

## SECTION 7

### FACILITIES INVENTORY

#### 7.1 Water Facilities Inventory

Caldwell County is supplied water by 12 CCN and numerous private wells. The information provided below is a compilation of data obtained from the TCEQ database and surveys. The 12 entities, as shown previously in *Exhibit 2-4*, allocate water through groundwater well permits and 66% obtain additional water through surface water rights. Municipal, Water Supply Corporations (WSC), and Special Utility Districts (SUD) are the ownerships types in the county. *Table 7-1* provides a list of the CCNs for water.

<b>TABLE 7-1</b>			
<b>Water Supply CCN</b>			
Utility Name	Ownership Type	Primary County	Serving Counties
Aqua	WSC	Bastrop	Caldwell, Lee, Travis
City of Lockhart	Municipality	Caldwell	None
City of Luling	Municipality	Caldwell	None
County Line	WSC	Hays	Caldwell
Creedmoor Maha	WSC	Travis	Caldwell, Bastrop, Hays
Goforth	WSC	Hays	Caldwell, Travis
Gonzales County	WSC	Gonzales	Caldwell, Dewitt, Guadalupe
Martindale	WSC	Caldwell	Guadalupe, Hays
Maxwell	WSC	Caldwell	Hays
Polonia	WSC	Caldwell	Bastrop
San Marcos	Municipal	Hays	Caldwell, Comal, Guadalupe
Tri-Community	WSC	Caldwell	Guadalupe

An inventory of the information to be presented in this section has been prepared in *Table 7-2*.



<b>TABLE 7-2</b>				
<b>TCEQ Water CCN Database Inventory</b>				
<b>Water User Group</b>	<b>Total Storage (MG)</b>	<b>Elevated Storage (MG)</b>	<b>Total Production (MGD)</b>	<b>Average Daily Consumption (MGD)</b>
Aqua WSC	12.12	5.64	24.71	4.97
City of Lockhart WSC	3.65	1.05	8.298	1.8
City of Luling	1.65	0.9	2.5	1.99
Creedmoor Maha	1.511	1.325	5.083	0.61
Martindale WSC	0.344	0.28	0.378	0.205
Maxwell WSC	1.238	1.238	2.67	0.431
Polonia WSC	0.961	0.475	1.845	0.367
TriCommunity WSC	0.338	0.12	0.713	0.125
County Line WSC	1.5	1.37	0.864	0.47
Goforth WSC	1.992	1.068	6.192	0.936
San Marcos	6.941	3.161	36.850	6.507
Gonzales County WSC	1.44	0.459	3.37	1.229

### **7.1.1 Aqua Water Supply Corporation**

Aqua Water Supply Corporation (CCN# 10294 est. 1969) produces groundwater from the Carrizo Aquifer. The service area includes Bastrop, Caldwell, Lee and Travis Counties. Aqua WSC currently services the southeast area of Caldwell County.

It is reported to have a total storage capacity of 12.12 million gallons (MG) with an elevated storage capacity of 5.640 MG. Production of Aqua WCS is 24.71 million gallons per day (MGD) with an average daily consumption of 4.970 MGD for the service area. In Caldwell County, the uses are primarily for residential.

### **7.1.2 City of Lockhart**

The City of Lockhart (CCN# 10295 est. 1952) is a municipality that provides groundwater from the Carrizo Aquifer. Surface water is supplied by GBRA

through run-of-river rights. Surface water currently accounts for more than half of the water supply. The service area for Lockhart is entirely in Caldwell County.

The total storage capacity is 3.650 MG with an elevated storage capacity of 1.050 MG. The total production is 8.298 MGD with a maximum purchase capacity noted to be 4.0 MGD and a service pump capacity of 4.896 MGD. Average daily consumption is 1.818 MGD. The meter count was 3,865 and uses in Caldwell County were classified as residential, commercial/industrial and other.

### **7.1.3 Creedmoor Maha Water Supply Corporation**

Creedmoor Maha (CCN# 11029 est. 1965) produces groundwater from the Edwards (Barton Springs) Aquifer and purchases groundwater from Aqua WSC. Creedmoor Maha obtains treated and raw surface water from Austin. The service area extends into Bastrop, Caldwell, Hays, and Travis with the latter being the primary county. Creedmoor Maha services Mustang Ridge which has city limits inside Caldwell County.

The total storage capacity is 1.511 MG with an elevated storage capacity of 1.325 MG and pressure tank capacity of 0.01420 MG. The total production is 5.083 MGD with a service pump capacity of 3.154 MGD and an average daily consumption of 0.610 MGD. A total meter count was listed to be 2,244 in 2008. Customer base in Caldwell County is presently residential and commercial.

### **7.1.4 City of Luling**

The City of Luling (CCN# 10291) is a municipality that provides surface water from run-of-river rights from GBRA. In addition, the City has one well that can, if needed, supply groundwater from the Carrizo Aquifer. Caldwell is the only county listed in the service area of the City of Luling.

The total storage capacity is 1.650 MG with an elevated storage capacity of 0.900 MG. The total production was not listed but a maximum purchase capacity was noted at 2.50 MGD and a service pump capacity at 2.304 MGD. Average daily consumption is 1.990 MGD. The meter count was 2,169 and uses were classified as residential, commercial/industrial, and other.

### **7.1.5 County Line Water Supply Corporation**

County Line Water Supply Corporation (CCN# 10292) produces groundwater from the Edwards Aquifer and obtains surface water from GBRA and CRWA. The service area is in Hays and Caldwell County with Hays County listed as the primary county. County Line WSC services Uhland, which has city limits in northwest Caldwell County. Uhland is southwest of Neiderwald and northeast of Maxwell WSC.

The total storage capacity is 1.500 MG with an elevated storage capacity of 1.370 MG. It has a total production capacity of 0.864 MGD with a maximum purchase capacity of 2.040 MGD. The average daily consumption is 0.470 MGD with 1,977 meters in service. Residential meters are the primary use in Caldwell County.

### **7.1.6 Goforth Special Utility District**

Goforth Special Utility District (CCN# 11356) produces groundwater from the Edwards (Barton Springs) Aquifer and purchases surface from CRWA and GBRA. Surface water, approximately 90%, is the primary source of water supply. The counties this utility serves include Caldwell, Hays, and Travis. The primary county for the utility is Hays. Goforth Special Utility District supplies water to Neiderwald. The service area in Caldwell County is located northwest of Lockhart. The area borders Polonia WSC to the north and west.

The total storage capacity is 1.992 MG with an elevated storage capacity of 1.068 MG and pressure tank capacity of 0.01 MG. The total production is 6.192 MGD with a maximum purchase capacity noted to be 0.90 MGD and a service pump capacity of 9.446 MGD. Average daily consumption is 0.936 MGD. The meter count was 4,002 and uses in Caldwell County were classified as residential and commercial/industrial.

#### **7.1.7 Gonzales County Water Supply Corporation**

Gonzales County Water Supply Corporation (CCN# 10704) produces groundwater from the Carrizo Aquifer and surface water is supplied from the Canyon Reservoir. The service area includes the counties of Caldwell, Dewitt, Gonzales, and Guadalupe. Gonzales County is the primary county of service.

The total storage capacity is listed to be 1.440 MG with an elevated storage capacity of 0.459 MG and pressure tank capacity of 0.06580 MG. Total production is 3.370 MGD with a maximum purchased capacity of 0.666 MGD. The service pump capacity is 16.013 MGD. Average daily consumption is 1.229 MGD with 2,293 meters in service. Caldwell County meters currently obtain water for residential use.

#### **7.1.8 TriCommunity Water Supply Corporation**

Tri Community Water Supply Corporation (CCN# 10313) produces groundwater from the Carrizo Aquifer. The service area includes the counties of Caldwell and Gonzales. Caldwell County is listed as the primary county. Tri Community WSC is located to the southwest of Lockhart and services the unincorporated areas of Fentress and Prairie Lea in Caldwell County.

The total storage capacity is listed to be 0.338 MG with an elevated storage capacity of 0.120 MG. Total production is 0.713 MGD with a service pump capacity of 1.872 MGD. Average daily consumption of 0.125 MGD is provided to

536 meters in service. Caldwell County meters primarily obtain water for residential use.

#### **7.1.9 Martindale Water Supply Corporation**

Martindale Water Supply Corporation (CCN#10312 est. 1965) produces groundwater from alluvial wells and obtains surface water from CRWA and GBRA. The Martindale WSC service area extends into Hays, and Guadalupe County. Caldwell County is listed as the primary service area. Martindale WSC provides water for all types of uses to the city of Martindale.

The total storage capacity is listed to be 0.344 MG with an elevated storage capacity of 0.280 MG and pressure tank capacity of 0.00200 MG. Total production is 0.648 MGD with a maximum purchased capacity of 0.378 MGD. The service pump has a capacity of 0.864 MGD. Average daily consumption is 0.205 MGD. Total service meter count is 838. Caldwell County meters currently obtain water for residential and commercial/industrial use.

#### **7.1.10 Maxwell Water Supply Corporation**

Maxwell Water Supply Corporation (CCN#10293 est. 1979) produces groundwater from the Edwards Aquifer and obtains surface water from GBRA and CRWA. The service area for Maxwell WSC lies in Hays and Caldwell counties. Caldwell County is listed as the primary service area. Maxwell WSC services the unincorporated area of Maxwell and Reedville. The service area lies in between the Martindale WSC area and the Lockhart Municipality territory.

The total storage capacity is 1.238 MG with an elevated storage capacity of 1.238 MGD. It has a total production capacity of 2.670 MGD with a maximum purchase capacity of 6.0 MGD. The average daily consumption is 0.431 MGD with 1,437 meters in service. The majority of use is for residential use and some in commercial/industrial.

### **7.1.11 Polonia Water Supply Corporation**

Polonia Water Supply Corporation (CCN#10420) produces groundwater from the Carrizo Aquifer and can purchase water from the City of Lockhart when needed. The Polonia WSC service area is primarily in Caldwell County with a portion extending into Bastrop County.

The total storage capacity is listed to be 0.961 MG with an elevated storage capacity of 0.475 MG and pressure tank capacity of 0.00400 MG. Total production is 1.845 MGD with a service pump capacity of 3.686 MGD. Average daily consumption is 0.367 MGD with a total of 1,884 meters in service for residential use.

### **7.1.12 City of San Marcos**

The City of San Marcos Municipality (CCN # 10298) has the smallest service area extending into Caldwell County. Out of the 9,500 plus meters, only about 24 are located in Caldwell County for commercial use at the airport.

## **7.2 Regional Water Wholesalers**

Regional water wholesalers for the county include Canyon Regional Water Authority (CRWA) and the Guadalupe-Blanco River Authority (GBRA).

### **7.2.1 Canyon Regional Water Authority**

Canyon Regional Water Authority was created by the Texas Legislature in 1989 to supply cities and districts with potable water. The water they distribute is treated before being routed to water supply corporations. CRWA currently serves Bexar, Wilson, Guadalupe, Comal, Hays and Caldwell Counties.

CRWA has operational responsibilities for two water treatment plants, Lake Dunlap Water Treatment Plant (WTP) and the Hays Caldwell WTP. The Lake

Dunlap Water Treatment Plant is rated at 16.4 MGD and receives water from Canyon Lake. The Hays Caldwell WTP receives water from the San Marcos River and Guadalupe River (Lake Dunlap) and is rated at 6 MGD.

The water supply corporations that currently receive water from CRWA are Martindale WSC, Maxwell WSC, and County Line WSC.

### **7.2.2 Guadalupe Blanco River Authority (GBRA)**

The Guadalupe River Authority (CCN# 20892, 12977) was established by the Texas Legislature in 1933 and reauthorized in 1935 as the Guadalupe-Blanco River Authority. GBRA serves the counties of Kendall, Comal, Hays, Caldwell, Guadalupe, Gonzales, DeWitt, Victoria, Calhoun and Refugio. The mandate of the GBRA is to conserve and protect the resources of the Guadalupe River Basin.

The services provided by GBRA include hydroelectric generation, water and wastewater treatment and raw water supply for municipal, industrial, and agricultural use.

In 2001 GBRA assumed operations as the contract operator for the Lockhart Water Treatment Plant. The well systems and water treatment plant are managed by the GBRA.

In 1978, GBRA constructed a water treatment plant in Luling with a capacity of 2.5 MG. Surface water from the San Marcos River is treated at the GBRA Luling Water Treatment Plant and delivered to the City of Luling and the City of Lockhart. The plant is capable of diverting up to 4,422 acre-feet annually from the San Marcos River under a water rights permit issued by the State of Texas. Peak rated capacity is 2.779 MGD. Performance of the plant has earned state recognition through of the EPA with “The Environmental Excellence Award for Public Water Supply”.

### 7.3 Wastewater Facilities Inventory

There are currently five wastewater facilities that are listed in the TCEQ database. Information regarding the facilities has been summarized in the following sections and an inventory of the data listed in *Table 7-3*.

Utility Name	Ownership Type	Primary County	Total Permitted Discharge (gpd)
City of Lockhart	Municipality	Caldwell	2,600,000
City of Luling (North/South)	Municipality	Caldwell	1,400,000
Mustang Plaza	Private	Caldwell	99,000
Sweetwater Utility LLC	Private	Hays	N/A
Turner Crest	Private	Caldwell	300,000

#### 7.3.1 The City of Lockhart/ GBRA

The City of Lockhart (CCN# 20114) has two operational wastewater plants. The plants have a total combined discharge amount of 2.6 MGD. GBRA operates the Lockhart plants.

In 1994 GBRA began operating the City of Lockhart’s 1.1 MGD wastewater treatment plant on Larremore Street. The treated effluent is discharged through a pipeline to Town Branch and then into Plum Creek in Segment No. 1810 of the Guadalupe River Basin.

In 1999 an additional 1.5 MGD plant on F.M. 20 became operational in Lockhart. Septic tank waste is accepted and treated at the F.M. 20 Plant. A carousel activated sludge process is implemented at the plant along with ultraviolet (UV) light disinfection instead of chlorine. To ensure the effluent will not impair

aquatic and other environments, daily sample tests are conducted to confirm the effluent meets all state and federal standards. The effluent is discharged into Plum Creek Segment No. 1810 of the Guadalupe River Basin.

### **7.3.2 The City of Luling**

The City of Luling (CCN# 20113) has a North and South plant in operation. The plants have a combined discharge permit of 1.4 MGD. The wastewater treatment plants and collection systems are owned and operated by the City.

The North Plant has an operational permit that authorizes the discharge of treated wastewater at a volume not to exceed a daily average flow of 900,000 gallons per day. The discharge route is from the plant to Salt Branch then to Plum Creek.

The South Plant has an operational permit that authorizes the discharge of treated wastewater at a volume not to exceed a daily average flow of 500,000 gallons per day. The discharge from the site is routed to the Lower San Marcos River.

Wastewater is treated through the contact stabilization method and then discharged. The “sequence of operations in this process is aeration of raw wastewater with return activated sludge, sedimentation to yield a clarified effluent, and re-aeration of the clarifier underflow with a portion wasted to an aerobic digester. Supernatant drawn from the digester is returned to the process influent. The raw wastewater aeration chamber, also referred to as the contact zone, is approximately one third of the total aeration volume.” (Hammer, 1986)

Because system inefficiencies may develop with increases in population to process larger flows, the systems may not be as economical as conventional methods with larger demands.

### **7.3.3 Turner Crest Village Wastewater Company, LLC**

Turner Crest Village WW CO (CCN# 21004) submitted an application for a facility that would be authorized to discharge treated wastewater at a volume no greater than 300,000 gallons per day. The discharge would be routed to an unnamed tributary of Morrison Creek, then to the Lower San Marcos River.

Turner Crest Village WW has not yet constructed the facility due to the conditions of the economy. The development of the subdivision has been postponed, perhaps indefinitely. No other information is available at this time.

### **7.3.4 Mustang Plaza**

Mustang Plaza (CCN# 20953) affiliated with Aus-Tex Parts & Services, Ltd, is authorized to discharge treated wastewater at a volume not to exceed a daily average flow of 99,000 gallons per day. The discharge route is to an unnamed tributary of Cedar Creek and then to the Colorado River above La Grange. Limited information was available and obtained.

### **7.3.5 Sweetwater Utility, LLC**

Sweetwater Utility LLC (CCN# 20887) was listed to have a service area in Caldwell County for Neiderwald. The CCN boundaries extend into Caldwell County but the service area is primarily in Hays. Limited information was available and obtained. Unsuccessful attempts were made to contact and locate the CCN owners for more information on the utility.