



**NOTICE OF MEETING OF THE
BARTON SPRINGS EDWARDS AQUIFER CONSERVATION DISTRICT
BOARD OF DIRECTORS**

Thursday, February 9, 2023

5:00 PM

IN-PERSON

Notice is given that a **Regular Meeting** of the Board of Directors (Board) of the Barton Springs/Edwards Aquifer Conservation District will be held on **Thursday, February 9, 2023** commencing at **5:00 p.m.** at the **District office, located at 1124 Regal Row, Austin, Texas.**

This meeting will be audio recorded and the recording will be available on the District's website after the meeting.

Public Comments at the Board Meeting – Please complete a comment card prior to the start of the meeting. Each registered person will be recognized and identified by the Presiding Officer or staff moderating the communications when it is their turn to speak. **Public comment is limited to 3 minutes per person.**

AGENDA

Note: The Board of Directors of the Barton Springs/Edwards Aquifer Conservation District reserves the right to meet in Executive Session at any time during the course of this meeting to discuss any of the matters listed on this agenda, as authorized by the Texas Government Code Sections §551.071 (Consultation with Attorney), 551.072 (Deliberations about Real Property), 551.073 (Deliberations about Gifts and Donations), 551.074 (Personnel Matters), 551.076 (Deliberations about Security Devices), 551.087 (Economic Development), 418.183 (Homeland Security). No final action or decision will be made in Executive Session.

- 1. Call to Order.**
- 2. Citizen Communications (Public Comments of a General Nature).**
- 3. Consent Agenda.** *(Note: These items may be considered and approved as one motion. Directors or citizens may request any consent item be removed from the consent agenda, for consideration and possible approval as a separate item of Regular Business on this agenda.)*
 - a. Approval of Financial Reports under the Public Funds Investment Act, Directors' Compensation Claims, and Specified Expenditures greater than \$5,000. **Pg. 4**
 - b. Approval of minutes of the Board's January 12, 2023 Regular Meeting. **Not for public review at this time**

4. General Manager's Report. Discussion and possible action. Topics

- a. Review of key team activities/projects. **Pg. 25**
- b. Aquifer status update.
- c. Upcoming events of possible interest.

5. Discussion and Possible Action.

- a. Discussion and possible action related to the performance and compliance of District permittees with their User Drought Contingency Plan curtailments. **NBU**
- b. Discussion and possible action on a Report of Investigation, Notice of Alleged Violation, and draft Agreed Order for Aqua Texas Bliss Spillar. **NBU**
- c. Discussion and possible action on Caldwell and Kidd, LLC Class A Conditional Production Permit application for commercial use of up to 600,000 of gallons of water per year for an existing exempt well located at 12000 Meredith Dr., Austin, TX 78748 including consideration by the Board of Directors of special conditions or delaying the effective date for an application submitted and/or considered during District-declared drought. **Pg. 52**
- d. Discussion and possible action on production fees charged outside of the Shared Territory. **NBU**
- e. Discussion and possible action on approval of the draft US Fish & Wildlife ITP Annual Report. **Pg. 73**

6. Director Reports.

Directors may report on their involvement in activities and dialogue that are of likely interest to the Board, in one or more of the following topical areas:

- Meetings and conferences attended or that will be attended;
- Board committee updates;
- Conversations with public officials, permittees, stakeholders, and other constituents;
- Commendations; and
- Issues or problems of concern.

7. Adjournment.

Please note: This agenda and available related documentation, if any, have been posted on the District website, www.bseacd.org. If you have a special interest in a particular item on this agenda and would like any additional documentation that may be developed for Board consideration, please let staff know at least 24 hours in advance of the Board Meeting so that we can have those copies made for you. The Barton Springs/Edwards Aquifer Conservation District is committed to compliance with the Americans with Disabilities Act (ADA). Reasonable accommodations and equal opportunity for effective communications will be provided upon request. Please contact the District office at 512-282-8441 at least 24 hours in advance if accommodation is needed.

Item 1

Call to Order

Item 2

Citizen Communications

Item 3

Consent Agenda

(Note: These items may be considered and approved as one motion. Directors or citizens may request any consent item be removed from the consent agenda, for consideration and possible approval as a separate item of Regular Business on this agenda.)

- a. Approval of Financial Reports under the Public Funds Investment Act, Directors' Compensation Claims, and Specified Expenditures greater than \$5,000.**
- b. Approval of minutes of the Board's January 12, 2023 Regular Meeting.**

Financial Reports – January 2023

February 9, 2023 Board Meeting

1. Profit and Loss Budget vs Actual

September 1, 2022 through January 31, 2023

2. Profit and Loss Previous Year Comparison

September 1, 2022 through January 31, 2023

3. Balance Sheet Previous Year Comparison

As of January 31, 2023 (compared to January 31, 2022)

4. Check Register – TRUIST Bank Account

January 1, 2023 through January 31, 2023

1. Profit and Loss Budget vs Actual

September 1, 2022 - January 31, 2023

BARTON SPRINGS EDWARDS AQUIFER CONSERVATION DISTRICT

BUDGET VS ACTUAL - PROFIT AND LOSS

September 1, 2022 - January 31, 2023

	Sept 1, 2022 - Jan 31, 2023	Budget	% of Budget	Notes
INCOME				
4400.0 · Interest Income	19,332.12	1,600.00	1,208.26%	
4625.0 · MISCELLANEOUS INCOME	41,638.09	0.00	100.0%	\$39,875 Intra Database Payment.
4800.0 · USAGE AND PRODUCTION FEES	886,172.47	1,619,554.00	54.72%	Permittees, Co/AWU, Transport, Annual Renewals.
4810.0 · OTHER FEES	53,529.76	12,300.00	435.2%	Well Development, Applications, DMFs, Pluggings, etc. Includes \$38,705 Penalties for PCSI and Bliss Spillar, and BS bond.
TOTAL INCOME	1,000,672.44	1,633,454.00	61.26%	
EXPENSE				
6000.0 · UTILITIES	8,123.03	22,000.00	36.92%	
6005.0 · Print/Copy/Photo Services	1,457.10	2,000.00	72.86%	High percentage due to large envelope order.
6007.0 · Postage/Freight/Shipping	615.70	2,000.00	30.79%	
6010.0 · Office Supplies	2,549.48	6,000.00	42.49%	
6010.2 · Office Furniture	0.00	1,000.00	0.0%	
6011.0 · Comp Hardware-Plotter Supplies	4,704.35	6,000.00	78.41%	In general, meant to cover 2 employee desktop replacements.
6014.0 · Software Acquisition & Upgrades	459.10	6,000.00	7.65%	
6015.0 · IT Monthly Maintenance	10,500.60	44,100.00	23.81%	
6016.0 · Meeting Expense	2,830.91	4,500.00	62.91%	Includes retirement party for \$1859.
6017.3 · Sponsorships	0.00	3,750.00	0.0%	
6019.0 · Subscriptions/Publications	1,288.48	5,000.00	25.77%	
6020.0 · Advertising	332.00	4,000.00	8.3%	
6021.0 · MISCELLANEOUS EXPENSES	4,402.66	0.00	100.0%	\$2000 to be moved to Facilities Repair - AC.
6022.0 · Accounting System Operation	1,718.20	6,000.00	28.64%	Includes Jourmyx timekeeping software.
6023.0 · MAINTENANCE	8,086.88	21,500.00	37.61%	Office and Auto - includes A/C repair.
6040.0 · LEASES	3,639.90	9,650.00	37.72%	Copier and Postage Machine
6065.0 · DIRECTOR EXPENSES	0.00	2,500.00	0.0%	
6066.0 · Directors Compensation	3,250.00	25,000.00	13.0%	
6075.0 · DUES & MEMBERSHIPS	2,635.00	6,100.00	43.2%	
6080.0 · COMMUNICATIONS AND OUTREACH	2,183.03	17,050.00	12.8%	
6081.0 · REGULATORY COMPLIANCE	3,250.00	7,500.00	43.33%	

	Sept 1, 2022 - Jan 31, 2023	Budget	% of Budget	Notes
6084.92 GENERAL MANAGEMENT	0.00	5,000.00	0.0%	
6089.0 AQUIFER SCIENCE	3,016.44	15,000.00	20.11%	
6095.0 CONTRACTED SUPPORT	6,204.40	40,750.00	15.23%	New placement (moved out of Team Budgets).
6100.0 INSURANCE - DISTRICT	4,148.84	7,047.00	58.87%	Property, Liability, Auto, E&O.
6150.0 INSURANCE - GROUP	49,401.12	150,660.00	32.79%	Employee Health, Dental, Life/Disability, Vision.
6160.0 LEGAL SERVICES	19,075.00	85,000.00	22.44%	General Matters.
6170.0 PROFESSIONAL SERVICES	29,892.47	183,850.00	16.26%	Audit, Database, Retirement Fees.
6179.0 LEGISLATION	10,000.00	36,000.00	27.78%	
6180.0 PROFESSIONAL DEVELOPMENT	1,826.05	20,000.00	9.13%	
6199.0 SALARIES AND WAGES	366,133.27	852,865.00	42.93%	
6203.0 TAXES & BENEFITS	38,382.48	128,327.00	29.91%	
6301.0 Depreciation Expense	0.00	0.00	0.0%	
6690.0 Reconciliation Discrepancies	790.08	0.00	100.0%	Returned check; permittee payment has since been received.
6800.0 PROJECTS	0.00	17,500.00	0.0%	Jacobs Well Project is completed.
TOTAL EXPENSE	590,896.57	1,743,649.00	33.89%	
NET ORDINARY INCOME	409,775.87	-110,195.00	-371.86%	Negative effect to the budget (shortfall), before accounting for the transfers to balance the budget, shown below.
OTHER INCOME				
9000.00 Transfer from Reserves	0.00	110,200.00		\$107,200 FROM General and \$3000 from TexPool Aquifer Reserve (General sub-account).
TOTAL OTHER INCOME	0.00	110,200.00		
NET INCOME	409,775.87	5.00		This is the difference between the negative amount in Net Ordinary Income before the transfers in from other accounts, needed to balance the budget.

2. Profit and Loss - Previous Year Comparison

September 1, 2022 – January 31, 2023

**BARTON SPRINGS EDWARDS AQUIFER CONSERVATION DISTRICT
PROFIT AND LOSS - PREVIOUS YEAR COMPARISON**

September 1, 2022 - January 31, 2023

	<u>Sept 1, 2022-Jan 31, 2023</u>	<u>Sept 1, 2021-Jan 31, 2022</u>	<u>\$ Change</u>	<u>% Change</u>
INCOME				
4400.0 · Interest Income	19,332.12	244.87	19,087.25	7,794.85%
4625.0 · MISCELLANEOUS INCOME (includes \$39,875 Intra database payment)	41,638.09	1,040.94	40,597.15	3,900.05%
4800.0 · USAGE AND PRODUCTION FEES (permitees, CoA, transport, renewals)	886,172.47	792,741.13	93,431.34	11.79%
4810.0 · OTHER FEES (well development, applications, pluggings) *	53,529.76	7,686.50	45,843.26	596.41%
TOTAL INCOME	<u>1,000,672.44</u>	<u>801,713.44</u>	<u>198,959.00</u>	<u>24.82%</u>
EXPENSE				
6000.0 · UTILITIES	8,123.03	7,981.52	141.51	1.77%
6005.0 · Print/Copy/Photo Services	1,457.10	906.71	550.39	60.7%
6007.0 · Postage/Freight/Shipping	615.70	626.57	-10.87	-1.74%
6010.0 · Office Supplies	2,549.48	1,743.55	805.93	46.22%
6010.2 · Office Furniture	0.00	57.35	-57.35	-100.0%
6011.0 · Comp Hardware-Plotter Supplies	4,704.35	4,193.45	510.90	12.18%
6014.0 · Software Acquisition &and Upgrades	459.10	404.50	54.60	13.5%
6015.0 · IT Monthly Maintenance (increase due to new vendor)	10,500.60	7,237.50	3,263.10	45.09%
6016.0 · Meeting Expense (FY 2023 includes retirement party for \$1,859)	2,830.91	1,136.86	1,694.05	149.01%
6019.0 · Subscriptions/Publications	1,288.48	1,656.74	-368.26	-22.23%
6020.0 · Advertising	332.00	586.49	-254.49	-43.39%
6021.0 · MISCELLANEOUS EXPENSES (\$2000 to be moved to Facilities Repairs-AC)	4,402.66	320.82	4,081.84	1,272.32%
6022.0 · Accounting System Operation (includes Journyx timekeeping software)	1,718.20	1,518.75	199.45	13.13%
6023.0 · MAINTENANCE (Office and Auto) - \$4400 in FY 2023 for A/C repairs	8,086.88	7,894.51	192.37	2.44%
6040.0 · LEASES (Copier and Postage Machine)	3,639.90	3,904.80	-264.90	-6.78%
6065.0 · DIRECTOR EXPENSES	0.00	0.00	0.00	0.0%
6066.0 · Directors Compensation	3,250.00	7,000.00	-3,750.00	-53.57%
6075.0 · DUES & MEMBERSHIPS	2,635.00	3,562.63	-927.63	-26.04%
6080.0 · COMMUNICATIONS AND OUTREACH	2,183.03	1,270.00	913.03	71.89%
6081.0 · REGULATORY COMPLIANCE	3,250.00	1,722.22	1,527.78	88.71%
6084.92 · GENERAL MANAGEMENT	0.00	282.36	-282.36	-100.0%

	Sept 1, 2022-Jan 31, 2023	Sept 1, 2021-Jan 31, 2022	\$ Change	% Change
6089.0 · AQUIFER SCIENCE	3,016.44	3,335.24	-318.80	-9.56%
6095.0 · CONTRACTED SUPPORT - used to be under Teams (GSI-Modeling and AAG-HR)	6,204.40	0.00	6,204.40	100.0%
6100.0 · INSURANCE - DISTRICT (Property, Liability, Auto, E&O) **	4,148.84	2,265.42	1,883.42	83.14%
6150.0 · INSURANCE - GROUP (Employee Health, Dental, Life/Disability, Vision)	49,401.12	46,954.74	2,446.38	5.21%
6160.0 · LEGAL SERVICES	19,075.00	21,487.50	-2,112.50	-9.97%
6170.0 · PROFESSIONAL SERVICES (Audit, Database, Retirement Fees)	29,892.47	32,458.35	-2,565.88	-7.91%
6179.0 · LEGISLATION (Increase is because it is currently in Session.)	10,000.00	4,000.00	6,000.00	150.0%
6180.0 · PROFESSIONAL DEVELOPMENT - All Teams	1,826.05	3,574.48	-1,748.43	-48.91%
6199.0 · SALARIES AND WAGES (GM vacancy 9/2021 - 1/24/2022)	366,133.27	319,748.25	46,385.02	14.51%
6203.0 · TAXES & BENEFITS	38,382.48	43,686.15	-5,303.67	-12.14%
6690.0 · Reconciliation Discrepancies ***	790.08	50.00	740.08	1,480.16%
6800.0 · PROJECTS	0.00	2,583.35	-2,583.35	-100.0%
TOTAL EXPENSE	590,896.57	533,850.81	57,045.76	10.69%
NET INCOME	409,775.87	267,862.63	141,913.24	52.98%

CAPITALIZATION INDICATES ACCOUNTS THAT HAVE SUB-CATEGORIES.

Those sub-categories have been collapsed.

* \$38,705 is Aqua and PCSI overpumpage, and Aqua bond payment that did not occur in the previous fiscal year.

** FY 2023 includes \$1,188 Crime Policy that renews every 4 years.

*** Permittee check for \$790.08 was returned from our bank. Payment has since been received.

3. Balance Sheet - Previous Year Comparison

As of January 31, 2023
(compared to January 31, 2022)

**BARTON SPRINGS EDWARDS AQUIFER CONSERVATION DISTRICT
BALANCE SHEET - PREVIOUS YEAR COMPARISON**

As of January 31, 2023

	January 31, 2023	January 31, 2022	\$ Change	% Change
ASSETS				
Current Assets				
Checking/Savings				
1000.0 · Cash in Bank-Checking Truist	48,506.91	59,997.37	-11,490.46	-19.15%
1010.0 · Cash in Bank - Payroll Truist	29,839.09	8,429.78	21,409.31	253.97%
1030.0 · TexPool Funds - General				
1030.1 · Aquifer Protection Reserve	53,750.00	52,050.00	1,700.00	3.27%
1030.21 · Cash Flow Reserve	175,000.00	175,000.00	0.00	0.0%
1030.0 · TexPool Funds - General - Operational	926,622.68	856,967.18	69,655.50	8.13%
Total 1030.0 · TexPool Funds - General	1,155,372.68	1,084,017.18	71,355.50	6.58%
1040.0 · TexPool Funds - Contingency	613,055.17	504,845.31	108,209.86	21.43%
1045.0 · TexPool Funds - Reserve (Vacation and Comp Payable)	65,590.31	61,069.17	4,521.14	7.4%
Total Checking/Savings	1,912,364.16	1,718,358.81	194,005.35	11.29%
Accounts Receivable				
1200.0 · Accounts Receivable				
1200.1 · A/R DMF (Drought Management Fees)	950.00	0.00	950.00	100.0%
1200.0 · Accounts Receivable - (A matter of timing of payment receipt vs billing dates)	39,994.90	-16,833.81	56,828.71	337.59%
Total 1200.0 · Accounts Receivable	40,944.90	-16,833.81	57,778.71	343.23%
Total Accounts Receivable	40,944.90	-16,833.81	57,778.71	343.23%
Other Current Assets				
1100.0 · Petty Cash	300.00	300.00	0.00	0.0%
1300.0 · Pre-paid Expenses	9,953.82	10,601.37	-647.55	-6.11%
1499.0 · Undeposited Funds-A/R payments (received, posted, not yet deposited)	0.00	10,751.75	-10,751.75	-100.0%
Total Other Current Assets	10,253.82	21,653.12	-11,399.30	-52.65%
Total Current Assets	1,963,562.88	1,723,178.12	240,384.76	13.95%

	January 31, 2023	January 31, 2022	\$ Change	% Change
Fixed Assets				
1400.0 · Field Equipment	376,487.89	376,487.89	0.00	0.0%
1410.0 · Office Equipment & Furniture	19,722.90	19,722.90	0.00	0.0%
1410.1 · Computer Hardware & Software	19,329.69	19,329.69	0.00	0.0%
1420.0 · Vehicles	52,363.03	52,363.03	0.00	0.0%
1430.0 · Accumulated Depreciation	-608,852.24	-608,852.24	0.00	0.0%
1440.0 · Land (Antioch Cave)	165,415.00	165,415.00	0.00	0.0%
1445.0 · Office Building	268,588.04	268,588.04	0.00	0.0%
Total Fixed Assets	293,054.31	293,054.31	0.00	0.0%
Other Assets				
1500.0 · Organizational Costs	300,783.26	300,783.26	0.00	0.0%
1510.0 · Accumulated Amortization	-326,324.26	-326,324.26	0.00	0.0%
1600.0 · Deposits Paid (Utilities)	71.00	71.00	0.00	0.0%
Total Other Assets	-25,470.00	-25,470.00	0.00	0.0%
TOTAL ASSETS	2,231,147.19	1,990,762.43	240,384.76	12.08%
LIABILITIES & EQUITY				
Liabilities				
Current Liabilities				
Credit Cards				
2007.0 · Truist VISA	144.68	929.01	-784.33	-84.43%
Total Credit Cards	144.68	929.01	-784.33	-84.43%
Other Current Liabilities				
2010.0 · Rebates Payable - Conservation Credits (program discontinued)	0.00	44,741.10	-44,741.10	-100.0%
2100.0 · Deferred Revenue	75,741.00	75,741.00	0.00	0.0%
2110.0 · Direct Deposit Liabilities	1,035.01	-219.45	1,254.46	571.64%
2200.0 · Fica & Medicare Withheld	-11.31	0.00	-11.31	-100.0%
2220.0 · Federal Income Tax Withheld	-1,065.01	-1,035.01	-30.00	-2.9%

	January 31, 2023	January 31, 2022	\$ Change	% Change
2230.0 · Employer Fica & Med Payable	-150.56	-139.25	-11.31	-8.12%
2250.0 · TWC Unemployment Tax Payable	66.73	52.44	14.29	27.25%
2270.0 · Payroll Liabilities	0.09	0.09	0.00	0.0%
2300.0 · Accrued Vacation Payable	49,232.20	56,215.71	-6,983.51	-12.42%
Total Other Current Liabilities	124,848.15	175,356.63	-50,508.48	-28.8%
Total Current Liabilities	124,992.83	176,285.64	-51,292.81	-29.1%
Total Liabilities	124,992.83	176,285.64	-51,292.81	-29.1%
Equity				
3000.0 · Fund Balance	1,286,210.13	1,181,186.90	105,023.23	8.89%
3000 3 - Invested in Capital Assets	365,127.26	365,127.26	0.00	0.0%
3110.0 - Reserve for Petty Cash	300.00	300.00	0.00	0.0%
Net Income	409,775.87	267,862.63	141,913.24	52.98%
Total Equity	2,061,413.26	1,814,476.79	246,936.47	13.61%
TOTAL LIABILITIES & EQUITY	2,186,406.09	1,990,762.43	195,643.66	9.83%

4. Check Register

TRUIST BANK
January 1 – January 31, 2023

BARTON SPRINGS EDWARDS AQUIFER CONSERVATION DISTRICT

MONTHLY CHECK REGISTER

January 1, 2023 - January 31, 2023

Type	Date	Num	Name	Memo	Amount	Balance
Transfer	01/03/2023			Funds Transfer - Payroll	-25,000.00	102,759.64
Check	01/04/2023	26594	WM Corporate Services	Trash and Recycle 1/1/2023-1/31/2023	-589.78	77,759.64
Check	01/04/2023	26595	Wex Bank	Gasoline December	-46.88	77,169.86
Check	01/04/2023	26596	Jan-Pro of Austin	January Cleaning Service	-310.00	76,812.98
Check	01/10/2023	26957	The Standard	Quarterly Retirement Fees 10/1/2022 - 12/31/2022	-7,935.50	68,877.48
Check	01/10/2023	26958	Telco Experts	January Telephone Service 1/1/2023 - 1/31/2023	-455.50	68,421.98
Check	01/10/2023	26959	Bickerstaff	General Legal Services 11/16/2022 - 12/15/2022	-2,340.00	66,081.98
Check	01/10/2023	26960	Charter Communications	Internet Service 12/20/2022 - 1/29/2023	-231.19	65,850.79
Check	01/10/2023	26961	Home Depot	Flood Lights, and AquSci Supplies	-122.30	65,728.49
Check	01/11/2023	26602	In-Situ Inc.	VOID: Troff 400	0.00	65,728.49
Check	01/11/2023	26603	Quill Corporation	Printer Toner	-140.98	65,587.51
Check	01/11/2023	26604	Ready Refresh	Water Cooler Rental	-15.29	65,572.22
Check	01/11/2023	26605	SiedgeLaw Group	December Consulting Services	-4,000.00	61,572.22
Liability Check	01/12/2023	EFT11220232	Reliance Trust Company	Employee Bi-weekly Retirement	-4,174.56	57,397.66
Liability Check	01/12/2023	EFT11220231	United States Treasury	74-2488641 Employee Bi-Weekly Payroll Liabilities	-8,379.71	49,017.95
Check	01/12/2023	26606	Vintage IT Services	January IT Services	-2,180.00	46,837.95
Check	01/12/2023	26607	United States Treasury	2022 GTLI for Tax Form 941 4th quarter	-186.50	46,651.45
Liability Check	01/12/2023	26608	AFLAC	January Supplemental Employee-paid	-107.30	46,544.15
Check	01/13/2023	26609	Fidelity Security Life Insurance Co	February Gap Insurance	-848.21	45,695.94
Check	01/13/2023	26610	CIT Technology Fin Serv, Inc	Copier Lease - January	-675.00	45,020.94
Check	01/17/2023	26611	Texas Water Foundation	2023 Central Texas Water Symposium Sponsorship	-500.00	44,520.94
Liability Check	01/18/2023	26612	United Healthcare	February Health Premium	-8,311.18	36,209.76
Deposit	01/18/2023			Deposit - permittee production fee payments	23,879.91	60,089.67
Transfer	01/19/2023			Funds Transfer - Payroll	-20,000.00	40,089.67
Transfer	01/19/2023			Funds Transfer - to replenish low checking funds	40,000.00	80,089.67
Check	01/19/2023	26613	Austin Alliance Group	HR On-Demand December 2022	-8.80	80,080.87
Check	01/19/2023	26614	City of Austin	Water 12/9/22 - 1/10/23	-19.84	80,061.03
Check	01/19/2023	26615	Camp, Justin P.	Aquifer Science Field Supplies	-75.76	79,985.27

Type	Date	Num	Name	Memo	Amount	Balance
Liability Check	01/20/2023	26616	Sun Life Assurance	February Life/Disability/Dental/Vision	-1,396.72	78,588.55
Check	01/24/2023	26617	Vintage IT Services	February IT Services	-2,366.60	76,221.95
Check	01/25/2023	26618	Quill Corporation	Cardstock, Pens	-86.33	76,135.62
Check	01/25/2023	26619	Wellintel Inc	Annual Analytics Dashboard Data Service	-1,700.00	74,435.62
Liability Check	01/26/2023	EFT1262023	United States Treasury	74-2488641 Employee Bi-weekly Payroll Liabilities	-8,379.65	66,055.97
Liability Check	01/26/2023	EFT12623	Reliance Trust Company	Employee Bi-weekly Retirement	-4,174.56	61,881.41
Check	01/26/2023	26620	Raymond, Tammy A.	Petty Cash Fund Replenishment	-195.87	61,685.54
Check	01/26/2023	26621	Hercules Wire	Wire Rope	-613.92	61,071.62
Check	01/27/2023	26622	Wellintel Inc	Extreme Weather Battery	-195.00	60,876.62
Deposit	01/27/2023			Deposit-production fees, DMFs, and new LPP/Exempt Well Applications	7,630.29	68,506.91
Transfer	01/30/2023			Funds Transfer - Payroll	-20,000.00	48,506.91
					<u>-54,252.73</u>	<u>48,506.91</u>

**Barton Springs Edwards Aquifer
Account QuickReport
September 1, 2022 through February 3, 2023**

Type	Date	Num	Name	Memo	Amount
4810.0 · OTHER FEES					
4817.0 · Enforcement Fines and Penalties					
Deposit	11/08/2022	96609	Professional Contra ...	FY 2022 Overpumpage...	11,480.00
Deposit	11/21/2022	91900...	Bliss Spillar - Aqua ...	2022 Tiered Overpump...	11,550.00
Deposit	12/01/2022	91900...	Bliss Spillar - Aqua ...	payment for bond - pen...	15,675.00
Total 4817.0 · Enforcement Fines and Penalties					38,705.00
Total 4810.0 · OTHER FEES					38,705.00
TOTAL					38,705.00

Item 4

General Manager's Report Discussion and possible action topics

Topics

- a. Review of key team activities/projects.**
- b. Aquifer status update.**
- c. Upcoming events of possible interest.**

Summary of February 2023 Team Activities and On Deck for March/April 2023

Aquifer Science Team

February Activities:

- Held HCP MAC meeting on Feb. 1. Written comments from MAC are due by Feb. 6.
- Analyzing Edwards and Trinity water-level data for responses to moderate rainfall for past few months.
- Installing telemetry equipment in new JWNA monitoring well

On Deck:

- Submitting proposal to the City of Austin for funds to install HCP monitor well at Barton Springs
- Submitting HCP annual report to USFWS by end of February.
- Continuing work on report for in-house model.

Administration Team

February Activities:

- March monthly billings and 3rd quarter billings to go out on February 16, 2023.
- Drought Management Fees now being assessed for 4th month. Details in Status Report.
- Update Transparency data graph on website for Texas Comptroller's Office Transparency Star program.

On Deck: (March/April)

- TWC Annual Tax Rate Change in March retroactive to January 1.

Regulatory Compliance Team

February Activities:

- Staff continues to work on new applications and assisting permittees with drought compliance.
- Staff will analyze monthly pumpage to confirm compliance/non-compliance of drought curtailments.
- Staff will continue working through the enforcement process with all non-compliant permittees.
- Staff will participate in MAC annual meeting and assist Aquifer Science in completing final draft.

On Deck:

- Ongoing application review for 3 larger scale well drilling authorizations and preparation for potential presentations/public hearing before the Board.

Policy and Project Team

February Activities:

- Database project with LRE.
- Well Impact Analysis project discussion with INTERA; query and review Trinity well data.
- Work on structured decision-making framework and example consequence table.
- GMA 10 RFQ meeting.

On Deck:

- Ongoing legislative committees and legislative review.
- Ongoing sustainable yield data compilation, research, and decision-making framework.

Communications and Outreach Team

February Activities:

- Planning Meeting with Colorado River Alliance on February 27, 2023 for Groundwater to the Gulf.
- New drought update with Justin Camp/New Drought video with Brian Smith.
- Finalize judges for Kent S. Butler Scholarship Essay Contest/Judges for Aquatic Science Scholarship Contest are confirmed.
- Finish Stage IV Drought Materials
- Continue to promote Kent S. Butler Scholarship on social media/website.

On Deck

- Finalize Communications Toolkit with TAGD Education Committee.

**STATUS REPORT UPDATE
FOR THE FEBRUARY 9, 2023 BOARD MEETING**

Summary of Significant Activities – Prepared by Staff Leads

Upcoming Dates of Interest

- Informal Science Education Association Conference – February 15-17 (Abilene)
- Texas Water Conservation Association (TWCA) Annual Convention – March 1-3, (Bastrop)
- Texas Ground Water Association (TGWA) Geoscience Seminar – March 31, (San Marcos)
- National Ground Water Association (NGWA) Managed Aquifer Recharge Conference – April 24-25 (San Antonio)
- Government Social Media Conference – May 2-4 (Reno)
- TAGD Spring Business Meeting – June 6-7 (Pflugerville)
- Texas Groundwater Summit – August 29-31, (San Antonio)

DROUGHT MANAGEMENT

Drought Status and Water-Level Monitoring (Justin)

We currently remain in Critical Drought status (Stage III). It was officially declared on October 20, 2022. One of the District's drought triggers, Lovelady Monitor Well, passed below its Critical Drought (Stage III) trigger on October 17, 2022.

January rain came in at just under 1 inch coming up short of the 2.2 historical monthly average. So far in February we've received between a half-inch to an inch - most of that frozen rain. According to the NOAA monthly rain outlook the Central Texas area is on the cusp of "equal chances" and "leaning below" reaching our February average of just over 2 inches.

On February 2, the Lovelady well had a level of 460.0 ft msl, 2.7 ft below the trigger level for Critical drought (Stage III) and about 2.9 ft above Stage IV Exceptional drought. Lovelady crossed under the Stage II trigger on May 26 and under Stage III on October 17.

Also on February 2, Barton Springs was flowing at 24 cfs (10-day average). 14 cfs below the Stage II Alarm drought trigger point of 38 cfs. The Stage III Critical trigger is 20 cfs. Barton Springs crossed under the Stage II drought trigger in late June and could cross into Stage III in late February if we receive no additional rain.

BSEACD and USGS staff continue to make manual measurements at Barton Springs and Lovelady to ensure accuracy. The last field visit for both was made on January 19.

Looking ahead to spring, the odds are good – 82 percent – for an end to the ongoing La Niña phase and a return to El Niño/Southern Oscillation (ENSO) neutral conditions.

Drought Communication (David, Erin)

Critical Drought Communications

Monthly Drought Update via eNews/social media/website: Communications and Outreach is putting out a monthly drought alert via icontact. It is also shared on the District's social media channels and website. In addition, we put out a drought video on Jan. 26. **In January, we also put out a 2022 Aquifer Conditions review in the District blog and newsletter.**

Drought Update – Jan. 4, 2023

<http://icont.ac/4OtaN>

Drought Update – Jan. 26, 2023

<https://www.youtube.com/watch?v=ckRHwBcUVWs&t=2s>

2022 Aquifer Conditions Review

<https://bscacdblogs.blogspot.com/2023/01/2022-aquifer-conditions-review.html>

Arroyo Doble picked up mail inserts for Stage III Critical Drought in January.

Signage Put Out by Permittees in November

Arroyo Doble H20 – 1 Sign
City of Hays PGMS – 4 Signs
Ruby Ranch PGMS – 4 Signs
Oak Forest PGMS – 4 Signs
Mystic Oaks – 4 Signs
Forest Oaks MHC – 1 Sign



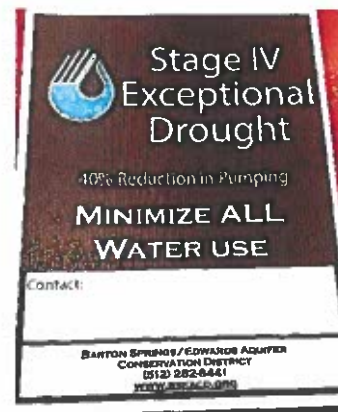
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Bliss Spillar/FM 1626 – 10 Signs
Wyldeewood Neighborhood – 2 Signs
Lowden Lane – 1 Sign
Ranch Road 12 – 10 Signs
Hilliard Road – 10 Signs

Permittee Signage Pick-Up in October

Arroyo Doble H20 – 2 Signs
Mountain City Water Utility – 4 Signs
Elliot Ranch PGMS – 4 Signs

Exceptional Drought (Stage IV) Material Prep: Regulatory Compliance and Communications and Outreach have started prepping Exceptional Drought (Stage IV) materials in case the District declares Stage IV in the future. Permittee yard signs were ordered and delivered, graphics for website/social media/newsletter have been made, along with mailouts/fliers.



DISTRICT PROJECTS

GMA Joint Planning

➤ *GMA 10 Coordination (Tim)*

District staff have submitted dates of first-quarter nonavailability and are waiting for a date to be set for the next meeting to be scheduled by Interim Coordinator, Daniel Meyer. Staff will accept an invitation to meet with a consulting team led by Blanton & Assoc. to have an informal discussion about the DFC Planning cycle and related matters.

Trinity Aquifer Sustainable Yield Study & Planning

➤ *Policy Concepts and Advisory Workgroup Planning (Kendall)*

The GM and staff are continuing to research and compile policy concepts related to sustainable yield and unreasonable impacts. Kendall gave a presentation to the Board in the January meeting on the Trinity Sustainability Plan – Policy Analysis and met with facilitator with Community Consulting to give her an update. Staff has also finalized the Trinity Well Impact Analysis scope and will be looking to hire a consultant to work on the project soon. Staff will also be querying and reviewing Trinity well data.

Technical Evaluations (Brian, Jeff)

Aquifer Science staff continue to collect data on the geology and hydrogeology related to the Trinity Aquifers. We are evaluating water-level data for a number of Trinity wells to look for long-term trends and aquifer responses to the ongoing and worsening drought. The results of this analysis should provide insight on both the severity and spatial distribution of drought impacts at various locations within the district, and should also inform us as to whether the District's current drought triggers provide an adequate gage of Trinity Aquifer health at worsening stages of drought. The Trinity in-house model (IHM), currently under development, will allow for simulation of different pumping and drought scenarios over time, and water level data collected during the present drought will eventually assist us in calibrating/validating the model for drought conditions in future iterations of the model. Several different pumping/drought predictive scenarios have already been run and a draft report summarizing these model runs is currently being prepared for review by the IHM technical advisory committee (TAC). A meeting with the TAC was held on October 5. The committee consists of 12 professionals with knowledge of the hydrogeology of central Texas and of numerical groundwater models. A one-hour presentation was made to the TAC followed by a one-hour discussion. Some of the committee members have provided written comments of model construction and the results of various modeling scenarios. We have evaluated comments and made changes to the IHM where appropriate. The comments, and our written responses, will be included as an appendix in the IHM draft report currently being written. Once complete, draft report will be submitted to the TAC for a second round of review by the committee. The report will be finalized after the second round of review by the TAC has completed, at which point it may be circulated, and will provide a valuable tool for guiding policymaking discussions for the Trinity Sustainable Yield project. We are members of a technical committee to guide the development of a numerical groundwater model (BRAAT) of the aquifers influenced by the Blanco River. Southwest Research Institute started work on the BRAAT model in September of 2021 but contracting issues stalled development of the model. Modelling efforts restarted in July 2022 after the contracting issues were resolved. A meeting of the technical committee was held on December 7, in which the head modeler provided an update on BRAAT modeling efforts. The aquifer science team will continue to provide technical input to the BRAAT team in their ongoing efforts.

Habitat Conservation Plan (Brian)

- **Planning for Technical Tasks:** Aquifer Science staff are coordinating studies at Barton Springs with COA staff. These studies include measurement of dissolved oxygen (DO) in the Barton Springs pool and the installation of a monitor well within Zilker Park and south of the pool. Deployment of this equipment will take place after the monitor well is installed. We will submit an application for a grant from the City of Austin in February which would help pay for the installation of a monitor well in Zilker Park. The purpose of the monitor well is to understand how groundwater flows from the deeper portions of the Edwards Aquifer to the springs and how DO is distributed vertically in the aquifer. The HCP identified low levels of DO as a threat to the endangered salamanders. A potential remedy for low DO during severe drought is augmentation of DO in the shallow aquifer so that the threat of low DO is reduced.

A meeting of the Management Advisory Committee (MAC) was held on February 1 to review the draft HCP Annual Report for FY 2022. The Board will review the report at the February 9 Board meeting and consider approving the report for submittal to the US Fish and Wildlife Service (USFWS). A final report is due to USFWS by the end of February.

Database Management System – LRE Water (Tim/Kendall)

District staff has had several meetings with LRE. LRE is working through phase 1 and has started to migrate and sort through data from the District's current database and has launched an alpha version of the database map. District staff met with LRE on January 20th to discuss the alpha map and data migration. Staff will be providing feedback on the map and will likely meet with LRE multiple times in February.

ILA Commitments (Brian)

The District has an ILA with COA to coordinate studies for the respective HCPs such as scientific feasibility studies and monitoring evaluations; to collaborate on the planning of future Kent Butler Summits; and to exchange technical information regularly on an annual basis. An annual technical meeting is held between BSEACD and COA in December each year to discuss each organization's activities related to their respective HCPs. The meeting for 2022 was held on December 12.

Region K Planning Activities (Tim)

Staff attended the meeting held on January 11, 2023. The next meeting is scheduled tentatively for April 26, 2023 and will be in Burnet.

Training, Presentations, and Conferences (All Teams):

- Aquifer Science: 17th Sinkhole Conference, Tampa, Florida, March 27-31, 2023; Python Programming for Groundwater Modeling, online training webinar attended by Jeff Watson December 5-15.
- Regulatory Compliance: N/A
- Administration: N/A
- Communications and Outreach: N/A
- General Manager: N/A

New Maps, Publications, or Reports:

A list of recent publications can be found at: <https://bseacd.org/scientific-reports/>

LITIGATION AND LEGISLATION

Litigation and SOAH Activities (Kendall)

There is no activity to report.

RULEMAKING, PERMITTING, AND ENFORCEMENT

Rulemaking (Erin, Kendall)

If there is direction from the Board, staff will initiate a narrow rulemaking effort on administrative or procedural changes regarding rules related to the potential for unreasonable impacts (PUI). Staff has had discussions internally and with legal counsel regarding the Enforcement Plan, including drought enforcement. Other areas that are being discussed are notice language and change of ownership timelines. However, the enforcement plan analysis and any rule changes are on a temporary hold so staff can prioritize work on sustainable yield concepts and other preparations that have been suggested by our attorney.

In November, staff gave a presentation to the Board on District rules pertaining to the PUI. Staff provided a debrief on the challenges and lessons learned from applying the rules to large permit applications prior to annexation and discussed administrative considerations such as inadequate fees, staff time, timelines, and public comment process for PUI applications. Staff recommended initiating narrow rulemaking on administrative and procedural changes and will be working on the rule concepts in this fiscal year.

Drought (Erin)

- Began enforcement process to address the non-compliance of drought curtailment volumes for Creedmoor-MAHA in November and December.
- Working to schedule pre-enforcement meeting with Monarch Utilities to address first occurrence of non-compliance for overpumpage of December's curtailed volume.
- Will continue monthly pumpage analysis to determine all permittee's compliance status of drought curtailments.
- Will continue to assist permittees in ensuring they successfully comply with their UDCPs and Stage III drought curtailments for December.

Enforcement and Compliance Matters (Erin)

<i>Compliance/Enforcement</i>			
<i>Permittee or Entity Name</i>	<i>Aquifer</i>	<i>Use Type</i>	<i>Notes</i>
Aqua Texas – Bliss Spillar (Edwards)	Edwards	PWS	Agreed Order Drafted
Creedmoor-MAHA	Edwards	PWS	Drafting Investigation Report

Permitting Activity (Erin, Alyssa)

<i>Upcoming</i>				
<i>Application Type</i>	<i>Aquifer</i>	<i>Applicant Name</i>	<i>Use Type</i>	<i>Volume Request</i>
LPP	Edwards/UGR	Sparks, Lisa	Domestic	500,000
TBD	Edwards	Haley, Ricky	Domestic/Irrigation?	TBD
LPP	Middle Trinity	Van Zyl, Jean	Domestic	500,000
Exempt – Domestic	Middle Trinity	Cavanaugh, Mandy	Domestic	7GPM – Exempt
LPP	TBD	Bruno, Justin	Domestic	500,000
LPP	TBD	Tabb, Jennifer	Domestic	500,000
<i>In Review</i>				
<i>Application Type</i>	<i>Aquifer</i>	<i>Applicant Name</i>	<i>Use Type</i>	<i>Volume Request</i>
IPP - >2 MIL	Middle Trinity	DC Southfork/Creedmoor	PWS	195,000,000
Exempt	Middle Trinity	Jones, Jason	Domestic	7GPM- Exempt
Exempt	Middle Trinity	Konescheck, Karen	Domestic	7GPM-Exempt
Plugging	Edwards	Klinger, Kyle	Abandon	0 -Plugging
IPP	Middle Trinity	Carpenter Ranch Road, LLC	Commercial/PWS	7.3 million
IPP	Edwards	Kidd and Caldwell, LLC	Commercial/Domestic	600,000
IPP	Lower Trinity	Carpenter Ranch Road, LLC	Commercial/PWS	7.3 million
IPP	Middle Trinity	6555 LLC (Palm)	Commercial	TBD
<i>Recently Approved</i>				
<i>Application Type</i>	<i>Aquifer</i>	<i>Applicant Name</i>	<i>Use Type</i>	<i>Volume Request</i>
IPP	Middle Trinity	6555 LLC (Palm)	Domestic	500,000

AQUIFER STUDIES **(Aquifer Science Team)**

Permitting Hydrogeologic Studies:

Working with Regulatory Compliance on permitting issues as needed. AS staff are reviewing geophysical logs of wells prior to final completion of the wells.

Groundwater Studies: *Dye Tracing, Water Quality, Aquifer Characterizations*

- Coleman's Canyon- Hydraulic conductivity testing was conducted at the Coleman's Canyon multiport well in July and that data is now being evaluated for aquifer zone characterization. We are continuing to collect water-level data from the multiport well every month to 6 weeks.
- Remaining TWDB water-quality sampling with isotopes was completed in July.
- There are no dye-trace studies planned at this time because of minimum to no flow in streams and springs.

Field Activities:

- Cooperating with USGS and City of Austin staff to confirm accurate real-time gauge reporting at Barton Springs and Lovelady. Conducting bi-weekly to monthly field measurements.
- Updating telemetry monitoring equipment at the Needmore index well (Amos). Reviewing pumping and water-level data as moderate amounts of rain over the past few months have slowed entry into the next stage of drought.
- Antioch- Continuing to maintain the system and to collect data on flow into the vault (when there is flow). A recent visit to Antioch Cave indicated that gravel-sized rocks are entering one of the valves and potentially limiting the amount of recharge into the cave.
- Well monitoring- Because of drought, we are increasing the amount of time maintaining equipment in numerous monitor wells and downloading and interpreting data. We are occasionally checking on wells that have been reported as "dry".

Trinity Aquifer Modeling Development:

- BRAAT modeling: Southwest Research Institute started work on this model in September 2021, but activity was on hold as funding issues were resolved. SWRI restarted the project in late July and are continuing to make progress. A meeting with the BRAAT review team was held on December 7.
- In-house model: A preliminary draft report on the model was completed in May 2022 and a presentation was made to the Board. Subsequently, improvements to the model were made and another round of model calibration was completed. A meeting with the Technical Advisory Committee (TAC) was held on October 5 and comments from the TAC have been reviewed and incorporated into the model where appropriate. A comprehensive technical report is being written covering model construction details and scenario results from the latest version of the model, and will be presented to the TAC for review upon completion.

COMMUNICATIONS AND OUTREACH

(David Marino)

January 2023

Website: During the month of January, a number of items were added to the spotlights page, including: Winter Storm Warning, Video Drought Update – Jan. 26, 2023, Next Board Meeting – Feb. 9, 2023, 2022 Aquifer Conditions Review, Martin Luther King Jr. Holiday – Monday, Jan. 16, Next Board Meeting – January 12, 2023, Drought Update – January 4, 2023

BSEACD Newsroom page was also updated with latest press releases, upcoming meetings, videos, etc. <https://bseacd.org/publications/bseacd-newsroom/>.

Website Analytics 2021			Top Page Searches		
Month	Total Page Views	Unique Page Views	November	December	January
November	3,144	2,908	Homepage 495 Views	Homepage 410 Views	Homepage 595 Views
December	1,872	1,700	Drought Status 155 Views	Drought Status 93 Views	Education/Scholarships 285 Views
January	3,868	3,534	Publications/Maps 111 Views	Publications/Maps 76 Views	Drought Status 152 Views
			Drought Information 82 Views	About Us/Staff 58 Views	Drought Information 101 Views
			Publications/Press Releases 68 Views	About Us/Board 49 Views	Publications/Maps 96 Views

Critical Drought Communications:

The District remains in Critical Drought (Stage III). General Manager Tim Loftus declared Critical Drought (Stage III) on October 20, 2022.

Monthly Drought Update via eNews/social media/website: Communications and Outreach is putting out a monthly drought alert via iconcontact. It is also shared on the District’s social media channels and website. In addition, we put out a drought video on Jan. 26. **In January, we also put out a 2022 Aquifer Conditions review in the District blog and newsletter.**

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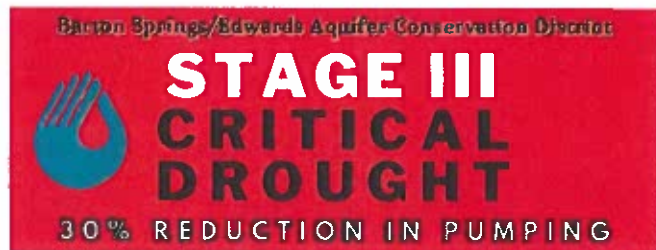
2022 Aquifer Conditions Review
<https://bseacdblogs.blogspot.com/2023/01/2022-aquifer-conditions-review.html>

Critical Drought Signage: In October, Communications and Outreach and Regulatory Compliance Team (Erin Swanson and Alyssa Gilbert) put out Critical Drought signage in the District’s permittee areas. Some of the District’s permittees have also come by to pick up signage. **Those signs remain posted throughout the District.** Below is what the District has put up, along with specific permittees who have picked up signs.

Arroyo Doble picked up mail inserts for Stage III Critical Drought in January.

Signage Put Out by Permittees in November

- Arroyo Doble H20 – 1 Sign
- City of Hays PGMS – 4 Signs
- Ruby Ranch PGMS – 4 Signs
- Oak Forest PGMS – 4 Signs
- Mystic Oaks – 4 Signs
- Forest Oaks MHC – 1 Sign



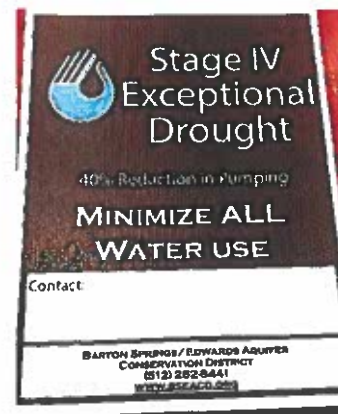
Signage Put Out by Staff in October

- FM 150/Kyle (Including Rollingwood Neighborhood) – 8 Signs
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- Wyldeewood Neighborhood – 2 Signs
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- Hilliard Road – 10 Signs

Permittee Signage Pick-Up in October

- Arroyo Doble H20 – 2 Signs
- Mountain City Water Utility – 4 Signs
- Elliot Ranch PGMS – 4 Signs

Exceptional Drought (Stage IV) Material Prep: Regulatory Compliance and Communications and Outreach have started prepping Exceptional Drought (Stage IV) materials in case the District declares Stage IV in the future. Permittee yard signs were ordered and delivered, graphics for website/social media/newsletter have been made, along with mailouts/fliers.

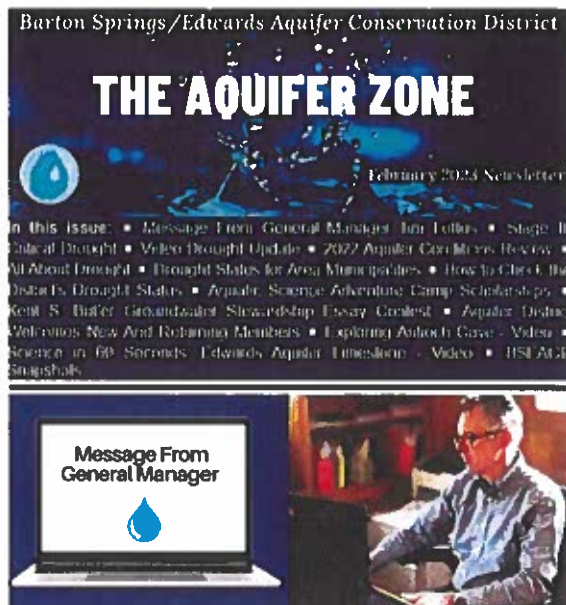


TAGD Communications Toolkit: The plan is in the final stages of completion. Julia Sanford, with TAGD has completed a final draft. There will most likely be an upcoming meeting with TAGD’s Information & Education Committee. It has not yet been scheduled. Communications and Outreach Manager is on TAGD’s Information & Education Committee. We are assisting TAGD in creating a communications toolkit for groundwater districts. This document will serve as a guide for employees in Texas groundwater districts and how to oversee communications for a variety of platforms and it also addresses how to communicate during specific situations. Communications and Outreach Manager assisted with the Media Relations Cheat Sheet as part of the plan, along with Crisis Communications, and other elements of the plan. The District’s Strategic Communications plan will be included as an example in the appendix of the TAGD Communications Toolkit.

Winter Newsletter: Communications and Outreach released the Winter Newsletter on February 1, 2023. You can read it here: <http://icont.ac/4OWXo>

It includes the following topics:

- Message From General Manager
- Stage III Critical Drought
- Video Drought Update
- 2022 Aquifer Conditions Review
- All About Drought
- Drought Status for Area Municipalities
- How to Check the District's Drought Status
- Aquatic Science Adventure Camp Scholarships
- Kent S. Butler Groundwater Stewardship Essay Contest
- Aquifer District Welcomes New and Returning Members
- Exploring Antioch Cave
- Science in 60 Seconds
- BSEACD Snapshots



Drought Monitor Blog: As a reminder, Communications & Outreach updated the drought monitor blog with a more updated format. <https://bscacdblogs.blogspot.com/>

Groundwater to the Gulf: Communications and Outreach attended a meeting on Monday, Jan. 9, 2023, to discuss plans for Groundwater to the Gulf. The Colorado River Alliance heads this up and the District takes part in the annual event. This is the first year it will happen since the pandemic started. Hydrogeologist Technician Justin Camp will conduct a flow measurement exercise at Barton Springs as part of the event. Communications and Outreach Manager will assist with promotion of the event and other requests as needed. The Colorado River Alliance will hold monthly preparation meetings until the three-day event in June. The agenda for the event is still being finalized. It is expected to take place the second week of June. The next planning meeting will be February 27, 2023.

Kent S. Butler Memorial Groundwater Stewardship Scholarship Essay Contest: Communications and Outreach has started promoting the 2023 Kent S. Butler Memorial Groundwater Stewardship Scholarship Essay Contest on social media and on the District's website. An email will be sent out to teachers after the start of the new year. We plan to give out three scholarships: \$2,500, \$1,500, and \$1,000.

The essay contest is open to high school juniors, seniors, and immediate graduates. Students must reside in one of the eight school districts overlapping the District boundary. These eight independent school districts are: Austin, Del Valle, Dripping Springs, Eanes, Hays Consolidated, Lockhart, San Marcos Consolidated, and Wimberley.

[2023 Groundwater Essay Contest Application Form \(pdf\) and Rules](#)

2023 Aquatic Science Adventure Camp Scholarship Essay/Art Contest: The Barton Springs/Edwards Aquifer Conservation District will offer several scholarships to attend the 2023 Edwards Aquifer Research and Data Center’s Aquatic Science Adventure Camp at Texas State University in San Marcos. Communications and Outreach has started promoting the scholarship on social media and the website. Communications and Outreach is working with Kellie Donajkowski, with Edwards Aquifer Research & Date Center, on making sure everything runs smoothly in terms of applicants. This year the District will contribute \$3,000 to the Aquatic Science Scholarship. This is down from last year, due to the fact that we are no longer getting conservation credits.



Scholarships are open to children ages 9 through 16 who reside in one of the eight school districts which overlap the Aquifer District boundary (ELIGIBLE ISD’s: Austin, Del Valle, Dripping Springs, Eanes, Hays, Lockhart, San Marcos, & Wimberley). Interested students must submit an application and a one-page essay entitled “Why I want to attend the Aquatic Science Adventure Camp!” Also include a one-page artwork that captures “Science and Outdoor Adventure.” As an example, artwork could include a drawing of river rafting, scuba diving, exploring a cave, fishing, or anything related to science and outdoor adventure. Artwork should be done on a separate page from the essay.

Aquatic Scholarship Application Package: <https://bscacad.org/uploads/AQUATIC-SCIENCE-ADVENTURE-CAMP-SCHOLARSHIPS-Application-Packet-FLYER-combined.pdf>

Regional Water Quality Planning Group Meeting: Communications and Outreach is no longer coordinating and setting up these meetings. For now, Christy Muse has taken over the responsibility of running the Regional Water Quality Planning Group Meetings, now that Craig Smith has stepped off the board. A meeting was held in January. The next meeting will be in February.

Ethics Policy Review: Communications and Outreach, General Manager Tim Loftus, and the District’s HR firm have been reviewing ethics policies and evaluating what may need to be updated. Ultimately, any changes would go before the board.

Media Articles:

Stage III Drought Continues – Hays Free Press
<https://haysfreepress.com/2023/01/18/stage-iii-drought-continues/>

Kyle Addresses ‘Historic’ Drought – Hays Free Press <https://haysfreepress.com/2023/01/11/kyle-addresses-historic-drought/>

Plan for new Brodic Oaks Development in South Austin to Gain final Approval – Community Impact
<https://communityimpact.com/austin/southwest-austin-dripping-springs/development/2023/01/25/plan-for-new-brodic-oaks-development-in-south-austin-to-gain-final-approval/>

Videos:

Drought Update – Jan. 26, 2023
<https://www.youtube.com/watch?v=ekRHwBcUVWs&t=2s>

Martin Luther King, Jr. Holiday

<https://www.youtube.com/watch?v=OPfWxUDNk8U>

2023 Kent S. Butler Memorial Groundwater Stewardship Scholarship Essay Contest

https://www.youtube.com/watch?v=RFJN2p_Sq1w

Social Media (Twitter, Facebook, Instagram, Nextdoor):

Winter Storm Office Closure, Winter Storm Warning, Video Drought Update – Jan. 26, 2023, Rain Averages, TWDB Water Weekly Report – Jan. 23, 2023, Rain Video, National Weather Service Forecast, Aquatic Science Adventure Camp Reminder, Throwback Thursday: Borheim Quarry, District Staff Working with Permittees to Monitor the Lower Trinity Aquifer in Northern Hays County, TWDB Water Weekly – Jan. 18, 2023, What the Well, MLK Day Video, MLK Day Office Closure Reminder, 2022 Aquifer Conditions Review, El Niño Information, Telemetry Installation, MLK Office Closure, Aquatic Science Adventure Camp Reminder, Board Meeting Reminder – Jan. 12, 2023, Drought Update – Jan. 4, 2023, TWDB Water Weekly Report – Jan. 2, 2023, Kent S. Butler Memorial Stewardship Scholarship Groundwater Essay Contest, Happy New Year

BSEACD Monthly Social Media Roundup/Groundwater News

Social Media Roundup (January 2023):

<https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-January-2023.pdf>

Monthly Groundwater News/Dates of Interest (January 2023):

<https://bseacd.org/uploads/BSEACD-Monthly-Groundwater-News-Dates-of-Interest-January-2023.pdf>

The top performing post on Facebook for the month of January was “Aquatic Science Summer Camp”. It reached 634 people. The top tweet on Twitter for the month of January was “A winter storm warning is in effect for Central Texas. Please take the necessary precautions to protect your outdoor pipes, faucets, and wellheads”. It had 218 impressions and 3 engagements. The top performing video on YouTube for the month of January was “Drought Update – Jan. 26, 2023” with 74 views. The top performing post on Nextdoor for the month of January was “A winter storm warning is in effect for Central Texas. Please take the necessary precautions to protect your outdoor pipes, faucets, and wellheads”. It had 11,029 impressions.

GENERAL ADMINISTRATION

(January 6, 2023 – February 3, 2022)

Accounts Receivable/Permittee Cycle Billings

On February 16, March monthly billings and 3rd quarter billings will go out for a total of \$325,691.83.

Drought Management Fees (DMFs)

Tracking monthly DMFs began in October (for September pumpage).

Six January assessments for December pumpage/DMFs for a total of \$1,850: Creechmoor, Aqua-Bliss Spillar, Aqua-Mooreland, Goforth, Monarch, and Texas Old Town.

Financial Reporting – Website Transparency Section (Texas Comptroller’s Office)

Transparency Star-related: Most current, available financial reports are to be posted on our website and accessible within three clicks, as required by the Texas Comptroller of Public Accounts Transparency Star Program. Balance Sheets, Profit and Loss Statements, and Check Registers (Operating and Payroll) through December 2022 should be posted on the District website.

Updated two website graphs – FY 2022 Actual Income vs Expenses graph, and Actual Income and Expenses per Capita graph, as required by the Comptroller’s Transparency Star program.

Tax Reporting

New 1099 form NEC, 1096, W-2s, W-3, Quarterly payroll taxes C-3, and 940 to TWC and to IRS. All due by February 1; completed by January 19.

Miscellaneous

Administration is setting up personnel and benefits e-files as part of a new HR file structure for better efficiency and organization.

The Administration Team typically has repetitive monthly tasks e.g. monthly bank reconciliations, monthly adjusting journal entries, accounts payable, payroll, contract/grant/project tracking, office maintenance and repairs, budget monitoring, bi-weekly payroll journal updates, directors' compensation, pre-paids, DMFs, posting public meetings, preparing meeting backups, etc. These types of tasks are not listed in this report because they are repetitive. Administration status reports are generally more summarized than the other teams, as we list our extra-ordinary tasks outside of our routine tasks, while supporting all other teams.

Item 5

Board Discussions and Possible Action

- a. Discussion and possible action related to the performance and compliance of District permittees with their User Drought Contingency Plan curtailments.**

Item 5

Board Discussions and Possible Actions

- b. Discussion and possible action on a Report of Investigation, Notice of Alleged Violation, and draft Agreed Order for Aqua Texas Bliss Spillar.**

Item 5

Board Discussions and Possible Actions

c. Discussion and possible action on Caldwell and Kidd, LLC Class A Conditional Production Permit application for commercial use of up to 600,000 of gallons of water per year for an existing exempt well located at 12000 Meredith Dr., Austin, TX 78748 including consideration by the Board of Directors of special conditions or delaying the effective date for an application submitted and/or considered during District-declared drought.



**Barton Springs
Edwards Aquifer**
CONSERVATION DISTRICT

Application for Production Permit

1124 Regal Row • Austin, TX 78748 • 512-282-8441

Complete this application to receive a permit to produce from an Alluvial, Austin Chalk, Edwards or Trinity well. Select the volume tier for which you are requesting and submit the appropriate application fee.

- \$ 500 - production volume requests less than 2,000,000 gallons per year
- \$ 750 - Tier 1 production volume requests > than 2,000,000 to 12,000,000 gallons per year
- \$ 1000 - Tier 2 production volume requests > than 12,000,001 to 200,000,000 gallons per year
- \$ 3000 - Tier 3 production volume requests > than 200,000,001 to 500,000,000 gallons per year
- \$ 5000 - Tier 3 production volume request > than 500,000,000 gallons per year

Section I. Owner Contact Information

Please check the box that appropriately describes the applicant: Land Owner/Grantor Lessee/Grantee

Well Owner /Applicant (Entity name): CALDWELL & KIDD, LLC, SERIES A Contact Person: CHIP KIDD

Physical Well Address: 12000 MEREDITH DRIVE City: AUSTIN Zip: 78748 County: TRAVIS

Property lot size: _____ acres

Email: CKIDD@AUSTIN@GMAIL.COM Primary Phone: 512 917 9246 Secondary Phone: _____

Check this box if the mailing address is the same as the physical address

Mailing Address: 11918 BLUEBONNET City: MANITACA Zip: 78652 County: TRAVIS

Technical Consultant

This is the person who may be employed by the applicant to complete this application on the applicant's behalf.

Consultant Name : _____

Mailing Address: _____

City: _____, Texas Zip: _____

Primary Phone: _____

Secondary Phone: _____

Email: _____

Alternate Point of Contact (Well Site Access)

Contact Name : _____

Mailing Address: _____

City: _____, Texas Zip: _____

Primary Phone: _____

Secondary Phone: _____

Email: _____

Section II. Supporting Ownership Documentation

- Property Deed.** Provide a complete copy of the recorded deed, showing current ownership, legal description, and a date recorded. If the applicant is a lessee/grantee then provide a copy of the recorded easement, lease, or memorandum of lease.
- Property Survey.** Provide a certified copy of the most recent property survey. If a subdivision plat is applicable, please also provide a recorded copy of the subdivision plat.
- Site Plan and Coordinates.** Provide a map of the property or a site plan showing the locations of the nearest property lines (50ft setback) AND the gps coordinate locations of the following:
 - the existing or proposed well,
 - the nearest septic tank/septic absorption field/ septic spray area (150ft setback),
 - the nearest potential sources of contamination (150ft setback).

Section IV. Permit Request

Requested Permit Type (i.e. Conditional Edwards; Historic Trinity): _____

Permit Volume Requested: _____ gallons per year

Proposed Primary Use Type: _____ Other Proposed Use Types: _____

Section V. Declarations


Int'l al to indicate that the applicant has read and understands the following declarations

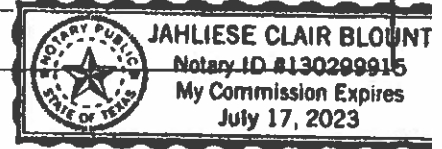
- The applicant agrees that water produced/withdrawn from the well in reference will be put to beneficial use at all times.
- The applicant understands that failure to submit all required application items within the application review period will result in an administratively incomplete application and non-issuance of a permit.
- The applicant will comply with the District Rules and Bylaws, all orders, and permits promulgated pursuant to the District Rules.
- The applicant will comply with well plugging and capping guidelines set forth in these Rules and will report well closures as required in Rule 3-5.
- Many of the incorporated cities within Travis and Hays Counties have ordinances concerning the drilling of wells within their city limits. It is your responsibility to comply with your city ordinances regarding the drilling of wells. The permits issued by the Barton Springs/Edwards Aquifer Conservation District do not confer any right to violate any city ordinances regarding drilling wells within city limits.
- The applicant understands that this permit confers no vested rights in the holder and the permit is non-transferable. **Written notice must be given to the District by the permittee prior to any sale or lease of the well covers by the permit.**

Section VI. Applicant or Authorized Agent Sworn Statement

I hereby make application to the Barton Springs/Edwards Aquifer Conservation District for the purpose indicated above for the water well described herein, and I certify that I am the property owner/grantor or lessee/grantee or an Authorized Agent, and that each and all the statements herein are true and correct, and that I will comply with District Rules, Well Construction Standards, and groundwater use permit and plan requirements. I hereby authorize the District access to this property following reasonable advance notice or, in an emergency, immediately, with such emergency access reported to the owner if advance notice was not possible. The District may access the well for the purposes of inspecting, collecting water quality samples, and investigating conditions relating to the withdrawal, waste, water quality, pollution or contamination of groundwater.


 Signature of Applicant or Authorized Agent* _____ Date: 1-4-23
 (*Notarized Agent Authorization Form Required) Print Name ROY KIDD

State of Texas, County of Travis, SWORN TO AND SUBSCRIBED before me by the said owner or agent on this the
4th day of January 2020
 Notary Public, State of Texas  My commission expires July 17, 2023



Application Fee Submitted on: 1/4/23 Staff Initials GA Application Fee Amount: \$ 500 Chk #: 7530
 90 day 4/4/23 180 day ___/___/___

Administratively Complete/Incomplete on : 1/3/23 Signature of Staff _____
 Signature of General Manager _____ Date: ___/___/___
 Permit Approval Date ___/___/___ Approved by: Board or General Manager _____
 Drought Delay Yes No Authorized Pumpage Volume: _____ Aquifer : _____
 Use Type: _____ Permit Type & Term: _____

Drought Target Chart

Conditional A Edwards Production Permit - Caldwell and Kidd, LLC

Water Use: Commercial Permitted Pumpage (GPY): 600,000 UDCP Approved in Fiscal Year: FY 2023

Fresh Edwards Management Zone Pumpage Volume Targets During Drought Stages

Fiscal Year	Monthly Volume Allocation	Fresh Edwards Management Zone Pumpage Volume Targets During Drought Stages						
		No Drought Baseline	Stage I Water Con. Period (Voluntary) 10% Reduction	Stage II Alarm (Mandatory) 20% Reduction	Stage III Critical (Mandatory) 30% Reduction	Stage IV Exceptional (Mandatory) 50% Reduction	Emergency Response Period (Mandatory) 50% Reduction*	Emergency Response Period (Mandatory) 50% Reduction*
September	9.40%	56,400	50,760	45,120	39,480	28,200	28,200	
October	8.60%	51,600	51,600	41,280	36,120	25,800	25,800	
November	8.10%	48,600	48,600	38,880	34,020	24,300	24,300	
December	7.60%	45,600	45,600	36,480	31,920	22,800	22,800	
January	7.20%	43,200	43,200	34,560	30,240	21,600	21,600	
February	6.90%	41,400	41,400	33,120	28,980	20,700	20,700	
March	7.30%	43,800	43,800	35,040	30,660	21,900	21,900	
April	7.50%	45,000	45,000	36,000	31,500	22,500	22,500	
May	7.80%	46,800	42,120	37,440	32,760	23,400	23,400	
June	8.50%	51,000	45,900	40,800	35,700	25,500	25,500	
July	10.00%	60,000	54,000	48,000	42,000	30,000	30,000	
August	11.10%	66,600	59,940	53,280	46,620	33,300	33,300	
Annual Totals:	100.00%	600,000	571,920	480,000	420,000	300,000	300,000	

* ERP(50%) ERP curtailments to be measured as a rolling 90 day average after the first three months of declared ERP

Template Updated: 03/30/22

District Representative _____ Date _____
 Permittee Signature _____ Date _____



**Barton Springs
Edwards Aquifer**
CONSERVATION DISTRICT

Conditional Edwards Class A User Drought Contingency Plan

For

Caldwell & Kidd, LLC Series A

Industrial, Commercial, or Institutional Permittee

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INTRODUCTION

This UDCP will enable CALDWELL & KIDD, LLC, SERIES A (the "Permittee") to manage its water system and water resources in a conscientious, fair, and appropriate manner during certain situations when water use reductions are necessary. It is not designed to punish, stigmatize, or criticize anyone about their usage of water. Its sole intent is to protect the public health and safety by maintaining an adequate supply of water during the various stages of drought conditions or other water supply emergencies, which may occur from time to time.

The Permittee believes that significant reductions in water usage can be achieved through drought triggered water use restrictions, voluntary efforts and contract provisions requiring curtailment. Implementation of voluntary water conservation measures and conscientious water use practices are encouraged at all times; however, additional water use restrictions and curtailments are required in cases of extreme drought, periods of abnormally high usage, system contamination, or extended reduction in ability to supply water due to equipment failure. During drought, these efforts, will protect the public health and safety and delay the depletion of spring flows at Barton Springs and aquifer water levels until sufficient recharge is available to replenish the Aquifer. Should drought conditions reach more severe levels, the permittee has planned and is prepared to restrict or curtail certain types of usage.

SECTION 1. Declaration of Policy, Purpose, and Intent

CALDWELL & KIDD LLC SERIES H (permittee), in its continuing effort to maintain an adequate supply of high quality water, has prepared this UDCP with the guidance of the Barton Springs/Edwards Aquifer Conservation District (District). In order to maintain supply, storage, or pressure; or to comply with regulatory requirements, temporary restrictions may be instituted to curtail water usage. This UDCP satisfies and complies with District Rules 3-7.5 and 3-7.7 related to Drought Management.

I, ROY KIDD (print name), being the responsible official for CALDWELL & KIDD, LLC, SERIES H (permittee), agrees to comply with all the applicable District Rules and the measures of the enclosed User Drought Contingency Plan, and to officially adopt the enclosed plan through the appropriate vehicle (i.e. ordinance, TCEQ tariff amendment, resolution, policy amendment, contract etc.)

Ray Kidd (Signature of Responsible Official) 1-3-23 (Date)

SECTION 2. Drought Notice

The District will notify permittees of the implementation or termination of each stage of the water restriction program. Permittees must then inform all facility personnel and/or tenants prior to implementation or termination of each stage of the water restriction program. Notice of the District declaration must be provided at least 72 hours prior to the start of water use restrictions. Notice posted onsite at the facility should contain the following information:

1. the date restrictions will begin
2. the circumstances that triggered the restrictions
3. the stages of response and explanation of the restrictions to be implemented

Upon notification of a Drought stage declaration by the District, the permittee will activate the respective response measures of its UDCP. The Permittee will perform the recommended and mandatory actions specified in this UDCP. The Permittee will curtail pumpage according to the following curtailment schedule:

Drought Curtailment Chart						
	Edwards Aquifer					Trinity Aquifer
	Historical	Conditional				
		Class A	Class B	Class C	Class D	Historical
No Drought	0%	0%	0%	0%	0%	0%
Water Conservation (Voluntary)	10%	10%	10%	10%	10%	10%
Alarm	20%	20%	50%	100%	100%	20%
Critical	30%	30%	75%	100%	100%	30%
Exceptional	40%	50% ¹	100%	100%	100%	30%
Emergency Response Period	50% ³	>50% ²	100%	100%	100%	30%

1. Only applicable to Edwards LPPS and existing unpermitted nonexempts after A to B reclassification triggered by Exceptional Stage declaration
2. Curtailments > 50% subject to Board discretion
3. ERP (50%) curtailments become effective October 11, 2015. ERP curtailments to be measured as rolling 90-day average after first three months of declared ERP.

SECTION 3. Alternate Water Sources

The permittee will identify an alternate water source or other contingency to be utilized or implemented directly by the permittee to manage limited water supplies in the event of water supply contamination or system outage. The alternate supply or other contingency shall be evidenced by documentation (contracts, affidavits, etc.) that demonstrates the availability when needed. **If no alternate water sources are identified, please provide a descriptive explanation as to why.**

The current available water sources and alternate contingency sources for the Permittee include:

Source: CITY OF AUSTIN H2O IN STREET

Source: _____; or,

Statement to achieve 100% curtailment: _____

SECTION 4. Coordination with Regional Water Planning Groups

The Permittee's water service area is located within the following listed Regional Water Planning Areas. A copy of this Drought Contingency Plan has been provided to those applicable regional water planning groups.

- Region K Lower Colorado
- Region L South Central Texas

SECTION 5. Facility Information

The permittee will periodically provide facility staff, employees, personnel and/or tenants with information about this Plan, including information about the conditions under which each stage of the plan is to be initiated or terminated and the drought response measures to be implemented in each stage. This information will be provided by means such as employee training/meetings, via email, websites, or print notice. Permittee must notify facility personnel and/or tenants of the initiation or termination of drought responses stages. Documentation of these efforts shall be kept by the Permittee for record and provided to the District upon request.

SECTION 6. Enforcement Procedure

The UDCP must include a means of implementation and enforcement in accordance with District Rule 3-7.5 (E). Specifically, each permittee must: 1) develop and implement procedures for enforcing this UDCP and 2) inform Permittee customers or facility personnel of the authority and intent to enforce the measures of the UDCP.

SECTION 7. Drought Stage Triggers and Responses

Permit Type: Conditional Edwards Class A	
No Drought	No curtailment
Stage I Water Conservation (Voluntary)	10% curtailment
Stage II Alarm	20% curtailment
Stage III Critical	30% curtailment
Stage IV Exceptional	50% curtailment
Stage IV Emergency Response Period	50% curtailment

STAGE I: WATER CONSERVATION PERIOD

INITIATION:

The Permittee will recognize that Stage I Water Conservation Period exists when the District issues a Stage I Water Conservation Period declaration. This water conservation period will be in effect between May 1 and September 30 every year when not already in a declared drought period. The permittee will be expected to follow voluntary water use measures during this water conservation period. This status will be prominently noted on the next regular billing cycle but not more than 20 days following May 1.

TERMINATION:

The Permittee will recognize that Stage I Water Conservation Period may be rescinded when the District issues a No-Drought declaration or has declared a different drought stage. This water conservation period will not be effective during October 1 and April 30 every year.

RECOMMENDED ACTIONS:

Voluntary overall 10% monthly reduction.

RESPONSE MEASURES:

Continue measures of User Conservation Plan.

Facility System Management

- Visually inspect lines and repair leaks on a regular basis.

Employee & Tenant Awareness

- Promote the water conservation BMPs listed in Appendix A through training, website and print materials.
- Implement employee personnel and tenant awareness efforts such as placing signage and/or posters in visible places (faucets, sinks, spigots, kitchens, restrooms, water storage areas etc) throughout the onsite facility in order to remind users of the prospective drought stage.
- Utilize the correct terminology on all outreach signage, "Water Conservation Period".

Permittee Initiated Penalties or Consequences

- Employee personnel and system operators should regularly monitor the service area for occurrences of waste or excessive usage.

STAGE II: ALARM DROUGHT

INITIATION:

The Permittee will recognize that Stage II Alarm Drought exists upon receiving notification from the Barton Springs/ Edwards Aquifer Conservation District that the District has declared the aquifer to be in a Stage II Alarm Drought; the permittee will activate the **Stage II Alarm Drought** measures of its UDCP.

TERMINATION:

The Permittee will recognize that Stage II Alarm Drought may be rescinded upon receiving notification from the Barton Springs/ Edwards Aquifer Conservation District that the District has declared No Drought or has declared a different drought stage.

MANDATORY ACTIONS:

Mandatory overall minimum 20% monthly reduction.

RESPONSE MEASURES:

Continue measures of User Conservation Plan.

Facility System Management

- Conduct a monthly Leak Detection Survey and immediately repair all identified leaks in the system.
- All meters throughout the facility shall be read as often as necessary to ensure compliance with monthly curtailments.
- Monitor any construction activity and require contractors to report line breaks immediately or shutoff flow if possible.
- Evaluate system pressure needs and reduce pressure where excessively high.
- Follow recommended irrigation BMPs for landscaping.
- Maximize process recycled water where possible.

Employee & Tenant Awareness

- Promote the water conservation BMPs listed in Appendix A through training, website and print materials.
- Train employees and personnel on implementing recommended indoor water conservation BMPs.
- Implement employee personnel and tenant awareness efforts such as placing signage and/or posters in visible places (faucets, sinks, spigots, kitchens, restrooms, water

storage areas etc) throughout the onsite facility in order to remind users of the prospective drought stage.

- Utilize the District's drought stages then utilize the correct terminology on all outreach signage, "Stage II Alarm Drought".

Permittee Initiated Penalties or Consequences

- Employee personnel and system operators should regularly monitor the service area for occurrences of waste or excessive usage.
- Permittee should install flow restrictors on connections with continued waste and excessive monthly consumption, or proscribed use.

STAGE III: CRITICAL DROUGHT

INITIATION:

The Permittee will recognize that Stage III Critical Drought exists upon receiving notification from the Barton Springs/ Edwards Aquifer Conservation District that the District has declared the aquifer to be in a Stage III Critical Drought; the permittee will activate the **Stage III Critical Drought** measures of its UDCP.

TERMINATION:

The Permittee will recognize that Stage III Critical Drought may be rescinded upon receiving notification from the Barton Springs/ Edwards Aquifer Conservation District that the District has declared No-Drought or has declared a different drought stage.

MANDATORY ACTIONS:

Mandatory overall minimum 30% monthly reduction.

RESPONSE MEASURES:

Continue measures of User Conservation Plan.

Facility System Management

- Conduct a monthly Leak Detection Survey and immediately repair all identified leaks in the system.
- All meters throughout the facility shall be read as often as necessary to ensure compliance with monthly curtailments.
- Monitor any construction activity and require contractors to report line breaks immediately or shutoff flow if possible.
- Evaluate system pressure needs and reduce pressure where excessively high.
- Follow recommended irrigation BMPs for landscaping.
- Maximize process recycled water where possible.

Employee & Tenant Awareness

- Promote the water conservation BMPs listed in Appendix A through training website and print materials.
- Train employees and personnel on implementing recommended indoor water conservation BMPs.
- Implement employee personnel and tenant awareness efforts such as placing signage and/or posters in visible places (faucets, sinks, spigots, kitchens, restrooms, water storage areas etc) throughout the onsite facility in order to remind users of the prospective drought stage.
- Utilize the District's drought stages then utilize the correct terminology on all outreach signage, "Stage III Critical Drought".

Permittee Initiated Penalties or Consequences

- Employee personnel and system operators should regularly monitor the service area for occurrences of waste or excessive usage.
- Permittee should install flow restrictors on connections with continued waste and excessive monthly consumption, or proscribed use.

STAGE IV: EXCEPTIONAL DROUGHT

INITIATION:

The Permittee will recognize that Stage III Critical Drought exists upon receiving notification from the Barton Springs/ Edwards Aquifer Conservation District that the District has declared the aquifer to be in a Stage IV Exceptional Drought; the permittee will activate the **Stage IV Exceptional Drought** measures of its UDCP.

TERMINATION:

The Permittee will recognize that Stage IV Exceptional Drought may be rescinded upon receiving notification from the Barton Springs/ Edwards Aquifer Conservation District that the District has declared No-Drought or has declared a different drought stage.

MANDATORY ACTIONS:

Mandatory overall minimum 50% monthly reduction.

RESPONSE MEASURES:

Continue measures of User Conservation Plan.

Facility System Management

- Conduct a weekly Leak Detection Survey and immediately repair all identified leaks in the system.
- All meters throughout the facility shall be read as often as necessary to ensure compliance with monthly curtailments.

- Reduce plant production hours or facility operational hours if necessary to avoid exceed the Stage IV monthly pumping limits.
- All nonessential outdoor use is prohibited (vehicle washing, irrigation, etc).
- Monitor any construction activity and require contractors to report line breaks immediately or shutoff flow if possible.
- Evaluate system pressure needs and reduce pressure where excessively high.
- Follow recommended irrigation BMPs for landscaping.
- Emergency interconnects, pumpage authorized by a Temporary Transfer Permit, or alternative supply arrangements shall be initiated to meet the respective reduction requirement.
- Maximize process recycled water where possible.

Employee & Tenant Awareness

- Promote the water conservation BMPs listed in Appendix A through training, website and print materials.
- Train employees and personnel on implementing recommended indoor water conservation BMPs.
- Implement employee personnel and tenant awareness efforts such as placing signage and/or posters in visible places (faucets, sinks, spigots, kitchens, restrooms, water storage areas etc) throughout the onsite facility in order to remind users of the prospective drought stage.
- Utilize the District's drought stages then utilize the correct terminology on all outreach signage, "Stage IV Exceptional Drought".

Permittee Initiated Penalties or Consequences

- Employee personnel and system operators should regularly monitor the service area for occurrences of waste or excessive usage.
- Permittee should install flow restrictors on connections with continued waste and excessive monthly consumption, or proscribed use.
- Permittee shall issue a notice to all employee personnel and tenants to inform them that their public water supply may be in peril and that physical restriction of water use and reporting of excessive users to the District may be required.

STAGE V: EMERGENCY RESPONSE PERIOD

INITIATION:

The Permittee will recognize that Stage V Emergency Response Period exists upon receiving notification from the Barton Springs/ Edwards Aquifer Conservation District that the District has declared the aquifer to be in a Stage V Emergency Response Period; the permittee will activate the **Stage V Emergency Response Period** measures of its UDCP.

TERMINATION:

The Permittee will recognize that Stage V Emergency Response Period may be rescinded upon receiving notification from the Barton Springs/ Edwards Aquifer Conservation District that the District has declared No-Drought or has declared a different drought stage.

MANDATORY ACTIONS:

Mandatory overall minimum 50% monthly reduction.

RESPONSE MEASURES:

Continue measures of User Conservation Plan.

Facility System Management

- Conduct a weekly Leak Detection Survey and immediately repair all identified leaks in the system.
- All meters throughout the facility shall be read as often as necessary to ensure compliance with monthly curtailments.
- Reduce plant production hours or facility operational hours if necessary to avoid exceed the Stage IV monthly pumping limits.
- All nonessential outdoor use is prohibited (vehicle washing, irrigation, etc).
- Monitor any construction activity and require contractors to report line breaks immediately or shutoff flow if possible.
- Evaluate system pressure needs and reduce pressure where excessively high.
- Follow recommended irrigation BMPs for landscaping.
- Emergency interconnects, pumpage authorized by a Temporary Transfer Permit, or alternative supply arrangements shall be initiated to meet the respective reduction requirement.
- Maximize process recycled water where possible.

Employee & Tenant Awareness

- Promote the water conservation BMPs listed in Appendix A, through training, website and print materials.
- Train employees and personnel on implementing recommended indoor water conservation BMPs.
- Implement employee personnel and tenant awareness efforts such as placing signage and/or posters in visible places (faucets, sinks, spigots, kitchens, restrooms, water storage areas etc) throughout the onsite facility in order to remind users of the prospective drought stage.
- Utilize the District's drought stages then utilize the correct terminology on all outreach signage, "Stage V Emergency Response Period (ERP) Drought".

Permittee Initiated Penalties or Consequences

- Employee personnel and system operators should regularly monitor the service area for occurrences of waste or excessive usage.

- Permittee should install flow restrictors on connections with continued waste and excessive monthly consumption, or proscribed use.
- Permittee shall issue a notice to all employee personnel and tenants to inform them that their public water supply is in peril and that physical restriction of water use and reporting of excessive users to the District may be required.

Appendix A

Recommended Drought Stage Measures

The Permittee will encourage or will establish procedures to adopt the following water efficiency measures during District declared drought stages:

Indoor Measures

- Visually inspect lines and repair leaks on a regular basis.
- Check for toilet and faucet leaks and repair any found leaks immediately.
- Use water displacement device in toilet tank or replace older model toilets with HET models when possible.
- Install aerators on faucets and water efficient appliances.
- While waiting for hot water to reach faucet, catch cold water in a container to be reused.
- Only run dishwashers with full load.
- Keep drinking water in a container in the refrigerator.
- Reduce use of garbage disposal.
- Wash only full loads of laundry.

Outdoor Measures – Landscape Irrigation

- Adopt a 2 day schedule for lawn watering and always only water between 8pm and 8am.
- For Automatic Sprinkler systems:
 - check sprinkler heads regularly to prevent clogging
 - adjust to eliminate overspray and
 - adjust run times and frequency monthly to respond to water schedules and changing rainfall and temperature conditions.
- Use hand held hose, drip irrigation, or soaker hoses for trees, garden, non-turf areas and bedded plants.
- Avoid watering on windy days.
- Cut lawns on highest setting and leave lawn clippings on lawn instead of bagging.
- For hose-end sprinklers use sprinkler timers to limit water duration.
- Use mulch to conserve soil moisture.
- Irrigation of lawn areas with hose-end sprinklers or automatic irrigation systems shall be manually set to follow a 2 day watering schedule between the hours of 8pm and 8am
- Use hand held hose, drip irrigation, or soaker hoses for trees, garden, non-turf areas and bedded plants during designated water days and times.
- Use of soaker hoses for foundation protection shall be limited to designated water days and times

Outdoor Measures – Power Washing or Vehicle Washing

- Vehicle washing should be avoided except when conducted with a bucket or hand-held hose with an automatic shutoff device during designated watering days and times (if possible, use a commercial car wash that recycles water).
- Wash vehicles over lawn areas where possible.
- No washing of driveways, sidewalks or streets.

Outdoor Measures – Pools and Fountains

- Keep pools covered when not in use.
- Limit pool filter backwashing to only when necessary.
- Utilize supplemental water sources where possible (e.g. purchased water, collected rainwater, etc.).
- Filling or refilling of pools is strongly discouraged. Topping off of existing pools for essential maintenance purposes is acceptable only during designated watering days and times.
- Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.

The following uses of water are defined as nonessential and should be avoided during drought:

- wash down of any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
- use of water to wash down buildings or structures for purposes other than immediate fire protection;
- use of water for dust control;
- flushing gutters or permitting water to run or accumulate in any gutter or street;
- failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s); and any waste of water.



**Barton Springs
Edwards Aquifer**
CONSERVATION DISTRICT

User Conservation Plan

For

Caldwell & Kidd LLC Series A

Commercial & Institutional Permittee

The above named permittee has adopted this User Conservation Plan as required by the Barton Springs/Edwards Aquifer Conservation District and agrees to comply with all the applicable District Rules in implementing and enforcing the measures of the enclosed plan.

Permittee Signature: Ray Kidd Date: 1-3-2023

The Permittee will adopt the following water conservation measures at all times:

General Facility Management

- Periodically review and evaluate this conservation plan and implement revisions to the plan as necessary.
- When possible, consider alternative water supplies including but not limited to rainwater collection and alternative irrigation strategies to improve conservation of water on site.
- Maintain record of submitted meter readings as record for future determination of possible system leaks and to quantify success of conservation practices and steps for usage reduction during drought conditions.
- Set system conservation goals for overall water use reductions and develop policies to monitor, mediate and enforce compliance with this User Conservation Plan.
- Implement general prohibition on water wasting activities or practices. During staff meetings and when appropriate, suggest ways for employees to reduce water consumption in order to promote and encourage voluntary conservation measures. Require employees to report any water wasting practices and all faulty fixtures or leaks to maintenance for repair.
- Require water efficient internal recycling equipment and air cooled equipment for cooling systems in any new construction and in retrofits where feasible.
- Implement water reuse from sources such as air conditioner condensate, treated effluent, and collected stormwater where feasible.
- Implement submetering for systems with multiple buildings and uses to account for water usage.
- Assist District in the distribution of conservation and educational materials or post signs at all faucets, sinks, outdoor spigots, and other water sources reminding employees to use water wisely.
- Implement an on-going program of system leak detection and repair which shall include the consideration and utilization of improved technology when possible.
- Require low flow/low volume fixtures, HET toilets, and water efficient appliances to be installed in all new construction or retrofits.

Outdoor Measures – Landscape Irrigation

- Utilize water efficient landscape practices such as water-wise landscape design and drip irrigation for new turf and landscaping.
- Convert high water use turf and landscapes to native and water-wise designs for existing turf and landscaping.
- Select vegetation from the list of appropriate native and naturalized plants compiled by the Lady Bird Johnson Wildflower Center when installing new or replacing landscape vegetation.
- Implement a watering schedule endorsed by the District that includes watering restrictions for hose-end and underground irrigation systems.
- Adopt a 2 day schedule for lawn watering and always only water between 8pm and 8am.
- Maximize efficient operation of automatic sprinkler systems:
 - frequently adjusting controllers based on conditions
 - check sprinkler heads regularly to prevent clogging or replace broken heads
 - adjust to eliminate overspray
 - installing rainwater shutoff devices, smart clocks and controllers
 - adjust run times and frequency monthly to respond to and changing rainfall and temperature conditions.
- Use hand held hose, drip irrigation, or soaker hoses for trees, garden, non-turf areas and bedded plants.
- Avoid watering on windy days.
- Cut lawns on highest setting and leave lawn clippings on lawn instead of bagging.
- For hose-end sprinklers - use sprinkler timers to limit water duration.
- Use mulch to conserve soil moisture.
- Irrigation of lawn areas with hose-end sprinklers or automatic irrigation systems shall be manually set to follow a 2 day watering schedule between the hours of 8pm and 8am
- Use hand held hose, drip irrigation, or soaker hoses for trees, garden, non-turf areas and bedded plants during designated water days and times.
- Use of soaker hoses for foundation protection shall be limited to designated water days and times

Outdoor Measures – Vehicle Washing

- Vehicle washing should be avoided except when conducted with a bucket or hand-held hose with an automatic shutoff device during designated watering days and times (if possible, use a commercial car wash that recycles water).
- Wash vehicles over lawn areas where possible.

Outdoor Measures – Pools and Fountains

- Use a cover on swimming pools when possible to minimize evaporative loss of water.
- Limit pool filter backwashing to only when necessary.
- Utilize supplemental water sources where possible (e.g. purchased water, collected rainwater, etc.).

- Filling or refilling of pools is strongly discouraged. Topping off of existing pools for essential maintenance purposes is acceptable only during designated watering days and times.
- Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.

The following uses of water are defined as nonessential and should be avoided when possible:

- wash down of any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard surfaced areas;
- use of water to wash down buildings or structures for purposes other than immediate fire protection;
- use of water for dust control;
- flushing gutters or permitting water to run or accumulate in any gutter or street;
- failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s); and any waste of water.

Commercial Well Application

- A) Conditional Edwards, Class A
- B) The water well is old and is located at the corner of Wirth Rd. and Meredith Dr. in Manchaca. The address is 12000 Meredith, 78748. It is on lot 2 of the Matthews Addition and the previous owners owned lots 1 & 2 of the Matthews Addition, used it as their homestead and it is the only well on the property. I've owned the property since 2014. It serves an older three bedroom manufactured home about 1,100 sq. ft. and a one bedroom garage apartment about 600 sq. ft. The manufactured home is on lot 2. The garage apartment is on lot 1. I have no records or history on the well, but because of the location, Manchaca, I assume it is an Edwards Aquifer well. The previous owner's name was Murchison. I own the adjoining property to the East, lots 5, 6, 7, 8 of the same subdivision: Matthews Addition. I would like to place a three bedroom, two bath mobile home on the property, on lot 7. It is about 944 sq. ft. The septic for the house was installed in 2015, permitted and approved by Travis County for a single-family residence and is located on lot 8. As the property owner / manager I intend to limit the number of occupants for the new home to no more than three persons. So, the water well will only serve the three properties that I have described. There are no irrigation systems.
- C) I don't know what the volume of water us it, but it is small and residential only.
- D) I have no further plans for any development or placement of other water using buildings.
- E) There are no conservation measures in place, other than those imposed by the district as needed.
- F) There are no backup supply measures in place.

This information is true and correct to the best of my knowledge.

Roy Kidd, owner

January 4, 2023

Item 5

Board Discussions and Possible Actions

d. Discussion and possible action on production fees charged outside of the Shared Territory.

Item 5

Board Discussions and Possible Actions

- e. Discussion and possible action on approval of the draft US Fish & Wildlife ITP Annual Report.**

Annual Report for FY 2022 Period (September 2021 - August 2022)

Permit # TE 10607- 0

Endangered Species Act Section 10(a)(1)(B) Permit for the Incidental Take of the Barton Springs Salamander (*Eurycea sosorum*) and Austin Blind Salamander (*Eurycea waterlooensis*) for Managed Groundwater Withdrawals from the Barton Springs Segment of the Edwards Aquifer

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Appendix A - Validation Monitoring Protocol

Appendix B - Interlocal Agreement between the District and City of Austin

Appendix C - Assessment of Progress on HCP Minimization Measures
(Appendix B of Management Plan Annual Report FY 2022)

Appendix D - Meeting Minutes (1/30/2023 or 2/1/23) of Management Advisory Committee

1.0 Introduction and Background

The Barton Springs/Edwards Aquifer Conservation District's ("District") Habitat Conservation Plan (HCP) and Incidental Take Permit (ITP) require the District to report annually on the status of the District's program implementation and achievement of conservation measures and objectives. This document is the Annual Report for Fiscal Year 2022, covering the period September 1, 2021 – August 31, 2022 (reporting period).

According to the Incidental Take Permit, the Annual Report shall cover:

1. Descriptions of Covered Activities undertaken;
2. Reported groundwater withdrawals from permitted wells;
3. Reference well levels;
4. Springflow at Barton Springs;
5. Total Aquifer discharge, measured for permitted wells, estimated for exempt wells, gaged/measured for Barton Springs, and estimated for Cold & Deep Eddy Springs;
6. Drought-stage management reductions;
7. Estimated actual take, if any, for the annual reporting period, and total cumulative take for the ITP term;
8. Minimization measures and actions taken during the prior year;
9. Mitigation actions taken during the year and updates on any ongoing mitigation actions;
10. An evaluation of the effectiveness of the avoidance, minimization, and conservation measures;
11. Adaptive management activities undertaken during the year or indicated as prudent by outcomes of the conservation program;
12. Expenditures by the District on implementation activities;
13. Any species-specific or aquifer research compiled or completed during the prior year;
14. Proposed activities for the next year;
15. Recommendations for improvement; and
16. Any other appropriate information documenting Permittee's compliance with the Permit.

This introduction section provides an overview of the District's application of the authority provided to manage the groundwater resources within the District and the fundamental management concepts and strategies that embody the District's regulatory and permitting program. Included as part of the introduction is a background and an overview of the following:

- 1.1 General Information about the District
- 1.2 Management of Groundwater Resources in the District
- 1.3 Implementation of Management Plan and Habitat Conservation Plan
- 1.4 Background on District's Incidental Take Permit (ITP)

Other major report sections that follow include a summary of the District's minimization measures and mitigation actions taken during the reporting year, a review of drought management activities, and aquifer status, and an outlook for planned activities.

Additionally, included as Appendix D of this annual report, is a summary of the meeting discussion and comments received from the HCP Management Advisory Committee (MAC). The District established an HCP MAC to advise and assist the Board in coordination of conservation activities affecting Covered Species at Barton Springs, and in monitoring and helping the Board improve implementation of the District HCP. The MAC provides an additional measure to ensure continued improvement of the HCP and compliance with the ITP, and ensures the Board is aware of stakeholder concerns regarding execution of and revisions to the HCP. The primary purpose of the MAC is to review and comment on the District's HCP annual reports, or on selected aspects of those reports, in its role to provide continuing improvement recommendations. At the Board's discretion, the MAC may also be requested to:

- Provide a forum for exchange of information relative to Covered Species,
- Provide ad hoc advice on Covered Species management activities,
- Advise the District on priorities for conservation actions, as warranted, and
- Provide input and recommendations, as warranted, on the development and implementation of actions through the adaptive management program.

The MAC was appointed by the District Board in early 2013 and includes independent, volunteer representatives with biological or natural-resource management responsibilities from designated interest groups. MAC composition focused on perspectives useful to the active management of the Aquifer and habitat of Covered Species at Barton Springs. The U.S. Fish and Wildlife Service (Service) was also requested to provide a non-voting representative to be liaison between the District, the Service, and the MAC. The MAC will convene in some manner appropriate to the purpose of each meeting and no less frequently than annually, and at such other times as they decide or as requested by the Board.

1.1 General Information about the District

Background.

Since 1904, the legal framework applied to groundwater resources in Texas has been the common law "Rule of Capture." Although the Rule of Capture remains in effect today, groundwater conservation districts (GCDs), such as the District, have been established across the state and authorized to modify how the Rule of Capture shall be applied within their boundaries as part of a comprehensive, approved groundwater management plan.

In 1997, the Texas Legislature codified the commitment to GCDs in Chapter 36, Section 36.0015 of the Texas Water Code (TWC) by designating GCDs as the preferred method of groundwater management. This section of Chapter 36 also establishes that GCDs will manage groundwater resources in order to protect property rights, balance the conservation and development of groundwater to meet the needs of this state, and use

the best available science through rules developed, adopted, and promulgated in accordance with Chapter 36. As the overarching statute governing GCDs, Chapter 36 gives specific directives to GCDs and the statutory authority to carry out such directives. It provides the so-called “toolbox” that enables GCDs to promulgate appropriate rules needed to protect and manage groundwater resources within their boundaries given consideration to conditions and factors unique to each GCD.

In addition to Chapter 36 authority, the District has powers expressly granted by Chapter 8802 of the Special District Local Laws Code (“the District Enabling Legislation”). Applied together, these statutes provide the District with the authority to serve the statutory purpose to provide for the conservation, preservation, protection, recharging, and prevention of waste of groundwater, and of groundwater reservoirs or their subdivisions, and to control subsidence caused by withdrawal of water from those groundwater reservoirs or their subdivisions.

Authority and Purpose

The District was created in 1987 by the 70th Texas Legislature, under Senate Bill 988. Its statutory authorities include Chapter 52 (later revised to TWC, Chapter 36), applicable to all GCDs in the state, and the District’s enabling legislation, now codified as Chapter 8802, Special District Local Laws Code. The District’s legislative mandate is to conserve, protect, and enhance the groundwater resources located within the District boundaries. The District has the power and authority to undertake various studies, assess fees on groundwater pumpage and transport, and to implement structural facilities and non-structural programs to achieve its statutory mandate. The District has rulemaking authority to implement its policies and procedures and to help ensure management of groundwater resources as directed by the Board. The District is not a taxing authority. Its only sources of income are groundwater production fees, the annual City of Austin water use fee, export fees, administrative fees, and occasional grants from various local, state, and federal programs for special projects.

Jurisdictional Area

Upon creation in 1987, the District’s jurisdictional area encompassed approximately 255 square miles including parts of four counties: northwestern Caldwell, northeastern Hays, southeastern Travis Counties, and a small territory in western Bastrop County. In 2011, that small part of Bastrop County was de-annexed from the District and is now in Lost Pines GCD’s sole jurisdiction. The jurisdictional area was generally defined to include all the area within the Barton Springs segment of the Edwards Aquifer with an extended area to the east to incorporate the service areas of the Creedmoor-Maha Water Supply Corporation, Goforth Special Utility District, and Monarch Utilities. In this area, designated as the “Exclusive Territory,” the District has authority over all groundwater resources.

In 2015, the 84th Texas Legislature (House Bill 3405) expanded the District’s jurisdictional area to include the portion of Hays County located within the boundaries of the Edwards Aquifer Authority (EAA) excluding the overlapping area in the Plum Creek Conservation District as show in Figure 1. The newly annexed area, designated as “Shared Territory,” excludes the Edwards Aquifer and includes all other aquifers, including the underlying

Trinity Aquifer. The District's jurisdictional area including the Shared Territory encompasses approximately 420 square miles and includes both urban and rural areas. The District shares boundaries with adjacent GCDs to the west, south, and east including the Hays Trinity GCD, Comal Trinity GCD, EAA, Plum Creek GCD, and Lost Pines GCD, respectively. The District participates in joint-regional planning with these and other GCDs in Groundwater Management Areas (GMAs) 9 and 10 which are configured generally to encompass the Trinity and Edwards Aquifers, respectively.

Aquifers and Uses

Water from the Barton Springs segment of the Edwards Aquifer serves as the primary water source for public water supply, industrial, and commercial purposes for some parts of the District, and is a source of high-quality base flow to the Colorado River via discharge through the Barton Springs complex. The Barton Springs complex provides habitat for the Barton Springs salamander (*Eurycea sosorum*) and Austin blind salamander (*Eurycea waterlooensis*) which are both federally listed Endangered Species under the Endangered Species Act requiring all activities that would or could adversely affect the species to represent optimal conservation efforts. The Trinity Aquifer underlying the Edwards, is an important primary water resource in some parts of the District and is increasingly being developed in both the Exclusive and Shared Territory. Some wells in the District also produce water from the Taylor and Austin Chalk formations as well as various alluvial deposits along river and stream banks.

The area has a long history of farming, ranching, and rural domestic use of groundwater, but over time the region has become more urban in areas of south Austin, Buda, Kyle, and San Marcos. Groundwater use in the area is now primarily for domestic and public water-supply purposes, with lesser amounts utilized for commercial, irrigation, and industrial use. See Figure 2 for a general breakdown of the types of wells in the District and percentage of permitted production for each classification category.

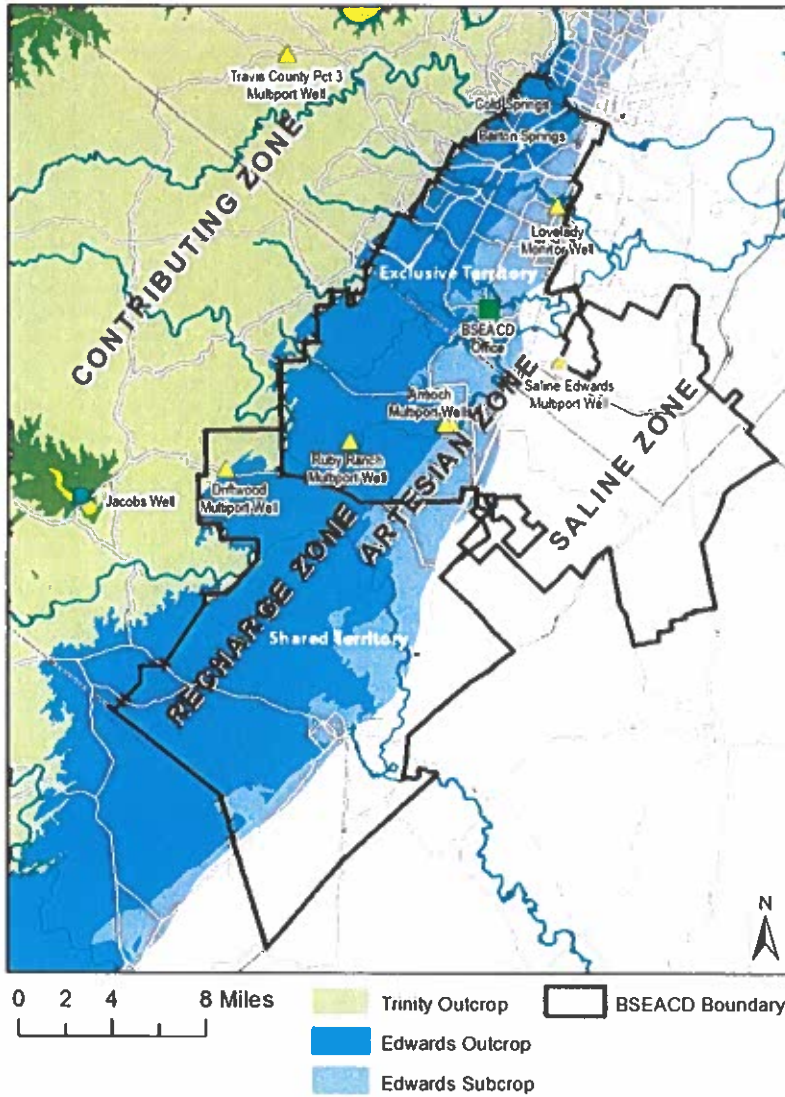


Figure 1. Location of the Barton Springs/Edwards Aquifer Conservation District

This map displays the District's boundaries, major aquifers, hydrogeologic zones, key springs, and sentinel monitoring wells.

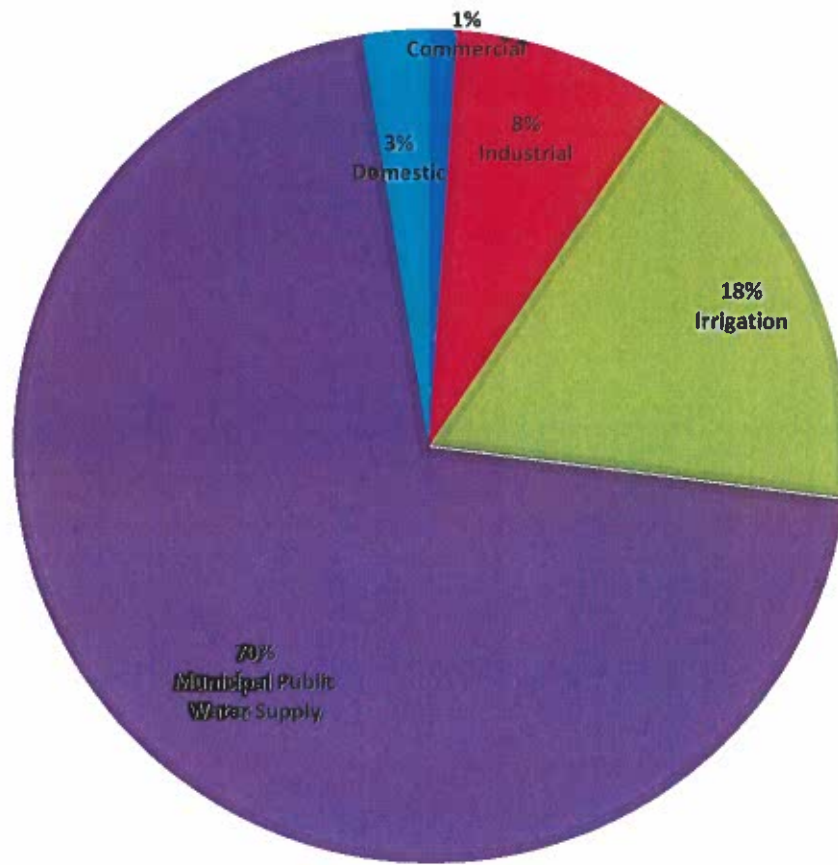


Figure 2. Types of Groundwater Use and Their Percent of Authorized Use for Permitted Wells in the District

1.2 Management of Groundwater Resources in the District

Since its creation in 1987, the District has honored the established precedent of developing policy and management strategies on the basis of statutory compliance, sound science, and stakeholder input. The District established a precedent for developing the governing policies and rules through an initial data-driven evaluation of the science to characterize the District's aquifers followed by a thorough vetting by affected stakeholders and the public. This process has served to inform the Board's direction and policy decisions resulting in the current regulatory program that has evolved to address challenges unique to the District. This evolution has been marked by key milestones, producing management strategies that are now integrated within the current regulatory approach. The evolution of the District's policies and strategies has produced a regulatory program that is fair, innovative, and customized to objectively address challenges and management objectives unique to the District. The District's management approach evolved from an initial focus on permitting for historical use from 1987 until the completion of the sustainable yield study in 2004. On the basis of that study, the District began preparation for management under an HCP to protect the endangered salamanders at Barton Springs.

After the passage of HB 3405 in 2015, the District's attention broadened to include management of the Trinity Aquifer and other non-Edwards aquifers in the Shared Territory, development of a permitting program with a refined interest in managing to avoid unreasonable impacts, and an updated definition of sustainable yield. The integration of these strategies collectively produced a program formed on the basis of demand-based permitting coupled with an evaluation of the potential for localized and regional unreasonable impacts. This permitting approach is bolstered by an active drought management program to abate groundwater depletion during District-declared drought. The current permitting and drought management programs are further described below.

Permitting. The current permitting program in place and supported by the District's Management Plan (MP) applies a three-part evaluation to affirm beneficial use in accordance with demand-based permitting standards, and to evaluate the full range of potential impacts for each production permit request. The three-part permit evaluation involves an assessment of reasonable non-speculative demand, local scale evaluations, and aquifer scale evaluations. The extent of the evaluation scales with the magnitude of the requested production volume, and the more comprehensive evaluations are reserved for more complex, larger-scale projects that show greater potential to cause unreasonable impacts. More information on the District's permitting program can be found on the District's website here: <https://bseacd.org/regulatory/permit-process/>

Drought Management. One of the principal responsibilities central to the District's mission is to manage groundwater production during drought conditions when the aquifers are most stressed. After creation of the District in 1987 and until 2004, the District put into place its initial permitting program and drought management program with a network of drought indicator wells and curtailments linked to percentiles of monthly flow at Barton

Springs. With a burgeoning regional population and increasing demand on District aquifers coupled with the findings of the sustainable yield study, the District recognized a need to improve the drought management program. Significant droughts in 2006, 2008–09, and 2011 provided further impetus for a series of amendments to implement more effective science-based drought trigger methodology and expand permit-based drought rules and enforcement protocol. The amendments produced milestones in the District’s regulatory approach (e.g., conditional permitting, Extreme Drought Withdrawal Limits, the Ecological Flow Reserve, and Management Zones) that were the product of numerous scientific studies conducted by the District’s hydrogeologists, vetted through technical consultants and advisors, reviewed and commented on by stakeholders and the public, and approved by the Board.

The current drought management program in place and supported by the District’s MP is implemented through User Drought Contingency Plans (UDCPs) that are an integral component required of each production permit. Drought declarations involve continuous evaluation of aquifer conditions measured at the drought indicators for the Edwards Aquifer that also serve as surrogates indicative of regional drought conditions for all District aquifers. When designated aquifer conditions are met, permittees are required to implement prescribed measures of the UDCPs requiring mandatory curtailments of permitted groundwater production based on permit type (Table 1) and aquifer management zones.

Table 1. Fresh Edwards Permit Types

Permit Type	Use Type	Description
[IPP] NE- Class A Conditional Fresh Edwards	Various Uses: Commercial, Institutional, Industrial, Agricultural, Irrigation, Public Water Supply	This permit applies to the Eastern and Western Fresh Edwards Management zones and is for those registered nonexempt wells approved by the District prior to September 2004. These permits are subject to drought restrictions. These permits have a max curtailment of up to 50%.
[IPP] NE- Class B Conditional Fresh Edwards	Various Uses: Commercial, Institutional, Industrial, Agricultural, Irrigation, Public Water Supply	This permit type applies to the Eastern and Western Fresh Edwards Management zones and is for those registered nonexempt wells approved after April 2007. Wells that have been issued this permit are interruptible and are subject to drought restrictions of up to 100% curtailment during a Stage IV Exceptional Drought.

[IPP] NE- Class C Conditional Fresh Edwards	Various Uses: Commercial, Institutional, Industrial, Agricultural, Irrigation, Public Water Supply, Domestic	This permit type applies to the Eastern and Western Fresh Edwards Management zones and is for those registered nonexempt wells approved after March 2011. Wells that have been issued this permit are interruptible and are subject to drought restrictions of up to 100% curtailment during a Stage IV Exceptional Drought.
[IPP] NE- Class D Conditional Fresh Edwards	Aquifer Storage and Recovery (ASR)	This permit applies to groundwater productions associated with Aquifer Storage and Recovery projects where stored water is recovered and used to supplement or substitute Freshwater Edwards supplies during District Declared Drought.
[IPP] NE – Historical Fresh Edwards	Various Uses: Commercial, Institutional, Industrial, Agricultural, Irrigation, Public Water Supply, Domestic	This permit applies to the Eastern and Western Fresh Edwards Management zones and is for those registered nonexempt wells approved by the District prior to September 2004. This permit type is no longer issued for new nonexempt wells. These permits are subject to drought restrictions of up to 50% curtailment during a Stage IV Exceptional Drought

Curtailments are implemented on a monthly basis during District-declared drought and increase with drought severity with maximum curtailments reserved for an Emergency Response Period as shown in Table 2. Curtailments are derived on the basis of a pumping profile representing the average monthly distribution of the demand-based annual permit volume for each groundwater use type and are calculated as a percentage reduction off of the monthly baseline amount as shown in the example drought target chart in Figure 3. Authorized permit volumes based on reasonable non-speculative demand, monthly reporting of actual groundwater production by permittees, and active enforcement of monthly curtailments are integral to effective drought management to ensure the more immediate and consistent relief in actual pumping pressure needed to sustain spring flows and existing water supplies during District-declared drought until the drought conditions recede and the aquifers recover.

Table 2. Mandatory Drought Curtailments.

Curtailments established for different well permit types, aquifers, and drought conditions. (Curtailment expressed as percentage of authorized monthly groundwater production in designated drought stage. For example, freshwater Edwards Aquifer historical permittees would be required to curtail their authorized monthly withdrawal by 30% during Stage III Critical Drought.)

Drought Curtailment Chart											
Aquifer Management Zone Permit Type		Edwards Aquifer						Trinity Aquifer			
		Eastern/Western Freshwater					Saline	Lower	Middle	Upper	Outcrop
		Historical	Conditional				Hist.	Hist.	Hist.	Hist.	Hist.
			Class A	Class B	Class C	Class D					
Drought Stages	No Drought	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Water Conservation (Voluntary)	10%	10%	10%	10%	10%	0%	10%	10%	10%	10%
	Stage II Alarm	20%	20%	50%	100%	100%	0%	20%	20%	20%	20%
	Stage III Critical	30%	30%	75%	100%	100%	0%	30%	30%	30%	30%
	Stage IV Exceptional	40%	50% ¹	100%	100%	100%	0%	30%	30%	30%	30%
	Emergency Response Period	50% ³	>50% ²	100%	100%	100%	0%	30%	30%	30%	30%

Percentages indicate the curtailed volumes required during specific stages of drought.

- 1 Only applicable to Limited Production Permits (LPPs) and existing unpermitted nonexempt wells after A to B reclassification triggered by Exceptional Stage declaration.
- 2 Curtailment > 50% subject to Board discretion.
- 3 Emergency Response Period (ERP) (50%) curtailments become effective October 11, 2015. ERP curtailments to be measured as rolling 90-day average after first three months of declared ER

Drought Target Chart							
Historic Edwards Production Permit -		Permittee					
Water Use: Public Water Supply		UDCP Approved in Fiscal Year: FY 2020					
Permitted Pumpage (GPY): 20,000,000							
Fresh Edwards Management Zone Pumpage Volume Targets During Drought Stages							
Fiscal Year	Monthly Volume Allocation	No Drought Baseline	Stage I Water Con. Period (Voluntary)	Stage II Alarm (Mandatory)	Stage III Critical (Mandatory)	Stage IV Exceptional (Mandatory)	Emergency* Response Period (Mandatory)
		No Reduction	10% Reduction	20% Reduction	30% Reduction	40% Reduction	50% Reduction*
September	10.00%	2,000,000	1,800,000	1,600,000	1,400,000	1,200,000	1,000,000
October	8.30%	1,860,000	1,494,000	1,328,000	1,162,000	996,000	830,000
November	7.00%	1,400,000	1,260,000	1,120,000	980,000	840,000	700,000
December	6.30%	1,260,000	1,134,000	1,008,000	882,000	756,000	630,000
January	6.30%	1,260,000	1,134,000	1,008,000	882,000	756,000	630,000
February	6.50%	1,300,000	1,170,000	1,040,000	910,000	780,000	650,000
March	6.60%	1,320,000	1,188,000	1,056,000	924,000	792,000	660,000
April	7.40%	1,480,000	1,332,000	1,184,000	1,036,000	888,000	740,000
May	8.00%	1,600,000	1,440,000	1,280,000	1,120,000	960,000	800,000
June	9.50%	1,900,000	1,710,000	1,520,000	1,330,000	1,140,000	950,000
July	12.10%	2,420,000	2,178,000	1,936,000	1,694,000	1,452,000	1,210,000
August	12.00%	2,400,000	2,160,000	1,920,000	1,680,000	1,440,000	1,200,000
Annual Totals:	100.00%	20,000,000	18,000,000	16,000,000	14,000,000	12,000,000	10,000,000

* ERP(50%) ERP curtailments to be measured as a rolling 90 day average after the first three months of declared ERP.

Template Updated: 022819

	District Representative	Date
	Permittee Signature	Date

Figure 3. Example Permittee Drought Target Chart

1.3 Implementation of Management Plan and Habitat Conservation Plan

The provisions of the District’s MP and HCP will be implemented and used by the District as a guide for determining the direction or priority for all District activities. All operations of the District, all agreements entered into by the District, all District policies and programs, and any additional planning efforts in which the District may participate will be consistent with the provisions of the District’s MP and HCP. The District will encourage cooperation and coordination with relevant entities to implement these plans.

The District adopted and implemented rules necessary to support its mission including rules related to permitting of wells, production and transport of groundwater, and drought management. Rules and policies established by the District are consistent with the provisions of these plans and are adopted on the basis of the best available science, public and stakeholder input, and recommendations of competent professionals. Further, the rules comply with TWC Chapter 36 and the District’s enabling legislation. All rules are enforced in a manner that is fair and objective. A copy of the Rules can be found on the District’s website here: <http://bseacd.org/about-us/governing-documents/>.

In order to achieve the goals, management objectives, and performance standards adopted in these plans, the District continually works to develop, maintain, review, and update rules, policies, and procedures for the various programs and activities described within the MP and HCP. As a means to monitor performance, the District implements

various goals, management objectives, and performance standards adopted in these plans. On an annual basis, the District develops annual reports for the MP and HCP that document progress made towards implementation and achievement of the goals and objectives.

All specific activities undertaken by the District in this FY 2022 reporting period, whether considered as direct or indirect management of the Aquifer are described in more detail in the latest “FY 2022 Management Plan Annual Report,” which can be viewed and downloaded at:

<https://bseacd.org/uploads/Annual-Report-with-Appendix-A-and-B.pdf>

1.4 Background on District’s Incidental Take Permit (ITP)

The District is charged with the management of the Barton Springs segment of the Edwards Aquifer (“Aquifer”), which is the primary water supply for more than 60,000 people in the region and the source water for the Barton Springs complex. The District manages this resource by a production permit-based regulatory program for larger, non-exempt wells, and these regulatory program elements constitute the Covered Activities described in the HCP. The overarching strategic purpose of the District is to optimize sustainable uses of groundwater for these users and other community interests.

However, it is established that during drought conditions large amounts of groundwater withdrawals (pumping) will contribute to diminished flow through the Aquifer, smaller springflow rates at Barton Springs, and associated adverse effects to some Aquifer users. The 2004 Sustainable Yield of the Barton Springs Segment report can be viewed at https://bseacd.org/uploads/HR_SustYield_BSEACD_report_2004_web.pdf. The Aquifer and its associated spring outlets are the sole habitat of the federally-protected Barton Springs salamander (BSS) and Austin blind salamander (ABS). The federal Endangered Species Act prohibits the harassment or harm of the salamanders (termed “take”) that may incidentally occur as a result of the effect of pumping on decreasing water levels and springflows unless exempted under a federal ITP.

The District’s activities that create the need for an HCP and an ITP relate to the District’s following programmatic functions for managing groundwater production:

- Adopt, implement, and enforce regulations and management programs that protect existing groundwater supplies, improve aquifer demand management, provide Aquifer and springflow protection during droughts, promote and improve aquifer recharge, and carry out other beneficial management strategies; and
- Avoid, or minimize, and mitigate negative impacts upon federally listed species dependent upon springflow from Barton Springs through adoption and implementation of regulations, management programs, scientific research programs, conservation education programs, and collaborative efforts with other governmental entities.

These activities directly and indirectly affect withdrawals (groundwater production) from the Aquifer. In turn, as a result of the hydrology of the groundwater system, such withdrawals lower the water levels in the Aquifer, which consequently reduces the discharge (springflow or flow) at Barton Springs. There is a well-established relationship, within the observed data range between the flow issuing from the outlets of Barton Springs and the chemistry of the water. As flow decreases, the dissolved oxygen (DO) concentration of the water, which is required by the Covered Species for survival, decreases, and the concentration of dissolved solids increases. This natural variation in water chemistry derives from the physical system of the Aquifer, and it occurs regardless of whether Aquifer water-levels and springflow decreases are due to drought, withdrawals by wells, or both.

During normal and high-flow conditions in the Aquifer, the combined flow of the natural outlets at Barton Springs are minimally affected by the total amount of water that is being withdrawn by wells in the Aquifer. Under these conditions, the District's program elements principally address the long-term sustainability of the Aquifer as a water supply. Under these high-flow conditions, the amount of water withdrawn from the Aquifer by pumping wells and the provisions of the District's regulatory program are believed to have essentially no effect on the chemistry of the springflow. This is because the physical and chemical characteristics of the springflow are mostly attributable to meteorologically-induced stormflows and seasonal factors, and from time to time, other external factors.

Accordingly, essentially no incidental take is attributable to the Covered Activities (lawfully conducted withdrawals from District permitted wells, see HCP Section 4.1, Proposed Covered Activities) when water levels in the Aquifer are above a certain elevation, which determines the flow at the Aquifer's major outlet, Barton Springs.

But during drought, and especially prolonged severe or Extreme Drought, the amount of water naturally discharging from the springs complex (the natural spring outlets taken together) is much smaller, similar in magnitude to the amount of water withdrawn from wells. During these drought conditions, the District's groundwater drought management program is key to preserving groundwater levels in the Aquifer and springflow. The joint and regional water planning conducted by the State, with which the District's MP is integrated, uses a recurrence of the drought of record (DOR) in the 1950s as the planning objective, and the DOR is also the framework for the District's drought management program. The District's integrated regulatory program is designed to protect the water supply of Aquifer users who are most vulnerable to supply interruption during periods of Extreme Drought and to conserve flows at Barton Springs for both ecological and recreational purposes.

During drought periods with low recharge rates, groundwater pumping contributes to diminished rates of springflow at Barton Springs. It is during these drought periods that groundwater levels and springflows decline sufficiently to create conditions in which District-managed activities may create incidental take and the programmatic need for the HCP and the ITP. Circumstances that give rise to such incidental take are discussed in

detail in HCP Section 5.2.2, Spatial and Temporal Extent of Take, and HCP Section 5.2.3, Consideration of Take and Jeopardy.

The cumulative withdrawals of all operating wells in the Aquifer can have significant impact on springflow during drought conditions and can increase the likelihood of low-flow conditions. Since June 2008, despite increased demand for water supplies in the District, withdrawals generally have been reduced as a result of groundwater management policies and regulations of the District and of responses by its permittees to projected shortfalls during severe droughts. As demand for groundwater has increased, the District has gradually changed its drought management and regulatory program to improve the effectiveness of Aquifer and springflow protection, supported by studies and planning for the ongoing HCP development.

The HCP specifies the District's commitment to a set of conservation (avoidance, minimization, and mitigation) measures consistent with statutory authorities of the District and that are based on sound science and effective groundwater management practices. The District's HCP has been formulated and framed in collaboration with other conservation efforts affecting the Covered Species and their respective habitats; that is, the HCP of the City of Austin (COA) for operation and maintenance at Barton Springs Pool and surrounding area, including individual spring outlets (Barton Springs Pool HCP). Well owners and users, especially the District's permittees (the regulated groundwater community), and all citizens who consider Barton Springs an ecological, recreational, and aesthetic resource, are key additional stakeholders for this HCP.

2.0 Descriptions of the Covered Activities Undertaken

The District's ITP allows for continued managed pumping (the covered activity) of the Aquifer by District permittees, provided the proposed HCP measures minimize and mitigate incidental take and avoids jeopardy of salamanders. Ultimately, the HCP measures safeguard continued sustainable use of the Aquifer and survival of the endangered salamanders.

The ITP identifies two categories of Covered Activities: groundwater withdrawals from the Aquifer by nonexempt permittees, and actions necessary to manage potential habitat of the Covered Species in the ITP Area.

Managing Groundwater Withdrawals

Managing groundwater in its jurisdictional area is the primary purpose of a GCD and managing withdrawals of groundwater in accord with its authorities is a primary activity of a GCD. The District employs a set of groundwater-management activities that relate directly to active management of groundwater withdrawals from the Aquifer (and from all aquifers). These active aquifer-management activities are an essential part of the District's groundwater management scheme and generally recur every year, to include:

- Renewal of existing production permits
- Processing of new permit applications

- Installation and operation of wells to monitor groundwater levels and quality
- Participation in joint groundwater planning with other GCDs in relevant groundwater management areas, and monitoring desired future condition (DFC) efficacy and compliance
- Monitoring groundwater drought status and informing the District Board of Directors of changes in drought status and need for responsive action
- Using well site inspections and actual production reports to evaluate compliance with applicable rules and need for potential enforcement actions
- Evaluating permittees' long-term actual withdrawals compared to authorized amounts and recommending conservation credit awards.
- Assessing the efficacy of existing rules to protect groundwater systems, to promote conservation measures, achieve and maintain applicable DFCs, and as warranted, recommending possible regulatory improvements for Board consideration. (In this reporting period, the Rules were not required to be amended.)

In addition to the recurring activities above, many other important activities conducted are considered as *indirect* management of the Aquifer. Those indirect activities include:

- program-supporting scientific investigations and monitoring, educational and outreach programs, internal and external communications and coordination, and legal support actions;
- initiatives that improve the efficiency and effectiveness of other programs; and
- activities required for governance and administration of a public agency.

Generally, such activities differ in specifics from year to year. Successful groundwater management of the Aquifer under the HCP requires operation and maintenance of a fully functioning GCD in compliance with all applicable statutes and rules in its entire jurisdictional area.

All specific activities undertaken by the District during this reporting period, whether considered as direct or indirect management of the Aquifer, are described in greater detail in Appendix C of this report. Appendix C is intended to reflect the detailed progress, activities and actions implemented by the District to achieve the HCP minimization measures. Appendix C is an excerpt from the FY 2022 Management Plan Annual Report referred to as, "*Appendix B - Assessment of Progress toward Management Plan Goals and Objectives.*"

The FY 2022 Management Plan Annual Report comprises a supporting complement to this stand-alone "Habitat Conservation Plan Annual Report" and can be viewed in full and downloaded at:

<https://bseacd.org/uploads/FY-2022-Annual-Report-with-App-A-and-B.pdf>

Managing Potential Habitat of Covered Species

Covered Activities related to managing groundwater withdrawals described above are, by design, intended to protect potential habitat of the Covered Species throughout the

Aquifer in an ongoing basis, but especially during critical drought periods when the endangered species are under additional stress. Covered Activities related more directly to management of potential habitat by the District involve decision-making and actions that support the general Biological Goals and the more explicit, quantitative Biological Objectives expressed in the District's HCP report Section 6.1. (https://bseacd.org/uploads/BSEACD_FinalHCPVol.1-Final-for-Submission-to-FWS-4.19.18.pdf). These measures are intended to ensure that reduction in springflow is minimized and corresponding DO concentrations in perennial spring outlets do not fall below specified minimum values under various springflow conditions. Drought indices of Barton Springs coupled with the Lovelady monitor well are the principal method of managing pumping during drought, and thereby preserving habitat.

Both springflow and DO are measured and reported in real-time by the U.S. Geological Survey (USGS). These data can be found online at: https://waterdata.usgs.gov/tx/nwis/uv/?site_no=08155500&agency_cd=USGS&

Water levels are measured and reported in real-time by the USGS. These data can be found online at: https://waterdata.usgs.gov/tx/nwis/uv/?site_no=301237097464801&PARAMeter_cd=72019

Table 3 provides a summary of DO concentration measured and reported by the USGS. The results are well above the minimum concentrations specified in the Biological Objectives. No unanticipated adverse effects of HCP-related activities on water chemistry were documented in the reporting year. Consequently, no extraordinary District actions, beyond those in the Covered Activities and HCP Conservation Measures, were required to actively manage the potential habitat and comply with the Biological Goals and Objectives.

Table 3. Range of Springflow and Dissolved Oxygen (USGS 08155500)

Month	Historic Mean DO (mg/L)	FY22 DO (mg/L)	Historic Mean Flow (cfs)	FY22 Flow (cfs)
Sep-21	5.6	5.6	58	58
Oct-21	5.8	5.6	58	72
Nov-21	5.8	6.0	60	81
Dec-21	5.9	6.1	61	72
Jan-22	6.2	5.9	63	56
Feb-22	6.1	6.6	65	69
Mar-22	5.9	6.4	67	59
Apr-22	5.9	6.0	68	48
May-22	5.5	5.5	70	44
Jun-22	5.6	5.3	72	39
Jul-22	5.5	5.0	68	29
Aug-22	5.5	5.7	62	27
Mean annual	5.8	5.8	64	54.5

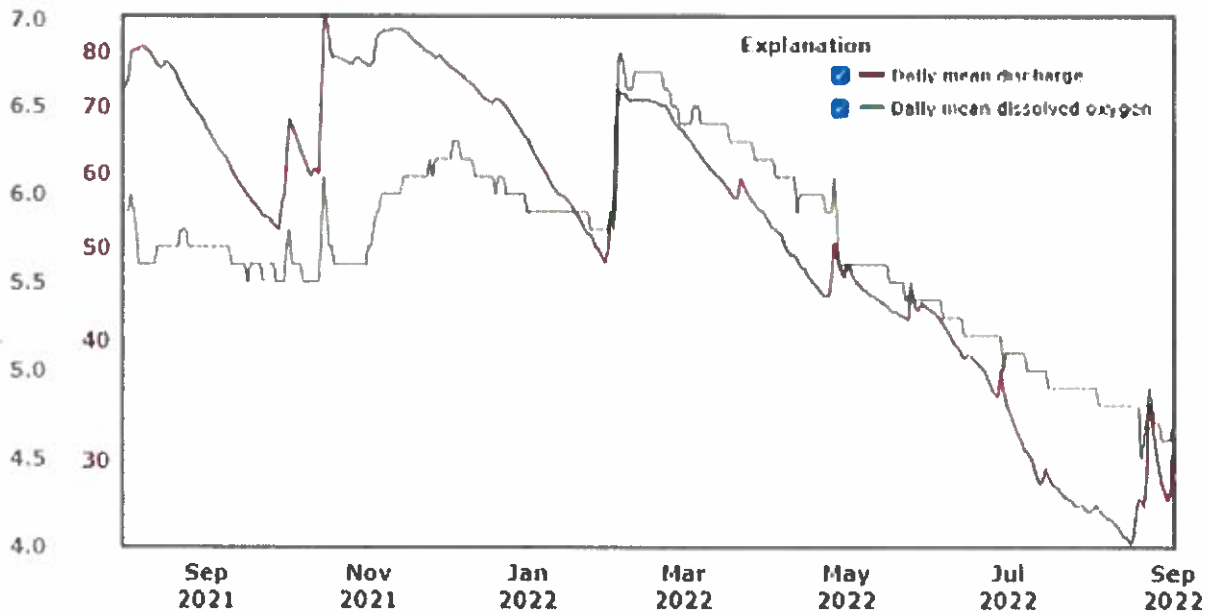


Figure 4. Hydrograph from the USGS of mean daily springflow and DO values.

In addition to considerations arising from the HCP Biological Goals and Objectives, there were two additional activities that specifically relate to management of potential habitat in the reporting period.

1. The District's Validation Monitoring Protocol is used annually to determine if new information suggests that the District's take estimate methodology should be re-evaluated. The results of this evaluation will be part of each HCP Annual Report, Section 16.0 Recommendations for Improvement. The current Validation Monitoring Protocol is included in this Annual Report in Appendix A.
2. In FY 2019, The District and COA executed an Interlocal Agreement (ILA) to facilitate data and information sharing between the parties and collaboration on activities directly related to habitat characterization and protection. The ILA enables more efficient implementation of beneficial HCP Conservation Measures, especially Mitigation Measures. The ILA is included in this Annual Report in Appendix B.

3.0 Reported Groundwater Withdrawals from Permitted Wells

The actual volume of groundwater withdrawn from non-exempt wells, i.e., wells with permits issued by the District, is shown in Table 4, along with the authorized permitted production amounts.

Table 4. Actual and Permitted Nonexempt Production by Management Zone

Table 4a. Individual Production Permits (Nonexempt):

FY 2022 Production from Individual Production Permits		
Production Zone	Actual Production	Permitted Production
Edwards	1,556,550,119 gpy	2,666,482,104 gpy
Trinity	211,230,909 gpy	617,156,117 gpy
Austin Chalk or Alluvial	48,116 gpy	2,500,000 gpy
Total (Gallons)	1,767,829,114	3,286,108,221
Total (Acre Feet)	5,425	10,085

Table 4b. Limited Production Permits (Nonexempt General Permits by Rule):

FY 2022 Production from Limited Production Permits		
Production Zone	Actual Production*	Permitted Production
Edwards	12,954,652	62,000,000
Trinity	5,954,961	28,500,000
Austin Chalk or Alluvial	0	0
Total (Gallons)	18,909,613	90,500,000
Total (Acre Feet)	58	278
<i>*Actual production is a volume estimate calculation described in the findings and conclusions of the BSEACD Staff Report 2010. Average annual exempt well production is approximately 104,473 gpy</i>		

In this reporting period, the volume of groundwater actually withdrawn from the Aquifer was considerably below the permitted volume. In aggregate, the amount of groundwater actually withdrawn from the Edwards Aquifer by permitted wells in the reporting period was 1,569,504,771 gallons compared to the overall permitted volume of 2,728,482,104 gallons.

A summary of the **permitted production volumes** for each Management Zone is provided below in Table 5.

Table 5. Permitted Production by Management Zone

FY 2022 Permitted Production by Management Zone			
Edwards MZs	Gallons	cfs	acre-feet
Historical (Individual)	2,310,552,596	9.8	7,091
Historical (LPP)	2,500,000	0.011	8
<i>Total Historical</i>	<i>2,313,052,596</i>	<i>9.81</i>	<i>7,092</i>
Conditional (Individual)	355,929,508	1.51	1,092
Conditional (LPP)	59,500,000	0.25	183
<i>Total Conditional</i>	<i>415,429,508</i>	<i>1.76</i>	<i>1,273</i>
Total Edwards Aquifer	2,728,482,104	11.57	8,365

Trinity MZs	Gallons	cfs	acre-feet
Historical (Individual)	617,156,117	2.62	1,894
Historical (LPP)	28,500,000	0.12	87
Total Trinity Aquifer	645,565,117	2.74 cfs	1,981

Other Aquifers MZs	Gallons	cfs	acre-feet
Historical (Individual)	2,500,000	0.01	8
Historical (LPP)	0	0	0
Total Other Aquifers	2,500,000	0.01	8

Total Permitted (All Aquifers)	3,376,547,221 gal	14.32 cfs	10,354 ac ft
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A summary of the **estimated exempt use production volumes** for the Edwards is provided below in Table 6.

Table 6. Exempt Production by Management Zone

Edwards Aquifer - Estimated Exempt Wells Production	
Estimated Volume of Exempt Well Production (gpy)*	105,827,876
<i>Estimated volume in cfs</i>	<i>0.45</i>
<i>Estimated number of exempt wells</i>	1012

*2010 BSEACD Staff Report – Avg Exempt Well Use=104,573 gpy

4.0 Reference Well Levels

The primary reference well that the District uses to gauge overall groundwater levels in the Aquifer, determine drought stages that trigger various elements of the District's drought management program, and estimate take of Covered Species, is the Lovelady well, near the intersection of Stassney Lane and South First Street in South Austin. The hydrograph of this well for the reporting period is shown below in Figure 5.

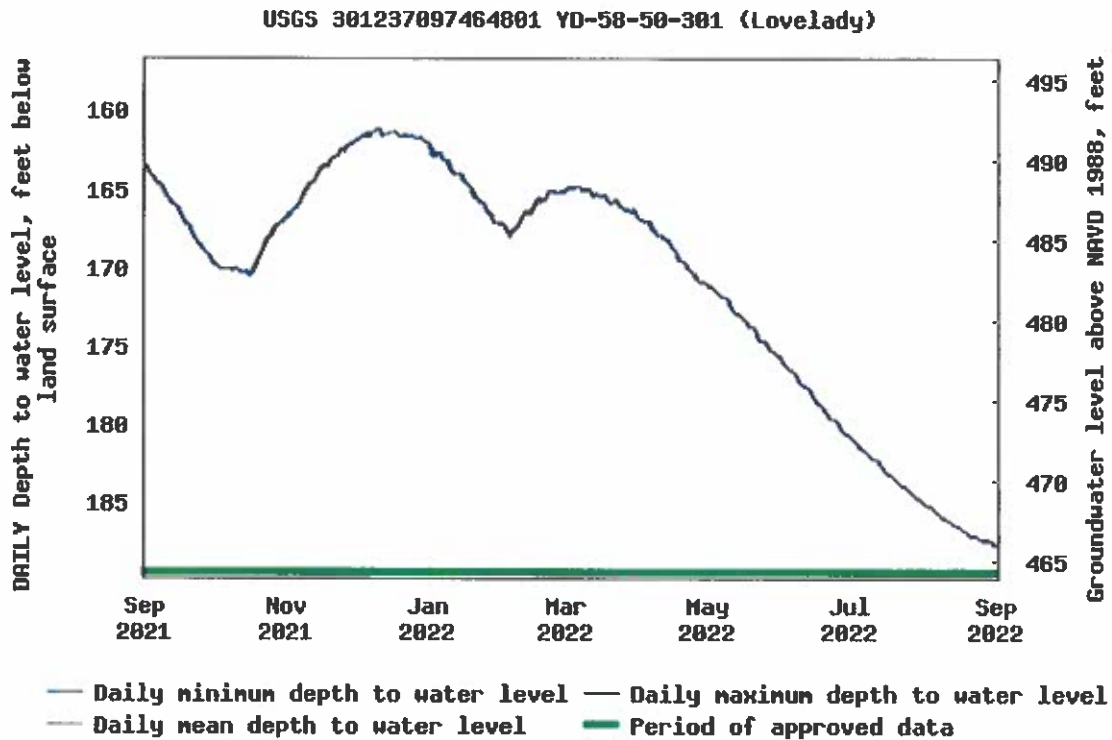


Figure 5. Hydrograph of the Lovelady water level shown as depth to water and elevation.

Data from Barton Springs and the Lovelady well informed the drought management determinations by the District’s Board. Following the Drought Trigger Methodology, drought is declared when either Lovelady or Barton Springs reaches their respective thresholds. Non-drought conditions are declared when both Barton Springs and Lovelady well have recovered above the respective drought trigger thresholds. Section 7 describes the drought stage management for this reporting year.

5.0 Springflow at Barton Springs

The hydrograph of the combined springflow at Barton Springs, as indicated by the USGS gage, for the reporting period is shown in Figure 6.

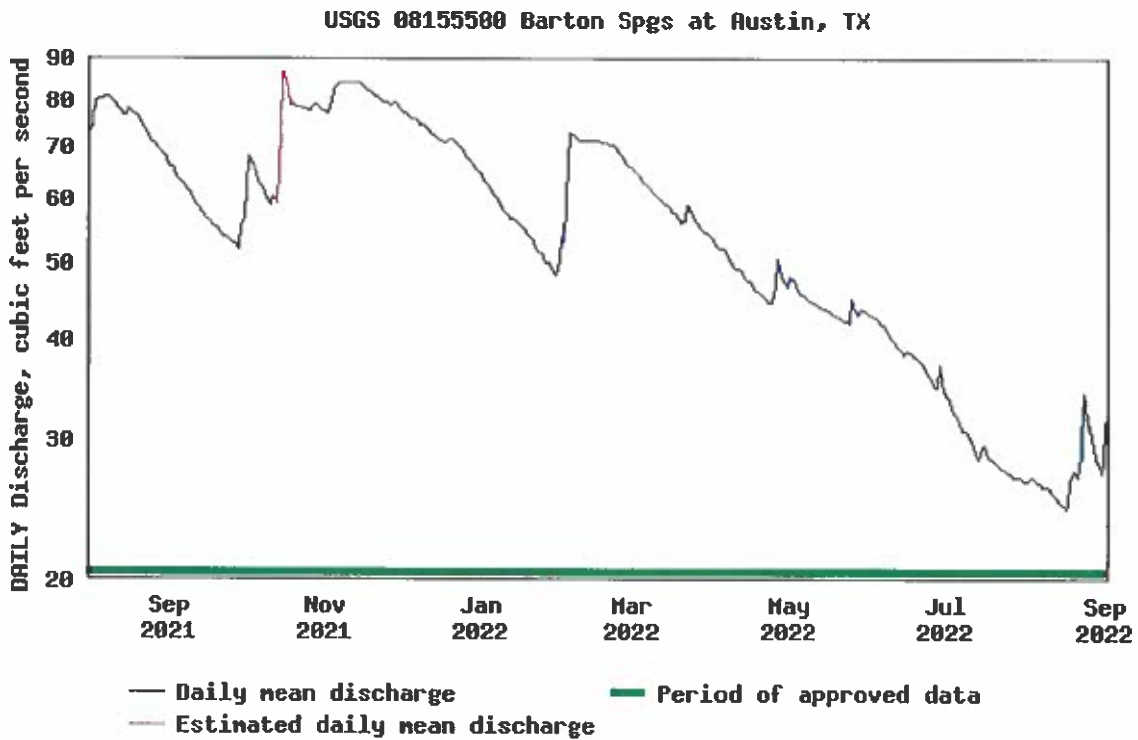


Figure 6. Hydrograph of daily mean Barton Springs flow.

Other statistics concerning spring flows during the reporting period are:

- Maximum daily discharge: 86.4 cfs (8/31/2022)
- Minimum daily discharge: 24.5 cfs (9/1/2021)
- Mean daily discharge: 54.2 cfs

6.0 Total Aquifer Discharge

The determination of total Aquifer discharge in any reporting year requires consideration of measured (metered) discharges from permitted wells, the prevailing estimate of use by exempt wells, gaged measurements of combined discharge at Barton Springs, and an estimate of discharge at Cold and Deep Eddy Springs. There is a large degree of uncertainty about the amount of discharge that may flow to the south into the San Antonio segment of the Edwards Aquifer during high-flow conditions. The total actual discharge from the Aquifer by source during FY 2022 is estimated in Table 7.

Table 7. Estimated total discharge from the Barton Springs segment of the Edwards Aquifer

Discharge Source	FY 2022 Actual Volume (gpy)	Equivalent Monthly Mean Flow Rate (cfs)	Comment
Individual Production Permits	1,556,550,119	6.6	Monthly meter measurements; see Section 3 above
Limited Production Permits by Rule	12,954,652	0.06	See Section 3 above
Exempt Wells	105,827,876	0.45	See Section 3 above
Discharge at Barton Springs	12,797,000,000	54.2	Table 2. Mean daily discharge (USGS)
Discharge at Cold & Deep Eddy Springs	3,490,000,000	14.8	Estimated Mean; cited in Hunt et al., 2019
Total Aquifer Discharge	17,962,332,647	76.1	

7.0 Drought-stage Management Reductions

The District implements a drought management program that requires mandatory monthly pumpage curtailments during District-declared drought stages for all non-exempt permitted wells with individual production permits.

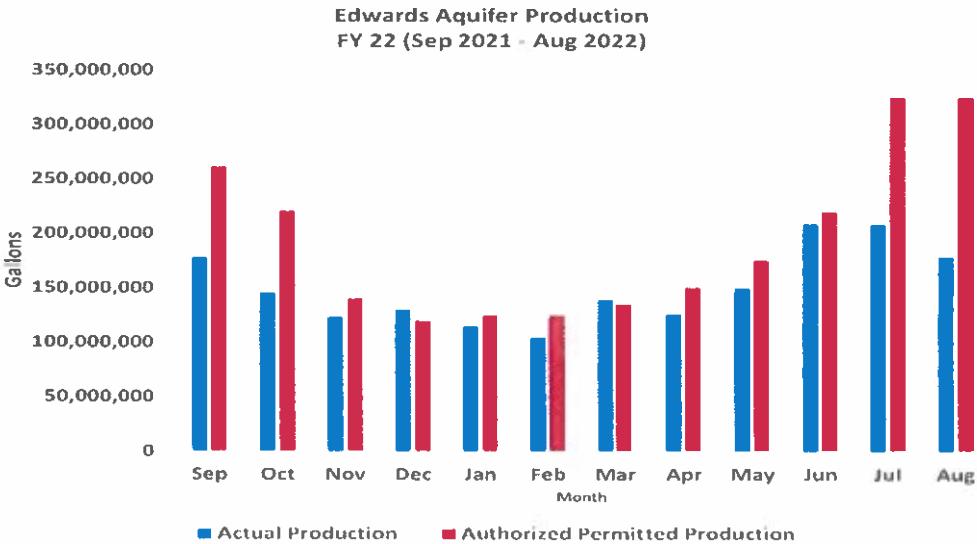


Figure 7. Hydrograph of Monthly Production Limits and Monthly Actual Use.

The District was in No Drought status from September 2021 to June 9, 2022 when Alarm Drought status was declared. We remained in Alarm status until Critical Drought status was declared on October 20, 2022. Figure 7 and Figure 8 reflect the overall trend that collective permittee actual production was on average lower than authorized permitted production allocations, by about 830,000,000 gallons, even during Alarm drought.

It should be noted that other factors such as climatic conditions, seasonal trends, and alternative supply sources can contribute to lower actual use trends even in non-drought. However, as stated in the HCP, the District has demonstrated effective drought curtailments and compliance that correspond to longer and more severe drought conditions, such as in 2009 and 2011.

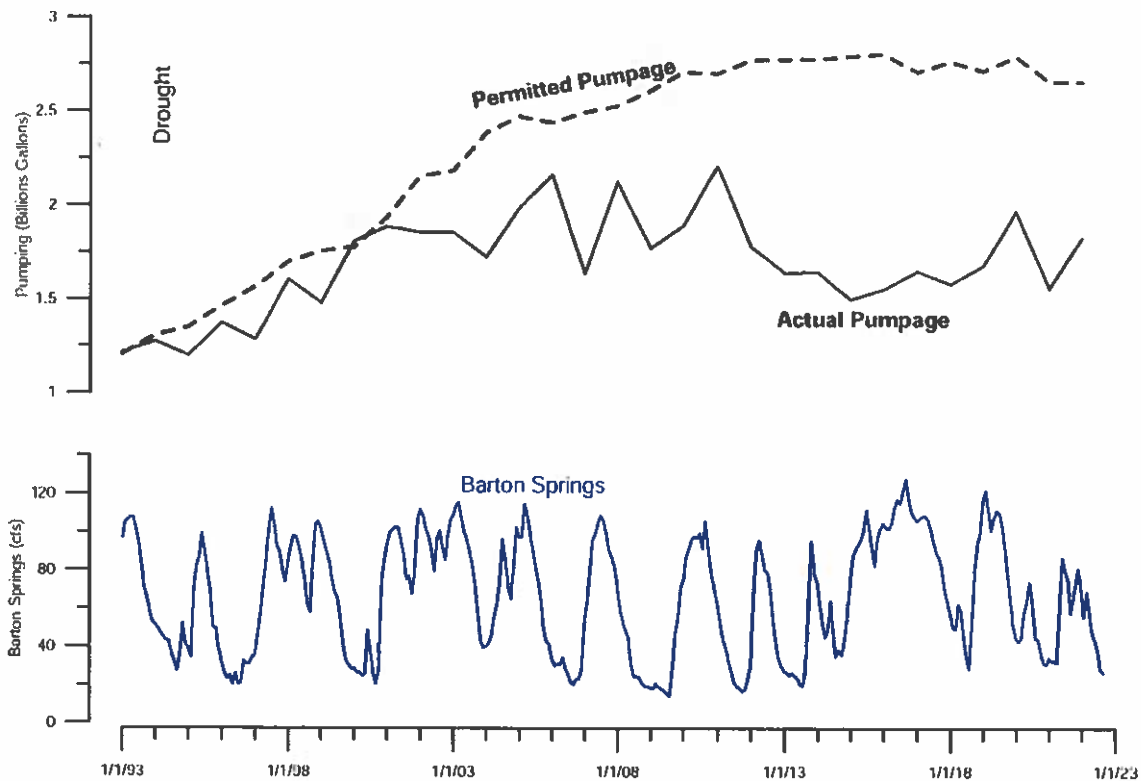


Figure 8 Hydrographs of Edwards Aquifer Production and Barton Springs Flow.

Figure 8 reflects production and spring flow since 1993. The data indicates there has been a trend over the past 20 years of lower total actual production than authorized production in the Edwards Aquifer. This overall trend is likely the result of the District's efforts in public awareness and drought conservation, promotion and support of Public Water Suppliers' diversification of source supplies, improved water use efficiencies, and key milestones in the District's science and regulatory framework. Some of those milestones include:

- 2004: Sustainable Yield Study and Conditional Production Permits
- 2005: Drought Trigger Methodology
- 2007: Extreme Drought Withdrawal Limitation (EDWL)
- 2009: Ecological Flow Reserve and Management Zones

8.0 Estimated Annual Take for Reporting Period (if any) and Total Cumulative Take for the ITP Term

The actual annual springflow-related take estimate to be included in the District's Annual Report to the Service involves a straight-forward procedure outlined in Appendix A that indicates the relative percentage of time during which springflow is below a given springflow threshold.

The hydrographs and data presented in Section 2 show that springflow was below the 40 cfs threshold for take for 33 days during the reporting period. Analysis of the mean daily spring flow and dissolved oxygen hydrograph (Figure 4) only indicates take of BSS during the 84-day threshold event during the reporting period. Using the Validation Monitoring protocol proposed by the District and approved by the Service for evaluating take (Appendix A), the District calculates the following amounts of take for the reporting period presented in Table 8.

It is estimated that take of 15 BSS occurs under category A when Barton Springs flow is at or decreases below 40 cfs (Table 8; Circumstance A). This is primarily due to Upper Barton Springs ceasing flow and induces negative behavioral effects. It is further estimated that additional take will occur for both species as a function of the number of months when springflow is between 20 and 30 cfs. Springflow between 20 and 30 cfs did occur for 51 days for this reporting period. Springflow below 20 cfs (Table 8; Circumstance C) did not occur for this reporting period.

Table 8. Summary of Take

CIRCUMSTANCE	NO. DAYS	NO. MONTHS	BSS TAKE FACTOR	ABS TAKE FACTOR	BSS SUM TAKE	ABS SUM TAKE	COMMENT
A (<40 CFS)	33	1.10	15	0	17	0	Did Occur
B (30-20 CFS)	51	1.7	174	36.6	296	62	Did Occur
C (<20 CFS)	0	0.00	174	36.6	0	0	Did Not Occur
SUM	84	2.8			313	62	2022 total
					20200	4260	permitted take over 20-yrs
					194	20	Previous year take
					19645	4168	Balance on permit
					2.7%	2.2%	% of total allowed

BSS: Barton Springs salamander; ABS: Austin blind salamander

The estimated take number is derived by the number of months (2.8 months in this case) multiplied by each take factor for each species (Table 8; Circumstance B). Thus, during this reporting period take of BSS is estimated to have been 313 and take of ABS is estimated to have been 62, using the prescribed methodology. We assume that the negative effects were likely behavioral. These amounts of take are added to the previously reported cumulative take amounts, resulting in new cumulative take amounts

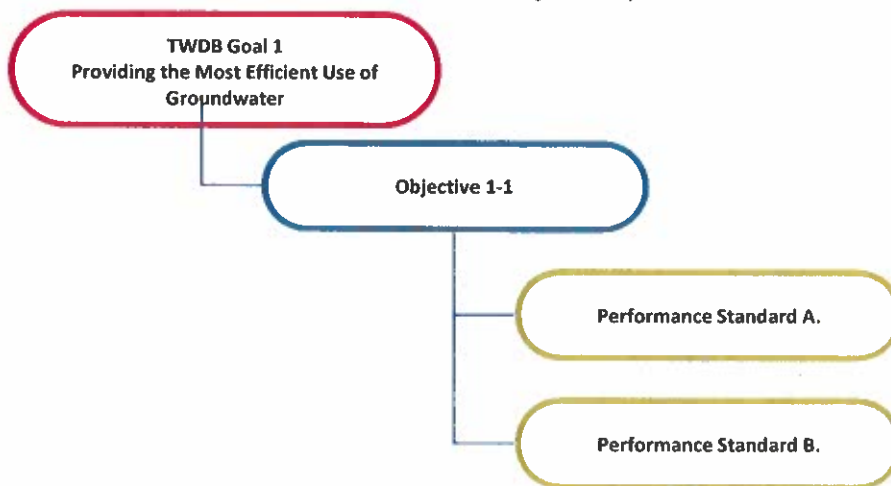
of 555 for BSS and 92 for ABS. For comparison, the authorized total cumulative take estimates for BSS and ABS during the 20-year permit term are 20,200 and 4,260, respectively. This represents 2.7% for BSS and 2.2% for ABS of the authorized total.

There was no take from the DO Augmentation mitigation measure, as those activities in the field have not yet begun.

9.0 Minimization Measures and Action Taken During the Prior Year

Conservation measures to avoid, minimize, and mitigate take by the District are by necessity rooted in the statutory and regulatory requirements for all GCDs in Texas. The Texas Water Development Board (TWDB) has set nine over-arching goals for all GCDs, and in this District, these goals have also been designated as categories of Minimization Measures in its ITP issued by the Service.

Each GCD establishes a hierarchy of objectives and performance standards to achieve its goals that reflect local groundwater management priorities and to ensure its continuing operation as a sustainable organization. The hierarchy is depicted schematically below:



- **Goals** are set by the TWDB. These 9 goals are addressed in the District's Management Plan.
- **Objectives** are set by District Staff/Board. These objectives are the same objectives for the HCP.
- **Performance Standards** are set by District Staff/Board. These performance standards are the same reporting standards that have to be completed for the HCP. Many of these standards have always been reported on in previous Management Plan Annual Reports.

The GCDs' selected objectives and standards are documented in the GCDs' adopted MPs and approved by the TWDB every five years.

As a result of its HCP planning, in its current MP, the District prioritized its objectives and performance standards such that HCP Conservation Measures now coincide with the regular and ongoing groundwater and habitat management activities, i.e., the Covered Activities. Thus, by design and with the TWDB approval of the 2022 Management Plan, the District MP's objectives and performance standards are now aligned with and identical

to the District HCP's conservation measures and their performance standards approved by the Service.

A comprehensive, detailed description of the progress, activities and actions taken by the District in the reporting year for each of the HCP Objectives and Conservation Measures is included in Appendix C of this HCP Annual Report.

The FY 2022 Management Plan Annual Report can also be viewed at:
<https://bseacd.org/uploads/FY-2022-Annual-Report-with-App-A-and-B.pdf>

On December 8, 2022, the District's Board of Directors determined that satisfactory progress had been made in FY 2022 toward all goals and objectives of the MP using the relevant performance standards for each.

10.0 Mitigation Actions Taken During the Year, and Updates on Any Ongoing Mitigation Measures

In its HCP, the District identified five mitigation measures intended to offset unavoidable take and to otherwise minimize take further. These are characterized in Table 9 below, along with the progress made for each, as of the end of the reporting period.

Most of these mitigation measures require concurrence and/or involvement of other parties, especially the COA.

The District and the COA finalized and executed an ILA in FY 2019. This ILA, provided in Appendix B, will be instrumental in more robustly pursuing certain aspects of the mitigation measures in the upcoming years. Several of the activities characterized in Appendix C, describing progress toward the over-arching HCP goals, also relate to preparation for mitigation action

Table 9. Summary of Progress on Mitigation Measures

HCP ID No.	HCP Section 6.2.2.2 Mitigation Measures	Progress or Status as of End of FY 2022
M-1	<p>The District commits to supporting the operations of an existing refugium with facilities capable of maintaining backup populations of the Covered Species to preserve the capacity to re-establish the species in the event of the loss of population due to a catastrophic event such as an unexpected cessation of spring flow or a hazardous materials spill that decimates the species habitat. Such supplemental support would be provided through a commitment of in-kind, contracted support, and/or cash contributions that would contribute to:</p> <ul style="list-style-type: none"> a. Continuing the study of salamander physiology and/or behavior, and b. Conserving field and captive populations. 	<p>Under ILA Section VII.E, the City and District agreed that the District would periodically analyze the water chemistry of the source water for the refugium. A groundwater sample was collected from the well at the Nature Center in February 2022 for chemical analysis.</p>
M-2	<p>The District, in cooperation with the City, commits to participating in conducting feasibility studies and as warranted, pilot and implementation projects to evaluate the potential for beneficial subsurface DO augmentation of flow in the immediate vicinity of the spring outlets and improved surface DO augmentation in the outlets (only) during Extreme Drought conditions. In-kind, contracted support, and/or cash contributions, phased during the term of the permit, may be authorized for feasibility studies and, if a project is feasible, for the pilot study and implementation of the augmentation project.</p>	<p>ILA Section VII.A describes the provisions under which these studies will be conducted. No other progress was made in the reporting year.</p>

M-3	<p>The District commits to extending the currently committed time period to operate the Antioch Recharge Enhancement Facility to continue after the 319(h) grant commitments (September 2014 or later), thereby improving recharge water quality and reducing nonpoint-source pollution at the outlets from runoff events during that time.</p>	<p>The facility continues to be operated by the District. Some upgraded controllers were installed in FY 2021 to ensure more responsive operation during variable creek flow conditions.</p>
M-4	<p>The District commits to establishing a new reserve fund for plugging abandoned wells to eliminate high-risk abandoned wells as potential conduits for contaminants from the surface or adjacent formations into the aquifer, with priority given to problematic wells close to the Barton Springs outlets and/or associated with water chemistry concerns under severe drought conditions. This reserve fund, which like others under state law has restrictions on its funding and use, would be established within the first year after issuance of the ITP by closing the existing Drought Reserve Account, whose stipulated purpose has been legal defense for drought management, and then by utilizing its current balance to initially fund a new Aquifer Protection Reserve Account. The new account would exist solely to fund plugging of abandoned wells and would be replenished after the first year with any collected enforcement penalties, any drought management fees imposed on larger nonexempt permittees that do not meet their drought curtailments, and an annual budgeted supplement at the discretion of the Board.</p>	<p>Implementation of key elements of this measure will require some additional rulemaking and related Board actions, which haven't yet occurred.</p>

<p>M-5</p>	<p>For the term of the ITP, the District commits to provide leadership and technical assistance to other government entities, organizations, and individuals when prospective land-use and groundwater management activities in those entities' purview will, in the District's assessment, significantly affect the quantity or quality of groundwater in the Aquifer. The District will respond actively and appropriately to legislative initiatives or projects that affect Aquifer characteristics, provided such actions are consistent with established District rules, ongoing initiatives, or existing agreements.</p>	<p>The District has been actively engaged in several activities that relate to this mitigation measure during the reporting period:</p> <ul style="list-style-type: none"> • Worked with various parties in developing groundwater models of the Trinity. These models are the BRAAT model being developed by Southwest Research Institute and a model being developed by the District in house. • Conducted hydrogeologic investigations at Jacob's Well with the installation of two multilevel monitor wells.
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11.0 Evaluation of the Effectiveness of the Avoidance, Minimization, and Other Conservation Measures

The District was in No Drought status from September 2021 to June 9, 2022 when Alarm Drought status was declared. We remained in Alarm status until Critical Drought status was declared on October 20, 2022. Figure 7 and Figure 8 reflect the overall trend that collectively, permittees' actual production is significantly lower than authorized permitted production allocations even during non-drought conditions. Sustained DO concentrations at the spring outlets have generally been similar to those expected on the basis of the spring flow volumes, which confirms the basis and expected effectiveness for the requisite pumpage reductions for the drought periods.

COA presents data in its 2021 HCP annual report showing that the salamander populations increased during this reporting period, but the increase is within the norms of variability in abundance of such a small population (City of Austin, 2021 Annual Report to Fish and Wildlife Service, January 2022).

As noted in Section 9 above, the District's Board of Directors determined that satisfactory progress was made in FY 2022 toward all HCP MP goals and objectives, using the relevant performance standards for each.

12.0 Adaptive Management Activities Undertaken During the Year, or Indicated as Prudent by Outcomes of the Conservation Program

This reporting period was the fourth one for the District's ITP. No adaptive management activities were identified as needed, and none were undertaken.

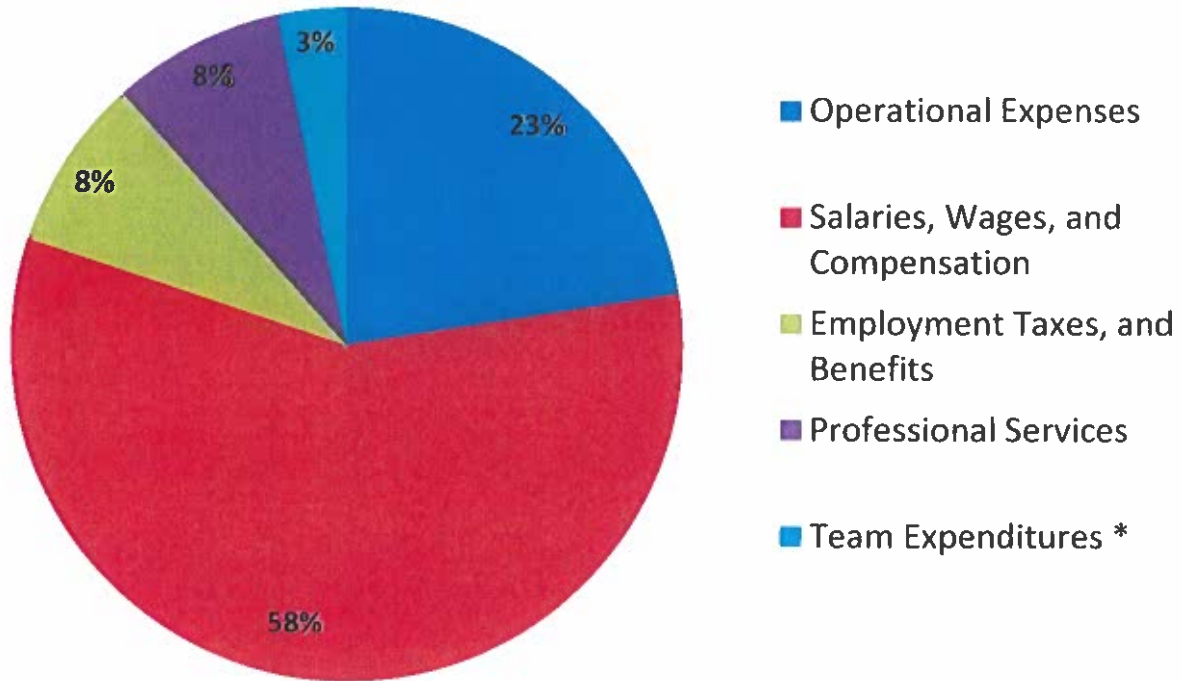
13.0 Expenditures by BSEACD on Implementation Activities

By approval of the MP Annual Report, the District's Board of Directors warrants that there were no FY 2022 expenses incurred that were not directly or indirectly related to the execution of this HCP.

Therefore, 100% of the District expenses shown on the accompanying pie chart were considered HCP expenses and satisfies the minimum commitment funding of no less than 60% of each year's annual budget.

The District's HCP implementation, which integrates the conservation measures and the District's groundwater management program, expended a total of \$1,422,084 in FY 2022. The breakdown of these expenses is shown in Figure 9 below.

FY 2022 Actual Expenditures



FY 2022 ACTUAL EXPENDITURES

A. Operational Expenses	\$320,267	22.5%
B. Salaries, Wages, and Compensation	\$818,576	57.6%
C. Employment Taxes, Insurance, and Benefits	\$117,986	8.3%
D. Professional Services	\$117,865	8.3%
E. Team Expenditures *	\$47,390	3.3%
	\$1,422,084	100.00%

Figure 9. FY 2022 Actual Expenditures.

14.0 Species-specific or Aquifer Research Compiled or Completed During the Prior Year

The District did not conduct species-specific research in the reporting period. It continues to monitor the ongoing salamander-related studies and assessments by the COA, as documented in its own HCP Annual Report. At this time, no additional cooperatively-funded, species-specific research needs have been identified.

Most of the District's hydrogeologic research in the reporting period was focused on the Trinity Aquifer and in areas outside the ITP Area. However, because the Trinity is directly or indirectly hydrologically connected to the Barton Springs segment of the Edwards and improved knowledge of the Trinity Aquifer supports decision-making for managing the Edwards, such research is relevant to the HCP. Published papers and District documents from FY 2018 through FY 2022 are listed below:

- Watson, J. A., Smith, B.A., and J. Camp, 2022, Preliminary Results and Insights from the BSEACD In-house Trinity Model: BSEACD Technical Memo 2022-0520 draft report.
- Smith, B.A., Watson, J.A., and J. Camp, 2022, Preliminary Report on the Installation of Two Multilevel Monitor Wells Near Jacob's Well: BSEACD Technical Memo 2022-0831, 80 p.
- Watson, J.A., 2022, Review of Copper Hills Well No. 5 Tier 1 Hydrogeologic Report: BSEACD Memo to File, Jul 23, 2021, 3 p.
- Hunt, B.B. and Smith, B.A., 2021, Same Aquifer, but Different Source of Water: Contrasting the Middle Trinity Aquifer in Central Texas: *GeoGulf Transactions*, v. 71, p.133-139.
- Smith, B.A., Hunt, B.B., Posso, K., and others, 2021, Highway Construction in the Faulted, Karstic, Cretaceous Edwards Limestone of Southwest Austin, Texas: Association of Environmental and Engineering Geologists, Karst Hazards Forum, Austin, Texas, March 23 to April 1, 2021, abstract.
- Hunt, B.B. and Smith, B.A., 2020, Development of a Steady-State Numerical Model Tool, versions 1.0 and 2.0, Middle Trinity Aquifer, Central Texas: BSEACD Technical Memo 2020-0930.
- Camp, Justin P., Hunt, Brian B., Smith, Brian A., 2020, Evaluating the Potential Groundwater Availability Within A Lower Trinity Aquifer Well Field, Balcones Fault Zone, Hays County, Central Texas: 2020 Abstracts with Programs, Geological Society of America, South-Central Meeting, March 9-10, 2020, Fort Worth, Texas.
- Cockrell, L.P., Gary, R.H., Hunt, B.B., and Smith, B.A., 2020, Data Compilation and Database Structure for the Geodatabase Accompanying the Hydrogeologic Atlas of Southwest Travis County, Central Texas: Barton Springs/Edwards Aquifer Conservation District (BSEACD) Data Series Report 2020-0721, July 2020, 15 p. + digital geodatabase.
- Smith, B.A., Hunt, B.B., Gary R.H., Wierman, D.A. and Watson, J.A., 2020, Springshed Delineation in a Karst Aquifer in Hays County, Central Texas: 16th Sinkhole Conference, NCKRI Symposium 8.
- Tian, L., Smith, B.A., Hunt, B.B., Doster, J.D., Gao, Y., 2020, Geochemical Evaluation of Hydrogeologic Interaction Between the Edwards and Trinity Aquifers Based on Multiport Well Assessment in Central Texas: 16th Sinkhole Conference, NCKRI Symposium 8.

- Cockrell, L.P., Hunt, B.B., Gary, R., Vay, J., Camp, J., and Kennedy, V., 2020, Hydrogeologic Atlas of Southwestern Travis County, Central Texas: Geological Society of America Abstracts with Programs, Vol. 52, No. 1.
- Gary, R.H., Hunt, B.B., and Cockrell, L.P., 2019, Estimating the Number of Trinity Aquifer Exempt Wells in a Recently Annexed Groundwater Conservation District Territory: Geological Society of America Abstracts with Programs, Vol. 51, No. 5.
- Zappitello, S.J., Johns, D.A., and Hunt, B.B., 2019, Summary of Groundwater Tracing in the Barton Springs Edwards Aquifer from 1996 to 2017: City of Austin, Watershed Protection, DR-19-04.
- Hunt, B.B., Smith, B.A., and Hauwert, N.M., 2019, Barton Springs segment of the Edwards (Balcones Fault Zone) Aquifer, central Texas, in Sharp, J.M., Jr., Green, R.T., and Schindel, G.M., eds., The Edwards Aquifer: The Past, Present, and Future of a Vital Water Resource: Geological Society of America Memoir 215, p. 75-100, <https://pubs.geoscienceworld.org/books/book/2156/The-Edwards-Aquifer-The-Past-Present-and-Future-of>
- Gary, M.O., Hunt, B.B., Smith, B.A., Watson, J.A., and Wierman, D.A., 2019, Evaluation for the Development of a Jacob's Well Groundwater Management Zone Hays County, Texas. Technical Report prepared for the Hays Trinity Groundwater Conservation District, Hays County, Texas. Meadows Center for Water and the Environment, Texas State University at San Marcos, TX. Report: 2019-05. July 2019. 58 p. https://bseacd.org/uploads/JW-Mgmt-Zone-Report_7.30.19.pdf
- Smith, B.A., and Hunt, B.B., 2019, Multilevel monitoring of the Edwards and Trinity Aquifers, in Sharp, J.M., Jr., Green, R.T., and Schindel, G.M., eds., The Edwards Aquifer: The Past, Present, and Future of a Vital Water Resource: Geological Society of America Memoir 215, p. 293-298, <https://pubs.geoscienceworld.org/books/book/2156/The-Edwards-Aquifer-The-Past-Present-and-Future-of>
- Hunt, Brian B., Brian A. Smith, Robin Gary, and Justin Camp, 2019, March 2018 Potentiometric Map of the Middle Trinity Aquifer, Central Texas. BSEACD Report of Investigations 2019-0109. 28 p. https://bseacd.org/uploads/BSEACD_RI_2019-0109_PotMap_FINAL.pdf
- Smith, B.A., B.B. Hunt, D.A. Wierman, and M.O. Gary, 2018, Groundwater Flow Systems of Multiple Karst Aquifers of Central Texas. In I.D. Sasowsky, M.J. Byle, and L. Land (Eds). Proceedings of the 15th Multidisciplinary Conference on Sinkholes and the Engineering and Environmental Impacts of Karst and the 3rd Appalachian Karst Symposium, National Cave and Karst Research Institute (NCKRI) Symposium 6, p 17-29. <https://bseacd.org/uploads/Smith-et-al.-2018-GW-Flow-Systems-in-Multiple-Karst-Aquifers-Sinkhole-Conference.pdf>
- Smith B.A., Hunt B.B., 2018, Recharge and Water-Quality Controls for a Karst Aquifer in Central Texas. In: White W., Herman J., Herman E., Rutigliano M. (eds) Karst Groundwater Contamination and Public Health. Advances in Karst Science. Springer. https://link.springer.com/chapter/10.1007/978-3-319-51070-5_35
- Cockrell, L., B.B. Hunt, R. Gary., B.A. Smith, 2018, Regional Geologic Geodatabase Project, Central Texas. Barton Springs Edwards Aquifer Conservation District. Data Series Report 2018-1211. December 2018. 14 p. https://bseacd.org/uploads/Cockrell-et-al.-2018_Geology_Geodatabase.pdf
- Wierman, D.A., B.B. Hunt, 2018, Groundwater Level Monitoring Results for HTGCD Transducer Wells and Wimberley Valley Public Water Supply Wells, Hays County, TX. Meadows Center for

Water and the Environment, Texas State University at San Marcos, TX.
https://bseacd.org/uploads/Wierman-and-Hunt-2018-TSU-Water-Levels_revised.pdf

- Hunt, B.B., B.A. Smith, and J. Camp, 2018, Is the BSEACD's Drought Trigger Methodology Representative of the Middle Trinity Aquifer?. BSEACD Technical Memo 2018-0829. August 2018. 12 p. https://bseacd.org/uploads/BSEACD_Tech-Note-2018-0829_DTM-MiddleTrinity.pdf
- Hunt, B.B., B.A. Smith, and J. Camp, 2018, Dye Trace at Raccoon Cave near Jacob's Well Spring, Hays County, Texas. BSEACD Technical Memo 2018-0831. August 2018. https://bseacd.org/uploads/BSEACD_techmemo_2018_0831_JWS_dyetrace.pdf
- Watson, J., A.S. Broun, B.B. Hunt, B.A. Smith, D.A. Johns, J. Camp, and D.A. Wierman, 2018, Summary of Findings: Upper Onion Creek Dye Trace, Hays County, Texas, Winter 2017. Interagency Memo. May 18, 2018. 19 p. http://bseacd.org/uploads/Upper-Onion-trace-memo_05182018.pdf
- Watson, J.A., A.S. Broun, B. B. Hunt and D.A. Wierman, 2018, Geologic Mapping of the Upper Glen Rose Unit 3 (Lower Cretaceous) in the Onion Creek Basin, Western Hays County, Texas: Implications for Recharge to the Trinity Aquifer. GCAGS Journal, v. 7 (2018), p. 107–120. https://bseacd.org/uploads/Watson_et_al2018.GCAGS_Journal.v7.07.p107-120.pdf
- Hunt, B.S. Smith, B.A., Gary, M.O., Watson, J., Broun, A., Wierman, D.A., and Fieseler, R., 2018, Technical Review and Comments: Conceptual Model Update for the Hill Country Portion of the Trinity Aquifer. Letter dated August 31, 2018. 22 p. (comments at end of the GAM report in link below)
http://www.twdb.texas.gov/groundwater/models/gam/trnt_h/ConceptualModelReport.pdf?d=4146.70000001147

15.0 Proposed Activities for Next Year

Activities proposed to take place next year generally relate to a continuation of those organizational activities necessary for the District meet its ongoing obligations as a GCD and its current commitments, as well as its planned direct and indirect groundwater management initiatives. In prospect, some of these include:

- Continuation of Joint Planning Efforts in the GMAs to adopt DFCs
- Continuation of model development to support evaluations of the Trinity Aquifer
- Continuation of Trinity Sustainable Yield Study
- Completion of database project
- Utilization of contractual support associated with various technical and professional services, including:
 - technical services to support prospective special projects including ASR pilot projects, continued aquifer characterization, new monitor well installation, and HCP-related projects;
 - technical and consulting services to support prospective implementation of the HCP including initial annual reporting and mitigation measures; and
 - technical and consulting services relating to rulemaking efforts.

Even if certain ones of these are not directly or indirectly related to the HCP, they will affect the financial resources that will be available to conduct special projects. However, none of these prospective activities will impede the implementation of work to comply with the HCP.

16.0 Recommendations for Improvement

The District has not identified any changes needed to improve implementation of the HCP or compliance with the ITP provisions at this time.

The Validation Monitoring Program (specified in HCP Section 6.3.1 and included in this Annual Report in Appendix A) anticipates eventual improved take estimate protocol for future use, based on then-new information and/or analyses concerning gaged springflows, water chemistry, and salamander counts. These characteristics form the basis for the take estimate methodology. In the current reporting period, the District has not identified any new information or analysis that would indicate the need for modification of the basis of the take estimate methodology.

17.0 Other Appropriate Information Documenting Compliance with the Permit

None required.

Appendix A - Description of District's Validation Monitoring Protocol

Appendix B - Interlocal Agreement between the District and City of Austin

Appendix C - Assessment of Progress in FY2022 Toward Plan Goals and Objectives (Appendix B of Management Plan Annual Report FY 2022)

Appendix D - Meeting Minutes (1/30/2023 or 2/1/23) of Management Advisory Committee

Item 6

Director's Reports

Directors' Reports.

Directors may report on their involvement in activities and dialogue that are of likely interest to the Board, in one or more of the following topical areas:

- **Meetings and conferences attended or that will be attended;**
- **Committee formation and updates;**
- **Conversations with public officials, permittees, stakeholders, and other constituents;**
- **Commendations; and**
- **Issues or problems of concern.**

Item 7

Adjournment