CONSERVATION ELEMENT

III. RESOURCE MANAGEMENT

2. Conservation Element

Introduction

Overview

Increasing public concern for environmental quality has heightened the importance of, and necessity for, the Conservation Element. As growth and urbanization continue, the City of Lawndale is confronted with difficult environmental issues such as the provision and maintenance of clean air and water, and the prevention and control of pollution.

Authority

In 1970, state law passed which required new General Plan elements, in addition to Land Use and Transportation, to be incorporated into the General Plan document. Among them is Government Code Section 65302(d) which requires the incorporation of a Conservation Element. In addition, that same year witnessed the passage of the California Environmental Quality Act which mandates the assessment of potential, and mitigation of significant impacts to the environment. Therefore, in order to meet state requirements, increase environmental awareness, and evaluate natural resources, the City of Lawndale will be addressing Conservation issues as part of its General Plan. Additionally, the Conservation Element is intended to:

- promote the protection, maintenance, and use of the state's natural resources;
- prevent the wasteful exploitation, destruction, and neglect of the state's natural resources; and
- recognize that natural resources must be maintained for their ecological value as well as for their direct benefits to the public.

Organization

This element provides an assessment for conservation, development, and utilization of the following resources:

- Mineral Resources
- Wildlife
- Water
- Air
- Energy

- Historical and cultural structures
- Solid Waste

Assessment of the existing conditions provides the necessary criteria for formulation of goals and policies. Therefore, following the summary and analysis of Lawndale's resources will be a statement of the goals and policies as well as the implementation programs necessary to achieve those goals.

The Conservation Element is intended to provide guidance to the City Council and other decision-making groups in preserving, enhancing, and creating resource conservation opportunities throughout the City.

Assessment

The City of Lawndale is a highly urbanized area that functions primarily as a bedroom community within the surrounding Los Angeles South Bay region. Because of the City's high degree of urbanization, there are few natural resources remaining.

Mineral Resources

There is one mineral resource that underlies the City of Lawndale: the Lawndale Oil Field. The field, roughly bounded by 135th Street on the North, Hawthorne Boulevard on the east, Marine Avenue on the south, and extending approximately 1/2 mile west of Inglewood Avenue, was semi-productive during the 1920's and 1930's. During that time, approximately 25 oil wells were drilled in Lawndale, mostly near the intersection of Rosecrans and Inglewood Avenues. Today, all of the wells within the City limits have been capped and are no longer active. The field is not depleted. Approximately 50-60% of the oil is still present in the field. The possibility of re-opening the field, in the event of an energy-related crisis exists. The existing zoning classifications, however, no longer allow for this type of land use. Additionally, any drilling would most likely occur outside the City limits in areas where higher productivity could be achieved.

Wildlife

Due to the minimal amounts of natural vegetation and limited domestic landscaping, no significant species of wildlife have been identified. Existing wildlife, such as sea gulls, ground squirrels, and lizards, can readily adapt to changes in the urban environment and do not have to compete with man for survival. Therefore, their displacement is not a significant conservation issue in Lawndale.

Water

Water is necessary for sustainment of any community. The natural water systems in Lawndale, such as surface water and ground water,

induce and sustain vegetative growth and animal habitat and provide for long term storage and use for the community. The City, therefore, recognizes water to be an invaluable resource to be conserved.

Drainage

There are no natural waterways or large bodies of water located within the City limits. In terms of surface water, Lawndale's resource lies in the runoff that occurs as a result of the high level of urban development. During heavy rains, some localized street flooding occurs in various areas of the City.

Groundwater

Groundwater resources in Lawndale are being depleted at rates faster than they are being replaced. The urban environment prevents ground water replenishment by diverting surface drainage through the streets directly into the County's subsurface drainage system. The inability to efficiently replenish ground water resources along with the climatic conditions of the region have led the City to grow and depend upon imported water to meet the majority of its domestic water needs. The City is serviced by the Southern California Water Company which obtains its water from the Metropolitan Water District and from groundwater wells.

Water Conservation

In recognition that water is a limited invaluable resource, the City has adopted a Water Conservation and Drought Response Plan. The Plan is intended to facilitate water conservation practices as well as to help cope with reduced water supplies during drought conditions. Additional actions taken to deal with the limited supply of water include reclamation projects. The proposed West Basin Water Reclamation Program is one such project that would reclaim 62.5 million gallons per day (70,000 Acre Feet Per Year) of secondary effluent from the Hyperion Treatment Plant to be used for irrigation and industrial purposes, as well as to be injected into the water table to prevent salt water intrusion. The project is expected to decrease the demand for potable water, decrease the dependency on outside services for water, and provide the area with a continuous dependable source of water.

Air Quality

Air quality is a regional issue, and therefore must be addressed by all local governments as well as regional agencies. Intergovernmental coordination is the key to dealing with air quality.

Air quality is affected by urban developments (stationary sources), and motor vehicles (mobile sources). Hence, increases in population and

urbanization affect air quality. The California Air Resources Board (CARB), and South Coast Air Quality Management District (SCAQMD) operate 32 ambient air quality monitoring stations throughout the South Coast Air Basin. The closest station to the City of Lawndale is located in Hawthorne. According to their figures, the entire South Coast Air Basin has not met state and federal standards for O3, CO, NO2, and PM10. The Air Quality Management Plan in the Resource Management chapter of the General Plan has a more detailed discussion of pollutant emission trends in the Lawndale area.

Energy

All areas within the City have access to natural gas services from the Southern California Gas Company. At the present time, the Gas Company is not experiencing any difficulties in providing the services required to meet the demand that is generated by the City of Lawndale or its surrounding cities. Furthermore, the Gas company is prepared to expand their systems should the demand increase.

Southern California Edison supplies electricity to the City. The fees that customers must pay for energy is an important factor in the amount of energy that is consumed and points to the economic attractiveness of energy conservation and alternative source programs. According to the total 1989-1990 energy billed for the entire service area, which encompasses a fifty-thousand square mile area and includes the City of Lawndale, the top three demand generating uses are commercial, residential, and industrial, respectively.

Southern California Edison recognizes the need to conserve energy and currently implements a number of energy conservation programs that are designed to assist individual customers in their energy conservation efforts. Examples of existing programs include:

- Rebates for purchase and or use of energy efficient equipment and facilities;
- Free on-site energy consumption surveys;
- Experimental rates based on incentive programs; and
- New construction and structural modification incentive programs.

Opportunities for energy savings for the general public lie in reducing space heating and cooling loads in their homes. Strategies to accomplish this include the construction of energy-efficient homes. Examples of typical home energy conservation measures are as follows:

- Use of insulation in floors, walls, and ceilings to deter heat loss and heat gain;

- Insulated thermal windows, storm doors and sealed fireplace flues reduce interior energy loss and air infiltration;
- Use of light exterior house colors reduce solar heat gain; and
- Overhangs, trees, and shrubs can shade exposed southerly walls and windows from direct sun rays in the summertime.

See Figure A for further description of typical energy conservation strategies.

Historical/Cultural Resources

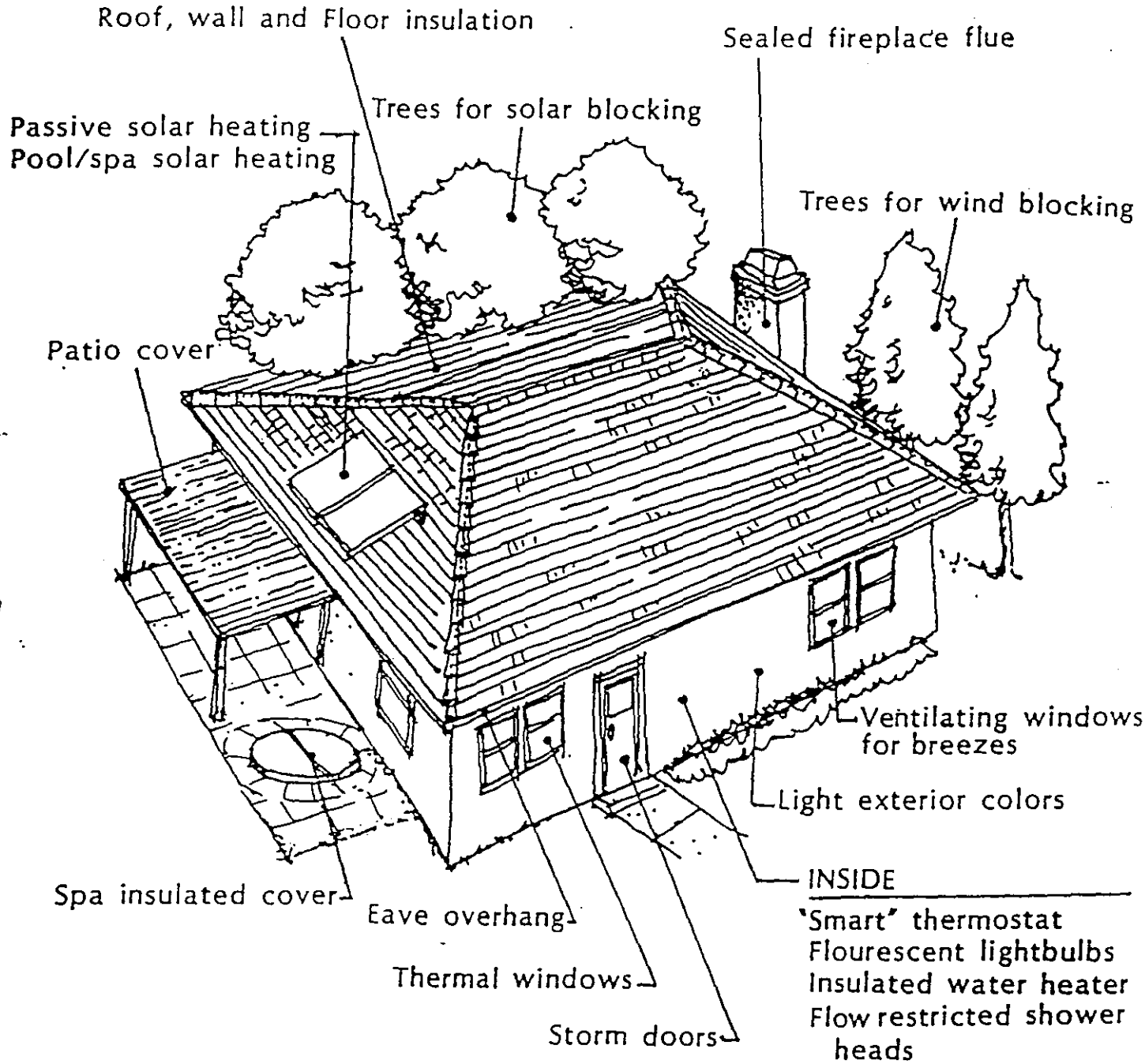
The City of Lawndale has a church and several private residences that are believed to be of local historic interest. See Figure B for a general description of the locations of historic structures in Lawndale. The First Congregational Church of Lawndale, located at 4521 W. 147th Street, was the first chruch to be located in Lawndale. The church was completed in 1906 and is believed to have been one of the first churches to be established in the entire Centinela Valley. The church still serves as a meeting place for civic groups and congregations. Many of the significant residential buildings were moved into Lawndale from other areas within the Los Angeles region. Many of these buildings are unknown and unrecognizable to the community because they are not located in one general area of the City, and many are concealed behind mature landscaping, or by remodeling that has "modernized" or significantly customized their appearance.

Solid Waste

Municipal Solid Waste is not, regarded to be a natural resource that requires conservation. However, its improper disposal and increasing quantities are serious environmental issues that can detrimentally affect many of the state's natural resources. Therefore, this element will address the solid waste issue as a means to promote conservation of previously discussed resources.

Assembly Bill 939:
The California Integrated Waste Management Act of 1989, Assembly Bill 939, states that the responsibility for solid waste management is a shared responsibility between the state and local governments. AB 939 requires local agencies to (a) promote source reduction, recycling, composting, environmentally safe transportation and land disposal, and (b) maximize the use of all feasible source reduction, recycling, and composting options in order to reduce the amount of solid waste that must be disposed of.

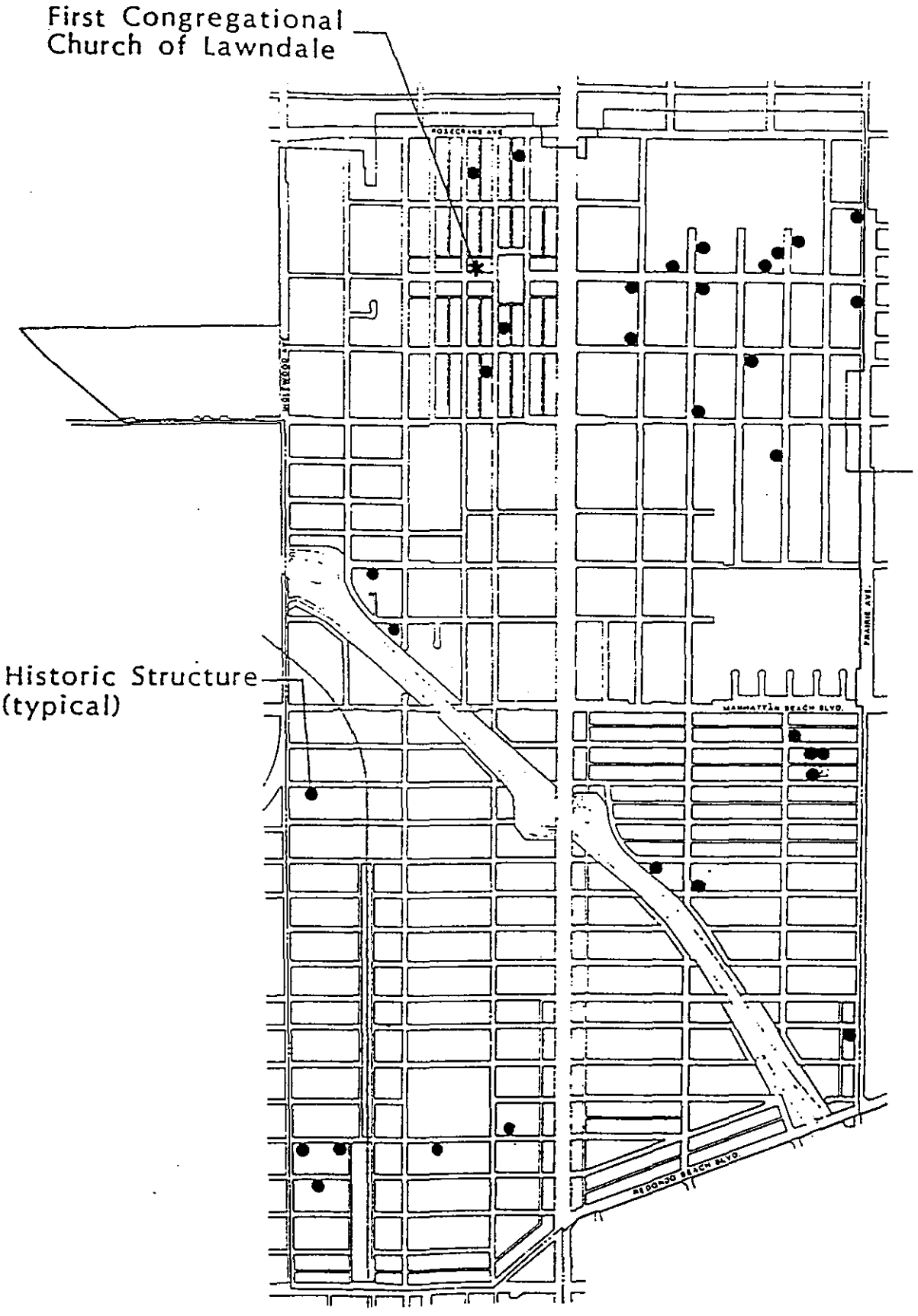
The City of Lawndale does not have an integrated solid waste management plan at this time, and there are no city operated recycling facilities. The City does, however, contract for the pick-up and hauling of all



Source: The Lightfoot Planning Group

Typical Household Energy Conservation Techniques

Figure A



Source: The City of Lawndale, 1983

Local Historic Structures

Figure B

residential solid waste to the nearest transfer station. Commercial and industrial accounts are shared between a number of private hauling companies. At the transfer station, the load is placed into a trailer and taken to the Puente Hills landfill which is operated by the Los Angeles County Sanitation District. The ultimate operating life of the landfill is projected to be approximately twenty years. The County Sanitation District has developed various environmental control systems to eliminate, mitigate, and/or reduce to minimal levels, any potential impacts on the environment and surrounding areas from the landfill activities, such as:

- Gas collection and monitoring systems;
- Groundwater protection system;
- Dust and litter control;
- Monitoring of illegally deposited wastes;
- Landscape and irrigation systems;
- Resource Recovery.

Waste Composition:
To obtain an understanding of the amounts and types of waste that are generated by a city, Table 1 provides a waste composition analysis performed for the City of Los Angles. As the table indicates, yard waste and miscellaneous paper comprise over two-thirds of residential waste. The percentages are similar to those County-wide, as shown on Table 2, and are indicative of the amounts and types of waste that are generated in the city of Lawndale.

Source Reduction:
Lawndale has three private accounts for recycling facilities in Lawndale which provide newspaper, glass, aluminum, and plastic pick up one time per week. Lawndale does not have any commercial or industrial recycling accounts at the present time.

Goals and Policies

Lawndale's Conservation Goals and Policies, which are designed to provide for efficient management and conservation of the City's natural resources, are as follows:

Goal 1. Water Conservation

Conserve water resources in the City through retention of the existing drainage system, the protection of limited groundwater resources, and domestic water conservation measures.

City of Los Angeles Residential and Commercial Waste Composition		
Material	Residential (% by weight)	Commercial/Indust. (% by weight)
Cardboard	2.6	9.7
Newspaper	5.7	5.4
Miscellaneous paper	25.5	17.2
Plastics	4.2	6.1
Aluminum	0.5	0.4
Ferrous and other metals	3.0	4.8
Glass	6.4	3.4
Textiles	2.2	2.8
Lumber/wood	2.2	22.6
Yard waste	35.6	4.1
Other/unclassified	3.3	19.2
TOTAL	100.0	100.0

Source: City of Los Angeles Solid Waste Management Plan, Phase I Report, Existing Conditions, August 1989..

City of Los Angeles
Solid Waste Composition

Table 1

Countywide Average Waste Composition for Los Angeles County		
Material	Residential (% of waste)	Commercial/Indust. (% of waste)
Newspaper	8	2
Glass	7	7
Tin cans	4	5
Alunimum cans	1	1
Plastic (all types)	5	7
Leather/rubber/textiles	6	8
Scrap wood	5	12
Yard waste	30	5
Ceramics/stone	3	4
Garbage	6	5
Miscellaneous paper/cardboard	20	40
Miscellaneous	5	4
TOTAL	100	100

Source: Solid Waste Management Status and Disposal Options in Los Angeles County, February 1988.

Los Angeles County
Solid Waste Composition

Table 2

Policy 1a
New construction and development shall conserve water through conservation techniques relating to water usage and waste.

Policy 1b
All new construction requiring indoor plumbing shall be required to install low-flow toilets, faucets and shower heads.

Policy 1c
New developments should install water conserving appliances, such as washing machines and dishwashers.

Policy 1d
Require the usage of xeriscape and micro-irrigation practices for development review approval of all landscape plans.

Policy 1e
Residential projects having common green areas, and all commercial, industrial, and public projects shall be required to install automatic, moisture sensing, micro-irrigation systems.

Policy 1f
Non residential projects shall be encouraged to incorporate decorative hardscape plazas with drought tolerant landscaping into project design.

Policy 1g
Examine and initiate where appropriate and feasible, the use of alternative water conservation systems, such as greywater and reclaimed water usage.

Policy 1h
Provide additional storm drainage facilities, and improve existing deficient facilities, where necessary as determined by the Los Angeles County Department of Waste Water Management and/or the City of Lawndale.

Goal 2. Air Quality

See Air Quality Management Compliance Plan Goals and Policies

Goal 3. Energy Conservation

Minimize negative environmental effects of supplying and using energy by reducing the community's reliance upon traditional energy resources through initiation of energy conservation practices and the utilization of available energy technology.

Policy 3a
Make use of energy audits and energy monitoring practices for publicly owned facilities and start programs to retrofit where necessary.

Policy 3b
Investigate the benefit and economic feasibility of establishing an energy coordinator position.

Policy 3c
Encourage innovative building, site design and orientation techniques which minimize energy use.

Policy 3d
Promote public awareness of energy conservation technology and practices in order to assist in the reduction of inefficient energy consumption.

Policy 3e
Inform the community of methods for achieving energy conservation.

Policy 3f
Encourage utility rate revisions, i.e. target or base rates that provide incentives for conservation practices

Goal 4. Cultural Resources

Promote the preservation and rehabilitation of cultural resources that are significant to the Lawndale community because of their age, architecture, history, or symbolism.

Policy 4a
Promote the preservation and/or conservation of historic structures, places, and or architectural features.

Policy 4b
Investigate the appropriateness and feasibility of implementing a Historic Preservation Ordinance for the preservation of historic structures.

Policy 4c
Investigate the feasibility of implementing a local historic registry program.

Policy 4d
Encourage the preservation of historic structures on their existing sites or relocation if necessary and feasible.

Policy 4e
Discourage the demolition or movement of historic structures without an evaluation of the condition of the structure, the costs of rehabilitation, and the feasibility of preservation or conservation alternatives.

Policy 4f
Encourage the adaptive re-use of historic structures.

Goal 5. Solid Waste

Promote source reduction as well as the safe and efficient transportion and disposal of the City's municipal solid waste.

Policy 5a
Prepare, adopt, and implement an Integrated Solid Waste Management Plan which includes a Source Reduction and Recycling Element per the provisions of Chapter 2 and commencing with Chapter 6 of the California Integrated Waste Management Act of 1989, Assembly Bill 939.

Implementation Programs

1. Water Conservation

1.1. Ordinance No. 671-91
The City shall revise the Water Conservation Ordinance to require additional conservation measures relating to new construction, development, landscaping, and general water usage and waste. Increase limitations during a stage three alert status to limit use of water used during construction to non-potable water only and limit the number of new building permits to be issued.

1.2. Utilization of Runoff
Research and develop a system to utilize storm drainage runoff for public landscaping needs.

1.3. Public Information Program
Prepare and distribute public information pamphlets to assist residents in their conservation efforts. Information to be contained in the pamphlets should include simple sprinkler design, identification of low cost drought tolerant plant materials, and development of temporary greywater usage during a drought emergency.

1.4. Surface Drainage Improvements
The City shall identify the locations in need of surface drainage facilities or improvements, and coordinate with the Los Angeles County Department of Waste Water Management to carry out the improvement projects.

1.5. Zoning Ordinance Revisions
For replenishment of the groundwater supply, the City shall revise the City's zoning Ordinance to promote the use of permeable materials in order to encourage water percolation into the soil.

2. Air Quality

2.1. Air Quality Management Plan
Adopt and Implement the Air Quality Management Plan as contained in part three of the Resource Management Chapter of the General Plan.

3. Energy Conservation

3.1. Energy Conservation
Coordinate with the Gas Company and the Electric Company to develop and implement an Energy Conservation Program with service teams that provide free home energy surveys and conservation items, such as fluorescent lightbulbs and low flow water fixtures.

3.2. California Environmental Quality Act
The City shall utilize the environmental review process, whenever appropriate, to evaluate energy use and potential energy impacts along with the appropriate mitigation measures requiring the use of energy conservation practices.

3.3. Retrofit
Evaluate and determine the best residential and non-residential retrofit program for energy conservation in existing structures. Adopt and implement the appropriate energy retrofit program.

3.4. Energy Efficiency Standards
The City shall establish and maintain appropriate energy efficiency standards for all new construction through a comprehensive energy management ordinance.

3.5. Title 24 Building Code Requirements
The City shall maintain appropriate legislation to establish, update, and implement energy performance building code requirements with respect to Title 24 of the Uniform Building Code and subsequent amendments.

3.6. Public Awareness
The City shall provide a model for the community, private and public, by undertaking and publicizing an energy efficiency and renewable energy resource program.

4. Historical/Cultural

4.1. Historic Preservation

The City shall develop and implement a Historic Preservation Ordinance for the preservation of historic residences and structures.

4.2. Historic Registry

Establish the feasibility of implementing a local historic registry program that provides incentives for retrofitting and maintenance, as well as public recognition, of the local resource.

4.3. Demolition Review

The City shall prohibit the demolition or movement of historic structures without an evaluation of the condition of the structure, the costs of rehabilitation, and the feasibility of preservation or conservation alternatives.

5. Solid Waste Programs

5.1. Recycling

The City shall develop and implement a community recycling program which provides facilities and public information for commercial and industrial properties as well as for residential.

5.2. Recycling Center

Locate and develop a public Source Reduction and Recycling Center that provides facilities to accommodate paper, glass, aluminum, plastics, cardboard, and ferrous metals.

5.3. Private Recycling Accounts

Establish accounts with private hauling agencies to provide recycling facilities on commercial and industrial property.