

## Flooding

The United States Department of the Army, Corps of Engineers, prepared an extensive study concerning the past, present, and future flooding of the northeastern half of Tulare County. Although not specifically focusing on Ivanhoe, the study described, in detail, the causes and probability of flooding from all water channels. The primary source of flood potential near the Ivanhoe community is the St. John's River, located approximately one-half mile south of the Plan Area.

The Study further indicates that southern portions of the community are within the Intermediate Regional Flood area (an area where flooding occurs on an average frequency in the order of once every 100 years although the flood may occur in any year). In the event of an Intermediate Regional Flood, portions of the community could be inundated with approximately three feet of water for several days. However, the most recent Federal Insurance Rate Maps (April 17, 1979) published by the Federal Emergency Management Agency, indicate that the southern portions of Ivanhoe are subject to inundation of one foot or less of flood water. Exhibit II-4 (page 12) illustrates those areas of the community within the 100-500 Year Flood Zones.

Although flooding can be a constraint to development, it will not significantly impede growth within the Plan Area since the areas that are subject to flooding are accurately identified, a sufficient amount of area not subject to flooding is available to accommodate future growth, and Tulare County has adopted development standards within flood zones to minimize flood damage.

## Biotic

The distribution of native wildlife has been greatly modified within the Plan Area due to agricultural production and development of urban uses. The activities accompanying these uses have helped to change the area's natural character. Remaining wildlife will be affected as urbanization intensifies within the Plan Area. The State Department of Fish and Game has documented sightings of San Joaquin Kit Fox (a federally-listed endangered species and state-listed threatened species) near the Plan Area and the unadopted Tulare County Biological Resources Element indicates that the San Joaquin Kit Fox historically ranged within the Plan Area.

The major distribution of vegetation in the Plan Area is attributed to agricultural activities such as orchards and pasture. No endangered or rare species of flora are recorded in the Plan Area.

## Archaeology

No known significant archaeological sites are located in the Plan Area because of its predominantly agricultural character.

## Seismicity

The 1974 Five County Seismic Safety Element, adopted by the County of Tulare, places the Ivanhoe Planning Area within Seismic Zone VI. Seismic Zone VI includes most of the eastern San Joaquin Valley, and is characterized by a relatively thin section of sedimentary rock overlying a granitic basement. Amplification of shaking that would affect low to medium-rise structures is