4.0 EXISTING INFRASTRUCTURE

4.1 OVERVIEW

This section contains a discussion of existing infrastructure in Tehama County including water, wastewater, storm water drainage, energy supply and communication systems.

LEGAL BASIS AND REQUIREMENTS

State law requires the general plan to address domestic water service issues but does not clearly specify or define requirements with regard to other facilities. However, State law encourages the local jurisdiction to include any other issue it determines to be relevant to the jurisdiction (Government Code 65303). This section addresses infrastructure, which dictates the ability for communities to expand and develop. Information in this section is relevant to most elements in the General Plan, particularly Land Use, as infrastructure availability will play a significant role in determining land use intensities appropriate to various planning areas.

4.2 PURPOSE AND METHODOLOGY

Information in this section can be used in the planning process to identify goals, objectives and policies for future development within the county. Information for this section was gained from existing public documents from County or other governmental agencies and from contacts with County staff and others as shown in the Bibliography.

4.3 EXISTING SETTING

POTABLE WATER

The Cities of Corning and Red Bluff each operate domestic water distribution systems that serve the residents of these communities. The remainder of the county is served by small community water systems and individual wells, listed below.

Gerber-Las Flores Community Services District

The Gerber-Las Flores Community Services District (GLFCSD) was formed in 1974 when several services consolidated. The Gerber and Las Flores area is located between State Highway 99 and Interstate 5 approximately 12 miles southeast of Red Bluff and 2 miles west of the Sacramento River. The GLFCSD began providing water services in 1999. Currently water, wastewater, levee, lighting and fire protection services are provided by the GLFCSD. The utility serves the unincorporated communities of Gerber and Las Flores with a district population of approximately 1200. Water services are funded with monthly user charges while fire protection, levee, and lighting services are funded by property tax assessments. Water is provided by 3 wells that have a maximum pumping capacity of 2 million gallons per day. Currently, the 420 water connections have an average daily use of 340,000 gallons.

Los Molinos Community Services District

The Los Molinos Community Services District (LMCSD) was formed in 1995 to deliver potable water to the unincorporated community of Los Molinos. The distribution system was completely rebuilt in 1996. The LMCSD uses 3 wells to serve 356 connections. The system was initially designed to service approximately 415 connections and was sized to provide for fire protection. The distribution system is currently not being used for fire protection; therefore it is believed that the system has additional capacity. No formal studies have been conducted to determine specific quantities.

Mineral Water Company

The Mineral Water Company, which was first certified in 1940, is a regulated water company serving 173 connections. The utility provides potable water to the unincorporated community of Mineral, located along State Highway 36, approximately 45 miles east of Red Bluff. Permitted water sources for Mineral City include two developed springs and a well. Four redwood storage tanks provide system storage of 325,000 gallons. The system has capacity to serve a maximum of 270 total connections.

Prior to 1991, the primary source of water for Mineral City was chlorinated surface water from Martin Creek. However, in 1991, the state adopted new regulations requiring an approved filtration method and disinfection of surface water. All public water systems using surface water were required to come into compliance with these regulations by June 29, 1993. The Mineral City Water Company initially had difficulty meeting water filtration and disinfection regulations. The company drilled three wells, but two were unsuccessful and the third had unacceptable levels of iron and manganese.

In August 2002, a private organization purchased the Mineral Water Company through an assessment district and upgraded the system with hookups that brought it into compliance with state standards.

Paskenta Community Services District

The Paskenta Community Services District was formed in 1968 to provide water to the unincorporated area of Paskenta, located approximately 20 miles west of Corning in southwestern Tehama County. The water treatment plant was constructed in 1968 and became operational in 1969. Because the bedrock in Paskenta is primarily vertical, reliable sources of groundwater in the area is very difficult to obtain. Currently, 100 percent of the district's water is pumped from Thomes Creek.

Surface water is removed from the creek via pumps prior to processing and treatment. The pumps currently operate approximately 18 hours per day during the peak season. The district utilizes a process of sedimentation tanks, pressure filters, and chlorination to treat the water. Although no documentation exists, information provided by a district representative estimated that the district currently has less than 4 miles of service lines. On average, the CSD estimates that it delivers approximately 2 million gallons of treated potable water per month to its current customers.

The CSD currently has 82 water connections, though some are not currently in use. The district charges a $30 flat fee for customers for any usage up to 15,000 gallons, with anything beyond 15,000 gallons being charged an additional rate. The district currently only employs a single individual that serves the functions of operation and maintenance. Based upon the current estimate provided by the CSD, the district could accommodate an expansion of 10 additional single-family units. There are currently no expansion plans contemplated by the district, as funding for such a small district is only enough to cover operation and maintenance.

Rio Alto Water District

The Rio Alto Water District (RAWD) was formed in 1968 to provide water to the residents of the Lake California area, which is located in northern Tehama County, approximately 20 miles north of Red Bluff. The district currently serves 1,163 potable water customers. Customers of the RAWD are almost exclusively residential, with the exception of five commercial uses. Rio Alto is 93

percent customer "fee for service" based, with about seven percent of its funding being tax-based.

Rio Alto's water source is 100 percent groundwater. None of the groundwater that is delivered to customers is treated by the water district and no chemicals are added. The district has three active wells and one standby well. These range from 450 feet to 660 feet in depth. The district can currently supply a maximum of approximately 2.5 million gallons of potable water per day. According to district officials, Rio Alto is currently at approximately 1.9 million gallons, or 75 percent of its maximum supply capacity per day on the hottest days of the year.

IRRIGATION WATER

Corning Water District

The Corning Water District was formed in 1954 to deliver irrigation, manufacturing, and industrial water to the Corning area. Corning is located approximately along Interstate 5 20 miles south of Red Bluff and 6 miles west of the Sacramento River. Distribution system construction was completed in the spring of 1967, with water delivery beginning immediately thereafter. The CWD has a water supply contract with the Bureau of Reclamation for 23,000 acre-feet annually by way of the Red Bluff Diversion Dam and the Corning Canal. The delivery system was originally designed to deliver 25,000 acre-feet annually. The District is committed to providing water delivery to approximately 400 users. Because limited capacity remains, each request for annexation is evaluated individually and acceptance is dependant on the distribution system capacity at the location of the requested delivery.

El Camino Irrigation District

The El Camino Irrigation District formed in 1921 to deliver irrigation water to 7500 acres (approximately 12 square miles) of Tehama County. The District maintains approximately 70 miles of underground pipe consisting of the original construction in addition to updates which occurred in 1967. Groundwater is pumped by 27 wells that have a 1,000 gallon per minute capacity. The system capacity is approximately 87,000 acre-feet per year. Currently, the District pumps approximately 60,000 acre-feet to around 800 connections.

In 1995 the District was serving approximately 670 connections. Facing rising service requests but a constant amount of water sales, the District adopted a Groundwater Management Plan. A Subdivision Policy was approved in 1996. By 2002 the number of connections had risen to 770 and the District adopted a system of development fees and strengthened both the Subdivision Policy and the review process for new parcels. The District now delivers water to 800 connections.

Los Molinos Mutual Water Company

The Los Molinos Mutual Water Company (LMMWC) was formed in 1948 and provides irrigation water for approximately 450 connections. The utility serves the unincorporated community of Los Molinos and the surrounding area. Los Molinos is located along State Highway 99 approximately 15 miles southeast of Red Bluff and 1 mile east of the Sacramento River. The LMMWC obtains its water from nearby Mill and Antelope Creeks in addition to a well which operates on an as-needed basis in the dry season. The LMMWC is currently at its capacity to serve water and is not able to take additional customers.

WASTEWATER INFRASTRUCTURE

Rio Alto Water District

As mentioned previously, the Rio Alto Water District was formed in 1968 to provide water and sewer facilities to the residents of the Lake California area, which is located approximately 20 miles north of Red Bluff. The district currently serves 764 sewer customers, which are almost exclusively residential, with the exception of five commercial uses.

To process wastewater, the District utilizes a Tertiary treatment system with a multi-media filtration structure, prior to chlorination/de-chlorination and eventual discharge into the Sacramento River. The biological system is an Oxidation Ditch (Lakeside) followed by secondary clarification, filtration, and then disinfection prior to discharge. The plant's capacity is currently at 0.64 MGD, with a current average daily flow of approximately 0.2 MGD, according to officials.

Two methods of wastewater treatment and disposal are utilized within Tehama County. The first consists of community collection and treatment systems with discharge into the Sacramento River. The Second method is individual treatment at the site with return to the ground, using either septic/leach-field systems or seepage pits.

Gerber-Las Flores Community Services District

The Gerber-Las Flores Community Services District was formed in 1974 when several services consolidated. The Gerber and Las Flores area is located between State Highway 99 and Interstate 5 approximately 12 miles southeast of Red Bluff and 2 miles west of the Sacramento River. The GLFCSD began providing wastewater services in 1989. The utility serves the unincorporated communities of Gerber and Las Flores with a district population of approximately 1200. Wastewater services are funded with monthly user charges. Wastewater service is provided to approximately 500 connections. The GLFCSD uses surface treatment ponds to treat the daily average of 84,000 gallons of wastewater. The wastewater system is capable of processing 134,000 gallons per day.

County Wide Wastewater System

Community wastewater disposal outside of these areas is handled primarily by septic tank and leach field systems or by seepage pits. Onsite wastewater systems are limited by soil conditions throughout the county. Percolation tests are required to test acceptability of soils for septic systems. Constraints upon the success of percolation tests include rocky soils, high water tables and extremely porous soil conditions.

STORM DRAINAGE

Storm drainage within Tehama County generally consists of natural swales and topographic features. The cities of Red Bluff and Corning have domestic storm drainage systems to service the residents within the city limits.

4.4 REGULATORY FRAMEWORK

Land use planning and decision-making conducted by Tehama County must comply with applicable state and federal laws that affect infrastructure and land use. A number of federal and state regulations mandate domestic water and wastewater systems.

FEDERAL REGULATIONS

Under the General Pretreatment Regulations of the Clean Water Act (40 CFR 401.12) the US Environmental Protection Agency established standards to regulate discharge into a Publicly Owned Treatment Works (POTW). The regulations require pretreatment of any pollutant that would interfere with, pass through untreated, or otherwise be incompatible with the PTOW in an effort to reduce the level of pollutants discharged into municipal sewer systems and thereby reduce the amount of pollutants released into the environment through wastewater. The Central Valley Regional Water Quality Control Board enforces the Pretreatment Program in Tehama County.

As mandated by the Safe Drinking Water Act of 1974 (Public Law 93-523), the US Environmental Protection Agency (EPA) regulates health-based standards for drinking water to protect against both naturally occurring and man-made contaminants that may be found in domestic water. These standards (National Primary Drinking Water Regulations) set enforceable maximum contaminant levels for particular contaminants in drinking water and require ways to treat water to remove contaminants. As amended in 1996 the law enhanced protection of source water and public information regarding drinking water. EPA regulates these contaminants through the development of national primary and secondary Maximum Contaminant Levels (MCLs) for finished water. These standards are reviewed as provided for by the Safe Drinking Water Act.

Energy and Communications

The Federal Communications Commission (FCC) regulates interstate radio, television, telephone and other communications supplied by wire, satellite and cable systems. The Federal Aviation Administration and California Public Utilities Commission, among others, also have regulatory oversight.

STATE REGULATIONS

Water Supply

The State Water Resources Control Board (SWRCB) has broad authority over water rights and regulations for the state. The Central Valley Regional Water Quality Control Board has local authority over enforcement of state and federal statues.

Water suppliers must obtain a permit from the Department of Health Services, Office of Drinking Water for a community water system, defined as a "public water system that serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents of the area served by the system."

Senate Bills 610 and 22, effective January 1, 2002, required substantiation of the link between water supply and some county and city land use decisions. SB 221 requires the approval of a subdivision or development agreement of more than 500 residential units to include affirmative written verification of public water availability. SB 610 requires CEQA documents for large development projects to assess water availability, including existing and prior water supply entitlements.

Wastewater

The California Department of Health Services has jurisdiction over the distribution of reclaimed wastewater and the enforcement of Title 22 of the Health and Safety Code. The Central Valley

Regional Water Quality Control Board is responsible for issuing and enforcing waste discharge requirements, including discharge prohibitions and user re-use requirements for wastewater reclamation projects.

Energy and Communications

Most of the energy and telecommunications systems in Tehama County are franchisees whose activities are regulated by the California Public Utilities Commission.

4.5 ISSUES AND OPPORTUNITIES

Counties should plan for the adequate supply of water, wastewater treatment and storm drainage infrastructure to serve new and existing development. The availability of infrastructure lays the foundation for future development and opportunities for growth within the county. Land use distributions that minimize conflicts with existing and future water and wastewater infrastructure should be examined as should the relationship between development patterns and service costs.