

## LAND COVER CHANGES IN URBAN AND RURAL AREAS OVER TIME

**Outcome: Protect and Enhance Natural Ecosystems**

### Countywide Planning Policy Rationale

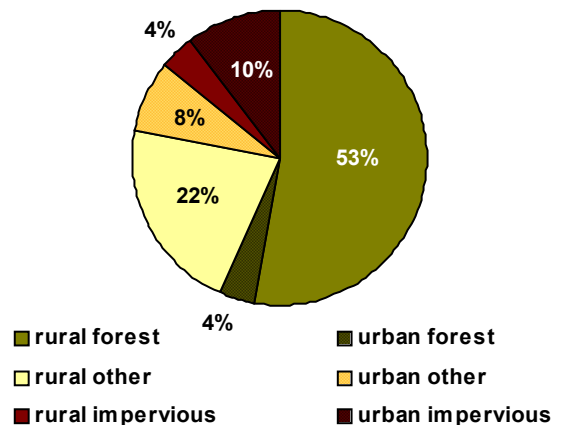
“The land use pattern for the County shall protect the natural environment by reducing the consumption of land and concentrating development. Urban Growth Areas, Rural Areas, and resource lands shall be designated and the necessary implementing regulations adopted.” (FW-6) “All jurisdictions shall protect and enhance the natural ecosystems through comprehensive plans and policies, and develop regulations that reflect natural constraints and protect sensitive features. Land use and development shall be regulated in a manner which respects fish and wildlife habitat in conjunction with natural features and functions, including air and water quality. Natural resources and the built environment shall be managed to protect, improve and sustain environmental quality while minimizing public and private costs.” (FW-4)

### About This Indicator:

Population growth and development have substantially altered the landscape in King County. Of particular interest for the protection of salmon and other aquatic resources is the conversion of forest and natural land cover to hard or impervious surfaces, such as roofs, sidewalks, parking lots and roads. In 2004, the King County Council adopted stormwater, clearing and grading, and critical area regulations that are designed to maintain forest cover and limit impervious surfaces in rural areas and improve stormwater management in urban areas. These changes reduce the impact of rural development on the natural environment. In the Rural Area, they protect hydrologically mature forest cover and soil, which in turn absorb rainfall, encourage natural stream flows and provide necessary wildlife habitat in the Rural Area. In the Urban Area, they provide for better infiltration of stormwater, which recharges the groundwater and reduces stormwater impacts on streams and wetlands.

Figure 9.1

**Land Cover in King County (2000/2001)**



**Land Cover** King County includes approximately 2,136 square miles of land area. Over 78% of this land area—1,676 square miles—is designated rural land. As shown in figure 9.1, over one-half of King County’s geography is forested, including a small percentage of forest cover within the urban growth area. Impervious cover accounts for 14% of the county’s land area and another 30% of the land area includes other forms of vegetative cover including grass, wetlands and crops. No trend data for land cover change currently exists; however, this land cover data, obtained by 2001 Landsat imaging provides a baseline for outyear comparison.

Figure 9.2

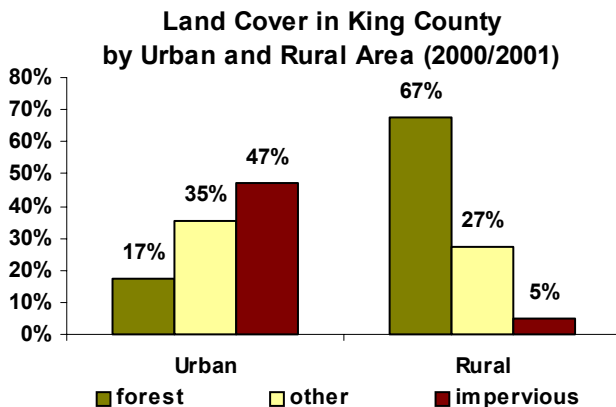


Figure 9.2 allocates King County’s land cover by Urban and Rural Area. As shown, the Rural Area is largely characterized by vegetative cover, while only 5% of the area is covered with impervious surface. The natural cover of the Rural Area and high rate of impervious cover in the Urban Area can be attributed to development practices that focus growth in the Urban Area and preserve natural space in the Rural Area. It is notable however, that 17% of the Urban Area’s geography includes forested land (a characterization determined by canopy density), providing important ecological functions and recreation opportunities for King County residents.