SECTION 16
SUMMARY OF RECOMMENDATIONS FOR WATER AND WASTEWATER FACILITIES

16.1 Introduction

The following paragraphs summarize the general facilities plans for water and wastewater treatment that resulted from the Caldwell County Regional Water and Wastewater Planning Study.

16.2 Recommended Regional Water Supply Facilities

The recommended regional water supply facilities are those that will be developed to utilize water made available under a proposed conjunctive-use groundwater-surface water project to be developed by the GBRA. This project, known as the Mid-Basin Project, was not included in the 2006 Region L Plan and a request has been made by GBRA to add the project to the 2011 Region L Plan.

The proposed Mid-Basin Project will provide 25,000 ac-ft to customers of Caldwell, Comal, Gonzales, Guadalupe, and Hays Counties. The source of water will be primarily surface water from the Guadalupe River with a point of diversion below the confluence of the San Marcos River. The water in the river at the proposed diversion point is not considered firm yield unless it is backed up with off channel storage or a groundwater source. Off-channel storage in Guadalupe County is being considered for the Mid-Basin Project as well as a secondary source of supply from the Carrizo and/or Wilcox Aquifers in west-central or northeast Gonzales County.

The advantage of the Mid-Basin Project compared to the proposed Hays-Caldwell PUA Project is the ability of the Mid-Basin Project to draw on either surface
water or groundwater to meet future water supply needs. Redundancy in water sources is an important part of a long-term water supply plan to buffer impacts from droughts, aquifer management rules and potential pollutant contamination of water sources.

*Exhibit 16-1* presents the features of the recommended regional water supply plan. The primary features include:

- River pumping plant with dam to create pumping pool in Guadalupe River for scalping flood flows
- Off-channel storage reservoir near river pumping plant to provide water delivery system water balance
- Carrizo Aquifer Well Field in southern Caldwell/northeastern Gonzales Counties
- Pipeline (approximately 18 miles) to convey raw surface water from off-channel storage reservoir to Luling
- New surface water treatment plant at Luling
- Pipeline (approximately 21 miles) to convey unchlorinated groundwater from Carrizo well field to Lockhart
- New groundwater treatment plant at Lockhart
- Pipeline (approximately 12 miles) to convey treated water north from Lockhart along SH 130
- Pipeline (approximately 10 miles) to convey treated water west from Lockhart along SH 130
- Pipeline (approximately 7 miles) to convey treated water north from Lockhart along FM 2720
- Use existing pipeline from Lockhart to Luling to move water in either direction as demands and supplies are balanced

The majority of the stakeholders attending the regional planning meetings supported either the proposed Mid-Basin Project or the HCPUA Project. The
Lockhart Groundwater Treatment Facility

Line 2
SH 130 North Route
(~12 miles)

Line 3
Northwest Route to Uhland (I-35)
(~7 miles)

Line 4
SH 130 West Route
(~10 miles)

Existing
Luling-Lockhart
Transmission Main
(~17 miles)

Line 1A
Source Route to Lockhart
(~21 miles)

Line 1C
Source Route to Luling
(~18 miles)

Off-Channel Storage Facility

River Pumping Facility with Dam

Legend
- Proposed WT Facility
- Existing Route to Lockhart
- North Route to Luling
- North to Mustang Ridge
- Northwest Route to Lockhart
- Northwest from Lockhart
- West Route to Guadalupe

Caldwell County
Recommended Regional Water Facilities

klotzK associates

EXHIBIT 16-1
Mid-Basin Project and associated facilities were recommended for implementation. There was no voiced or written opposition to the Mid-Basin Project but the owners of the HCPUA project have expressed that they will continue to move the HCPUA project forward.

### 16.3 Recommended Regional Wastewater Treatment Facilities

The recommended regional wastewater treatment facilities are based on a regionalization concept that will ultimately provide four regional wastewater facilities in the county. These facilities will be sized and phased to accommodate growth and enable reuse of reclaimed water.

*Exhibit 16-2* presents the features of the recommended regional wastewater treatment plan. The primary features include:

- Wastewater treatment plant at Lockhart
- Wastewater treatment plant at Martindale
- Wastewater treatment plant at Luling
- Wastewater treatment plant in Peach Creek Basin
- Regional wastewater collection pipelines with downstream connectivity

The majority of the stakeholders attending the regional planning meetings supported either the proposed regional plan or a decentralized plan of multiple smaller treatment plants throughout the County. The large plant regionalization plan was recommended for implementation. There was no voiced opposition to the large plant regionalization plan but there is growing interest in the decentralized treatment plant concepts.