

ENERGY CONSERVATION

ENERGY CONSERVATION

The City of Cannon Beach promotes energy conservation through several means:

1. Funding support of the community recycling center (\$1000 per year) in conjunction with the Portland Recycling Team.
2. Land use controls that provide for efficient land use and public facilities extensions, including a realistic urban growth boundary, small lot size requirements where feasible, and maintenance of a compact commercial center.
3. Use of energy efficient sewer and water systems, including a stabilization lagoon-type sewage treatment system, high level water reservoir, and use of gravity wherever possible for moving water or wastewater.
4. Promotion of bike use and walking through the construction of bike paths and sidewalks, and the establishment of parking lots in central locations to encourage people to park in one place and walk rather than drive from place to place.

The City is currently investigating the feasibility of powering the sewer pump stations and aerating the waste lagoons with wind energy conversion systems (windmills); a grant application is currently being prepared for submission to the State Department of Energy to fund a feasibility study and pilot project. The aim would be to study both the mechanical and electrical energy possibilities of conserving the power now used to pump wastewater, one of the major uses of energy by the City.

The City encourages the use of solar energy in home construction through its zoning ordinance, which protects solar access of adjacent structures, and through the enforcement of the uniform building code. Although the climate of Cannon Beach is cloudy and wet much of the year (70 hours of sunshine per month in January, 240 hours in July), the mild temperatures and radiation that comes through the cloud cover makes solar space heating and water heating quite feasible. One solar home owner in Cannon Beach claims 60-75% heating needs in a passive solar heating system. Several solar structures have been constructed in town, including a motel complex. Most solar heated structures use wood as a backup source.

The abundance of wood in the area makes it an extremely feasible source of alternative energy.

In conjunction with Mr. R.H. Walkup of the Crown Zellerbach Corporation, it has been determined that a community firewood lot of approximately 300 acres can provide the City with enough cord wood to heat all of the permanent structure on a sustained yield basis. At the present time, most firewood is logging debris culled from clearcut forests. 1979 prices of a cord range from \$50-\$60, depending on the species and availability. It was determined that an efficient, managed woodlot close to the City could significantly reduce this cost.

In order to pursue this idea, a feasibility study could be done to investigate: 1) the use of State Forestry Department lands just east of the City (approximately 750 acres), 2) the possibility of providing grants or loans for the installation of safe, efficient wood heaters, particularly to low income persons, and 3) the use of mechanized harvesting and splitting equipment to reduce the cost per cord.

The breakdown of home heating types in Cannon Beach is as follows:

HOME HEATING METHODS - 1977

| <u>Type</u> | <u>Number</u> | <u>Percent</u> |
|------------------------|---------------|----------------|
| Propane | 21 | 4 |
| Oil | 120 | 23 |
| Electricity | 294 | 57 |
| Wood | 76 | 15 |
| Solar | 2 | - |
| Don't Know/No Response | 5 | 1 |
| Totals | 519 | 100 |

Natural gas is not available in Cannon Beach at the present time, although Northwest Natural Gas Company has discussed the possibility of bringing a line from Seaside in the future. Pacific Power and Light provides electrical power from a substation on Ecola Creek Road. The substation and corridor is reported to be sufficient for the foreseeable future.

The other major use of energy in the City is for motorized transportation. Since the community is a resort, it has little

power to control use of visitors. However, the City encourages bike and pedestrian modes wherever possible. The police department has recently purchased a Volkswagen Rabbit for use as a patrol car. It is projected that as energy costs rise, use will grow at a rate below that of population growth. The gas shortages of 1979 have already caused a measurable reduction in tourist traffic. The city has adopted the energy conservation provisions of the Uniform Building Code for new structure, and interest in alternative forms of energy is high among the populace of Cannon Beach.