



MESQUITE MASTER PLAN

5.

CONSERVATION PLAN ELEMENT

5.1 Major Resource Issues

Settlement along the Virgin River, in or near Mesquite, has evolved over the last one hundred years in a precarious balance between man, his society and nature's forces. Members of the community whose families pioneered the area are well versed in the strength and power of the variety of forces wielded. As such, until recently, residents of the community have been sustained through their respect for nature and ability to maintain ecological balance through agricultural pursuits.

As the community has grown, demands for sustenance have outstripped nature's willingness to provide; therefore, other outside economic venues have been required to continue support for the town's existence. Agriculture's importance to the economic stability of Mesquite's past has given way to business and real estate development.

Increased population has exponentially decreased the community's ability to remain sustainable and has inversely, exponentially increased waste. Agricultural land has been taken out of production permanently for real estate development for housing. "Leap frog" development has created infrastructure extensions that are not adequately designed or constructed to accommodate future demands on the systems.

Resource conservation is imperative for the isolated desert community. Energy conservation. Through passive means, education, and water conservation programs, including the use of drought resistant (native) landscaping, is a critical component of significant resource reduction measures. Solid waste disposal requirements will continue to be ever expanding, and there is an important need to utilize recycling measures for household items, construction waste and junked vehicles. Structured plans are also needed to protect the community from storage of any hazardous waste and protection from solid and ground water contamination from industrial waste.

As indicated in various other sections of the master plan, the Virgin River, its tributaries and riparian zones are important community elements in Mesquite. Furthermore, efforts need to shield these elements from development through conservation and protect them as resources in perpetuity. The "wetlands" are a natural resource of the river valley, providing an important natural habitat for area wildlife and sanctuary for migrating birds.



Agricultural lands, which have played such an important role in the community's history and culture, are being depleted rapidly. Future technology may provide more effective means to use these lands more efficiently for growing food products. Where possible, farmland should be preserved for long-term agricultural community based purposes.

Planning Context

The beauty of Mesquite is reflected in the sensitivity the community has always held for the river and its surrounds. Early settlers used the river for agricultural purposes, for drinking and for support of life in the community. Stock was raised for food products, and the river attracted wildlife that was hunted for sustenance.

Land along the river was cleared and farmed. A canal was constructed for irrigation. Crops were harvested and sold or traded for other needs. Whatever waste bi-products were created, were returned to the soil in some fashion to reinforce future agricultural purposes. The life cycle was simple. Early development consisted of a mixture of houses and small businesses along Mesquite Boulevard, which also served as the segment of the original highway between Salt Lake City, Utah and Los Angeles, California. The homes and businesses used the highway as a linkage between themselves and the remaining community and to travelers needing service and assistance along the route.

Man and his society existed within a balanced eco-system. Man lived in harmony with nature and with others and at peace with his role as a steward.

From today's viewpoint, Mesquite has been a totally sustainable community. It lived in balance of terms of what early settlers were able to hunt, grow, harvest, sell and trade. There was plenty of available work for those who lived in the community and a future for the children. While the community has outgrown its capacity to live solely off of the land, it can continue to provide strong linkages to the natural eco-system, which sustained early society.

All of the land in the valley should forever be viewed as a community resource. The purpose of the land is to assist in sustaining future life in the community, and it is not to be exploited. Agricultural land, wherever possible, should be preserved and utilized for farming or related farm activities. Land area north of U.S. Interstate 15 should be developed with the same respect. Steep vertical slopes and the tops of mesas should be preserved for their natural beauty and scenic vistas.

Phase #2 and Phase #3 lands (which remain to be master planned) should be released only when Phase #1 development is complete and utility and infrastructure services to the areas are available, or the land is needed for



some additional public benefits. Cluster development should be used extensively for housing to preserve open space and reduce infrastructure requirements provided by the city.

Appropriate land planning can provide a community context in which most day to day transportation can be accomplished by pedestrian activity. When work, education, public assembly, goods and services and other community facilities have convenient pedestrian access, the use of non-renewable resources for transportation can be significantly reduced, thus conserving energy and the cost of living within the community.

5.2 Environment and Resources

Major components of the Conservation Plan Element are policy issues established by the City Council. These policies are implemented through the City Manager, through the various city departments. Master planning, planning and zoning issues can be channeled through the advisory board for citizen review and recommendation.

Community education programs supporting conservation issues can be provided by the city, or by the city in association with a wide variety of outside resources. Such resources include local conservation groups, public education programs and county, state and federal agencies focused on the concerns of conservation and / or the depletion of natural resources.

State-of-the-art technology related to conservation for construction and development projects, and land use conservation restrictions can be implemented and administered as regulations and guidelines administered by the city.

Environmentally sensitive areas to be protected, including drainage ways to the Virgin River, as well as agricultural farmlands, will have to be acquired and transferred to public ownership. The acquisition of these lands may occur through rights-of-way and easement transfers gifts to the City of Mesquite, land trades and procurement. Courts have ruled that eminent domain, as an option, is only available when the land to be acquired is needed to construct a specifically needed public facility. The magnitude of resources necessary to acquire land judged to be important to the community good will only increase in value with time.



5.3 The Plan

B. Conservation Plan

Goal:

- 1. To support community development, which will preserve and enhance a balanced relationship with the area's natural resources, agricultural activities, wildlife habitats, drainageways and scenic resources.**

Objectives:

B-1.1 Require development which utilizes state-of-the-art energy and resource conservation techniques including drought – resistant and native landscape materials.

B-1.2 Regulate development to protect steep vertical slopes in the area to be annexed north of Interstate 15.

B-1.3 Restrict development in wetlands, critical wildlife habitats, corridor areas, special agricultural areas and other environmentally sensitive zones.

B-1.4 Promote land stewardship through the development of environmentally oriented site planning standards and the acquisition of environmentally sensitive open space.

Strategies:

1. The city shall establish standards and design guidelines to protect the community's resources, including special agricultural lands, from being unnecessarily depleted through development, and promote educational programs, which support energy, water and other natural resource conservation.
2. The city shall develop regulations and measures to prevent air pollution, noise pollution, and ground / ground water pollution.
3. The city shall identify and acquire environmentally sensitive areas for protection from development.



5.4 Guidelines

Guidelines for the Conservation Plan Element address the following planning issues as each relates to development:

- . Increased Utilization of Environmental Influences
- . Effective Use of Contemporary Technology
- . Reduction in the Use of Critical Natural Resources
- . Protection of Natural Resources from Contamination

Increased Utilization of Environmental Influences

1. Design for development in the city shall consider those natural and environmental conditions which influence land-use in the desert southwest including soils characteristics and topography; solar and wind influences (as they relate to passive heating); cooling and ventilation and the use of efficient landscaping materials to increase air quality in the community.
2. Design for development in the city shall incorporate means to collect rainwater, which falls across a site and to use that resource to supplement landscape irrigation within the development.

Effective Use of Contemporary Technology

1. Design for development in the city shall utilize state-of-the-art design technology to reduce the continuous demands and use of fossil fuels for heating, ventilating and air conditioning for buildings and structures.
2. Design for development in the city shall consider the benefits of life cycle costing relative to materials and building techniques utilized for each aspect of construction.

Reduction in the Use of Critical Natural Resources

1. Design for development in the city shall utilize techniques and methods to reduce the use of potable water for landscape irrigation requirements.

Protection of Natural Resources from Contamination

1. Design for development in the city shall be responsible to assure the community that the results of development will in no way create any exposed hazards which can denigrate the quality of air (including noise), ground, surface and ground-water and / or subterranean water resources.