SECTION 2
CALDWELL COUNTY CHARACTERISTICS

2.1 City Limits and ETJ Boundaries

The name Caldwell was given to the county in recognition of an Indian Fighter named Matthew Caldwell, who led a group of militia against the Comanches at Plum Creek in 1840. The county seat was named for Byrd Lockhart who owned the land over which the town of Lockhart would be established. Lockhart was incorporated in 1852. Luling, the other large city in Caldwell County, was incorporated in 1884 and is a significant center for railroads, cattle, cotton and oil.

Martindale is an incorporated city within Caldwell County. Mustang Ridge, Niederwald, and Uhland are incorporated cities that straddle the Caldwell County line with either Hays or Travis Counties.

Dale, Fentress, Lytton Springs, McMahan and Prairie Lea are some of the larger unincorporated communities in Caldwell County. Exhibit 2-1 illustrates the location of the cities and more populated communities in Caldwell County.

There are numerous other settlements in the County that are recognized geographically and include Brownsboro, Delhi, Elm Grove, Joilet, Maxwell, McNeil, Mendoza, Pettytown, Reedville, Saint Johns Colony, Seawillow, Soda Springs, Stairtown, Taylorsville, Tilman and Watts.

Major roadways that cross the county include United States (US) Highway 90 (east-west), US Highway 183 (north-south), SH 21, SH 80 and future SH 130 (northeast-southwest). Numerous other state and county roadways exist in the county that will provide easy connection to SH 130 and enable easy and fast travel to San Antonio, Austin and other destinations along the central Texas “I-35 corridor”.
Construction for segments 5 and 6 of SH 130 is underway and completion is scheduled for the year 2012. Segment 5 will begin in Mustang Ridge and continue to north of Lockhart while Segment 6 will pick up at the southern end of Segment 5 and exit Caldwell County between Martindale and Fentress on the way to the intersection of SH 130 with I-10 near the City of Seguin in Guadalupe County. Approximately 40 miles of roadway will be constructed for these segments of SH 130.

SH 130 will be a four lane divided highway. It will have direct connection to interchanges and provide ramps for access to non-toll lanes. SH 130 will be a toll road and it is anticipated that tolls may remain to fund maintenance and future local transportation projects.

2.2 Land Use

Current land use within Caldwell County is illustrated by Exhibit 2-2 and was obtained from the United States Department of Agriculture (USDA). Land in Caldwell County is mostly undeveloped and is used as pastureland, grassland, forestland or cropland. The developed areas are primarily located along US Highway 183, SH 21 and SH 80. Current population density is greatest in the northwest and north central portions of the county because of the area’s proximity to San Marcos, Austin and the I-35 corridor.

The southern and southeast portions of the county, with the exception of Luling, remain largely rural in character in nature. The oil and gas industry has been an important part of the economy in Caldwell County but its footprint and impact on land use is relatively small.

2.3 Watersheds

Land in Caldwell County drains primarily to the Guadalupe River Basin. Regional watersheds in the basin include the San Marcos Watershed, Plum Creek
Watershed and Peach Creek Watershed. Exhibit 2-3 illustrates the major watershed boundaries in the county.

A 58 square mile area in the northeastern corner of the county drains to the Colorado River Basin. The 58 square miles represents about 11 percent of the area of Caldwell County with the remaining 487 square miles draining to the Guadalupe River Basin.

Plum Creek is the largest watershed in Caldwell County. Plum Creek rises in Hays County and enters Caldwell County near Niederwald. It then flows from north to south through the heart of Caldwell County and enters the San Marcos River at the Caldwell/Gonzales County line. At its mouth, Plum Creek has a drainage area of 397 square miles and a stream length of 52 river miles. Approximately 80 percent (319 square miles) of the Plum Creek Watershed is in Caldwell County. The 319 square miles of the Plum Creek Watershed in Caldwell County comprises about 59 percent of the total area within Caldwell County. Plum Creek is an important surface water feature in Caldwell County and the citizens of the county have a vested interest in protecting the character and health of this historic and highly-valued water course.

The area within Caldwell County draining to the San Marcos River Watershed is 88 square miles or about 16 percent of the county. The San Marcos River flows south from the San Marcos city limits until it joins the Guadalupe River approximately 75 miles downstream near Gonzales, Texas. At its confluence with the Guadalupe River, the San Marcos River Basin has a total drainage area of 522 square miles. The San Marcos River is the western boundary of Caldwell County with a length along this boundary of 43 stream miles.

The Peach Creek Watershed has a total drainage area of 480 square miles at its mouth with approximately 81 square miles (about 14 percent of the county) of the watershed in Caldwell County. Peach Creek joins the Guadalupe River near the community of Harmon in Gonzales County.
2.4 **Certificates of Convenience and Necessity (CCN)**

In Caldwell County, there are twelve (12) water and four (4) wastewater utilities that hold a Certificate of Convenience and Necessity (CCN). A CCN is obtained by utilities for the purpose of defining a service area for municipal and public utility providers. A municipal utility defines a city, village or township and a public utility or water supply corporation (WSC) identifies a corporation or individual has ownership and responsibility.

2.4.1 **Water CCN Utilities**

Caldwell County has twelve (12) water providers that serve portions of Caldwell County. *Exhibit 2-4* outlines the areas within the CCN in Caldwell County that is held by the water service providers. The Texas Commission on Environmental Quality (TCEQ) provided the geographic information system (GIS) data through the Water Utility District (WUD) database. Luling and Lockhart are municipal utilities and the other providers are water supply corporations and special utility districts.

2.4.2 **Wastewater CCN Utilities**

Wastewater utilities in the county are limited due to the largely rural land use in the county. Undeveloped areas rely on on-site sewage facilities (OSSF) for treatment and disposal of sewage. The TCEQ discharge permits that were identified are shown in *Exhibit 2-5*.

Although Turner Crest Village LLC has obtained a wastewater discharge permit, the wastewater facilities have not been constructed. The intended service area is a large subdivision that will be developed based on demand for residential lots grows.
The City of Lockhart has two wastewater treatment plants that are operated and maintained by GBRA to serve the city residents. The facilities are located to the east of Lockhart.

The City of Luling also has two municipal facilities each to serve the city. The facilities in Luling are located to the northeast and southwest of the city limits.

2.5 Climate

The climate in Caldwell County is sub-tropical and humid. Low temperatures (40 degrees Fahrenheit (°F)) occur in the months of January and December and high temperatures (95 °F) occur in July and August. Average annual rainfall is approximately 37 inches per year and average the monthly precipitation varies from 1.8 inches in July to 4.4 inches in May. Table 2-1 presents the average temperatures, precipitation with record lows and highs as measured in the county at Lockhart, Texas. Graph 2-1 and Graph 2-2 graphically presents the information provided in the tables.

<table>
<thead>
<tr>
<th>Month</th>
<th>Average High</th>
<th>Average Low</th>
<th>Mean</th>
<th>Average Precipitation</th>
<th>Record High</th>
<th>Record Low</th>
</tr>
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<tr>
<td>January</td>
<td>61°F</td>
<td>37°F</td>
<td>49</td>
<td>2.27</td>
<td>89°F (1975)</td>
<td>-3°F (1949)</td>
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<tr>
<td>February</td>
<td>66°F</td>
<td>41°F</td>
<td>54</td>
<td>2.2</td>
<td>99°F (1996)</td>
<td>4°F (1951)</td>
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<tr>
<td>March</td>
<td>74°F</td>
<td>48°F</td>
<td>61</td>
<td>2.22</td>
<td>100°F (1971)</td>
<td>17°F (2002)</td>
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<tr>
<td>April</td>
<td>80°F</td>
<td>55°F</td>
<td>67</td>
<td>3.06</td>
<td>100°F (1939)</td>
<td>26°F (1971)</td>
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<tr>
<td>May</td>
<td>86°F</td>
<td>64°F</td>
<td>75</td>
<td>5.44</td>
<td>105°F (1967)</td>
<td>40°F (1903)</td>
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<tr>
<td>June</td>
<td>92°F</td>
<td>70°F</td>
<td>81</td>
<td>4.29</td>
<td>108°F (1934)</td>
<td>50°F (1919)</td>
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<tr>
<td>July</td>
<td>96°F</td>
<td>72°F</td>
<td>84</td>
<td>1.7</td>
<td>110°F (1954)</td>
<td>58°F (1967)</td>
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<tr>
<td>August</td>
<td>96°F</td>
<td>71°F</td>
<td>84</td>
<td>2.32</td>
<td>109°F (1943)</td>
<td>56°F (1992)</td>
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<td>October</td>
<td>83°F</td>
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<td>70</td>
<td>4.36</td>
<td>99°F (1937)</td>
<td>26°F (1993)</td>
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<td>47°F</td>
<td>59</td>
<td>3</td>
<td>92°F (1969)</td>
<td>19°F (1911)</td>
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<tr>
<td>December</td>
<td>64°F</td>
<td>39°F</td>
<td>51</td>
<td>2.3</td>
<td>88°F (1955)</td>
<td>4°F (1989)</td>
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</table>
GRAPH 2-1
Lockhart, Texas Monthly Average Temperatures

GRAPH 2-2
Lockhart, Texas Monthly Average Precipitation
2.6 Topography

The topography of Caldwell County is comprised of flat to rolling terrain with elevations ranging from 310 feet to approximately 750 feet above sea level. The highest elevations are in the northern part of the county and are in the range of 750 feet above mean sea level along the ridges that divide the San Marcos and Plum Creek watersheds. The lowest elevations are found in the southern portion of the county at the confluence of the San Marcos River and Plum Creek. The lowest elevation at the confluence is approximately 310 feet. Exhibit 2-6 illustrates elevation variances in the county. The elevation at Lockhart is about 515 feet and the elevation at Luling approximately 410 feet.

2.7 Transmission System

The Transmission System in Caldwell County consist of a 345 KV transmission line with one Substation North of Lockhart, some138 KV transmission lines with 4 substations and several 69 KV transmission lines with 9 substations. Exhibit 2-7 illustrates the approximate line locations and identifies the northern area of the county with the most activity. The map was prepared using the ERCOT 2008 Texas Transmission Map.

2.8 Impervious Cover

Impervious cover data obtained for Caldwell County indicates that the overall impervious cover percentage is approximately 0.6%. High impervious cover percentages are found in cities and near state roadways. Exhibit 2-8 illustrates impervious cover locations in the county. The red color in the map identifies the areas with a high value of impervious cover while the predominantly blue color symbolizes the most pervious areas. The impervious cover data was obtained from USGS spatial data.