

**SUMMARY OF BOARD ITEM**

**ITEM NO. 01-5-3:** PUBLIC HEARING TO PRESENT INFORMATION REGARDING THE EFFECTS OF TREES AND OTHER VEGETATION ON AIR QUALITY.

**DISCUSSION:** Trees and other vegetation have both positive and negative effects on air quality. Quantifying the various effects is not simple, but is a necessary element for developing a complete understanding of the factors that influence air quality. One of the positive effects is that shade trees, and to a lesser extent other vegetation, can reduce urban daytime temperatures and thereby reduce the demand for air conditioning and electrical power generation, including the associated emissions of criteria pollutants, greenhouse gases, and carbon dioxide. Vegetation also generally increases the rate of removal of pollutants from the atmosphere. However, this effect depends on species, age, and management techniques such as water and fertilizer. It is also known that vegetation emits hydrocarbons that are precursors to ozone and particulate matter and that the emission rates vary widely between species. But this information is not widely used in landscaping or urban planning and there is little, if any, incentive for its consideration. Lastly, for many individuals, the acute health effects from pollens associated with trees and plants are a major concern. Thus, it is clear that choices in landscaping and in land use can influence air quality. Despite the difficulty of quantification, the effects of vegetation on air quality are worthy of consideration.

