative storm water solutions to reduce run off and to increase soil permeability.

Goal E-4 *Preserve, enhance, and create scenic views within the City.*

Policy E-4.1 Identify key scenic views and develop strategies to enhance these views, i.e. mountains, open space, Jordan River corridor, landscaping, civic structures and uses.

Policy E-4.2 Consider key scenic views in subdivision and site plan design during the development review process.

Policy E-4.3 Minimize removal of desirable vegetation. Require tree protection plans for development sites with significant vegetation cover. Require re-vegetation plans as needed.