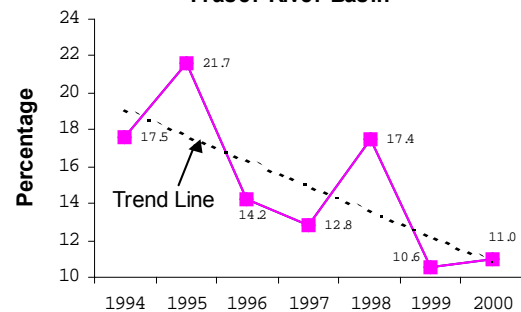


Air Quality in the Fraser River Basin

Particulate Matter

- Particulate Matter includes both solid and liquid particles such as dust, dirt, soot, and smoke that remain in a suspended state for some duration.
- Particles smaller than 10 micrometers (PM₁₀) can enter into our lungs and can damage lung tissue, weaken the immune system, and aggravate existing conditions.
- PM is also a major component of smog, can cause increased corrosion, and can damage vegetation by reducing photosynthetic capabilities.
- Fine Particulate Matter levels within the Fraser River Basin have declined between 1994 and 2000. In the 17 monitoring stations throughout the Basin, the average percent of time where PM₁₀ levels have exceeded health criteria of 25ug/m³ has decreased from 17.5% to 11%.

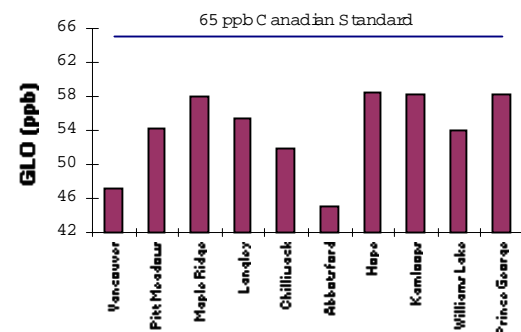
Average Percent of Time Inhalable Particulates (PM₁₀) Exceeded 25ug/m³ in Monitored Communities within the Fraser River Basin



Ground Level Ozone

- Ground Level Ozone (GLO) is a main component of urban smog, and can damage lung tissue as well as reduce crop yields. Although there are other ways that ground level ozone can get into the environment, most GLO is produced as a result of vehicle emissions reacting with sunlight.
- Ground level ozone is a problem in many areas of the Fraser River Basin, although values have remained below the Canadian Standard. Between 1998 and 2000, the highest levels of GLO were measured in Maple Ridge, Kamloops, Prince George, and Hope.

Ground Level Ozone in Monitored Communities in the Fraser River Basin Averaged for 1998-2000



Note: GLO was measured in parts per billion as the annual 4th highest 8-hr daily maximum

- To people living in the Lower Mainland and the Lower Fraser Valley of the Fraser River Basin, ground level ozone is an obvious concern. In the summer, the high population density, the high vehicle concentrations, and the significant commercial transportation often helps to produce very visible smog that is usually carried into the Fraser Valley where it tends to linger.

Source:

BC Ministry of Water, Land and Air Protection, 2002. *Environmental Trends in British Columbia 2002*. Victoria, BC. <http://wlapwww.gov.bc.ca/soerpt>