

Air Quality

Poplar/Cotton Center is located in the San Joaquin Valley Air Basin. This basin comprises the southern portion of the Central Valley which is bounded on the west by the Coastal Range, on the east by the Sierra Nevada Mountains, on the south by the Tehachapi Mountains, and on the north by the Sacramento Valley Air Basin.

The San Joaquin Valley Air Basin has failed to attain National Ambient Air Quality Standards for two pollutants: ozone and particulates (PM-10). As such, the valley has been designated a "non-attainment area". Accumulation of high concentrations of these pollutants has been attributed to the basin-like topography of the Southern San Joaquin Valley and the presence of a low level inversion layer for much of the year.

Significant sources of air pollution include the automobile, local industry, fireplace smoke, and farming activities which generate dust and smoke. On a more local level, persons living adjacent to agricultural fields are the most likely to be exposed to chemical spraying and to smoke from the burning of agricultural waste.

Ground Water

Groundwater serves as the main source of domestic water in the Poplar/Cotton Center area. Water moving down gradient from the floodplains of Sierra Nevada streams and rivers, including the Tule River, is the major source of groundwater recharge in the area. Application of imported irrigation water in the surrounding agricultural lands is another source of groundwater recharge, as is percolation from irrigation canals. Rainfall in the Poplar/Cotton Center area is about 10 inches annually and provides only a minor percentage of total groundwater recharge in the area.

The groundwater table currently lies about 75 feet below the ground's surface. The Environmental Impact Report prepared for construction of the Poplar Wastewater Treatment Plant indicates that all of Poplar CSD's wells are currently meeting state health requirements for domestic water supply.

Flooding

According to maps prepared by the Federal Emergency Management Agency, the planning area is located entirely within Flood Zone C - described as "areas of minimal flooding". The nearest area subjected to flooding is within the channel of the Tule River, north of Cotton Center.