An Audit Report on

Groundwater Conservation Districts – Phase Four

April 2003
Report No. 03-030
www.sao.state.tx.us

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Overall Conclusion

One of the 12 groundwater conservation districts (districts) we audited—Salt Fork Underground Water Conservation District—did not achieve a majority of the objectives in its groundwater management plan. Therefore, this district is not operational. The State has no assurance that this district is adequately conserving, preserving, and protecting the groundwater it administers.

The remaining eleven districts we audited are operational and achieved a majority of the objectives in their groundwater management plans during the last two years. These districts are implementing their plans to adequately conserve, preserve, and protect the groundwater they administer.

Key Points

The Salt Fork Underground Water Conservation District is not operational.

The Salt Fork Underground Water Conservation District is not operational. This district did not achieve six of the nine objectives in its groundwater management plan; it achieved the remaining three objectives. Among the objectives it did not achieve were objectives to establish a water level monitoring network, measure water levels in the monitoring network, conduct water quality testing, and participate in the Water Development Board’s Agricultural Conservation Loan program. The District identified these objectives as important to conserving, preserving, and protecting its groundwater.

The remaining eleven districts we audited are operational.

The remaining eleven districts we audited have achieved a majority of the audited objectives in their groundwater management plans. Therefore, these districts are operational and are implementing their plans to adequately conserve, preserve, and protect the groundwater they administer. These eleven districts are as follows:

- Bexar Metropolitan Water District
- Coke County Underground Water Conservation District
- Culberson County Groundwater Conservation District
- Emerald Underground Water Conservation District

Background Information

Texas Water Code, Chapter 36, requires districts to develop groundwater management plans. These plans must contain certain goals (if applicable) outlined in the Texas Water Code. Each goal can have one or more supporting objectives.

Districts must submit their groundwater management plans to the Water Development Board for certification.

No earlier than one year after the certification of a district’s groundwater management plan, the State Auditor’s Office audits the district’s operational status. A district is operational if it has achieved a majority of the objectives in its groundwater management plan.

The Texas Commission on Environmental Quality enforces districts’ compliance with their groundwater management plans.

For more information on state agencies’ roles in the groundwater management plan process, see Chapter 2.
An Audit Report on
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➢ Fort Bend Subsidence District
➢ Garza County Underground and Fresh Water Conservation District
➢ Harris-Galveston Coastal Subsidence District
➢ Hemphill County Underground Water Conservation District
➢ Llano Estacado Underground Water Conservation District
➢ Panhandle Groundwater Conservation District
➢ South Plains Underground Water Conservation District

Since 1999, the State Auditor’s Office has audited 44 districts.

Including the districts we audited in this project, the State Auditor’s Office has audited 44 districts since 1999; 9 of these districts were not operational. The 44 districts we have audited thus far represent 90 percent of the 49 districts eligible for audit.

In addition to the one district we deemed not operational in this audit, we found eight districts that were not operational in our prior audits. The Texas Commission on Environmental Quality (the agency responsible for enforcing districts’ compliance with groundwater management plans):

➢ Has determined that one of these districts—Live Oak Underground Water Conservation District—is now operational.

➢ Has entered into a compliance agreement to address the remaining finding for Hudspeth County Underground Water Conservation District No. 1 and bring this district into operational status.

➢ Is reviewing documentation from the remaining six districts to bring them into operational status. These six districts include the following:
  ➢ Collingsworth County Underground Water Conservation District
  ➢ Dallam County Underground Water Conservation District No. 1
  ➢ Fox Crossing Water District
  ➢ Permian Basin Underground Water Conservation District
  ➢ Real-Edwards Conservation and Reclamation Water District
  ➢ Saratoga Underground Water Conservation District

Summary of Management’s Response

We issued management letters providing detailed audit results to each of the districts we audited. Most of the districts generally agreed with the observations we made in these management letters.
Summary of Objective, Scope, and Methodology

Our objective was to determine whether the audited districts were making a good-faith effort in pursuing the objectives in their groundwater management plans.

Our audit scope covered the two most recently completed calendar or fiscal years of each district audited (depending on whether a district operated under a calendar or fiscal year). This audit did not include any reviews of information technology systems.

We based our assessment of the districts’ operational status on our review of the districts’ efforts toward achieving the objectives in their groundwater management plans. We assessed whether a district had achieved an objective based on a desk review of evidence the district submitted. If a district achieved a majority of the audited objectives in its groundwater management plan, we considered the district to be operational.

We gained an understanding of Texas groundwater district law by reviewing the districts’ enabling legislation. We obtained additional knowledge by reviewing the districts’ groundwater management plans and discussing the development of the plans with personnel from the Water Development Board.
Table of Results

- The Salt Fork Underground Water Conservation District is not operational (page 1).
- The Bexar Metropolitan Water District is operational (page 2).
- The Coke County Underground Water Conservation District is operational (page 3).
- The Culberson County Groundwater Conservation District is operational (page 3).
- The Emerald Underground Water Conservation District is operational (page 4).
- The Fort Bend Subsidence District is operational (page 5).
- The Garza County Underground and Fresh Water Conservation District is operational (page 6).
- The Harris-Galveston Coastal Subsidence District is operational (page 6).
- The Hemphill County Underground Water Conservation District is operational (page 7).
- The Llano Estacado Underground Water Conservation District is operational (page 8).
- The Panhandle Groundwater Conservation District is operational (page 8).
- The South Plains Underground Water Conservation District is operational (page 9).

Recent SAO Work

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<th>Release Date</th>
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<tr>
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<td>An Audit Report on Groundwater Conservation Districts - Phase Three</td>
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<td>An Audit Report on Groundwater Conservation Districts - Phase 2</td>
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<td>00-037</td>
<td>An Audit Report on Groundwater Conservation Districts: Phase One</td>
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<th>Page</th>
</tr>
</thead>
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<td>17</td>
</tr>
</tbody>
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Detailed Results

Chapter 1

One of the 12 Groundwater Conservation Districts Audited Is Not Operational

As we have found in prior groundwater conservation district (district) audits, the majority of the groundwater conservation districts we audited are operational. However, 1 of the 12 districts we audited is not operational.

Chapter 1-A

The Salt Fork Underground Water Conservation District Is Not Operational

The Salt Fork Underground Water Conservation District (District) achieved three of the nine objectives in its groundwater management plan. It did not achieve the remaining six objectives. Therefore, we assessed the District as not operational.

The District did not achieve its objectives to:

- Establish a water level monitoring network.
- Measure a minimum of 80 percent of wells in the network.
- Sample water quality in at least 20 wells annually.
- Sample water quality for all requested wells.
- Participate in the Water Development Board’s Agricultural Conservation Loan program as a lender district.
- Make loans to purchase water-conserving apparatuses to all qualified applicants.

Table 1 provides a summary of the District’s goals and objectives.

The District’s management responded to our audit results by asserting that the District has achieved the objectives related to water quality testing. However, the documentation the District provided to us did not support that assertion. Management also asserted that it plans to strengthen its documentation practices and that its board plans to review the District’s management plan and update it accordingly.
Table 1 - The Salt Fork Underground Water Conservation District is not operational.

<table>
<thead>
<tr>
<th>Goal (as it appears in the District's groundwater management plan)</th>
<th>Number of Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fully Achieved</td>
</tr>
<tr>
<td>Goal 1 - Provide for the most efficient use of groundwater within the District.</td>
<td>1</td>
</tr>
<tr>
<td>Goal 2 - Control and prevent waste of groundwater within the District.</td>
<td>2</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

Source: State Auditor's Office analysis of achievement of groundwater management plan objectives

Chapter 1-B

The Bexar Metropolitan Water District Is Operational

The Bexar Metropolitan Water District (District) achieved 7 of the 11 objectives in its groundwater management plan. Therefore, we assessed the District as operational.

The District partially achieved one objective. However, it did not achieve its objectives to permit wells; to enforce well permitting, spacing, and production limitation requirements; or to comply with deadlines regarding its Endangered Species Act permit application. Table 2 provides a summary of the District’s goals and objectives.

The District’s management responded to our audit results by stating that it agreed with our observations.

Table 2 - The Bexar Metropolitan Water District is operational.

<table>
<thead>
<tr>
<th>Goal (as it appears in the District's groundwater management plan)</th>
<th>Number of Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fully Achieved</td>
</tr>
<tr>
<td>Goal 1 - Provide for the most efficient use of groundwater [Tex. Water Code §36.1071(a)(1); 31 TAC 356.5(a)(1)(A)]</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2 - Control and prevent waste of groundwater within the District [Tex. Water Code §36.1071(a)(2); 31 TAC §356.5(a)(1)(B)]</td>
<td>2</td>
</tr>
<tr>
<td>Goal 3 - Address conjunctive surface water management issues within the District [Tex. Water Code §36.1071(a)(4); 31 TAC §356.5(a)(1)(D)]</td>
<td>1</td>
</tr>
<tr>
<td>Goal 4 - Address natural resource issues that may impact the availability of groundwater within the District, and which are impacted by the use of groundwater [Tex. Water Code §36.1071(a)(5); 31 TAC §356.5(a)(1)(E)]</td>
<td>1</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

Source: State Auditor's Office analysis of achievement of groundwater management plan objectives
Chapter 1-C
The Coke County Underground Water Conservation District Is Operational

The Coke County Underground Water Conservation District (District) achieved all three of the objectives in its groundwater management plan. Therefore, we assessed the District as operational. Table 3 provides a summary of the District’s goals and objectives.

The District’s management responded to our audit results by stating that it agreed with our observations.

Table 3 - The Coke County Underground Water Conservation District is operational.

<table>
<thead>
<tr>
<th>Goal (as it appears in the District’s groundwater management plan)</th>
<th>Number of Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fully Achieved</td>
</tr>
<tr>
<td>Goal 1.0 - Provide for the efficient use and control of groundwater within the District.</td>
<td>2</td>
</tr>
<tr>
<td>Goal 2.0 - Control and prevent waste of groundwater.</td>
<td>1</td>
</tr>
<tr>
<td>Totals</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: State Auditor's Office analysis of achievement of groundwater management plan objectives

Chapter 1-D
The Culberson County Groundwater Conservation District Is Operational

The Culberson County Groundwater Conservation District (District) achieved 12 of the 15 objectives in its groundwater management plan and partially achieved one objective. Therefore, we assessed the District as operational.

We could not determine whether the District had achieved one objective because the deadline for that objective is in 2004. The District did not achieve its objective to institute a Production Use Measurement Area to limit groundwater withdrawals from a specific area. Table 4 provides a summary of the District’s goals and objectives.

The District’s management responded to our audit results by stating that it agreed with our observations.
Table 4 - The Culberson County Groundwater Conservation District is operational.

<table>
<thead>
<tr>
<th>Culberson County Groundwater Conservation District</th>
<th>Number of Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal (as it appears in the District’s groundwater management plan)</td>
<td>Fully Achieved</td>
</tr>
<tr>
<td>Goal 1.0 - Implement a system to improve the basic understanding of groundwater conditions in the District</td>
<td>4</td>
</tr>
<tr>
<td>Goal 2.0 - Implement management strategies that will provide for the most efficient use of groundwater</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3.0 - Each year strive to prevent the waste of water</td>
<td>1</td>
</tr>
<tr>
<td>Goal 4.0 - Minimize the influence of pumping of wells on the degradation of the aquifers by regulating the spacing of wells and by use of a Production Use Measurement Area</td>
<td>1</td>
</tr>
<tr>
<td>Goal 5.0 - Minimize the potential for contamination of groundwater by new or existing wells</td>
<td>2</td>
</tr>
<tr>
<td>Goal 6.0 - Monitor water exported out of the district</td>
<td>1</td>
</tr>
<tr>
<td>Totals</td>
<td>12</td>
</tr>
</tbody>
</table>

Source: State Auditor’s Office analysis of achievement of groundwater management plan objectives

Chapter 1-E

The Emerald Underground Water Conservation District Is Operational

The Emerald Underground Water Conservation District (District) achieved all seven of the objectives in its groundwater management plan. Therefore, we assessed the District as operational. Table 5 provides a summary of the District’s goals and objectives.

The District’s management responded to our audit results by stating that it agreed with our observations.
Table 5 - The Emerald Underground Water Conservation District is operational.

<table>
<thead>
<tr>
<th>Emerald Underground Water Conservation District</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Achievement of Groundwater Management Plan Objectives</strong></td>
</tr>
<tr>
<td><strong>Goal</strong></td>
</tr>
<tr>
<td><strong>(as it appears in the District’s groundwater management plan)</strong></td>
</tr>
<tr>
<td>Goal 1.0 - Provide for the efficient use of groundwater within the District.</td>
</tr>
<tr>
<td>Goal 2.0 - Implement management strategies that address controlling and preventing waste of groundwater.</td>
</tr>
<tr>
<td>Goal 3.0 - Establish a groundwater monitoring system to improve the basic understanding of water conditions, and provide information necessary in addressing natural resource issues that impact the use and availability of groundwater within the District.</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
</tr>
</tbody>
</table>

Source: State Auditor’s Office analysis of achievement of groundwater management plan objectives

Chapter 1-F

**The Fort Bend Subsidence District Is Operational**

The Fort Bend Subsidence District (District) achieved 12 of the 13 audited objectives in its groundwater management plan. Therefore, we assessed the District as operational. The District partially achieved the remaining audited objective. Table 6 provides a summary of the District’s goals and objectives.

The District’s management responded to our audit results by stating that it agreed with our observations.

Table 6 - The Fort Bend Subsidence District is operational.

<table>
<thead>
<tr>
<th>Fort Bend Subsidence District</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Achievement of Groundwater Management Plan Objectives</strong></td>
</tr>
<tr>
<td><strong>Goal</strong></td>
</tr>
<tr>
<td><strong>(as it appears in the District’s groundwater management plan)</strong></td>
</tr>
<tr>
<td>Goal 1 - Provide for the efficient use of groundwater.</td>
</tr>
<tr>
<td>Goal 2 - Control and prevent waste of groundwater.</td>
</tr>
<tr>
<td>Goal 3 - Control and prevent subsidence.</td>
</tr>
<tr>
<td>Goal 4 - Address conjunctive surface water management.</td>
</tr>
<tr>
<td>Goal 5 - Address groundwater natural resource issues.</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
</tr>
</tbody>
</table>

Source: State Auditor’s Office analysis of achievement of groundwater management plan objectives.
Chapter 1-G

The Garza County Underground and Fresh Water Conservation District Is Operational

The Garza County Underground and Fresh Water Conservation District (District) achieved both of the objectives in its groundwater management plan. Therefore, we assessed the District as operational. Table 7 provides a summary of the District’s goals and objectives.

The District's management responded to our audit results by stating that it agreed with our observations and plans to extend its scope of operation on monitoring wells.

Table 7 - The Garza County Underground and Fresh Water Conservation District is operational.

<table>
<thead>
<tr>
<th>Goal (as it appears in the District’s groundwater management plan)</th>
<th>Number of Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fully Achieved</td>
</tr>
<tr>
<td>Goal 1.0 - Controlling and preventing the waste of groundwater within the District.</td>
<td>1</td>
</tr>
<tr>
<td>Goal 2.0 - Providing for the most efficient use of groundwater within the District.</td>
<td>1</td>
</tr>
<tr>
<td>Totals</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: State Auditor's Office analysis of achievement of groundwater management plan objectives

Chapter 1-H

The Harris-Galveston Coastal Subsidence District Is Operational

The Harris-Galveston Coastal Subsidence District (District) achieved 16 of the 17 audited objectives in its groundwater management plan. Therefore, we assessed the District as operational. The District partially achieved the remaining audited objective. Table 8 provides a summary of the District’s goals and objectives.

The District’s management responded to our audit results by stating that it agreed with our observations.
Table 8 - The Harris-Galveston Coastal Subsidence District is operational.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Number of Objectives</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(as it appears in the District’s groundwater management plan)</td>
<td>Fully Achieved</td>
<td>Partially Achieved</td>
<td>Not Achieved</td>
<td>Total</td>
</tr>
<tr>
<td>Goal 1 - Provide for the efficient use of groundwater.</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Goal 2 - Control and prevent waste of groundwater.</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Goal 3 - Control and prevent subsidence.</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4 - Address conjunctive surface water management.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Goal 5 - Address groundwater natural resource issues.</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Goal 6 - Manage District activities in an efficient, effective, and</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>equitable manner.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>16</td>
<td>1</td>
<td>0</td>
<td>17</td>
</tr>
</tbody>
</table>

Source: State Auditor’s Office analysis of achievement of groundwater management plan objectives

Chapter 1-I

The Hemphill County Underground Water Conservation District Is Operational

The Hemphill County Underground Water Conservation District (District) achieved two of the three objectives in its groundwater management plan. Therefore, we assessed the District as operational.

The District did not achieve its objective to investigate all complaints of waste of water within three days of receiving the complaint. Table 9 provides a summary of the District’s goals and objectives.

The District’s management responded to our audit results by stating that it will take actions to inform the public as to how and where to report groundwater waste.

Table 9 - The Hemphill County Underground Water Conservation District is operational.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Number of Objectives</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(as it appears in the District’s groundwater management plan)</td>
<td>Fully Achieved</td>
<td>Partially Achieved</td>
<td>Not Achieved</td>
<td>Total</td>
</tr>
<tr>
<td>Goal - Provide prompt and timely processing of all applications of</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>water well permits to provide for efficient use of water.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal - Reduce the waste of water as far as is reasonably and</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>economically viable. Work with the Texas Railroad Commission to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>monitor for waste of water and develop economical methods to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prevent contamination.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: State Auditor’s Office analysis of achievement of groundwater management plan objectives
Chapter 1-J

The Llano Estacado Underground Water Conservation District Is Operational

The Llano Estacado Underground Water Conservation District (District) achieved 10 of the 13 objectives in its groundwater management plan. Therefore, we assessed the District as operational.

The District could not provide documentation indicating that it achieved its objective to note which center pivot irrigation systems have low energy precision application (LEPA) spaced nozzles. In addition, the District did not achieve its objectives to test water quality samples for irrigation wells and to publish four annual District newsletters. Table 10 provides a summary of the District’s goals and objectives.

The District’s management responded to our audit results by stating that it agreed with our observations.

Table 10 - The Llano Estacado Underground Water Conservation District is operational.

<table>
<thead>
<tr>
<th>Llano Estacado Underground Water Conservation District</th>
<th>Number of Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement of Groundwater Management Plan Objectives</td>
<td>Fully Achieved</td>
</tr>
<tr>
<td>Goal 1.0 - Implement management strategies that will protect and enhance the quantity of useable quality groundwater by encouraging the most efficient use.</td>
<td>4</td>
</tr>
<tr>
<td>Goal 2.0 - Implement management strategies that will protect and enhance the quantity of usable quality groundwater by controlling and preventing waste.</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3.0 - Implement management strategies that will provide public education and information opportunities that will assist in the accomplishment of Goals 1.0 and 2.0.</td>
<td>3</td>
</tr>
<tr>
<td>Totals</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: State Auditor’s Office analysis of achievement of groundwater management plan objectives.

Chapter 1-K

The Panhandle Groundwater Conservation District Is Operational

The Panhandle Groundwater Conservation District (District) achieved 14 of the 17 objectives in its groundwater management plan. It partially achieved one objective. Therefore, we assessed the District as operational. The District did not achieve its objectives to prevent waste by implementing the District’s rule on depletion and to initiate a program to identify and close abandoned wells. Table 11 provides a summary of the District’s goals and objectives.

The District’s management responded to our audit results by stating that it agreed with our observations.
Table 11 - The Panhandle Groundwater Conservation District is operational.

<table>
<thead>
<tr>
<th>Goal (as it appears in the District’s groundwater management plan)</th>
<th>Number of Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fully Achieved</td>
</tr>
<tr>
<td>Goal 1.0 - Retain 50% of current supplies, or saturated thickness, in 50 years (in 2048).</td>
<td>1</td>
</tr>
<tr>
<td>Goal 2.0 - Implement strategies that will provide the most efficient groundwater use.</td>
<td>4</td>
</tr>
<tr>
<td>Goal 3.0 - Implement strategies that will control and prevent groundwater waste or contamination.</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.0 - Implement strategies to address conjunctive surface water management issues.</td>
<td>2</td>
</tr>
<tr>
<td>Goal 5.0 - Implement strategies that will address natural resource issues which impact the use and availability of groundwater and which are impacted by the use of groundwater.</td>
<td>2</td>
</tr>
<tr>
<td>Goal 6.0 - Improve operating efficiency and customer service.</td>
<td>2</td>
</tr>
<tr>
<td>Totals</td>
<td>14</td>
</tr>
</tbody>
</table>

Source: State Auditor’s Office analysis of achievement of groundwater management plan objectives

Chapter 1-L

The South Plains Underground Water Conservation District Is Operational

The South Plains Underground Water Conservation District (District) achieved 13 of the 15 objectives in its groundwater management plan. The District partially achieved the remaining two objectives. Therefore, we assessed the District as operational. Table 12 provides a summary of the District’s goals and objectives.

The District’s management responded to our audit results by stating that it agreed with our observations.
Table 12 - The South Plains Underground Water Conservation District is operational.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Number of Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fully Achieved</td>
</tr>
<tr>
<td>Goal 1.0 - Implement management strategies that will protect and enhance the quantity of useable quality groundwater by encouraging the most efficient use.</td>
<td>5</td>
</tr>
<tr>
<td>Goal 2.0 - Implement management strategies that will protect and enhance the quantity of useable quality groundwater by controlling and preventing waste.</td>
<td>4</td>
</tr>
<tr>
<td>Goal 3.0 - Implement management strategies that will provide public education and information opportunities that will assist in the accomplishment of Goals 1.0 and 2.0.</td>
<td>4</td>
</tr>
<tr>
<td>Totals</td>
<td>13</td>
</tr>
</tbody>
</table>

Source: State Auditor’s Office analysis of achievement of groundwater management plan objectives.
Chapter 2

State Agencies’ Roles in the Groundwater Management Plan Process

Texas Water Code, Section 36.0015, specifies that having local groundwater conservation districts is the State’s preferred method of groundwater management. This approach gives landowners local control with limited state oversight.

Texas Water Code, Section 36.1071, requires districts to develop groundwater management plans. These plans outline the districts’ unique goals and objectives for managing the groundwater they administer. As Figure 1 illustrates, the Water Development Board reviews and certifies each district’s groundwater management plan. The State Auditor’s Office audits districts’ performance under their management plans. The Texas Commission on Environmental Quality enforces districts’ compliance with their groundwater management plans.

Figure 1 - Summary of State Agencies’ Roles In Groundwater Management Plan Process

Chapter 2-A

The Water Development Board Certifies District Groundwater Management Plans

Texas Water Code, Section 36.1071, requires that within two years of the confirmation election to approve their creation, districts must submit a groundwater management plan to the Water Development Board (Board) for review and certification. The groundwater management plan must address the following seven statutorily required goals (if applicable to the district):
Providing the most efficient use of groundwater

Controlling and preventing waste of groundwater

Controlling and preventing subsidence (Subsidence is the gradual lowering in the elevation of the land surface that is caused by withdrawal of groundwater.)

Addressing conjunctive surface water management issues (Conjunctive issues are issues related to the combined use of groundwater and surface water.)

Addressing natural resource issues

Addressing drought conditions (The 77th Legislature added this goal, which became effective September 1, 2001.)

Addressing conservation (The 77th Legislature added this goal, which became effective September 1, 2001.)

Texas Water Code, Section 36.1072, requires the Board to certify administratively complete groundwater management plans within 60 days of receiving them from the districts. A groundwater management plan is administratively complete if it contains the information required by Texas Water Code, Section 36.1071. Additionally, Texas Water Code, Section 36.1072, requires districts to review and readopt their groundwater management plans at least once every five years, and they must resubmit the plans to the Board so that it can certify that those plans are administratively complete.

The Board reported on April 2, 2003, that of the 87 districts that have been created:

- Three districts have not held confirmation elections to confirm the creation of the district and elect a permanent board of directors.
- Four districts have held confirmation elections that failed to confirm all or part of the creation of the district.
- Fifty-one districts are currently operating with groundwater management plans that the Board has certified.
- Twenty-nine confirmed districts are in the process of preparing and submitting management plans. All of these districts are still within the two-year time frame that the Texas Water Code, Section 36.1072(a), allows for submission of their groundwater management plans.

Chapter 2-B

The State Auditor’s Office Determines Districts’ Operational Status

Texas Water Code, Section 36.302, requires the State Auditor’s Office (Office) to determine whether a district is actively engaged in achieving the objectives in its groundwater management plan. The Office’s determination is based on an audit of the district’s performance under the plan. The Office considers a district to be operational if the district achieves a majority of the objectives the Office audits.
The Office’s review of a district’s operational status must occur after the first anniversary of the initial Board certification of the district’s groundwater management plan, as well as every five years thereafter. The Office must report the results of its review to the Legislative Audit Committee and the Texas Commission on Environmental Quality.

Prior to our current project, the Office conducted four projects to audit districts’ operational status (Pilot Project, Phase One, Phase Two, and Phase Three). Of the 32 districts included in the prior projects:

- Eight districts were not operational.
- Twenty-three districts were operational.

The Office was unable to determine the operational status of the remaining district.

Chapter 2-C

The Texas Commission on Environmental Quality Enforces Districts’ Compliance with Their Groundwater Management Plans

The Texas Commission on Environmental Quality (Commission) is responsible for enforcing districts’ compliance with their groundwater management plans. Texas Water Code, Section 36.303, specifies that if a district fails to submit a groundwater management plan or if the Office finds that a district is not operational, the Commission must implement an enforcement action. The Commission has several enforcement action options established in statute. These options include:

- Requiring a district to take or refrain from certain actions.
- Dissolving a district’s board and calling for an election to elect a new board.
- Requesting that the Office of the Attorney General bring suit for the appointment of a receiver to collect the assets and carry on the business of a district.
- Dissolving a district.

In addition, as the lead agency for the Texas Groundwater Protection Committee, the Commission is primarily responsible for the regulatory protection of groundwater quality in the state.

According to the Commission, it has followed up on the two districts the Office assessed as not operational in the Office’s Pilot and Phase One projects. In October 2001, the Executive Director of the Commission determined that the Live Oak Underground Water Conservation District had independently addressed compliance issues in response to the audit and the Commission’s noncompliance review. The Executive Director concluded that no formal enforcement or other action by the Commission was necessary. The other district that was not operational, Hudspeth County Underground Water Conservation District No. 1, has provided sufficient documentation to the Commission that it has addressed four of the five operational findings of the audit. The Commission and this district entered into a compliance agreement in February 2002. As directed in the compliance agreement, this district
adopted an amended management plan with revisions in March 2002. The Water Development Board certified the revised plan in May 2002.

The Commission has begun its follow-up on the Office’s Phase Two project. The five non-operational districts identified during that audit responded in July and August 2002 to Commission documentation requests. Further compliance action is pending.

The Commission’s review evaluation in response to the Office’s Phase Three audit for the district that was not operational is presently ongoing. Table 13 summarizes the Commission’s actions regarding the eight districts identified as non-operational in our prior audits.

Table 13 - The Commission is responsible for enforcing districts’ compliance with their groundwater management plans.

<table>
<thead>
<tr>
<th>District Identified as Non-operational</th>
<th>Date of State Auditor’s Office Audit</th>
<th>Current Status of the Commission’s Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hudspeth County Underground Water Conservation District No. 1</td>
<td>August 2000</td>
<td>As of February 2002, the Commission entered into a compliance agreement with the District to address one remaining non-operational finding.</td>
</tr>
<tr>
<td>Live Oak Underground Water Conservation District</td>
<td>August 2000</td>
<td>As of October 2001, the Commission determined the District was operational.</td>
</tr>
<tr>
<td>Collingsworth County Underground Water Conservation District</td>
<td>October 2001</td>
<td>As of December 2002, the Commission was reviewing the District’s responses to the Commission’s information and documentation requests.</td>
</tr>
<tr>
<td>Dallam County Underground Water Conservation District No. 1</td>
<td>October 2001</td>
<td>As of December 2002, the Commission was reviewing the District’s responses to the Commission’s information and documentation requests.</td>
</tr>
<tr>
<td>Fox Crossing Water District</td>
<td>October 2001</td>
<td>As of December 2002, the Commission was reviewing the District’s responses to the Commission’s information and documentation requests.</td>
</tr>
<tr>
<td>Real-Edwards Conservation and Reclamation Water District</td>
<td>October 2001</td>
<td>As of December 2002, the Commission was reviewing the District’s responses to the Commission’s information and documentation requests.</td>
</tr>
<tr>
<td>Saratoga Underground Water Conservation District</td>
<td>October 2001</td>
<td>As of December 2002, the Commission was reviewing the District’s responses to the Commission’s information and documentation requests.</td>
</tr>
<tr>
<td>Permian Basin Underground Water Conservation District</td>
<td>July 2002</td>
<td>As of December 2002, the Commission was reviewing the District’s responses to the Commission’s information and documentation requests.</td>
</tr>
</tbody>
</table>

Chapter 3

Map of Confirmed and Newly Created Groundwater Conservation Districts, Regional Water Planning Groups, and Major Aquifers

See the following page for a map showing confirmed and newly created groundwater conservation districts, regional water planning groups, and major aquifers.
DISCLAIMER: This map was generated by the Texas Water Development Board. No claims are made to the accuracy or completeness of the information shown herein nor to its suitability for a particular use. The scale and location of all mapped data are approximate. Boundaries for groundwater conservation districts are approximate and may not accurately depict legal descriptions. Map updated February 2003.

NEWLY CREATED GROUNDWATER CONSERVATION DISTRICTS
(These districts’ confirmations are pending.)
- 81. Brazoria County GCD
- 82. Colorado County GCD
- 83. Hays Trinity GCD
- 84. Lavaca County GCD
- 85. Lower Pecos GCD
- 86. Post Oak GCD
- 87. Southeast Trinity GCD

CONSERVATION DISTRICTS
(Still pending) Middle Trinity GCD

Regional Water Planning Groups
- A. Panhandle
- B. Region B
- C. Region C
- D. North East Texas
- E. Far West Texas
- F. Region F
- G. Brazos G
- H. Region H
- I. East Texas
- J. Plateau
- K. Lower Colorado
- L. South Central Texas
- M. Rio Grande
- N. Coastal Bend
- O. Llano Estacado
- P. Lavaca

Failed election in Bluebonnet GCD
Failed election in Tri-Country GCD
Appendix

Objective, Scope, and Methodology

Objective

Our objective was to determine whether the audited districts were making a good-faith effort in pursuing the objectives in their groundwater management plans.

Scope

Our audit scope covered the two most recently completed calendar or fiscal years of each district audited (depending on whether a district operated under a calendar or fiscal year). This audit did not include any reviews of information technology systems.

We audited the following groundwater conservation districts:

- Bexar Metropolitan Water District
- Coke County Underground Water Conservation District
- Culberson County Groundwater Conservation District
- Emerald Underground Water Conservation District
- Fort Bend Subsidence District
- Garza County Underground and Fresh Water Conservation District
- Harris-Galveston Coastal Subsidence District
- Hemphill County Underground Water Conservation District
- Llano Estacado Underground Water Conservation District
- Panhandle Groundwater Conservation District
- Salt Fork Underground Water Conservation District
- South Plains Underground Water Conservation District

Methodology

We based our assessment of the districts’ operational status on our review of the districts’ efforts toward achieving the objectives in their groundwater management plans. We assessed whether a district had achieved an objective based on a desk review of evidence the district submitted. If a district achieved a majority of the audited objectives in its groundwater management plan, we considered the district to be operational.
We gained an understanding of Texas groundwater district law by reviewing the districts’ enabling legislation. We obtained additional knowledge by reviewing the districts’ groundwater management plans and discussing the development of the plans with personnel from the Water Development Board.

**Information collected** to accomplish our objective included the following:

- District board meeting minutes
- District manager reports to the board
- Annual audit reports
- District rules
- District policies and procedures
- District well permits
- Water quality testing results
- Water level monitoring documentation
- Regional water planning group meeting minutes
- Water conservation information disseminated by the districts

**Procedures and tests conducted** included the following:

- Comparison of district activities to written management plan objectives
- Review of documentation for compliance with written management plan objectives
- Review of rules and policies for compliance with written management plan objectives
- Review of rules and policies for compliance with statutory requirements

**Analysis techniques used** included a comparison of actual district activities with targets set in district management plans.

**Criteria used** included the following:

- District management plan objectives
- Statutory requirements in Texas Water Code, Chapter 36
- Board meeting information
- District rules
- District policies and procedures
Other Information

We conducted fieldwork from January 2003 through March 2003. The audit was conducted in accordance with generally accepted government auditing standards; there were no significant instances of noncompliance with these standards.

The following members of the State Auditor’s staff performed the audit work:

- Robert G. Kiker (Project Manager)
- Rick A. Rupert, MPA (Assistant Project Manager)
- Joseph K. Mungai
- John Quintanilla
- Anthony Patrick, MBA (Quality Control Reviewer)
- Julie Ivie, CIA (Audit Manager)
- Frank Vito, CPA (Audit Director)
Copies of this report have been distributed to the following:

**Legislative Audit Committee**
The Honorable Tom Craddick, Speaker of the House, Chair
The Honorable David Dewhurst, Lieutenant Governor, Vice Chair
The Honorable Teel Bivins, Senate Finance Committee
The Honorable Bill Ratliff, Senate State Affairs Committee
The Honorable Talmadge Heflin, House Appropriations Committee
The Honorable Ron Wilson, House Ways and Means Committee

**Office of the Governor**
The Honorable Rick Perry, Governor

**Parks and Wildlife Department**
Mr. Robert L. Cook, Executive Director

**Texas Commission on Environmental Quality**
Ms. Margaret Hoffman, Executive Director

**Water Development Board**
Mr. J. Kevin Ward, Executive Administrator

**Presidents, board members, and managers of the following groundwater conservation districts:**
Bexar Metropolitan Water District
Coke County Underground Water Conservation District
Culberson County Groundwater Conservation District
Emerald Underground Water Conservation District
Fort Bend Subsidence District
Garza County Underground and Fresh Water Conservation District
Harris-Galveston Coastal Subsidence District
Hemphill County Underground Water Conservation District
Llano Estacado Underground Water Conservation District
Panhandle Groundwater Conservation District
Salt Fork Underground Water Conservation District
South Plains Underground Water Conservation District