two miles. Elevations range from 385 – 415 feet above sea level.

Vegetation and Wildlife

The vegetation, where undisturbed, is valley grassland, which is characterized primarily by deep-rooted perennial bunch-grass. Cultivated fields produce cotton and other field crops, or grass for range land.

The Strathmore area is in the historic range of certain endangered animals including the Blunt-Nosed Leopard Lizard, San Joaquin Kit Fox, and Giant Garter Snake. However, few if any of these species are found-in Strathmore today due to extensive building within the community and cultivation of the surrounding lands.

Geology & Seismic Hazards

Soil groupings are based upon major physical and chemical characteristics of the soil. Information contained in the Tulare county ERME II, Soils, categorized Strathmore within the Group 3 soils consisting of well drained soils with hardpans or indurate layers situated in its profile (the vertical section make-up extending from the surface into the parent material). The permeability of the soil is limited by the hardpan layer, and is thus considered inappropriate for septic tank absorption fields.

Strathmore area soils, as identified in the ERME II, Soils, are generally classified as having slow filtration rates. The soils are fine textured soils or shallow soils (over nearly impervious materials resulting in slow rates of water transmission) and very high run-off potentials. According to the United States Department of Agricultural, soil conservation service, the erosion hazard in the Strathmore Area is none-to-slight. Gentle slopes, soil texture and structure, parent material, vegetative cover, and run-off potential contribute to the low soil erosion.

Soil quality within the Strathmore area and throughout Tulare County is well suited for long-term agricultural production. Strathmore soils are predominantly Class III, which is considered one of the most important agricultural soils in the County.

The 1974 Five County Seismic Safety Element, adopted by the County of Tulare, places the Strathmore Planning Area within Seismic Zone VI. Seismic Zone VI includes the most of the eastern San Joaquin Valley, and is characterized by a relatively thin section of sedimentary rock overlying a grantic basement. Amplification of shaking that would affect low to medium-rise structure is relatively high, but the distance to either the San Andreas or Owens Valley faults (the expected sources of shaking) is sufficiently great that the effects should be minimal. Adherence to the requirements of the Uniform Building Code applicable to the Planning Area should be adequate to protect new structures from earthquake damage.

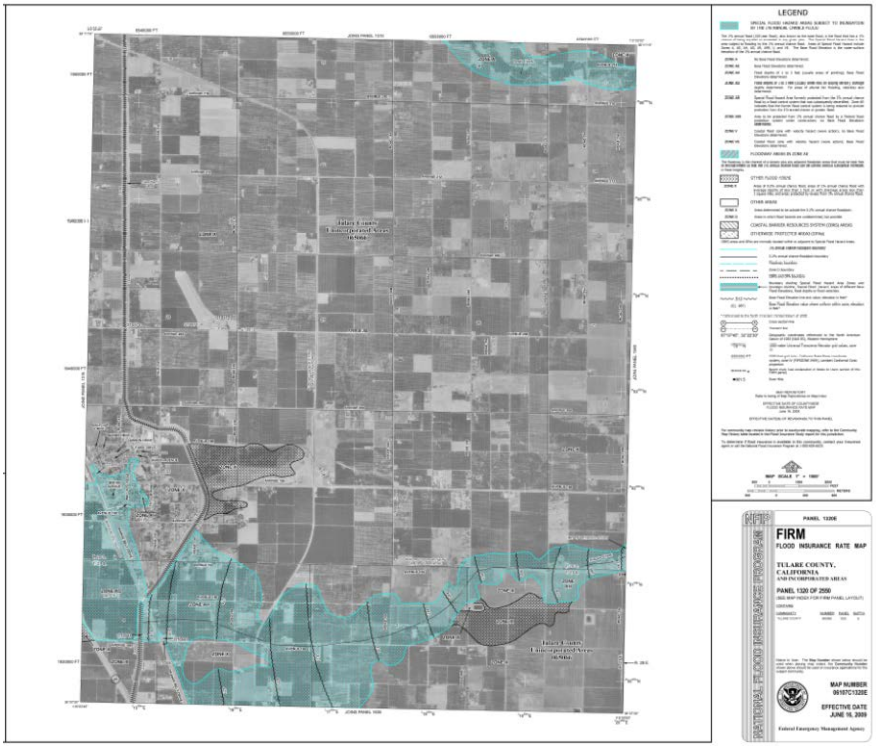
Flooding

"Flooding is a natural occurrence in the Central Valley because it is a natural drainage basin for thousands of watershed acres of Sierra Nevada and Coast Range foothills and mountains. Two kinds of flooding can occur in the Central Valley: general rainfall floods occurring in the late fall and winter in the foothills and on the valley floor; and snowmelt floods occurring in the late spring and

early summer. Most floods are produced by extended periods of precipitation during the winter months. Floods can also occur when large amounts of water (due to snowmelt) enter storage reservoirs, causing an increase in the amount of water that is released."[1] "Flood events in the Tulare Lake region are caused by rainfall, snowmelt, and the resultant rising of normally dry lakes. Although significant progress has been made to contain floodwaters in the region, improvements to the flood control system are still needed to lessen the flood risk to life and property."[2]

"Official floodplain maps are maintained by the Federal Emergency Management Agency (FEMA). FEMA determines areas subject to flood hazards and designates these areas by relative risk of flooding on a map for each community, known as the Flood Insurance Rate Map (FIRM). A 100-year flood is considered for purposes of land use planning and protection of property and human safety (see Figure 3). The boundaries of the 100-year floodplain are delineated by FEMA on the basis of hydrology, topography, and modeling of flow during predicted rainstorms."[3] Although some areas of Tulare County have experienced major flooding along its major rivers, the Strathmore Plan Area has not. There are portions of Strathmore, however, that are within and adjacent to the FEMA 500 and 100 year flood zones. According to the Tulare County General Plan Update, substantial flooding could occur in Tulare County if the two (2) major dams were to experience failure. The Tulare County Flood Plain Management Study identified Frazier Creek and local ponding as the primary sources of flood water within and near the Strathmore community. The inundation area below the Success Dam does extend to portions of Strathmore.

Figure 3 – FEMA FIRM



[1] General Plan Background Report, page 8-13
[2] California Water Plan Update 2009, Tulare Lake, page TL-28 to TL-29
[3] General Plan Background Report, page 8-14

"Special flood hazard area" is the land in the floodplain subject to a one percent or greater chance of flooding in any given year. "Floodway" means the channel of a river or other watercourse and the adjacent land area that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot. The floodway is delineated on the Flood Boundary Floodway Map, on maps adopted by the State Reclamation Board when acting within its jurisdiction, and on the County Zoning Map (signified by the F-1 Primary Flood Plain Zone). The F-2 Secondary Flood Plain Combining Zone which is intended for application to those areas of the County which lie within the fringe area or setback of the flood plain and are subject to less severe inundation during flooding conditions than occur in the F-1 Zone.

FEMA determines areas subject to flood hazards and designates these areas by relative risk of flooding on a map for each community, known as the Flood Insurance Rate Map (FIRM). These areas are designated as Zone A, AO, A1-A30, AE, A99, or AH on the FIRM. A 100-year flood is considered for purposes of land use planning and protection of property and human safety. The boundaries of the 100-year floodplain are delineated by FEMA on the basis of hydrology, topography, and modeling of flow during predicted rainstorms. Within Strathmore, there are areas of localized ponding and puddling that occur during heavy rainfall events. Additional projects will be required in the future to further expand stormwater drainage capacity. According to the Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency (FEMA), as mentioned above areas in Strathmore, area subject to a 100-year flood. The depth of this potential flood could range from one to three feet. The elevation of building pads should eliminate the potential for loss of property should flooding occur.

The County of Tulare has taken steps to be a part of the National Flood Insurance Program (NFIP), which means the County of Tulare agreed to manage flood hazard areas by actively adopting minimum regulatory standards as set forth by Federal Emergency Management Agency (FEMA). The National Flood Insurance Program (NFIP) is administered by the (FEMA) to offer flood insurance to properties located in special flood hazard areas (SFHAs). Information about the NFIP, is available at the following website: www.fema.gov. As part of the county's participation in the NFIP, individuals are eligible to obtain flood insurance. Information regarding flood control in Tulare County is available at the County of Tulare Resource Management Agency at the following website:http://www.tularecounty.ca.gov/rma/index.cfm/public-works/engineering/flood-control/. On June 16, 2009, Tulare County adopted the new Digital Flood Insurance Rate Maps (DFIRMs). Information is available to determine if a property is located in a SFHA by using the following FEMA Map Service Center link as follows: https://msc.fema.gov/portal.

Air Quality

The Strathmore Plan Area is within the San Joaquin Valley Air Basin (SJVAB) and under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The SJVAB is classified non-attainment/severe for the State 0_3 1-hour standard, non-attainment for the State 0_3 8-hour standard, non-attainment for the State PM_{10} standard, non-attainment for the federal and State $PM_{2.5}$ standards, and attainment and/or unclassified for the remaining federal and State air quality standards. According to the Tulare County General Plan, the San Joaquin Valley has some of the worst air quality in the nation. The CO and NO_x emissions are typically generated by motor vehicles (mobile sources). The ROG emissions are generated by mobile sources and agriculture. Although emissions have been shown to be decreasing in recent years, the SJVAB continues to exceed state and federal air quality emission standards.