



*Clearwater Underground Water
Conservation District*

Annual Report

Fiscal Year 2003

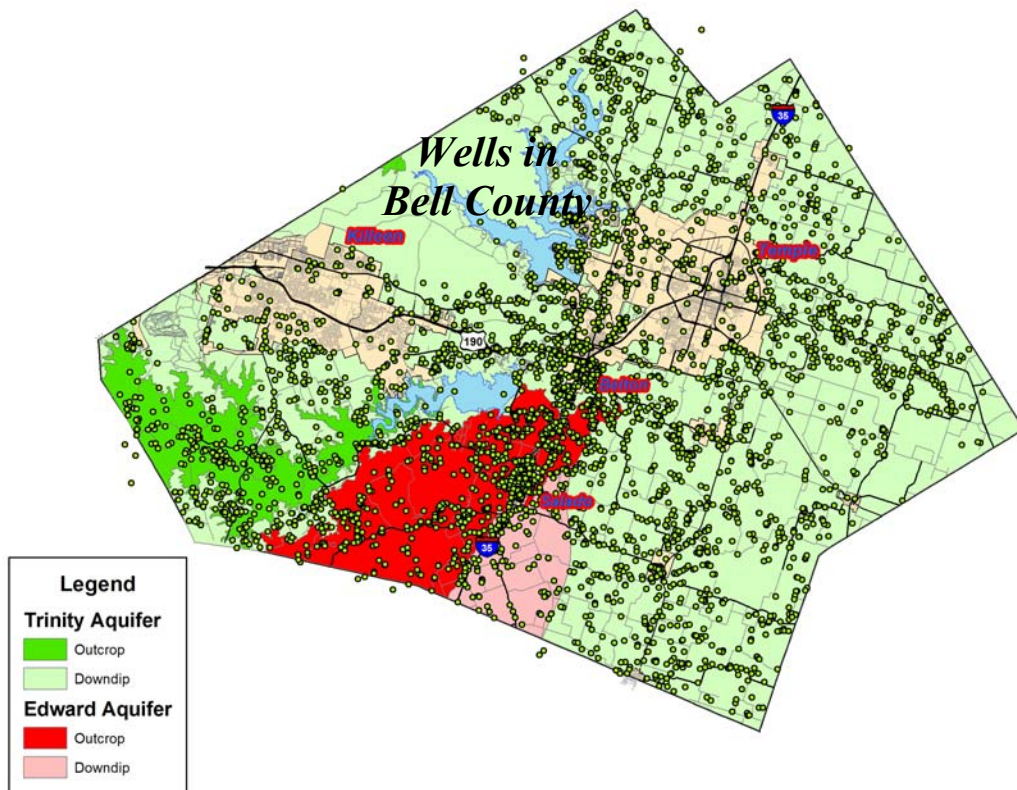


TABLE OF CONTENTS

1.	Introduction	1
2.	Administrative Activities	2
	A. Contracts	
	1. Central Texas Council of Governments.....	2
	2. Turner Collie & Braden, Inc.	2
	3. Legal Services.....	3
	B. Financial Items	
	1. Budget and Tax Rate.....	3
	2. Financial Audit.....	4
	C. Board of Directors--Officers.....	4
	D. District Rules	
	1. Transport Fee and Transport Permit	5
	2. Proposed Revisions to Rules.....	5
	E. Management Plan.....	5
3.	Management Plan Activities	6
	A. Efficient Use of Groundwater.....	6
	B. Minimize Waste of Groundwater.....	12
	C. Conjunctive Surface Water Management Issues	16
	D. Develop Public/Private Partnerships.....	16
4.	Miscellaneous Activities	18
	A. Water Issues in Southwestern Bell County.....	18
	B. Aquifer Monitoring System	19
	C. Water Conservation Kits.....	19
	D. WaterWise Program.....	20
	E. Water Quality Testing.....	20
	F. Well Plugging Demonstration.....	20
	G. Water Quality Protection Grant Program	21

H.	Internet Site.....	21
I.	Resource Library.....	22
J.	Book Cover Distribution.....	22
K.	Promotional Materials/Activities.....	22
5.	Summary.....	23
6.	Exhibits	
	CUWCD Budget.....	3
	CUWCD Tax Rate.....	3
	Well Registration by Month—2003.....	6
	Well Registration Summary.....	7
	Well Registration—2002.....	7
	Well Registration—2003.....	7
	Production from Non-Exempt Wells—2003.....	8
	Comparison of Water Level Depths, TWDB Monitor Well Sites.....	9
	Water Level in Monitor Wells—Edwards (BFZ) Aquifer.....	9
	Water Level in Monitor Wells—Trinity Aquifer.....	10
7.	Appendix	
A.	Approved Budget for FY03; Closeout Report for FY03.....	A-1
B.	Map of Bell County Commissioner/Clearwater Precincts.....	B-1
C.	Resolution Addressing Transport Fees.....	C-1
D.	Letter to Region G regarding Water Demand Estimates/Projections.....	D-1
E.	Bell County Water Symposium Agenda.....	E-1
F.	Inventory of Literature Packets.....	F-1
G.	MTBE Sites in Bell County.....	G-1
H.	Aquifer Monitoring Sites.....	H-1
I.	Resource Library Information.....	I-1
J.	District Activity Reports.....	J-1
K.	Summary of Staff Time and Expenses Necessary to Meet Management Plan Goals.....	K-1

1. INTRODUCTION

The creation of the Clearwater Underground Water Conservation District (CUWCD or District) was approved by the voters of Bell County in August 1999 and opened its doors for business in February 2002. The District's fiscal year runs from October 1st through September 30th. This report summarizes the accomplishments and activities of the District during FY2003 (FY03).

During FY03, the District made significant steps in obtaining necessary data to effectively manage groundwater in Bell County. These steps include implementing an aquifer monitoring program to measure water levels and test water quality, and collecting monthly production figures from non-exempt wells. These programs and others are discussed in this report.

The information in this report is presented in three categories as follows:

- Administrative
- Management Plan
- Miscellaneous

Administrative activities include the basic tasks and requirements necessary for a groundwater district to function effectively. Management Plan activities include the required tasks and activities identified in the District's Management Plan. Miscellaneous activities include tasks and programs that do not fall within the other two categories.

2. ADMINISTRATIVE ACTIVITIES

A large portion of the District activities during FY03 were related to administrative needs. A review of the District's rules was a top priority during this period. Major administrative activities during FY03 include the following:

A. Contracts:

- Central Texas Council of Governments for administrative services
- Turner Collie & Braden Inc. for technical support
- Legal counsel
 - (1) Naman, Howell, Smith & Lee
 - (2) Lloyd, Gosselink, Blevins, Rochelle, Baldwin & Townsend, P.C.

B. Financial Items:

- Budget and tax rate for FY03
- Financial audit

C. Board of Directors—Officers

D. District Rules:

- Transport fee and transport permit
- Proposed revisions to rules

E. Management Plan

A detailed discussion of each of these activities follows below.

A. CONTRACTS

1. Central Texas Council of Governments

The District renewed its contract with Central Texas Council of Governments (CTCOG) for administrative and planning services for FY03. This contract includes the use of CTCOG staff, equipment, and facilities. The District originally contracted with CTCOG for administrative and planning services in March 2000. This contract has proven to be beneficial for both parties and has allowed the District to operate with minimal expenses. (The District has renewed the contract with CTCOG for FY04 for a two year term.)

2. Turner Collie & Braden, Inc.

The District continued contracting with Turner Collie & Braden Inc. (TCB) during FY03 for technical consulting services. The District originally contracted with TCB in March 2001. Services for FY03 included establishing a well monitoring program

and training of District staff. TCB has also provided valuable recommendations regarding potential rules revisions.

During FY03, the District authorized TCB to conduct a study of the Trinity aquifer in southwestern Bell County. This study will determine the hydrogeologic properties of the aquifer and determine the volume of available water in storage. This study is anticipated to be completed by the end of FY04.

3. Legal Services

The District requests legal consulting services on an as-needed basis and utilized two law firms during FY03: Naman, Howell, Smith & Lee for general consultation, and Lloyd, Gosselink, Blevins, Rochelle, Baldwin & Townsend, P.C. for consultation regarding water-related issues. The latter has been instrumental in reviewing the District's rules and recommending revisions.

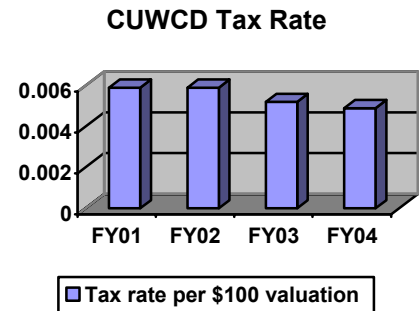
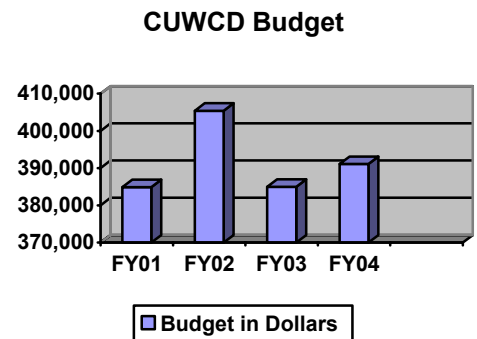
B. FINANCIAL ITEMS

1. Budget and Tax Rate

Several months prior to FY03, the District held worksessions to develop an operating budget for the upcoming fiscal year and to set the corresponding ad valorem tax rate. The District lowered its tax rate for FY03 from \$0.0059/\$100 valuation assessed during FY02, to \$0.0052/\$100 valuation. The approved budget for FY03 totaled \$384,078. (For FY04, the District adopted a tax rate of \$.0049/\$100 valuation with an approved budget of \$391,078.)

Total revenue (including interest) for CUWCD for FY03 was \$378,689.46. Revenue was \$5,388.54 less than budgeted. Expenditures for FY03 totaled \$294,948.06, leaving an unencumbered balance of \$89,129.94. Due to the \$5,388.54 shortage in revenue, the adjusted balance for FY03 is \$83,741.40. The excess funds are placed in a reserve account for the District.

The approved budget for FY03, along with the final schedule of revenues and expenditures for FY03, is attached as Appendix A. The figure shown in the final report includes a \$209,987.62 carry over from previous years.



2. Financial Audit

An annual audit of the District’s finances is required by Chapter 36.153 of the Texas Water Code. CUWCD’s audit occurs in conjunction with CTCOG’s audit. The fiscal year for CTCOG runs from July 1st through June 30th. The audit for FY02 began January 2003. Patillo, Brown & Hill, LLP conducted the audit which was successful--there were no findings to report. The audit for FY03 will begin in February 2004.

C. BOARD OF DIRECTORS—OFFICERS

Board members for FY03 are identified below, along with the office they held. The same officers were elected for FY04.

Horace Grace, President
Wallace Biskup, Vice President
Leland Gersbach, Secretary
Ricky Preston
Judy Parker

Clearwater Underground
Water Conservation District
Board of Directors
2002—2004

Ricky Preston, Leland Gersbach, Judy Parker, Wallace Biskup, Horace Grace
At-Large Precinct 1 Precinct 4 Precinct 3 Precinct 2

A map of the Bell County precincts is provided in Appendix B.

D. DISTRICT RULES

1. Transport Fee and Transport Permit

The District discussed the assessment of transport fees to users existing prior to the effective date of the District's rules. The District Board passed a resolution authorizing the assessment of a transport fee to all entities transporting water out of Bell County. The resolution is attached as Appendix C.

The Board also agreed to not issue transport permits but to consider these as operating permits. This will be addressed with the rules revisions.

2. Proposed Revisions to Rules

The District began reviewing the rules during FY03. During this review, the following issues were considered:

- Historic & Existing Use Permits
- Permit Exemptions
- Permit Requirements/Process
- Hearings Process
- Management Zones
- Spacing Requirements
- Water Quality Rules
- Rulemaking & Other Hearings

The District anticipates adopting revised rules early in 2004.

E. MANAGEMENT PLAN

During FY03, the District continued to meet the goals and objectives outlined in its Management Plan. The District Management Plan is reviewed annually and is to be updated and readopted at least every five years. The Board discussed the need to revise the Management Plan and agreed to look at this in detail during FY04.

Groundwater districts are subject to a State audit to determine if the district is actively engaged in achieving the objectives of its management plan. During FY03, legislation was passed that changed the requirement from a mandatory State audit every five years, to a permissive audit every seven years. This District has not yet been audited. A detailed discussion of the District's Management Plan activities is included in the following section.

3. MANAGEMENT PLAN ACTIVITIES

The District Management Plan identifies the goals and objectives of the District and provides performance standards and tracking methods to measure the District’s effectiveness in meeting these goals. A large portion of the District’s activities during FY03 have been related to the Management Plan requirements. Several of the Plan’s goals and objectives are referenced to the calendar year rather than the fiscal year; therefore, this report will include Management Plan activities through December 2003. The District goals are shown below:

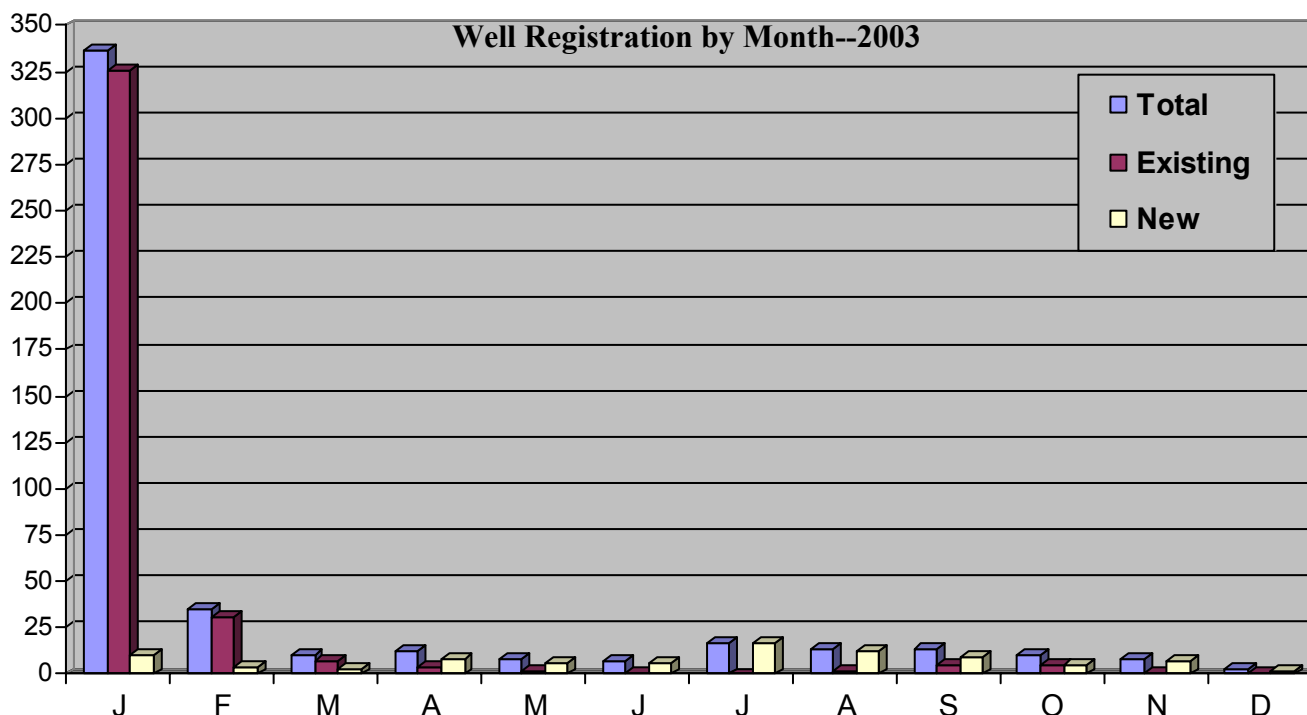
- Efficient use of groundwater
- Minimize waste of groundwater
- Conjunctive surface water management issues
- Develop public/private partnerships

Following is a summary of the District’s activities related to these goals. Appendix K provides a summary of the estimated staff time and expenses necessary to achieve them.

A. EFFICIENT USE OF GROUNDWATER

Objectives A.1 and A.2: Registration & Permitting of Wells.

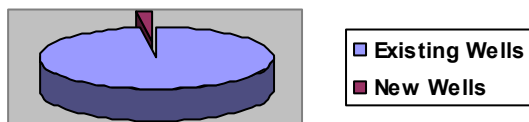
The registration and permitting of wells is an ongoing process. During 2003, 474 wells were registered. Of these, 7 wells were non-exempt. The tables below summarize the well registration and permitting activity through December 31, 2003. Well registrations dropped off significantly after January 2003, following the 2002 deadline. It should be noted that in 2003, there was an increase in the percentage of new wells registered vs. existing wells.



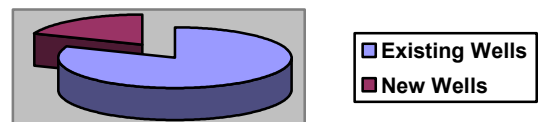
Well Registration Summary

Period	Exempt		Non-exempt		Total
	Grandfathered	New	Grandfathered	New	
TOTAL 2002	3504	81	61	--	3646
2003 Jan	324	10	2	--	336
Feb	31	4	--	--	35
Mar	7	3	--	--	10
Apr	4	8	--	--	12
May	2	6	--	--	8
Jun	1	6	--	--	7
Jul	--	17	--	--	17
Aug	1	12	1	--	14
Sep	5	9	--	--	14
Oct	4	5	1	--	10
Nov	--	6	1	1	8
Dec	1	1	0	1	3
TOTAL 2003	380	87	5	2	474
GRAND TOTAL	3884	168	66	2	4120

Well Registration--2002



Well Registration--2003

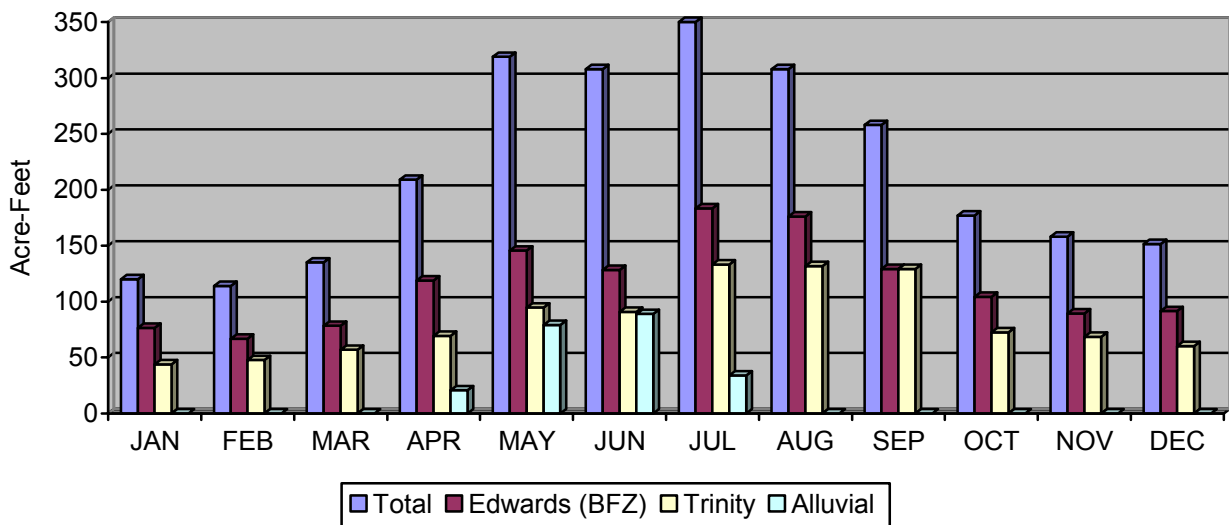


Objective A.3: Establish a Groundwater Database.

The District’s database is continually updated as new information is acquired. Data is entered within 45 days of receipt, as required by the Management Plan. The Management Plan also requires the District to review water demand estimates and projections from the Brazos G Regional Water Planning Group (Region G). Estimates were provided to the District in March, 2003. See Appendix D for the District’s letter to Region G regarding these estimates.

During FY03, the District began collecting data from non-exempt wells. Monthly production reports are required by the 15th day of the following month. Production from the non-exempt wells is shown below. Production peaked in July with a total withdrawal of 350 ac-ft. Throughout the year, withdrawals from the Edwards (BFZ) were consistently higher than from the Trinity aquifer.

Production From Non-Exempt Wells--2003



2003 Annual Production (Non-Exempt Wells)

Edwards (BFZ):	1,387.94 ac-ft
Trinity:	997.35 ac-ft
Alluvial:	222.33 ac-ft
TOTAL:	2,607.61 ac-ft

The District worked with TCB to select 8 sites for use as monitoring wells with measurements taken twice annually (January and July). In addition, the District supplemented Texas Water Development Board (TWDB) data by taking July water level measurements from 6 of the 10 wells that are measured by the TWDB in January.

The table shown below provides a comparison of water levels in the TWDB monitor wells from January 1997, January 2002, and January 2003. **NOTE: Larger numbers represent greater depth necessary to reach the surface of the aquifer, i.e. a decline in the aquifer level.**

Of the three wells identified in the Edwards (BFZ) aquifer, two show a decline in the aquifer level ranging from 4 feet to 8 feet from 1997 to 2003. Of the seven wells identified in the Trinity aquifer, six of the wells show a decline in levels ranging from 5 feet to 39 feet, with one well showing an increase in water level of nearly 14 feet.

Comparison of Water Level Depths TWDB Monitor Well Sites

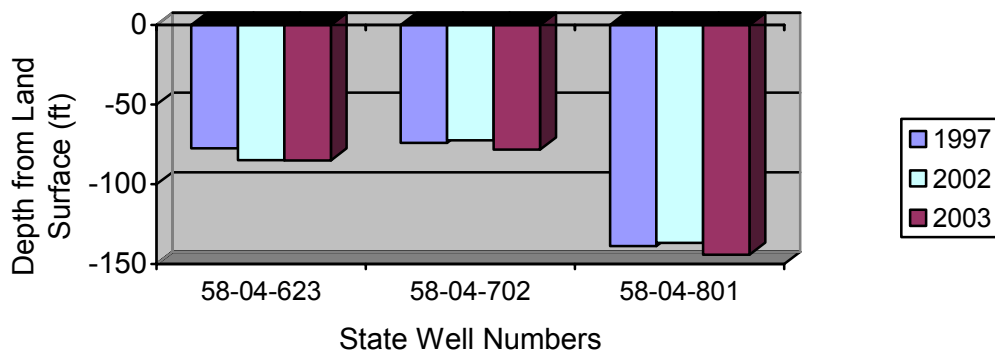
State Well No.	Location	Aquifer	Depth From Land Surface (ft)		
			Jan 1997	Jan 2002	Jan 2003
58-04-623	Salado	Edwards (BFZ)	77.40	84.83	85.00
58-04-702	SW of Salado	Edwards (BFZ)	73.99	72.40	78.25
58-04-801	S of Salado	Edwards (BFZ)	138.80	136.82	144.15
40-45-701	NW of Moffat	Trinity	641.46	646.00	646.00
40-53-102	NW of Moffat	Trinity	60.05	67.48	68.35
40-53-505	Moffat	Trinity	348.92	335.00	335.00
58-03-805	SW of Salado	Trinity	*350.10	387.80	389.40
58-04-103	W of Salado	Trinity	302.44	311.60	310.80
58-05-403	W of Salado	Trinity	**211.50	238.16	248.30
58-05-901	Holland	Trinity	3.45	20.45	23.70

* Measurement taken in August of 1997 instead of January.

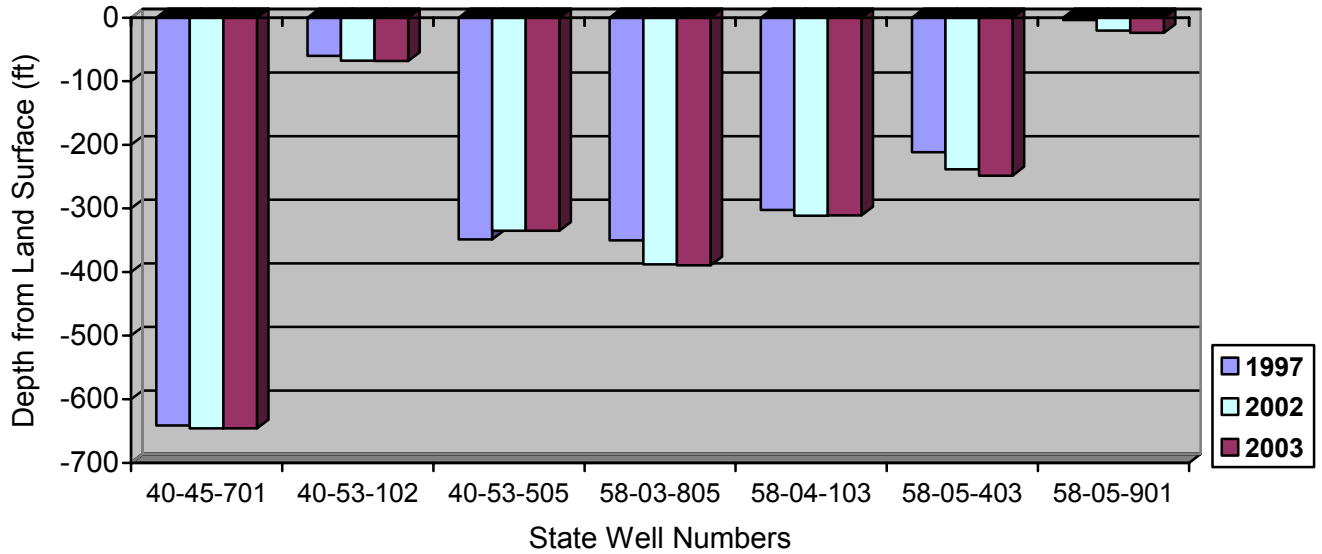
**Data for 1996 was used since data for 1997 was not available for this site.

Data from the above table is also shown in the two charts below:

Water Level in Monitor Wells--Edwards (BFZ) Aquifer



Water Level in Monitor Wells--Trinity Aquifer



Objective A.4: Provide Public Education Opportunities.

The District’s Management Plan requires the dissemination of educational information regarding the hydro-geologic cycle and status of aquifers through at least two newspaper articles, two field day/open house events, and responses to public inquiries as needed. This objective was met as follows:

- (1) ***Field Day/Open House.***
 - Earth Day Event

The District supported local Earth Day events held on April 16 & 17, 2003 by contributing funds and displaying information regarding the aquifers and the District. Refer to Appendix J for a complete list of items distributed during this event.



- Bell County Water Symposium

CUWCD sponsored its third water symposium on November 19, 2003 at the Bell County Expo Center. Presentations included information about the District; water marketing; legislative issues; Bell County aquifers; role of water supply corporations and Certificates of Convenience and Necessity; water quality issues; water conservation measures; and the Brazos River Authority and Region G.

CUWCD set up a display and distributed literature packets and water conservation kits as well as other information on water conservation and the status of the aquifers. Approximately 70 people attended the symposium. Refer to Appendix E for an agenda of the meeting. Appendix J contains a complete list of items distributed during this event.



(2) *Newspaper Articles.*

- The Clearwater UWCD Spring 2003 Report

The District published an article in the Temple Daily Telegram and the Killeen Daily Herald on Sunday, April 6, 2003, and in the Salado Village Voice on Wednesday, April 9, 2003. The article provided data from 10 sites in the Edwards (BFZ) and Trinity aquifers monitored by the TWDB, as well as information on well production and District activities.

- The Clearwater UWCD Fall 2003 Report

The District published an article in the Temple Daily Telegram and Killeen Daily Herald on Sunday, October 19, 2003, and in the Salado Village Voice on Wednesday, October 22, 2003. The article provided a summary of District activities, information on the water cycle, updated well production figures, and changes in aquifer levels from 1993 to 2003.

(3) *Responses to Public Inquiries.*

- The majority of inquiries the District received this year were in regard to well registration requirements and subsequent requests for registration forms. This occurred primarily in the months of January and February. The District responded by mailing approximately 50 packets with registration information.
- Other requests for information included the District’s abandoned well program; water quality testing; well depth data; District rules; management plan; election information; meeting minutes; and data on well registration, permitting, and production. Approximately 20 such requests resulted in information being sent via mail.

B. MINIMIZE WASTE OF GROUNDWATER

Objective B.1: Public Education.

The District’s Management Plan requires the distribution of conservation material, an annual school contest on water conservation practices, and the annual distribution of two water conservation literature packets. This objective was met as follows:

(1) *Distribution of educational information regarding the current conservation practices for efficient use of water resources.*

- The District distributed various material on water conservation from TWDB, WaterSmart, Water Wise Council of Texas, the Groundwater Foundation, US EPA, Natural Resources Conservation Service, and US Geological Survey (USGS) as identified below. The information below does not include conservation material contained in literature packets or the water conservation kits. (See Appendix J for a list of material distributed.)

<u>Event</u>	<u>Date</u>	<u># Distributed</u>
Brazos Basin Public Forum	01-25-03	86
Earth Day 2003	04-16-03	2,565
Prizes to Winning Class—Earth Day (St. Mary’s Catholic School)	05-27-03	132
CTCOG Household Hazardous Waste Collection Day	06-07-03	1,200
CTCOG Compost Workshop (UMHB)	06-25-03	36
Temple/Belton Area Board of Realtors	07-23-03	69
Class Presentation (St. Mary’s Catholic School)	09-19-03	25
Bell County Water Symposium	11-19-03	<u>120</u>
TOTAL		4,233

(2) ***Conduct secondary school and/or college contest focused on the demonstration of conservation practices applicable to the District.***

- The District sponsors an essay and poster contest on water conservation each year. Instead of holding a contest during the Fall of 2003, the District moved the date of the annual contest to the Spring so that the winners may be announced during the Earth Day events. The next contest will be held in the Spring of 2004. The contest is open to all 5th grade students in Bell County. The top three entries in each category are awarded savings bonds. CUWCD complimentary packets are provided to all participants and their classroom teachers.

(3) ***Compile appropriate water conservation literature into a handout packet made available to District patrons and educational institutions (minimum two per year).***

- The District compiled literature packets containing a variety of information on water conservation, the water cycle, and water quality. The packets are distributed to Bell County schools and are available for distribution at water conferences and other water-related events. Distribution of these packets is listed below. Refer to Appendix F for an inventory of information contained in the packets. A total of 290 packets were distributed during the year.

Packet ID	Event/Entity	Date	Number Distributed
1	Brazos Basin Public Forum	01-25-03	11
2	Earth Day 2003	04-16-03	41
1	CTCOG Compost Workshop	06-25-03	11
3	School Distribution	07-11-03	97
4	Bell County Water Symposium	11-19-03	30
5	School Distribution	12-05-03	100
TOTAL			290

For the school distributions, one packet was provided to each campus within each Bell County school district. Packets were also provided to several private schools within Bell County. The distribution of packets to schools is summarized below:

Academy ISD (3)	Rogers ISD (3)
Bartlett ISD (3)	Salado ISD (3)
Belton ISD (11)	Temple ISD (15)
Holland ISD (3)	Troy ISD (4)
Killeen ISD (41)	Private Schools (14)

Objective B.2: Identify Wasteful Practices.

The District's Management Plan identifies several performance standards to monitor the District's effectiveness in meeting this objective. Some of the performance standards were addressed in previous years. The remaining ones are discussed below.

(1) *Track Water Quality Issues.*

District directors and staff have had the opportunity to attend various seminars and conferences that address water quality issues. These include seminars sponsored by Texas Watch and CLE International. In addition, the District routinely keeps abreast of water quality issues reported in the news. US Waternews Online publishes water related articles on a monthly basis. Many of these articles are related to water quality and have issues applicable to the CUWCD. The District also follows local water quality issues identified in the local news media. The District has a Board member serving on the TAGD (Texas Alliance of Groundwater Districts) Groundwater Protection Committee. This enables the District to follow various water quality issues as well.

Water quality issues were discussed at the Bell County Water Symposium on November 19, 2003. These included the following: Source Water Assessment and Protection Program; BMP's for protecting drinking water supplies; abandoned wells and plugging guidelines; and Blackland Research and Extension Center projects.

The District continues to monitor events associated with the pollution of the North Bosque River watershed and the impact on Lake Waco. Although this area is not in Bell County, many believe similar problems may exist in the Leon River watershed. Perchlorate and MTBE are also issues the District continues to monitor.

During FY03 the District worked with TCB to collect water samples for water quality testing as part of its well monitoring program. Samples were taken from 5 wells in January 2003. The test results showed extremely high levels of TDS (total dissolved solids) in one well in eastern Bell County. This testing was repeated in July 2003 and yielded similar results. The District is currently working with the well owner to resolve this issue.

In May 2003, the District received notice from TDLR (Texas Department of Licensing and Regulation) identifying an area in southwestern Bell County with known levels of elevated TDS. The notice explained that elevated TDS levels were identified in the upper Glen Rose zone. To prevent the commingling of the upper Glen Rose strata with the producing Hensell Sand, alternative construction specifications were required on all new wells producing from the Hensell Sand in this area.

(2) *Perchlorate Discharges from the US Naval Weapons Industrial Reserve Plant (NWIRP) at McGregor, Texas.*

CUWCD continues to follow the perchlorate issue by attending various stakeholder meetings and briefings.

The US Army Corps of Engineers and the Brazos River Authority received funding in 2001 to conduct a study of the Bosque River and Leon River watersheds to determine if there is any impact resulting from the perchlorate at the NWIRP site.

A total of 15 monitoring stations were established along tributaries in the two watersheds. Samples taken during 2003 showed perchlorate levels less than 4 ppb (parts per billion) at the nearest stations north of Lake Belton. In addition, six intake stations were monitored around the two lakes, with 5 of these around Lake Belton. These stations all reported less than 4 ppb during 2003. Surface water and sediment samples were taken from Lake Belton, and again, these reported less than 4 ppb.

Groundwater in Bell County has not been tested for perchlorate. Contamination of groundwater is not considered an issue since information available indicates the perchlorate outside of Bell County is located in shallow groundwater that disperses to surface water where it becomes diluted.

Recent studies focus on an environmental assessment of perchlorate in samples such as soil, water, sediments, and vegetation, and a toxicological evaluation of perchlorate in fish, amphibians, birds, and mammals. The study involves a cooperative effort between US Army Corps of Engineers, Brazos River Authority, The Institute of Environmental and Human Health at Texas Tech University, and MWH Inc. A final report is expected in the Spring of 2004. CUWCD will continue to monitor this issue.

(3) *MTBE—Methyl Tertiary-Butyl Ether.*

CUWCD continues to collect information on MTBE and coordinates with Texas Commission on Environmental Quality (TCEQ) to keep an updated list of leaking petroleum storage tanks in Bell County. TCEQ has identified 28 leaking petroleum storage tank sites in Bell County that are undergoing investigation or remediation. Appendix G contains a listing of these sites. CUWCD will continue to monitor this issue.

(4) *Initiate Program to Identify Abandoned Wells by January 2003.*

The District implemented its *Abandoned Well Program* in January 2003. As part of this program, the District budgeted funds to pay the evaluation fee (up to \$100) for a consultant to inspect a water well in Bell County, determine the condition of the well, and provide advice as to any corrective action that may be needed. All registered well owners were eligible to participate in this program that ran through September 2003. The District received several inquiries regarding this program and several wells were inspected; however, only two inspections requested reimbursement. Funds for this program were not budgeted in FY04.

The District is currently working with the Bell County Public Health District for assistance in locating abandoned wells when septic systems are inspected. The District continues to promote the plugging of abandoned wells by distributing educational information at various conferences and events. According to records from the Texas Department of Licensing and Regulation, twenty-five wells were plugged in Bell County during 2003.

(5) ***Reporting Unplugged Abandoned Water Wells.***

The District staff will report unplugged abandoned water wells to the well owners and the District Board within 30 days of discovery and will provide TCEQ and TWDB an annual report on unplugged abandoned water wells.

C. CONJUNCTIVE SURFACE WATER MANAGEMENT ISSUES

Objective C.1: Coordinate Emergency Response/Drought Contingency Planning With Surface-Water Entities.

During 2002, the District began collecting existing drought management plans from municipalities, water supply corporations, and other entities in Bell County, and soliciting input from these entities regarding the development of the District's drought management plan. During 2003, the District implemented its well monitoring program which provides useful data on changes occurring in the aquifers. The groundwater availability model (GAM) for the northern segment of the Edwards (BFZ) has been completed. The GAM for the northern Trinity is underway and is scheduled to be completed during the fall of 2004. The data from these sources will be evaluated to determine if adequate information is available to develop the District's drought management plan.

The District continues to work towards acquiring more information on the aquifers. TCB's study of the Trinity aquifer in southwestern Bell County will provide valuable data on the availability of groundwater in this area. This study is anticipated to be completed by December 2004.

D. DEVELOP PUBLIC/PRIVATE PARTNERSHIPS

Objective D.1: Encourage Public Participation.

New Public Advisory Committee (PAC or Committee) members were appointed in August/September 2003. The Committee members are shown below:

Marvin Green, Chair	-	Precinct 3
Vince Cortese	-	Precinct 1
Sara Mackie	-	Precinct 2
John Mayer	-	Precinct 4
David Cole	-	At-Large

These members will serve on the PAC through April 2004, at which point the Board may retain these members or appoint new ones.

The Board determined the general role of the PAC as follows:

- Act as a partner/liaison in promoting public education regarding water conservation and other water-related issues.

- Bring water-related concerns to the Board's attention.
- Provide input/recommendations to the Board regarding water-related issues, as needed.

Throughout the year, PAC members have regularly attended the CUWCD Board meetings, providing representation at 9 of the 13 Board meetings that were held. The PAC has provided valuable comments to the Board members at these meetings.

The PAC has held one meeting since their appointment in August. This was held on September 30, 2003. Potential tasks for the PAC include the following:

1. Issues regarding rules—10 acre requirement.
2. Management Plan issues.
3. Water symposium topics/speakers.
4. Topics for District newsletter.
5. Providing surface water to southwestern Bell County.
6. Input on budget—what are the public's priorities.
7. Public opinion on the role/expectation of the District.
8. Public education and outreach needs.

The Board continues to value the input from the PAC and will assign tasks to them as needed.

4. MISCELLANEOUS ACTIVITIES

In addition to the administrative tasks and Management Plan requirements, the CUWCD has been involved in several miscellaneous activities during FY03. Many of these activities are related to Management Plan goals; therefore, this report includes activities through December 2003. These activities include the following:

- Water Issues in Southwestern Bell County
- Aquifer Monitoring System
- Water Conservation Kits
- WaterWise Program
- Water Quality Testing
- Well Plugging Demonstration
- Water Quality Protection Grant Program
- Internet Site
- Resource Library
- Book Cover Distribution
- Promotional Material/Activities

These activities are discussed in more detail below.

A. WATER ISSUES IN SOUTHWESTERN BELL COUNTY

The District has been concerned with the development of new residential subdivisions in southwestern Bell County that rely on individual wells to meet their water needs. More information is needed to determine what impact these wells will have on the Trinity aquifer, in which water levels and water quality appear to be declining. To address this concern, the District contracted with Turner Collie and Braden Inc. to conduct a study of the Trinity aquifer and determine the hydrogeologic properties of the aquifer in this area and the volume of available water in storage.

During 2003 the District continued to meet with county officials and water supply corporations to discuss water availability in this portion of the county. Officials concurred that serving this area with surface water is the desired goal and the availability of surface water is a key factor. A new water treatment facility is proposed on the south side of Lake Stillhouse Hollow and would help in attaining this goal.

The District is also working with the county to become more active in reviewing subdivision plats for developments that will rely on groundwater for their water supply. The District's goal is to ensure that developers and potential purchasers are knowledgeable about the groundwater resources in this area.

B. AQUIFER MONITORING SYSTEM

The District implemented its well monitoring program during 2003 by taking water level measurements from selected wells in January and July. Eight sites were measured in January—five in the Trinity aquifer and three in the Edwards (BFZ).

The same eight wells were measured in July, along with six wells measured by the TWDB in January. These additional six wells included three in the Trinity aquifer and three in the Edwards (BFZ). (See Appendix H for a map of monitoring sites.)

Samples for water quality testing were collected from five sites in January. The samples identified a problem with high levels of total dissolved solids (TDS) in one well located in eastern Bell County. That situation is now being addressed.



The District will continue to take water level measurements each year in January and July and will seek to expand its system. Equipment for measuring water levels has been purchased.

C. WATER CONSERVATION KITS

To promote public awareness and encourage water conservation, the District developed water conservation kits for distribution at special events. The water conservation kits include the following items: faucet aerator; one touch on/off tap saver; shorter shower timer; 5 spray water saving hose nozzle; moisture meter; and shower flow meter bag*. The kits were distributed as follows:

Event	Date	Number of Kits Distributed
Earth Day 2003	04-16-03	19
Temple/Belton Area Board of Realtors	07-23-03	20
St. Mary's Catholic School Presentation	09-19-03	25
Bell County Water Symposium	11-19-03	<u>48</u>
TOTAL		112

*A CUWCD brochure and a TWDB brochure on water conservation were included with each water conservation kit.

D. WATERWISE PROGRAM

During 2003, the District implemented the WaterWise program in selected schools. The 5th grade students in the Holland and Salado Independent School Districts (ISD), and a portion of the Maxdale campus in the Killeen ISD were selected. This included 151 students and 5 teachers. As part of this program, each student received a water conservation kit with water saving devices for installation in the home. An activity book and CD rom was included, along with a teacher guide.

The District has agreed to fund this program an additional year. The FY04 budget included funds to support 444 students and 8 teachers. This will include all 5th grade students in the Holland and Salado ISDs, and the Maxdale and Clear Creek campuses in the Killeen ISD.

E. WATER QUALITY TESTING

During 2003, the District considered options for providing water quality testing for Bell County well owners. The District provided contact information for coliform bacteria testing at the Waco-McLennan County Health Department as well as contact information for coliform bacteria and chemical contaminants testing at the Environmental Laboratory Services in Austin. For convenience, the District obtained bottles for collecting samples for bacterial analyses from the Waco-McLennan County Health Department.

The District purchased equipment to conduct in-house testing for coliform bacteria and various chemical contaminants during the latter part of 2003. Testing will be available in 2004.

F. WELL PLUGGING DEMONSTRATION

In August 2003, the District had the opportunity to host a well plugging demonstration conducted by Texas Cooperative Extension. A shallow hand dug well was selected for the

demonstration. The well was located in the southeastern portion of Bell County on Reeds Lake Loop between the City of Rogers and Little River-Academy. Approximately 15 people attended this event. The District hopes to host another well plugging demonstration in the early portion of 2004.



G. WATER QUALITY PROTECTION GRANT PROGRAM

In November 2003, the District established a Water Quality Protection Grant Program to provide financial assistance to local governmental entities and other non-profit entities that provide public drinking water. The funds are to be used to implement measures or recommendations that protect water quality. The District approved a grant application from the City of Rogers to conduct a video survey of their well to determine the condition of the well.

H. INTERNET SITE

The District's web site (www.clearwaterdistrict.org) has continued to expand since it was first developed in the spring of 2001. The web site contains general information about the District and Board of Directors; press releases; meeting agendas; District Management Plan; District Rules; District Bylaws; links to water-related sites; District forms; an overview of the District including a summary of its activities; aquifer data; educational information including definition of terms, data on water use, and water conservation tips.

We have recently reformatted the web site and have added a section on frequently asked questions. Additional information will be added to the web site during the next year as needed, and will include the District's resource library and a calendar of upcoming events.

I. RESOURCE LIBRARY

The District continues to add items to its resource library to help promote public education and conservation. The resource library consists of videotapes and literature focusing on the water cycle, groundwater, water conservation, and other water-related issues. This information is designed for age groups from pre-K to college level. The information in the CUWCD library is available for use by the public. A listing of the library material is shown in Appendix I.

J. BOOK COVER DISTRIBUTION

During 2003, the District provided book covers to all middle and high school students in Bell County. The book covers provided information on water conservation and a brief overview of the District, including its goals and objectives. A total of 25,000 book covers were distributed.

K. PROMOTIONAL MATERIAL/ACTIVITIES

CUWCD continues to distribute various items to promote public awareness of the District and water conservation. These items have been distributed at various events. In addition, Board members have spoken to various groups throughout the year. Refer to Appendix J for a summary of activities and items distributed during 2003.



5. *SUMMARY*

During the past year, the District began acquiring important data to help it effectively manage groundwater in Bell County. An aquifer monitoring system was established with wells selected for water level measurements and water quality testing. The District also began receiving monthly production reports from non-exempt wells. The data from the aquifer monitoring program and the well production reports will help evaluate the impact of production on the aquifers.

In response to concerns regarding developments relying on groundwater in southwestern Bell County, the District authorized Turner Collie & Braden Inc. to conduct a study of the Trinity aquifer in this portion of the county. The study will identify the hydrogeologic properties of the Trinity and determine the volume of available water in storage. Additional sites suitable for aquifer monitoring will also be identified as part of the study.

During the past year, the District spent considerable time reviewing its rules and proposed major changes to help address issues specific to Bell County. Revised rules are anticipated to be adopted early in 2004. The District Management Plan will be the focus of review following adoption of the revised rules.

Public education and service remain a top priority of the District. Programs and activities during the past year include the WaterWise program, book cover distribution, Earth Day events, Abandoned Well Program, Water Quality Protection Grant Program, and well plugging demonstration. The District has purchased equipment for an in-house water quality testing lab and will begin providing this service early in 2004.

The District will continue to acquire data on the aquifers and will focus on groundwater availability and management goals during the next year. Educational efforts during the next year will include an annual newsletter and activity book.