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## **CONSERVATION**

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### **GOAL**

Provide a clean and healthy environment in which to live.

### **OBJECTIVES**

- Minimize and avoid adverse noise impacts by planning for the appropriate placement of high noise generating land uses and by mitigating existing noise impacts, where feasible.
- Encourage water conservation through development and landscaping guidelines.
- Conserve energy by utilizing alternative energy sources and energy-efficient building and site design principles.

### **DISCUSSION**

Conservation and protection of natural resources is becoming an increasingly important aspect of daily life in every community. Air, water, land and energy are resources which must be conserved or protected. Conservation is the planned management, preservation and wise utilization of natural resources. Its purpose is to prevent the wasteful exploitation or destruction of the community's natural resources and adoption of policies for their preservation, development and wise use.

#### **Air Quality**

Monitoring of air quality at the Island Avenue and El Cajon Air Monitoring Stations (the two closest stations) for the years 1977, 1978 and 1979 (and 1980 for Island Avenue) indicate that the California standards for ozone, hydrocarbons and particulates were exceeded while the California standards for nitrogen dioxide and sulfur dioxide were achieved during the most recent monitoring year. The standard for carbon monoxide was exceeded at both air monitoring stations in 1979, but in 1980, the standard was achieved at Island Avenue.

The Park North-East community planning area is located in the San Diego Air Basin/San Diego County which has been classified as a non-attainment area for the pollutants of ozone and particulates; the county is an attainment area for nitrogen dioxide, carbon monoxide and sulfur dioxide. The most significant source of air pollution in the San Diego Air Basin is automobile emissions. There are no known stationary sources in Greater North Park that significantly impact air quality.

#### **Noise**

Air and ground transportation are the predominant noise sources in the Greater North Park community planning area. Traffic volumes on all existing freeways, prime arterials, major streets and many collector streets within the Park North-East generate average noise levels of

65 decibels and greater on adjacent properties. Noise contours for the year ending September 30, 1981 indicate that only the southwestern tip of the community was impacted by average noise levels of 65 and greater because of aircraft approaching Lindbergh Field.

According to the San Diego Plan for Air Transportation prepared for SANDAG, a “comparison of the 1980 and 1985 contours shows that the contour areas are reduced in later years, reflecting changes in aircraft types that will serve Lindbergh Field in the future.” More specifically, “based on estimated fleet replacement rates and manufacturers’ estimates, it is assumed that all carrier aircraft operating from Lindbergh Field will meet Federal Aviation Regulation (FAR Part 36) noise standards by 1985.” As a consequence, the aircraft projected 60 CNEL noise contour for 1995 falls outside the Park North-East community.

## **Energy**

There is general agreement that existing ways of life, urban patterns, transportation facilities, buildings and equipment all reflect a past when energy was abundant and cheap. Many other countries, with living standards equal to ours, use less than half the energy per capita that is consumed in the United States. Apart from savings in transportation, the next most fertile area for improving efficiency is building and development design and land use patterns. It is indisputable that sprawled low-density urban development increases travel distances, street and highway requirements, public utility extensions and public service costs (fire, police, schools) – all of which translate directly into increased energy use. Grouped structures and higher-density development have recognized energy savings. Subdivisions in areas that are hot in summer and cold in winter, or in areas where auto dependence is mandatory, or where cultural and commercial and recreational and employment facilities are lacking, can only result in increased energy use – not only in initial development but also in yearly operation and in the more nebulous energy costs that traffic congestion, waste water and public services demand.

In addition to the location of development, its design can be oriented toward better use of energy. Narrow streets reduce construction energy and materials, and reflected summer heat. Deciduous street trees allow summer shade and winter sun on buildings and streets, and make walking and bicycling more attractive. More extensive walks and bicycle paths reduce auto use. Smaller minimum lot sizes reduce travel, utility and service distances.

Important energy savings can also be realized through energy-conserving site planning and building design techniques and principles. Flexibility in required setbacks allows building to be oriented to maximize sun access and wind for natural heating and cooling factors. Designs that consider micro-climates, building efficiency, summer shade and winter exposure of windows and the energy implications of colors and materials can reduce total energy operating needs by as much as 50 percent.