



**Barton Springs
Edwards Aquifer**
CONSERVATION DISTRICT

**ANNUAL REPORT
FISCAL YEAR 2022**

(Board-approved on December 8, 2022)

BOARD OF DIRECTORS (August 31, 2022)

Blayne Stansberry, President	Precinct 2	November 2014 - November 2026
Craig Smith, Vice President	Precinct 5	May 1998 - November 2022
Lily Lucas, Director	Precinct 3	December 2021 - November 2024
Dan Pickens, Director	Precinct 1	November 2020 - November 2024
Christy Williams, Secretary	Precinct 4	November 2020 - November 2024

DISTRICT STAFF

August 31, 2022

General Management Team

Timothy Loftus, Ph.D.

General Manager

Administration Team

Dana Wilson

Senior Administrative Manager/Team Leader

Tammy Raymond

Senior Administrative Coordinator

Aquifer Science Team

Brian Smith, Ph.D., P.G.

Principal Hydrogeologist/Team Leader

Jeff Watson, P.G.

Hydrogeologist

Justin Camp

Hydrogeologist Technician

Communications and Outreach Team

David Marino

Communications and Outreach Manager

Regulatory Compliance Team

Erin Swanson

Regulatory Compliance Manager/Team Leader

Kendall Bell-Enders

Senior Policy and Project Manager

Alyssa Gilbert

Regulatory Compliance Specialist

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1.0 BACKGROUND

The Barton Springs/Edwards Aquifer Conservation District (District) Bylaws require the District Board President or the District General Manager to report on the status of the District and its programs annually to the Board and to the Texas Commission on Environmental Quality (TCEQ). This document is the Annual Report for Fiscal Year 2022, covering the period from September 1, 2021 to August 31, 2022.

According to District Bylaw 4-6, this report shall include:

- The status of the aquifer and the District's programs,
- A financial report to include the report of the annual audit and the security of any District investments,
- A review and evaluation of professional services rendered to the District,
- A status report of any capital projects of the District, and
- The evaluation of the District's long-range plans pursuant to §36.107 (now §36.1071) of the Texas Water Code (TWC).

This introductory section provides an overview of the District, and summarizes the mission and vision of the District and its Board-established critical success factors. Other major report sections that follow include a summary of the active programs in FY 2022; a recap of other specific information required by statute, including an assessment of performance in terms of objectives and performance standards identified in the prevailing Management Plan (MP); and a financial summary. The annual audit report conducted by an independent audit firm is included in its entirety as Appendix A. The Board's assessment of progress toward the MP's objectives by performance standards and the basis for that assessment are included as Appendix B.

1.1 General Information About the District

The District was created in 1987 by the 70th Texas Legislature, under Senate Bill 988. Its statutory authorities include Chapter 52 (later revised to Chapter 36) of the TWC, applicable to all groundwater conservation districts (GCDs) in the state, and the District's enabling legislation, now codified as Chapter 8802, Special District Local Laws Code (SDLLC). 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 the management of groundwater resources. The District is not a taxing authority. Its only sources of income are groundwater production fees, including a water use fee supplement paid by the City of Austin (CoA); administrative processing fees; and occasional grants from various local, state, and federal programs for special projects.

Upon creation in 1987, the District's jurisdictional area encompassed approximately 255 square miles and 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 (WSC), Goforth Special Utility District (SUD), 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 (see Figure 1). The newly annexed area designated as "Shared Territory," excludes the Edwards Aquifer and includes all other aquifers, including the underlying Trinity. The District serves southern Travis County, central and eastern Hays County, and portions of northwestern Caldwell County. The District's jurisdictional area including the Shared Territory encompasses approximately 420 square miles and includes both urban and rural areas.

Water from the Barton Springs segment of the Edwards Aquifer serves as the primary water source for public water supply, industrial, and commercial purposes in the District, and is a major source of high-quality base flow to the Colorado River via discharge through the Barton Springs complex. The Barton Springs complex provides the only known habitat for the listed endangered Barton Springs and Austin blind salamanders under the federal Endangered Species Act (ESA), 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 as an alternative water supply to the oversubscribed Edwards Aquifer in both the Exclusive and Shared Territories. 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.

A five-member Board of Directors (Board) governs the District. The Directors are elected in even-numbered years to staggered four-year terms from the five single-member precincts that comprise the District. As a result of legislation in 2011 and subsequent Board action in late FY 2011, director elections were moved from the May local elections date to the November general elections date.

There was a vacant position on the Board of Directors due to a resignation from the director in Precinct 3. Lily Lucas was appointed by the Board to fill that vacancy in December 2021.

Three director precincts (precincts 2, 3, and 5) were up for a possible election during FY 2022 for the November 8, 2022 election (FY 2023). Two directors were unopposed, and the third resigned and a new director took his place with no opposition. Since there was no opposition for any of the three directors, the election was cancelled.

In accordance with District Bylaws, the Board elects its officers for one-year terms in December of each year. At the time of this report, this has not yet taken place. The elected officers in December 2021 were Blayne Stansberry, President; Craig Smith, Vice President; and Christy Williams, Secretary. As a local political subdivision of the State of Texas, all meetings of the Board are conducted in accordance with the Open Meetings Act, and the District's business is subject to the Texas Public Information Act.

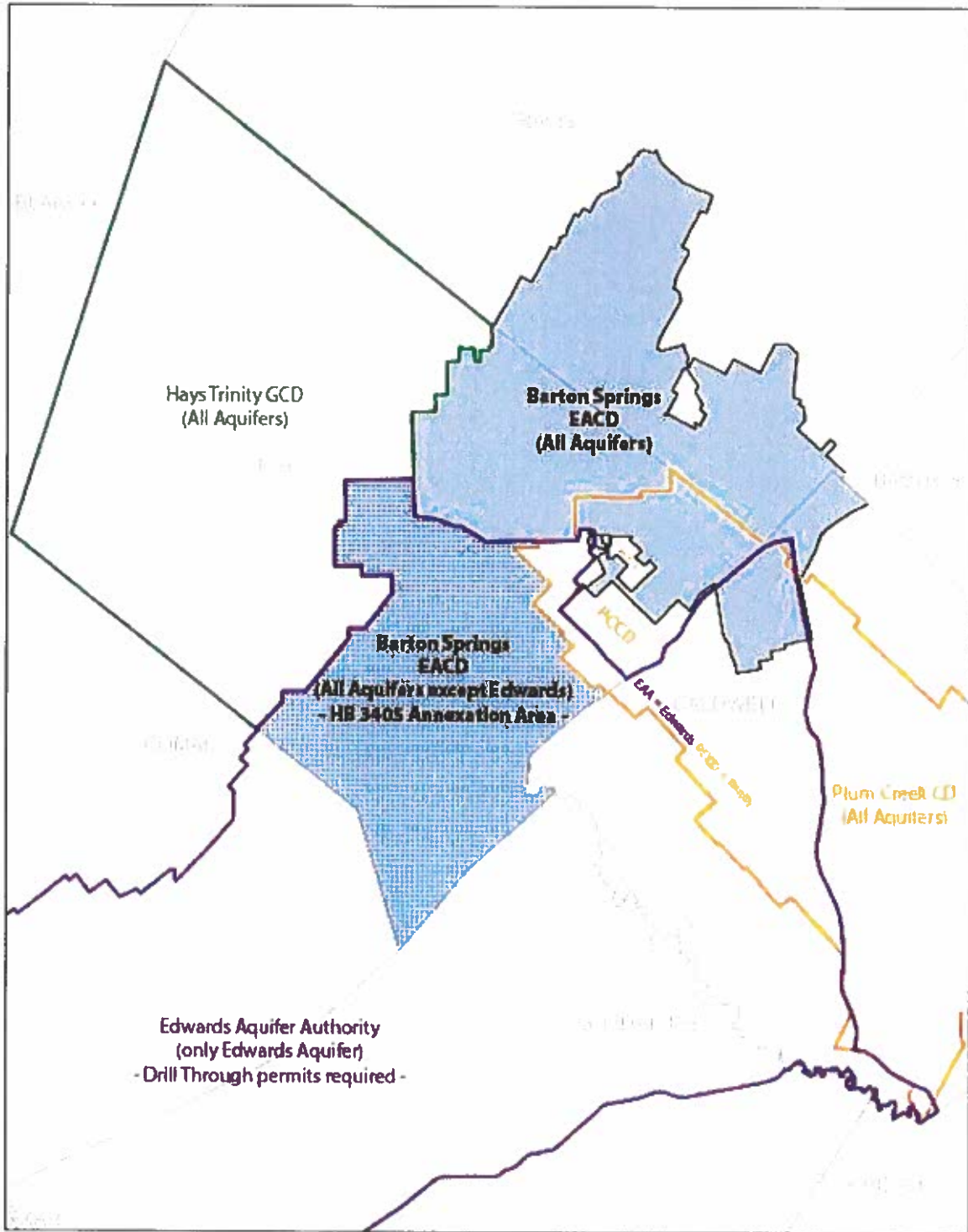


Figure 1 - The District's territory including the expanded Shared Territory and the adjacent Groundwater Conservation Districts and their respective jurisdiction over aquifers.

1.2 District Mission and Vision Statements

The District Board has assessed and articulated not only the mission of the District but also its vision and overarching strategic purpose.

The mission of the District is largely mandated by and adapted from its enabling legislation and statutes:

“The Barton Springs/Edwards Aquifer Conservation District, as the responsible public agency and authority, is committed to conserving, protecting, recharging, and preventing waste of groundwater and to preserving all aquifers within the District.”

The vision of the District provides a succinct statement of the ultimate, continuing goal of the District, describing the standard by which it will execute its mission:

“The Barton Springs/Edwards Aquifer Conservation District will excel in its operations and administration so that it is considered the model and standard for other groundwater districts.”

The overarching strategic purpose articulates more action-oriented direction consistent with the mission and vision:

“We will manage the District aquifers to optimize the sustainable uses of groundwater in satisfying community interests.”

1.3 District Critical Success Factors

The District has established a set of continuing “critical success factors” that flow from and are generally consistent with the goals and objectives of the MP. These critical success factors include:

- Providing sound science to support and form the basis of policy and tactical decisions made by the District that affect water supply users and endangered species habitats;
- Being highly efficient, accurate, and fair in administering staff activities related to all District programs;
- Developing and instituting an equitable and consistently administered regulatory program that is required to serve our mission;
- Becoming a respected and effective part of the state and local political landscape for water resource management and its stakeholder communities;
- Serving our permittees, stakeholders, and the public at large as a readily accessible source of first resort for reliable information about local water, groundwater, aquifer science, water use and conservation; and
- Providing the programmatic and resource basis for innovative, cost-effective solutions to augment the sustainable quantity of water in the District and to protect the quality of District waters required for various existing uses.

2.0 DISTRICT PROGRAM AREAS AND TEAM HIGHLIGHTS FOR FY 2021

The District continues to successfully use a team-oriented organizational structure in which all staff members are assigned to a primary team but also support other teams as needs arise. Each staff member works under the direct supervision and directly reports to their respective team leaders who are responsible for executing team-specific responsibilities and duties. Each team leader works under the supervision of and directly reports to the General Manager (GM). All staff members ultimately report to the GM for administrative supervisory purposes.

This section of the report summarizes the operational teams that existed throughout FY 2022, and provides some highlights and notable achievements for each. Appendix B contains more information and details on the work undertaken by these teams in support of the various goals, objectives, and performance standards identified in the applicable 2017 District MP.

2.1 General Management Team

Vanessa Escobar resigned as the District's GM on September 3, 2021. The GM position remained vacant until filled on January 24, 2022 by Dr. Timothy T. Loftus. The GM also serves as the District's Chief Operating Officer and is responsible for the day-to-day business of the District. In addition to managing a staff of nine people, the GM is an *ex-officio* member of all the other teams. The key areas of functional responsibilities for the GM include ensuring staff performance and development, programmatic planning and execution, stakeholder relationship development and cultivation, and financial administration of the District. The GM:

- Ensures that the policies and direction of the Board are implemented effectively, appropriately, and efficiently;
- Provides leadership both inside and outside the District organization in accomplishing the mission, vision, and goals of the District; and
- Serves as an advocate for the staff with the Board, and an advocate for the Board with the staff.

In FY 2022, some highlights for the office of the GM:

- **Covid 19** – In February 2022, the GM began to update a near-two-year-old Office Health Protocol and Guidance policy for staff. A new policy was issued March 14, 2022 that addressed all relevant areas of office operations. The updated policy gave rise to a need to update the Telecommuting policy. A new Telecommuting policy was included among other changes to the Employee Policy Manual that became effective on April 14, 2022. These policies have worked well as staff has readily accepted and adapted to them.
- **Cybersecurity Policy** – HB 3834 passed amending the Government Code to require the establishment of state verified cybersecurity training programs. The District established internal policy guidance on the requirements for board and staff cybersecurity training. Each year the District must verify and report the employee completion of the training, and periodically audit to ensure compliance. The Administration Team keeps certification records and receipt of submission to the Texas Department of Information Resources (DIR). In the spring of 2022, board and staff completed the training. The training certificates are maintained by the Administration Team.
- **Legislative Session** – During FY 2022, the Texas Legislature was not in session. The GM and Board President strategized with SledgeLaw Group on matters that could be addressed in the 88th Legislative Session that would convene during FY 2023.

- **Regional and Joint Planning** – The Regulatory Compliance Team Leader attended as the District Representative to Groundwater Management Area (GMA) 10 and continued in his role as the chairman of GMA 10, including related interactions with the Texas Water Development Board (TWDB). This year, discussions at meetings included desired future conditions (DFCs) monitoring activities, and discussions on adopting and approving GMA 10’s 2022 DFCs. The Regulatory Compliance Team Leader actively participated in regional water planning group activities and meetings which included presentations and discussions on the water management strategies, updates to non-Modeled Available Groundwater availability, and finalizing the 2022 water plans. The GM became involved in the Joint Planning process during the summer of 2022 and attended one meeting in August.
- **Redistricting** - The District revised Director Precincts in accordance with state and federal law. A public hearing was held at the March 10, 2022 Board of Directors meeting and the revised Director precinct boundaries were adopted.
- **Trinity Sustainable Yield Study and Planning** - In FY 2022, it became apparent that the in-house modeling effort needed to reach a first phase end point in order to inform the sustainable yield planning process. The Aquifer Science team presented their preliminary results at the June 9, 2022 Board meeting. Any stakeholder process would have to follow the final results of this first phase modeling effort. It was expected that the Aquifer Science team would return to the Board with first-phase-final results in the fall.
- **Litigation** – The District was not involved in any litigation matters during FY 2022.

2.1.1 Board and Staff Training, and Open Meetings Act:

There were no Open Meetings Act violations in FY 2022.

A summary of training for board and staff included: Cybersecurity Training, 2021 National Habitat Conservation Plan Coalition Annual Meeting – October 2021, GeoGulf Annual Conference – October 2021, Hydrogeo Workshop, NWGA Groundwater Summit – November 2021, National Cave and Karst Management Symposium – November 2021, Texas Water Resource Network (UT Environmental Sciences Institute) – December 2021, GMDA Conference – Jan. 2022, TAGD Boot Camp/Business Meeting – February 2022, TCEQ Information Meeting – March 2022, TAGD Business Meeting – April 2022, TELEA Training – April 2022, HydroGeo Workshop – Dye Tracing Presentation – April 2022, EAA Research Center/Education and Outreach Center Visit – May 2022, UT Jackson School of Geosciences Hydrogeological Field Trip – May 2022, PYTHON Groundwater Modelers Webinar – June 2022, Barton Springs Workshop – August 2022, TAGD Annual Summit/Conference – August 2022, Region K Meetings 2021/2022, AIPG Edwards Aquifer Workshop – August 2022.

2.2 Administration Team

Ms. Dana Wilson, Senior Administrative Manager, and the Administrative Team Leader, and Ms. Tammy Raymond, Senior Administrative Coordinator, are the team members for administrative programs support.

The Administration team is responsible for banking, accounting, timekeeping and payroll administration, records retention and management, facilities and vehicle fleet management, personnel and human resources administration, contracts administration, director compensation and reimbursement administration, and state/federal grant administration.

In FY 2022, some highlights for the Administration Team included:

- Board and staff maintained their financial resources in a manner that maximizes liquidity while maintaining the greatest return on District fund balances by investing in securities or investment pools that operate in low risk investments and are backed by the state and/or federal government.
- Contracted for and participated in the independent annual financial audit, including the provision of all financial records, and preparation of the Management Discussion and Analysis. Year-end reports are submitted to the TCEQ and the State Pension Review Board, as required by law.
- Maintained District financial records to receive a clean financial audit in December 2022 (Appendix A).
- Developed and monitored the District annual budgets. In FY 2022, there were two versions. The initial budget was brought before the Board in a public hearing held on July 8, 2021 where it was approved. The Board approved a budget revision on October 14, 2021.
- Administrative staff is responsible for proper maintenance, management, retention, and disposition of all District records; inventory of District property (asset management); and capital depreciation. Administration preserved and protected all public documents in accordance with state and federal laws, the adopted District Records Retention Schedule, and with the Texas State Library regulations; and maintained the District's reference material library.
- Assisted the District's information technology (IT) consultant in making improvements to the IT infrastructure to standardize productivity tools and improved security, and resolving various staff IT issues.
- Continued monthly District transparency efforts, specifically in the area of finance (on the District's website Transparency tab), since achieving a Financial Transparency Star Award from the Texas Comptroller's office in FY 2017.

2.3 Aquifer Science Team

Dr. Brian Smith, P.G., Principal Hydrogeologist, serves as the leader of the Aquifer Science Team which is involved in various internally- and externally-funded groundwater research and assessment programs. The team is supported by Jeff Watson, P.G., Staff Hydrogeologist; Justin Camp, Hydrogeologic Technician; and from time-to-time other staff members, including interns.

To protect and manage the groundwater resources of the District's aquifers, the District continued an active research program that is designed to better understand the hydrogeology and hydrodynamics of aquifers in the District, and to advise the Board on policy-related decisions.

In FY 2022, the Aquifer Science Team worked on many projects, developed new technical reports and memos, presented technical talks, published technical papers, and attended technical conferences including:

- Brian Smith and Jeff Watson attended the Texas Alliance of Groundwater Districts (TAGD) Groundwater Summit (August 30-September 1, 2022).
- Brian Smith and Jeff Watson virtually attended a technical stakeholder meeting covering the kickoff of component B of the Blanco River Aquifer Assessment Tool (BRAAT) model development process (August 22, 2022).
- Brian Smith attended the National Cave and Karst Management Symposium in San Marcos from November 1 through November 5, 2021.
- Jeff Watson and Brian Smith attended several virtual training sessions with GSI on groundwater modeling.

Presented technical information and studies to the public and students:

- Brian Smith served on a panel to discuss aquifer storage and recovery (ASR) at the TAGD Summit in San Antonio (September 2, 2021).
- Jeff Watson gave a presentation to the Hays County Master Naturalists at Jacob's Well Spring Natural Area on the Hydrogeology of the Trinity Aquifer and Associated Springs (August 28, 2021).
- Jeff Watson and Justin Camp demonstrated stream gauging at the 7th Annual Texas Hydro-Geo Workshop (April 1-3, 2022).
- Brian Smith gave a presentation on Dye Tracer Testing in Karst at the 7th Annual Texas Hydro-Geo Workshop (April 1-3, 2022).
- Aquifer Science staff led a field trip to Borheim/Stoneledge Quarry and Antioch cave for TWDB and Austin Water employees (May 7, 2021).
- Brian Smith gave a presentation and guided a field trip to Barton Springs for the Texas Chapter of the American Institute for Professional Geologists (August 5, 2022).
- Aquifer Science staff led a field trip to Antioch Cave for the Austin Chapter of the American Water Works Association (October 29, 2021).
- Jeff Watson gave a presentation on central Texas hydrogeology to the Travis County Audubon Society (April 10, 2022).
- Brian Smith participated in a field trip to the Jacob's Well area for the UT-Austin Hydro Field Camp (May 31, 2022).
- Justin Camp and Jeff Watson gave a presentation on Trinity Aquifer hydrogeology at a community meeting in Rolling Oaks (August 6, 2022).

In FY 2022, other highlights for the Aquifer Science Team included:

- Maintained a monitor well network of about 44 wells with instruments that collect hourly data. The District's HOBO weather station at the District office also collects hourly data and reports to an online dashboard accessible on the District website.
- The District routinely measures water levels in the seven multiport monitor wells that are completed in the Edwards and Trinity Aquifers.
- Determined and documented drought status, including keeping the District's drought monitor blog up to date.
- Worked cooperatively with the City of Buda for test design and data collection during their aquifer storage and recovery (ASR) pilot project testing.
- Maintained the Antioch Cave Recharge Enhancement Project as required by the District's Management Plan and HCP permit. Staff entered and surveyed the cave on November 9, 2022 to evaluate conditions and quantify sediment accumulation in the cave passage.
- Implemented an annual sampling program in cooperation with Magellan Pipeline Company related to the operation of the Longhorn Pipeline that transports crude oil through the District. In May 2022, staff sampled about eight springs and well sites for hydrocarbon contaminants as a screening test for BTEX and TPH.
- Staff worked cooperatively with Hays County and Wimberley Valley Watershed Association to drill and install two new dedicated monitoring wells in the vicinity of Jacob's Well and wrote a report summarizing data collection efforts and preliminary findings from drilling operations.
- Collected water-quality data (major ions and isotopes) from about 13 sample locations in FY 2022 in cooperation with the TWDB.
- Held the annual meeting between CoA and District staff to discuss the status of their respective Habitat Conservation Plan (HCP) projects (December 6, 2021).
- District staff hosted the annual HCP Management Advisory Committee (MAC) meeting on to discuss the accomplishments of the District's HCP projects (January 6, 2022).
- Collected water-quality data (major ions) from the City of Austin Nature and Science Center well during above average flow conditions at Barton Springs for the HCP (Interlocal Agreement (ILA) (February 8, 2022).

Published Papers and District Documents:

- 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.

2.4 Communications and Outreach Team

Mr. David Marino serves as the Communications and Outreach Manager and is the sole team member of the Communications and Outreach Team. Under the Communications and Outreach Team, increased communication with the public is the main priority, with the goal of educating a broader audience on the roles and responsibilities of the District. Because GCDs are complex in nature, ranging from regulatory responsibilities, aquifer science, alternative water supplies, well components, and various other projects, breaking down this information in a clear, consumable manner for the public serves both as an opportunity and a challenge.

Job Postings/Hiring Committees

The Communications and Outreach Team has taken over job posting responsibilities. Job postings are shared on various job boards/social media channels including: District Social Media Channels (YouTube, LinkedIn, Facebook, Instagram, Twitter), the District Website, Indeed, TAGD, Texas Municipal League (TML), Workforce Solutions Rural Capital Area, Save Barton Creek Association (SBCA), Texas Water Foundation, Water Environment Association of Texas, and The Meadow Center for Water and the Environment.

General Manager Hiring Committee: The Communications and Outreach Team led the GM hiring Committee. The GM posting went up on August 13, 2021, and closed on October 22, 2021. Ms. Vanessa Escobar, the former GM, accepted a position with another organization in September 2021. The GM Hiring Committee was comprised of Craig Smith, Dan Pickens, David Marino, Michael Redman, and Brian Smith. Communications and Outreach collected all the resumes for this position. The hiring committee narrowed down five top candidates for the first round of interviews. Board and staff members on the hiring committee did separate zoom interviews with the top five candidates for the first round of interviews. The interviews wrapped up on October 28, 2021. A score card system was created by the Communications and Outreach Team, with the assistance of the hiring committee. The committee then narrowed down the top two candidates by using the score card system. Collectively, the hiring committee narrowed down the top two candidates based on several factors, including:

- Board Management Experience
- Management/Administrative Experience
- Groundwater Policy Knowledge
- Strategic Planning Experience
- Leadership Experience
- Communication Skills
- Budget Management
- Technical Background

At a Special Called Board of Directors Meeting on December 2, 2021, the top two candidates were required to present a Power Point presentation for the board in executive session. During the board meeting on January 13, 2022, Tim Loftus was announced as the District's new GM.

Regulatory Compliance Specialist Hiring Committee: The Communications and Outreach Team posted the Regulatory Compliance Specialist vacancy in June 2022. Communications and Outreach collected all resumes for this position and coordinated interviews with Regulatory Compliance Manager Erin Swanson. Communication and Outreach Manager David Marino served on the Regulatory Compliance Specialist Hiring Committee with Erin Swanson and GM Tim Loftus. All interviews were conducted in July and the committee narrowed it down to two candidates. Alyssa Gilbert was offered the position. She accepted and started in August 2022.

Social Media

The Communications and Outreach Team continued to build engagement across the District’s social media channels in FY 2022. The District’s audience has grown across all social media platforms. The table below shows the growth from September 2021 to August 2022.

Social Media Channels FY 2022	August 2022	September 2021
Twitter Followers https://twitter.com/BSEACD	768 Likes	698 Likes
Facebook Likes/Followers https://www.facebook.com/BSEACD	1,555 Followers	961 Followers
Instagram https://www.instagram.com/bseacd/	104 Followers	10 Followers
YouTube https://www.youtube.com/channel/UCqiQIZ7y708Ar0yPB2Yd4Cg	20 Subscribers	16 Subscribers



In August 2022, the District created a Nextdoor channel. Nextdoor allows us to reach out individual neighborhoods within our District. This provides another tool for the District to use for its communication outreach efforts. In a short time, the District’s Nextdoor channel has reached thousands of people. We will continue to utilize this important communication tool in FY 2023.

Social Media Posts:

Communications and Outreach Team shares videos, educational information, scholarship information, drought-related news, and other groundwater-related topics on the District’s various social media channels. The reports below reflect the posts shared each month from September 2021 to August 2022.

- September 2021 <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-September-2021.pdf>
- October 2021 <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-October-2021.pdf>
- November 2021 <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-November-2021.pdf>
- December 2021 <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-December-2021.pdf>
- January 2022 <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-January-2022.pdf>
- February 2022 <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-February-2022.pdf>
- March 2022 <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-March-2022.pdf>
- April 2022 <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-April-2022.pdf>
- May 2022 <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-May-2022.pdf>
- June 2022 <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-June-2022.pdf>
- July 2022 <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-July-2022.pdf>
- August 2022 <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-August-2022.pdf>

BSEACD Website

The Communications and Outreach Team makes most of the changes to the website. However, for more elaborate changes the team works with our contracted website manager, Brian Zavala. Communications and Outreach added the following new pages to the website in FY 2022:

Career Opportunities <https://bseacd.org/careeropportunities/>

Election Information <https://bseacd.org/about-us/election-information/>

Drought Information Resources <https://bseacd.org/regulatory/droughtinformation/>

Request for Qualifications <https://bseacd.org/transparency/rfqs-request-for-qualifications/>

Other changes include a “meetings” tab at the top of the home page, and larger United States Geological Survey (USGS) graphics on the “Drought Status” (<https://bseacd.org/aquifer-science/drought-status/>) page.

The table below shows the total number of page views and unique page views on the District website for FY 2022. Website views are up from FY 2021.

September 2021 – August 2022	Website Views FY 2022	Website Views FY 2021
Total Page Views	43,710	39,335
Unique Page Views (people who have never visited our site)	37,903	32,123

The District’s homepage, publications/maps, and education/scholarships pages typically have the highest views each month.

The Aquifer Zone Newsletter



The Aquifer Zone Newsletter is released quarterly. The newsletter has continued to evolve with additional videos and a message from the GM.

Communications and Outreach sends the newsletter to subscribers and shares all the District’s communication channels, including the website and social media. The table below is a snapshot of the number of people the newsletter was sent to, along with the percentage of opens and clicks.

Aquifer Zone Newsletter	Sent to	Opens	Clicks
Fall 2021 Edition https://bit.ly/3WGzHAI	2.5K	26.0%	12.7%
Winter 2022 Edition https://bit.ly/3qYrn17	2.4K	28.5%	9.1%
Spring 2022 Edition https://bit.ly/3OfkCBT	2.4K	15.5%	14.3%
Summer 2022 Edition https://bit.ly/3om196u	2.3K	27.6%	10.2%

Press Releases

During FY 2022, the District put out about a dozen press releases. These are sent to the media, shared with subscribers through eNews, posted on the District's website, and shared on the District's social media channels.

Community Meeting on Drought-Related Topics – July 15, 2022

<https://bseacd.org/uploads/Community-Meeting-On-Drought-Related-Topics.pdf>

BSEACD Awards Kent S. Butler Memorial Groundwater Stewardships Scholarships – June 10, 2022

<https://bseacd.org/uploads/BSEACD-Awards-Kent-S.-Butler-Memorial-Groundwater-Stewardship->

Aquifer District Declares Stage II Alarm Drought – June 9, 2022

<https://bseacd.org/uploads/Aquifer-District-Declares-Stage-II-Alarm-Drought.pdf>

BSEACD Awards Aquatic Science Adventure Camp Scholarships – April 18, 2022

<https://bseacd.org/uploads/BSEACD-Awards-Aquatic-Science-Adventure-Camp-Scholarships-.pdf>

Board of Directors Adopts New Director Precinct Boundaries – March 16, 2022

<https://bseacd.org/uploads/District-Board-of-Directors-Adopts-New-Director-Precinct-Boundaries.pdf>

2022 Water Well Checkup – Feb. 9, 2022

<https://bseacd.org/uploads/2022-Well-Water-Checkup.pdf>

BSEACD Board of Directors names Tim Loftus General Manager – Jan. 20, 2022

<https://bseacd.org/uploads/BSEACD-Board-of-Directors-Names-Tim-Loftus-General-Manager.pdf>

2022 Aquatic Science Adventure Camp Application and Rules – Dec. 29, 2021

<https://bseacd.org/uploads/Aquatic-Science-Adventure-Camp-Application-Form-with-Texas-State-Flyer-FINAL.pdf>

BSEACD Board Appoints Interim Director for Precinct 3 – Nov. 22, 2021

<https://bseacd.org/uploads/BSEACD-Board-Appoints-Interim-Director-for-Precinct-3-Unexpired-Term-1->

Drought Outreach

On June 9, 2022, the Board declared Alarm Drought (Stage II). To reach more permittees and a wider audience, Communications and Outreach Team began putting out a monthly drought update. The first report went out on July 20, 2022.

Drought Update – July 20, 2022 - <https://bit.ly/3PHv5pr>

Drought Update – August 25, 2022 - <https://bit.ly/3clxFUV>

Drought Information Website Page: Communications and Outreach launched Drought Information Website page to assist with drought outreach efforts. The page contains the following information:

- District Drought Status
- Rainfall Hydrograph
- Edwards Aquifer Conditions (Barton Springs Segment)
- Trinity Aquifer Conditions
- Austin/San Antonio Drought Monitor
- Frequently Asked Questions
- Helpful Links

Alarm Drought (Stage II) Signage in Permittee Areas:

FM 1626 – 10 signs (Austin)
FM 150 (including Rollingwood Neighborhood) – 7 signs
Wildwood Neighborhood (Austin) – 3 Signs
Hays Hills Baptist Church – 3 signs
PGMS – 7 signs
City of Mountain City – 4 signs
Sunfield Neighborhood in Buda – 4 signs
St. Marks Episcopal Church – 3 signs
Buda/Kyle Church of Christ – 3 signs
Byron Townsend – 3 Signs (Byron covers Cimarron Park, Slaughter Creek Acres, and Village San Leanna)

San Marcos

Ranch Road – 12 signs
Hilliard Area – 10 signs

Media Coverage

The District received substantial media coverage in FY 2022. In particular, the media focused on the District's Stage II Alarm Drought Declaration. All the news stories and their links are included below.

Public Notice: A Drop in the Aquifer

<https://www.austinchronicle.com/news/2022-09-02/public-notice-a-drop-in-the-aquifer/>

Austin loses advocate for the environment and people

<https://www.austinmonitor.com/stories/2022/08/austin-loses-advocate-for-the-environment-and-people/>

Is Stage 3 Critical Drought on the Horizon for Hays County?

<https://haysfreepress.com/2022/08/17/is-a-stage-3-critical-drought-on-the-horizon-for-hays-county/>

Aquifer District declares Stage II Alarm Drought – June 10, 2022 – Hays Free Press

<https://haysfreepress.com/2022/06/10/aquifer-district-declares-stage-ii-alarm-drought-2/>

Potentially Hottest June on Record – June 24, 2022 – Austin American-Statesman

<https://bseacd.org/uploads/Hottest-June-on-Record.pdf>

BSEACD Aquifer District Declares Stage II Alarm Drought – June 17, 2022 – San Marcos Corridor News

<https://smcorridornews.com/bseacd-aquifer-district-declares-stage-ii-alarm-drought/>

Quarry Air Permit Approved, TESPAs Files Suit - May 19, 2022 – Wimberley View

<https://www.wimberleyview.com/news/quarry-air-permit-approved-tespa-files-suit>

TESPA takes action to halt rock crushing plant – May 18, 2022 – Hays Free Press

<https://haysfreepress.com/2022/05/18/tespa-takes-action-to-halt-rock-crushing-plant/>

Experts discuss possibility for drought in Texas this season

<https://www.fox7austin.com/video/1057518>

BSEACD Awards Aquatic Science Adventure Camp Scholarships

<https://haysfreepress.com/2022/04/20/bseacd-awards-aquatic-science-adventure-camp-scholarships/>

Quarry May Be Built On Needmore Ranch – The Wimberley View – March 17, 2022
<https://www.wimberleyview.com/news/quarry-may-be-built-needmore-ranch>

Water Flowing Under Buda Homes for 11 Years – KXAN – February 27, 2022
<https://www.kxan.com/investigations/somebody-messed-up-water-flowing-under-buda-homes-for-11-years/?fbclid=IwAR0ZcSbOzAZHyAP3ETAmMok8RHAXNNigBMs-l-IgnjjG540UgeqVkvVlsa28>

BSEACD Hires New General Manager
<https://www.wimberleyview.com/news/bscacad-hires-new-general-manager>

Dewatering solutions discussed for Buda subdivision – January 17, 2022 – Hays Free Press
<https://haysfreepress.com/2022/01/17/dewatering-solutions-discussed-for-buda-subdivision/>

Report: Future of groundwater pumping in Texas unsustainable – November 22, 2021 – San Antonio Express-News
<https://www.expressnews.com/news/local/article/Texas-groundwater-16642092.php>

Hopes float away as homeowners deal with swampy foundations – November 17, 2021 – Hays Free Press
<https://haysfreepress.com/2021/11/17/hopes-float-away-as-homeowners-deal-with-swampy-foundations/>

BSEACD Appoints Interim Director for Precinct 3 – The Wimberley View – November 18, 2021
<https://www.wimberleyview.com/news/bscacad-appoints-interim-director-precinct-3>

Videos

Communications and Outreach has continued its focus on building the District's video presence. Videos drive engagement on social media and even on websites. Videos are shared on the District's YouTube channel, the District's social media channels, and the website. Communications and Outreach has put together videos on various topics, including drought, dye tracing, and more. Included below are all the videos completed in FY 2022.

District YouTube channel: <https://www.youtube.com/channel/UCqiQIZ7y708Ar0yPB2Yd4Cg>).

Drought Update – August 17, 2022 <https://www.youtube.com/watch?v=WGiQ4-aAIWs&t=5s>

Community Meeting – August 6, 2022 <https://www.youtube.com/watch?v=ybwewZldMYI&t=199s>

Slug Testing Video Explainer <https://www.youtube.com/watch?v=93JRkFneiSg&t=2s>

Perspective on the Current Drought – July 27, 2022 <https://www.youtube.com/watch?v=bTFhaKvB-ns>

Drought Update/Well Monitoring–July 26, 2022 <https://www.youtube.com/watch?v=HpLznZZ7QYE&t=>

The Aquifer Zone Newsletter – July 22, 2022 <https://www.youtube.com/watch?v=d2e3sOjY4oA>

Kent S. Butler Scholarship Winners 2022 <https://www.youtube.com/watch?v=y0hryBJQNb4>

Aquifer District Declares Stage II Drought <https://www.youtube.com/watch?v=wJ5KiCpog2c&t=78s>

Multiport Monitor Well – Water Sample Collection <https://www.youtube.com/watch?v=hhoZBmt2bas>

Monitor Well Installation Part 2 <https://www.youtube.com/watch?v=54xpKKo0ipg&t=107s>

Happy Teacher's Day – May 3, 2022 <https://www.youtube.com/watch?v=Kvp-wOY6pOE>

Administrative Professionals Day – April 27, 2022 <https://www.youtube.com/watch?v=Q8yCIJ8PjZU>

Well Inspection – Regulatory Compliance Team <https://www.youtube.com/watch?v=IU-YoOlq8ZE&t=36s>

Aquatic Science Camp Scholarship Winners <https://www.youtube.com/watch?v=GOf7PzfZzOU&t=64s>

Multiport Monitor Well Installation <https://www.youtube.com/watch?v=yDQw4HI ZahY&t=6s>

Dye Tracing Study <https://www.youtube.com/watch?v=TZ-S7kRT7oM&t=69s>

National Groundwater Awareness Week <https://www.youtube.com/watch?v=28psb6Rvox8>

Well Water Check Up–Sampling Instructions <https://www.youtube.com/watch?v=wpHxfqvAT6o&t=1s>

The Aquifer Zone Newsletter – January 2022 <https://www.youtube.com/watch?v=c8xjNhiQO0fk>

What is Aquifer Testing? <https://www.youtube.com/watch?v=k6-0V2GfMUY&t=1s>

Kent S. Butler Scholarship Groundwater Essay Contest <https://www.youtube.com/watch?v=jNNUjM27VBo>

Martin Luther King Jr. Day <https://www.youtube.com/watch?v=5O2jwrKMZBE>

Drought Update – Jan. 14, 2022 https://www.youtube.com/watch?v=4us_MGXWY3c&t=1s

Jacobs Well – Throwback Thursday <https://www.youtube.com/watch?v=wurjRyWnJp4&t=1s>

Edwards Aquifer Recharge <https://www.youtube.com/watch?v=ZOKphlR-0EY&t=18s>

Edwards Aquifer Signs – Why Should You Care? <https://www.youtube.com/watch?v=NL04fyqGelo>

How to Check the District’s Drought Status <https://www.youtube.com/watch?v=7aU4mBFfKgM>

Do I live in the District? <https://www.youtube.com/watch?v=jQ0XN4AhRgM&t=1s>

Drought Update – Nov. 18, 2021 <https://www.youtube.com/watch?v=ciBfVUoKZJU&t=33s>

Streamflow Measurement: Raw Video https://www.youtube.com/watch?v=i_J3xFOWWTE&t=1s

Science in 60 Seconds: Streamflow Measurement <https://www.youtube.com/watch?v=Qgl6WVSo9kg&t=>

Happy November <https://www.youtube.com/watch?v=SJgaTDloSuU>

Throwback Thursday – What is dye tracing? <https://www.youtube.com/watch?v=zRSfztjWlQo>

The Aquifer Zone Newsletter – Fall 2021 <https://www.youtube.com/watch?v=JrzmzyDyIg8>

Onion Creek at Twin Creeks Road – October 14, 2021 <https://www.youtube.com/watch?v=MLiG0QmuZ-g>

Slaughter Creek at Manchaca – October 14, 2021 <https://www.youtube.com/watch?v=OOmAsA3OFM4>

National Fossil Day – October 13, 2021 <https://www.youtube.com/watch?v=5PKJe9hkECI>

Science in 60 Seconds: Downhole Video Cameras <https://www.youtube.com/watch?v=SELZvhmLhlo>

Trinity Downhole Camera <https://www.youtube.com/watch?v=LNNBMSOs0Jk>

New BSEACD Instagram Channel https://www.youtube.com/watch?v=wGSF_aGBmfg

Collect Rocks Day – September 16, 2021 <https://www.youtube.com/watch?v=xbDimo1buwM>

Science in 60 Seconds: Water Conductivity <https://www.youtube.com/watch?v=ul3iPXVpZ2o>

Aquifer Status Update – September 9, 2021 <https://www.youtube.com/watch?v=nHAMyrU7th4>

Protect Your Groundwater Day – September 7, 2021 <https://www.youtube.com/watch?v=ojqVHSz5cxM&t=54s>

BSEACD Weather Station https://www.youtube.com/watch?v=7y_vlAvWs0s&t=1s

Programming/Events/Collaborations

Protect Your Groundwater Day: September 7, 2021. Communications and Outreach put together a video with Aquifer Science Principal Hydrogeologist, regarding how the District protects groundwater.

MyPoint.TV: MyPoint.TV is a new online news company in Austin that uses public and eyewitness reporting to give everyone the opportunity to publish stories that matter to them. The District has an account and shares videos from time to time on their site. They don't have a huge reach, but this is another tool that gives the District access to a broader audience and allows to educate more than just in the District's jurisdiction on aquifer/water related issues. This is a continued collaboration from FY 2021.

Explorers Guide to the Hill Country Oasis: The District sponsored Save Barton Creek SBCA's Explorers Guide to the Hill Country Oasis. The District budgeted \$1,000 for the sponsorship.

Imagine a Day Without Water: October 21, 2021. Communications and Outreach shared several posts highlighting staff, the District's mission, and other facts around groundwater.

2022 Summer Aquatic Science Adventure Camp Scholarship Essay/Art Contest: The District offered scholarships (overnight and day camp options) to attend the 2022 Edwards Aquifer Research and Data Center's Aquatic Science Adventure Camp at Texas State University (TSU) in San Marcos. The Aquatic Camp returned after being canceled for two years due to Covid. Scholarships were awarded to ten students. Total camp scholarship funding was \$6,360.

2022 Kent S. Butler Memorial Groundwater Stewardship Scholarship Essay Contest: The District conducted its annual Kent. S. Butler Memorial Groundwater Stewardship Scholarship Essay Contest. Three high school scholarship winners were selected. Total scholarship funding was \$4,500.

TAGD Information and Education Committee: Communications and Outreach Manager is part of TAGD's Information and Education Committee. As part of the committee, Communications and Outreach reviewed sections of the communications toolkit that is being worked on. This included reviewing the newsletter guide, advocacy checklist, open meetings guide, introduction to communications channels, and how to use the toolkit. Communications and Outreach also assisted TAGD with creating a media relations cheat sheet. The document serves as a guide for employees in Texas GCDs on how to handle communications for a variety of platforms. It also addresses how to communicate during specific situations.

National Cave and Karst Management Symposium 2021: Communications and Outreach attended in San Marcos from November 1 to November 5. This included setting up a table at the symposium.

Water Well Checkup: The District teamed up with Texas A&M Agrilife Extension and Texas Well Owner Network to provide Water Well Checkups for District well owners. The cost of the water analysis was covered by the District for the first fifty well owners to pick up a water kit. The samples were taken to Luling for analysis. Results were physically mailed and emailed to well owners.

Water Week Owners Educational Event: Communications and Outreach and Regulatory Compliance Team Leader, spoke at this event educating the audience on the District. This took place at Luling Foundation Headquarters in Luling on March 3, 2022.

Buda Trash-Off: The District sponsored the City of Buda's Trash-Off in April 2022. People gathered to pick up trash around Buda for the event. Communications and Outreach set up an informational table at the event.

BUDA ASR Article for Fall 2021 Newsletter: Communications and Outreach worked with City of Buda Water Resources Coordinator on a City of Buda ASR article for the District newsletter. Communications and Outreach also worked with the City of Buda Communications Department.

City of Sunset Valley Public Works Open House: Communications and Outreach was invited to take part in this open house. The District set up an informational table and Communications and Outreach answered resident questions.

Caves, Mud, and Water Event: Communications and Outreach volunteered at the Caves, Mud, and Outreach event at the Wildflower Center on June 30, 2022. This is put on by the Austin Watershed Protection Department, Park Rangers, and Wildland Conservation Division.

UT Jackson School of Geosciences Hydrogeological Field Trip: Students with the UT Jackson School of Geosciences visited Jacob's Well and the District's new multiport monitor well in Wimberley. Communications and Outreach took photos and shared on social media.

TWDB Monitor Well Visit/Video Shoot: The TWDB came out on May 12, 2022, to shoot a video on a second monitor well installation near Jacob's Well. The District collaborated with TWDB on the shoot, and they interviewed Aquifer Science Principal Hydrogeologist. The video was shared on the District's social media channels and in the newsletter.

EAA Research Center/Education and Outreach Center Visit: Staff went on a retreat to the EAA Research Center and visited the new Education Outreach Center. Communications and Outreach took photos and shared information about the visit on the District's social media channels.

Regional Water Quality Planning Group Meeting: Communications and Outreach began coordinating the monthly Regional Water Quality Planning Group Meetings. The meetings take place the last Friday of every month. The group is comprised of stakeholders from various organizations focused on protecting water here in Central Texas.

Community Meeting – Rolling Oaks Neighborhood: The District held a community meeting in the Rolling Oaks Neighborhood on August 6, 2022. The meeting focused on the current drought, along with a question-and-answer session for those in attendance. Director Dan Pickens and staff attended. Communications and Outreach set up an informational table and signed up those in attendance for the District's newsletter/press releases. The meeting was recorded and shared on the District's social media channels and website.

The District has a collaborative relationship with the following organizations and plans to collaborate more with municipalities like the City of Buda, City of Kyle, and City of San Marcos: Austin Youth River Watch, Austin Nature and Science Center, Central Texas Water Efficiency Network (CTWEN), Texas Master Naturalists (Capitol area and Hays County), Capitol Area Council of Governments, Cave Sim Children in Nature Collaborative of Austin, CoA Wildlands, CoA Watershed Protection, CoA Parks and Recreation, City of Sunset Valley, Colorado River Alliance, EAA, Expedition School, Texas State Edwards Aquifer Research and Data Center, Girl Scouts, Greater Edwards Aquifer Alliance, Hays County and Hays County Parks, Hays Trinity Groundwater Conservation District (HTGCD), Hill Country Alliance, Hill Country Conservancy, Jacobs Well Natural Area, Keep Austin Beautiful, Lady Bird Johnson Wildflower Center, Lower Colorado River Authority, Natural Bridge Caverns, Texas State Meadows Center, Travis County, SBCA, Shield Ranch and El Ranchito, Southwest Travis County GCD, Splash! Exhibit, Texas Cave Management Association, Texas Parks, and Wildlife Department (TPWD), Texas River School, TWDB, UT's Bureau of Economic Geology, UT Jackson School of Geosciences, and Westcave Outdoor Discovery Center.

In FY 2022, highlights for the Communications and Outreach Team included:

- Communications and Outreach Manager continues to serve on TAGD's Information and Education Committee. As part of the committee, Communications and Outreach reviewed sections of the communications toolkit that is being worked on.
- Communications and Outreach led the GM Hiring Committee. The team also collaborated with Regulatory Compliance Manager on Regulatory Compliance Specialist search, and served on hiring committee.
- Created District Nextdoor Channel.
- Created four new website pages including Career Opportunities, Election Information, Drought Information Resources, and Request for Qualifications.
- Website views increased in FY 2022 for both visitors and unique visitors.
- Social media followers increased across all District channels in FY 2022.
- Resumed Well Check-Up program for permittees in collaboration with Texas A&M Agrilife Extension and Texas Well Owner Network.
- Drought communication was enhanced with a new website page and monthly drought updates.
- Resumed Aquatic Science Adventure Camp Scholarship Essay/Art Contest with Edwards Aquifer Research and Data Center at Texas State University in San Marcos. Scholarships were awarded to ten students. Scholarship funding totaled \$6,360.
- Awarded three scholarships for the 2022 Kent S. Butler Memorial Groundwater Stewardship Scholarship Essay Contest. Scholarship funding totaled \$4,500.
- Took part in City of Sunset Valley Public Works Open House for the first time.
- Increased the amount of District videos created in FY 2022. Forty-five videos were created, up from thirty-eight in FY 2021.
- Co-Sponsored City of Buda's Annual Trash-Off for the first time.
- Co-Sponsored TAGD's Water Summit Conference.
- Attended TAGD Bootcamp.
- Spoke about the District at Water Week Owners Education Event at Luling Foundation Headquarters.
- Volunteered at Cave, Mud, and Water Event put on by the Austin Watershed Protection Department, Park Rangers, and Wildland Conservation Division.

2.5 Regulatory Compliance Team

The Regulatory Compliance Team consists of two Regulatory Compliance Coordinators and one Regulatory Compliance Specialist who are responsible for a wide range of District responsibilities including drought management, pumpage tracking/compliance assessment, rulemaking, rule and well construction standard interpretation, permitting, enforcement, well inspections, well pluggings, and drilling oversight. Erin Swanson serves as the Regulatory Compliance Manager; with Kendall Bell-Enders, Senior Regulatory Policy Manager; and Alyssa Gilbert, Regulatory Compliance Specialist, completing the team. Regulatory Compliance Team members have also actively attended and participated in community outreach and regional development and planning groups, and served as District liaisons to local municipalities, political subdivisions, permittees, and licensed drillers and pump installers in the area.

In FY 2022, some highlights of the Regulatory Compliance Team included:

- Development Activities Over Recharge & Contributing Zones - The District continues to monitor for proposed Texas Pollutant Discharge Elimination System (TPDES) permits in the contributing and recharge zones of the Barton Springs segment of the Edwards Aquifer. The District continues to track legislation regarding wastewater discharges in the Edwards Aquifer Contributing Zone. In April 2022, staff provided comments to the Texas Sunset Advisory Commission on TCEQ's Wastewater Permitting Program. The District commented that in many cases TCEQ's existing wastewater regulations and effluent standards are inadequate to protect the receiving stream uses and groundwater.
- EP Applications - In July 2017, EP submitted a Production Permit application, a Hydrogeologic Report, and seven Well Modification applications. Staff reviewed the applications and all supporting documents, and requested additional information from the applicant. Through a comprehensive review, the District determined that the proposed production had the potential to cause unreasonable impacts to existing wells. In February 2018, the District provided EP with notice of the GM's Preliminary Finding on the Production Permit application. The applicant was granted a 90-day extension to the application review period to provide additional application requirements and/or options such as a Compliance Monitoring Plan and Mitigation Plan. After extensive review of the additional submitted plans, the District determined the application administratively complete and issued a GM's Statement of Position (draft permit) on May 21, 2018. On June 18, 2018, staff held a public information session on the draft permit for EP at the Wimberley Community Center. During the 20-day comment period, the District received 12 requests for a contested case hearing and 312 comment letters on the application. In July 2018, the Board referred the permit application to State Office of Administrative Hearings (SOAH) to conduct the contested case hearing. A SOAH preliminary hearing was held on September 17, 2018 to determine standing.

The original dates for the hearing on the merits of the application were scheduled for late spring 2019. After an attempted mediation in March 2019, stakeholder discussions, and additional staff research, staff continued to move forward with improvements and revisions to the 2018 draft permit and issued a May 2019 Revised Draft Permit. The hearing on the merits was then rescheduled for September 19-27, 2019.

On September 25, 2019, the Protestants filed a Motion for Summary Disposition that asked the Administrative Law Judges (ALJs) to dismiss EP's application on the basis that (1) the phase-in of production volumes should not be permitted without notice and an opportunity for a hearing, and (2) the application is not supported by reasonable non-speculative demand. EP requested and the ALJs granted a schedule abatement because the properties for which EP seeks a production permit are subject to a condemnation proceeding by the Permian Highway Pipeline (PHP). In August of 2020, EP and Kinder Morgan finalized the terms and conditions for a settlement, and the abatement ended. SOAH issued a new schedule for hearing and EP filed a supplemental prefiled testimony. The hearing on the merits was scheduled for April 2021.

On February 4, 2021, EP filed for a nonsuit, dismissal, and remand in SOAH Docket No. 457-18-4589. This sent EP's application back to the District and canceled the SOAH proceedings. On March 9, 2021, staff returned EP's application back to EP due to the District considering EP's withdrawal from SOAH as a withdrawal of the application. On March 11, 2021, EP declared that the application was not withdrawn and that the application was waiting for a Board hearing.

EP voluntarily dissolved their Domestic Limited Liability Company (LLC) on October 25, 2021; therefore, the production permit application is no longer active. However, staff began working with the current landowners (Bridges and Odell) and the Texas Department of Licensing (TDLR) to finalize well modifications for the seven wells associated with the project.

- DFC Planning – Staff actively collaborated in DFC planning discussions with neighboring GCDs, GMA 9 and GMA 10 representatives, and TWDB staff. District staff served as GMA 10 chair for the majority of FY 2022 (until Michael Redman resigned in June 2022). In that role, he guided the discussions and planning activities for GMA 10 with the primary focus being on development of an explanatory report and adoption of the DFCs. GMA 10 passed and approved a resolution adopting the DFCs in October 2021. In lieu of GMA 10 hiring a consultant, District staff took the lead on coordinating a significant planning effort to review technical reports and to update the content of the explanatory report that was submitted to TWDB in December 2021. GMA 10 began to prepare for the next DFC planning cycle, including drafting an RFQ to hire a consultant for the next round.
- Trinity Sustainable Yield – Due to a transition period between GMs, staff paused the advisory group planning effort with the facilitator (Community Consulting). However, staff continued to research and compile technical and policy concepts related to sustainable yield and unreasonable impacts in an effort to determine what additional data, tools, and information that may be still needed. Staff met multiple times in FY 2022 to discuss concepts related to the Trinity Sustainable Yield Project.
- Habitat Conservation Plan - On December 6, 2021, staff held the annual HCP ILA meeting with the CoA. The District and the CoA agreed to collaborate and coordinate on routine and planned communication and activities including flow/aquifer level measurements and monitoring, and regional issues.

Regulatory Compliance staff assisted in drafting the first U.S. Fish and Wildlife Service (USFWS) HCP Annual Report. Staff also held the third annual Management Advisory Committee (MAC) meeting since the issuance of the HCP on January 26th to provide an overview of the annual report and to solicit feedback. The annual report was submitted to USFWS on February 16, 2022.

- Management Plan - Per statutory requirements, staff and programmatic teams actively worked towards implementing the goals and objectives of the MP. In November 2017, the Board adopted the updated MP, and in January 2018, the TWDB approved the plan that was in effect during FY 2022. Staff began work to update the MP for the next 5-year cycle and submitted an updated draft to the TWDB for a pre-review during the summer of 2022. Following one or more pre-reviews, the next 5-year plan must be approved by the Board in the fall and in the hands of the TWDB for final approval in November 2022.
- Database Development and Upgrade – At the beginning of FY 2022, staff finalized all database workflows and mockups and sent them to Intera in November 2021. Intera reviewed the information and documentation in attempt to assess the amount of time and resources needed to complete the database. The new GM and Intera leadership corresponded over several months on how to proceed. Intera offered to partner with Epic Engineering and Consulting, headquartered in Florida, to help finish the database project. Staff met with Epic and Intera in July 2022 to discuss their proposal. Epic proposed to use their proprietary database application, Simplify i3, and customize it to meet the District's needs per the original scope of work. Their proposal included a relatively high annual hosting and maintenance fee. In August, the GM decided to issue a Request for Qualifications (RFQ) to consider other database developers in the event that the Board may not support the new proposal. LRE Water submitted a Statement of Interest and Qualifications (SOQ) on August 12, 2022.

- External Communication and Coordination - Work groups and projects involving staff participation included:
 - Edwards Aquifer recharge and contributing zone development activity coordination
 - Regular meetings of the Regional Water Quality Protection Plan workgroup
 - TDLR - Well Construction Standards
 - TAGD – Legislative Subcommittees
 - TWCA – Groundwater Subcommittee
 - GMA 10
 - BRATWURST Technical Committee
- Implementation and Compliance of Existing Rules - Staff reviews permit compliance of each permittee, and monitors existing wells for compliance with the Rules, and Well Construction Standards. Through required meter readings reports, performing regular inspections of wells, and reviewing pumpage compliance at regular intervals, staff is able to ensure that permitted wells and well systems are operated as intended. Staff also maintains an open dialogue with permittees when compliance matters arise, and facilitate solutions through pre-enforcement discussions.
 - Inspections and Investigations - During FY 2022, staff conducted a number of inspections relating to the processing of permit applications. Staff completed a total of 13 inspections related to special investigations, site permittee inspections, and well permit applications. Staff collected three water quality samples during routine permit inspections or from new well construction inspections. There were no formal enforcement actions initiated in FY 2022.

Barton Springs Pool Plume Event – An event occurred between December 18 - 20, 2018, where three separate, discrete, and visible discharges of turbidity from Barton Springs into Barton Springs Pool were observed. CoA staff worked with District staff to identify the likely source of turbidity as sediment produced from the drilling of boreholes for a geothermal system in the Barton Hills area about ¼ of mile (4,000 ft) SSW from Barton Springs. Once the source was identified, the CoA and the District worked together to develop additional drilling protocols within proximity to Barton Springs to minimize future turbidity plumes related to drilling activities.

In FY 2022, staff continued coordination with CoA staff to ensure drilling protocols developed in FY 2019 for the Risk Management Zone were followed to minimize future turbidity plumes related to drilling activities.

A summary of the inspections, investigations, and site visits conducted in FY 2022 is provided below.

Inspections/ Investigations/ Visits	FY 2021	FY 2022
Exempt Well Inspections	0	0
Limited Production Permit Inspections	5	3
Individual Production Permit Inspections	3	2
Test Well Inspections	0	0
Plugging Inspections	2	1
Special Investigation Inspections	5	1
Other Permittee Meetings/Visits *	0	6
<i>*Multiple meetings were held with some permittees.</i>		
TOTAL	15	13

- Meter Reporting - Monthly meter readings were collected from all individual permittees each month with the large majority reported in a timely manner. Permittees failing to submit timely reports were provided with notices of the District's intent to collect meter readings. Most delinquent permittees were generally responsive once the notice was received. Meter readings not received after the notice was provided were collected, and a fee was assessed, in accordance with the Rules.

The annual meter reading requirement for all Limited Production Permits (LPPs) were due in September 2022. Email correspondence and notifications were provided to the nonexempt domestic users in an effort to ensure compliance; however, approximately 25% did not timely submit a meter reading.

- User Drought Contingency Plans, and User Conservation Plans (UDCPs and UCPs) - In FY 2019, staff worked with interns to update 136 permit records in order to incorporate updated drought planning documents into their records. According to the District MP, all permittees must update their UDCP and UCP plans at least every five years. Therefore, since all UDCPs were updated in FY 2019, staff did not update them in FY 2022.
- Right Sizing and Alternative Sources - After notice and an opportunity for a hearing, the Board may renew a permit with a reduced amount of the authorized production if the authorized withdrawal volume is no longer commensurate with reasonable non-speculative demand, or actual production from a well is substantially less than the authorized permit amount for multiple years without any rationale that reasonably relates to efforts to utilize alternative water supplies, conserve, or improve water use efficiency. Staff typically conducts an overpumpage analysis every few years and conducted the analysis in FY 2019, therefore staff did not conduct an overpumpage analysis in FY 2022.

The District has been actively encouraging alternative source projects to reduce the dependency on the aquifers during drought. Staff has collaborated with water suppliers on ASR projects in providing regulatory and technical guidance. Staff has been working with the City of Buda on ASR feasibility. The Ruby Ranch ASR project was approved and has been in operation since the summer of FY 2021. Staff also assisted in assessing the feasibility of Lower Trinity Aquifer for water supply.

- Drought Compliance - The District implements a drought management program that requires mandatory monthly pumpage curtailments during District-declared drought stages. The District declared Stage II Alarm Drought on June 9, 2022 and remained in Stage II drought through the end of FY 2022. The District has implemented all drought-related rules and curtailments in accordance with the District's enforcement plan and drought management protocols. Drought enforcement measures were assessed for Stage II Alarm Drought for the entire duration of the drought during FY 2022. A monthly drought compliance report for all individual permittees was provided during the month of August 2022 to the Board during District-declared drought, and that report can be found on the drought management website pages.
- Well Registration - Staff processed and reviewed all well registrations, permit renewals, and applications for permits, permit amendments, and authorizations in accordance with the Rules, Well Construction Standards, and other District guidelines in accordance with specified procedural timeframes. All newly drilled or modified exempt and nonexempt wells were automatically registered at the time of application and were in compliance with District Rules, including Well Construction Standards.

During FY 2022, the District continued with an online registration system to receive well registration applications from well owners. The online registration system was implemented in June 2015 in response to recent annexation efforts associated with the passage of HB 3405. Staff received and processed two registration forms in FY 2022.

- Application Reviews - To ensure that all firm-yield production permits are evaluated with consideration given to the District's demand-based and non-speculative permitting standards, staff completed comprehensive administrative and technical reviews of permit application requests. A summary of the number and type of applications processed and approved for authorizations, permits, and permit amendments including approved use types and commensurate permit volumes for production permits and amendments, is provided below.

A summary of the new wells drilled in FY 2022 is provided in the table below.

New Wells Drilled	FY 20	FY 21	FY 22
New Exempt Wells	2	7	5
Limited Production Permits (Nonexempt Domestic Wells)	7	11	8
Individual Wells	4	2	1
Test Wells	0	0	0
Replacement Wells	0	0	0
TOTAL	13	20	14

A summary of the processed permit applications in FY 2022 is provided in the table below.

Processed Permit Applications	FY20	FY21	FY22
Minor Amendment	3	4	5
Major Amendments	0	0	0
New Exempt Well	2	9	11
Limited Production Permit (Nonexempt Domestic Wells)	9	15	10
Individual Production Permit	5	1	4
Individual Well Drilling Authorizations or Well Modification	2	1	0
Test Well	0	0	0
Well Plugging	6	5	9
Replacement Well	0	0	0
TOTAL	28	35	39

A summary of the individual production permits processed in FY 2022 is provided in the table below.

	Annual Volume (gpy)	Production Permits Processed	Permit Type	Use Type	Aquifer
1	300,000	Confido, LLC	Class A Conditional	Commercial	Edwards
2	130,500	17050 S IH-35 Frontage Road, LLC	Class A Conditional	Commercial	Edwards
3	1,834,560	Goebler Properties, Inc.	Class A Conditional	Commercial	Edwards
4	943,500	Texas Legacy Masters, LLC	Historic	Commercial	Middle Trinity

2.5.1 Permit Summary:

A summary of the active individual production permits to date in FY 2022 is provided in the table below.

Active Individual Permits	FY 20	FY 21	FY 22
Conditional A Edwards	22	22	26
Conditional B Edwards	2	2	2
Conditional C Edwards	5	5	5
Conditional D Edwards	2	2	2
Historical Edwards	74	74	74
Historical Trinity	33	34	34
Historical Chalk or Alluvial	2	2	2
Transport Permits	2	2	2
Total	142	143	146

A summary of the active general permits to date in FY 2022 is provided in the table below.

Active General Permits	FY 20	FY 21	FY 22
Limited Production Permits (LPP)	164	175	183
Test Permits	0	0	0
Monitoring Permits	0	0	0
Total	164	175	183

2.5.2 Production Summary and Exempt Estimates:

Staff monitors annual withdrawals from all nonexempt wells through required monthly or annual meter reports to ensure that groundwater is used as efficiently as possible for beneficial use. A summary of the volume of aggregate groundwater withdrawals permitted and actually produced from permitted wells for each Management Zone is provided below.

A summary of the permitted production volumes for each Management Zone is provided below.

FY 2022 Permitted Pumpage 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
Total Historical	2,313,052,596	9.81	7,092
Conditional (Individual)	355,929,508	1.51	1,092
Conditional (LPP)	59,500,000	0.25	183
Total Conditional	415,429,508	1.76	1,273
Total Edwards	2,728,482,104 gal	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	645,565,117	2.74	1,981

Other Aquifers MZs	Gallons	cfs	acre-feet
Historical (Individual)	2,500,000 gal	0.01	8
Historical (LPP)	0	0	0
Total Other Aquifers	2,500,000	0.01	8
Total Permitted	3,376,547,221	14.32	10,354

A summary of the actual versus permitted production volumes for each Management Zone is also provided below.

FY 2022 Production from Individual Permittees		
Production Zone	Actual Production	Permitted Individual Production
Edwards	1,556,550,119	2,666,452,104
Trinity	211,230,909	617,156,117
Austin Chalk or Alluvial	48,116	2,500,000
Total (Gallons)	1,767,829,114	3,286,108,221
	(5,425.27 ac ft)	(10,084.69 ac ft)

FY 2022 Production from Limited Production Permits		
Production Zone	Actual Production*	Permitted Limited 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
	(58.03 ac ft)	(277.73 ac ft)
<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>		

A summary and description of the estimated exempt well production volumes for the Edwards and Trinity Management Zones is also provided below.

Edwards Aquifer – Estimated Exempt Wells Production		Trinity Aquifer – Estimated Exempt Wells Production	
Average Annual Volume per Exempt Well (gpy)	104,573	Average Annual Volume per Exempt Well (gpy)	104,573
Total Est Volume of Exempt Well Production (gpy) *	105,827,876	Total Est Volume of Exempt Well Production (gpy) *	120,572,669
<i>Est # of wells</i>	1012	<i>Est # of wells</i>	1153
<i>cfs</i>	0.45	<i>cfs</i>	0.51
<i>% of Permitted Production</i>	3.13%	<i>% of Permitted Trinity Production</i>	18.7%
<i>Permitted Edwards Production(gpy)</i>	3,376,547,221	<i>Permitted Trinity Production (gpy)</i>	645,565,117

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

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

Edwards Aquifer Exempt Use Estimates

The most current estimate for Edwards exempt well production is described in a 2010 District report (Banda et al., 2010). The methodology findings are fully described and involve using GIS to count the total number of potential exempt water wells within the District, and determine how to add them to existing databases of wells. A volume of annual estimated production from exempt wells was based upon water-use profiles and metered data. The 2010 report findings conclude that the estimated production volumes for Edwards Exempt wells was 104,050,000 gal (0.44 cfs) and the estimated number of exempt wells was 995. This volume was approximately equal to 5% of the permitted volume at that time, and was thought to be a proportion that could be applied going forward. However, considering that the current estimate of exempt Edwards wells is about 1012, the number, and therefore volumetric use of exempt Edwards is relatively constant, and substantiates the use of the 0.44 cfs.

Trinity Aquifer Exempt Use Estimates

Very few exempt Trinity wells existed in the District prior to the HB 3405 annexation. After annexation of a large portion of Hays County, the total number of exempt Trinity wells within the District was largely unknown due to the complexity of geology, aquifer completion, and lack of available information. In 2019, staff developed a method to help estimate the number of exempt wells completed in the Trinity Aquifer in the District that focused on the annexation area. The results of the methodology are briefly described in the District Staff Report 2019 (Gary et al., 2019). The methodology estimates the number of exempt Trinity wells using GIS, and considers existing well completions, water service areas, geology, and County Appraisal District information. Results estimated that the number of exempt wells was 1153 wells. Considering meter data and average annual household use, the estimated production volumes for Trinity Exempt wells are approximately 120,260,000 gal (0.51 cfs).

3.0 REQUIRED DATA AND INFORMATION

The District Bylaws and MP require a number of specific items to be included in the Annual Report. This information is included in the following subsections of the Annual Report.

3.1 Aquifer Status

FY 2022 began with a status of “No Drought” due to a wet spring and summer 2021, narrowly keeping spring flow and aquifer levels from dipping below Stage II thresholds. However, below-average rainfall from winter 2021 through summer 2022 wasn’t enough to keep levels from declining. By June 2022, Barton Springs and Lovelady crossed under their Stage II Alarm Drought thresholds and the Board declared a Stage II Alarm Drought on June 9, 2022. Levels declined throughout the summer as La Niña conditions - entering a third consecutive year - brought warmer and drier climate to the Hill Country.

Calendar year 2022 began with a combined 8.2 inches of rain from January to April (0.8 inches below historical average), which provided enough recharge to keep spring flow and water levels hovering just above the Stage II thresholds. The Climate Prediction Center (CPC) announced that La Niña conditions built up strength in February and were favored to continue into the summer. The impact of drier-than-usual conditions early in the year were seen in regional aquifers when Barton Springs flow began to decline in early February and Lovelady water level followed in early March.

A combined 6.7 inches of spring rain fell from March through June 2022, almost 7 inches below historical average. May and June, which are historically the wettest months of the year in Central Texas, were both well below their historical monthly averages (-2.8 & -2.7 respectively). In fact, both May and June 2022 were documented as the warmest on record in Austin, which perpetuated the downward spring flow and water level trends. With Barton Springs and Lovelady water levels falling below their respective Stage II Alarm thresholds in early June, the Board declared Stage II Alarm Drought conditions on June 9, 2022.

In July 2022, the CPC predicted a high probability for La Niña to persist into fall and early winter. This indicated that aquifer conditions were likely destined for intensifying drought. With a combined 5.6 inches of rain from July to October (5.5 inches below historical monthly average) and little-to-no recharge, aquifer levels and spring flow continued to decline.

To summarize, the Austin/Hill Country area has received an average 18 inches of rainfall so far in 2022 (through November 17th), 14 inches below the annual average and only half as much as the 36 inches in 2021. Forecasted below-average rainfall with persistent La Niña conditions indicate we’ll finish 2022 well below average and are in for a dry spring 2023. Conservation remains critical if we hope to be resilient through this significant period of Central Texas drought.

3.2 Grant Programs

During FY 2022, Aquifer Science staff installed two monitor wells near Jacob’s Well, funded in part by grants from Hays County and HTGCD including additional funding from the District. One of these wells was a Westbay multiport well that was completed into the Middle and Lower Trinity Aquifers with ten monitor zones. The second well was a dual completion well installed in the Jacob’s Well Natural Area with one monitor zone in the Cow Creek and another in the Lower Glen Rose. A preliminary report was written describing the well installation process and the initial water-level data (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.)

3.3 Professional Services

The District expended \$98,992 for professional services in FY 2022.

This amount included legal fees of \$50,842 for general counsel support provided by Bickerstaff, Heath, Delgado & Acosta LLP of Austin, and included involvement of the District and its attorneys in the following main billing categories: General Matters/Personnel \$38,981; and Redistricting \$10,321.

There were no legal services associated uniquely with grant projects as grant-billable costs.

Additional professional services for FY 2022 also reported in the above amount include the District's third-party retirement plan administrator, The Standard, for \$34,500.

The District retained Montemayor Britton Bender PC early in 2016 to perform its annual financial audits. The fee for these professional services is \$13,650 for FY 2022, and is also included in the professional services total above.

Not included in the professional services total above, the District expended \$12,000 for the lobbying services of SledgeLaw Group for the 87th Legislative Session. The District has changed the timing of when legislative issues are addressed from a biennial expense to an ongoing expense according to a new term of agreement dated July 1, 2016, being a flat-fee structure bifurcated between legislative session months and legislative interim months spread across 24 months. During legislative months – November of even-numbered years through June of odd-numbered years, the fee will be \$4,000 per month. During legislative interim months – July of odd-numbered years through October of even-numbered years, the fee will be \$1,000 per month, therefore one year there will be \$36,000 in legislative expenses, and the following year there will be \$12,000 in legislative expenses.

These professional services do not include the contracted labor that comprises programmatic support to various team initiatives and that is budgeted as part of the individual team budgets.

3.4 Capital Projects

There were no District capital projects in FY 2022.

3.5 Financial Report

As authorized in the District Bylaws, the Board utilizes the Texas Treasury Safekeeping Trust Company (commonly referred to as "TexPool") as a depository for its funds not required by its current operations. There are several built-in controls and safeguards in the TexPool account mechanisms. The District has established and maintains funds in three TexPool accounts to further minimize risk and to partition funds designated for certain potential uses. To facilitate payments and timely deposits, the District also maintains both checking and payroll accounts with Branch Banking and Trust Company (BB&T)/now Truist, which are FDIC-insured. Monies are moved electronically between these Truist accounts and the TexPool accounts, generally keeping funds not required by current operations in TexPool, and therefore the cash balances in the operating bank accounts as small as prudently feasible. The District has no additional monetary investments other than its cash fund accounts.

End-of-the-year cash and account balances and an independent assessment of financial controls will be found in the Annual Audit Report, included as Appendix A, upon completion of the financial audit.

3.6 Evaluation of District's Long-Range Plan Pursuant To §36.1071

3.6.1 Background

TWC §36.1071 requires all GCDs to establish and maintain a long-range comprehensive plan for groundwater management in the District. This long-range plan is a ten-year plan called the District Management Plan. The MP must be reviewed, revised as necessary, readopted, and reapproved at least once each five years. The current plan was adopted in November of 2017. Pursuant to the code provisions, all GCDs are required to assess progress quantitatively toward the objectives in their prevailing MP at least annually. This assessment is summarized in the following Section 3.6.2, and elaborated on in Appendix B of this Annual Report.

3.6.2 Board Evaluation of Goals, Objectives, and Progress Assessment

Section 2.0 of this report highlights some activities for each of the operational teams. A more comprehensive and detailed listing of the activities of the District is included in Appendix B, which was prepared by staff to assist the Board's evaluation of the progress made in FY 2022 toward the goals, objectives, and performance standards identified in the prevailing District MP.

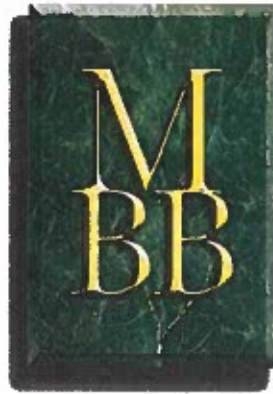
On December 8, 2022, the Board reviewed the information in Appendix B, discussed its conformance with the plan objectives and their subsidiary performance standards, and then took action to evaluate progress made by the District toward these strategic objectives, as specified in the metrics for each of the objectives. Following a proper motion and second, and discussion in a properly noticed Open Meeting, the Board unanimously approved the progress toward each and all objectives in FY 2022 as being satisfactory. The basis for that decision-making is included in this Annual Report as Appendix B.

This assessment for FY 2022 measured the progress towards the goals and objectives of the current MP, which was approved by the TWDB on November 21, 2017, and will serve as the basis for the Board's next evaluation of the plan's objectives in FY 2023.

APPENDIX A

Independent Annual Financial Audit Report

(Board-approved in December 2022)



Montemayor Britton Bender PC

CERTIFIED PUBLIC ACCOUNTANTS

**BARTON SPRINGS/ EDWARDS AQUIFER
CONSERVATION DISTRICT**

**INDEPENDENT AUDITOR'S REPORT
AND
FINANCIAL STATEMENTS**

31 AUGUST 2022

**BARTON SPRINGS/EDWARDS AQUIFER
CONSERVATION DISTRICT**

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Montemayor Britton Bender PC
CERTIFIED PUBLIC ACCOUNTANTS

Board of Directors
Barton Springs/Edwards Aquifer Conservation District

INDEPENDENT AUDITOR'S REPORT

Opinions

We have audited the accompanying financial statements of the Barton Springs/Edwards Aquifer Conservation District (District) as of and for the year ended 31 August 2022, and the related notes to the financial statements, which collectively comprise the District's basic financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the District as of 31 August 2022, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the District and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with the accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the District's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

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Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with generally accepted auditing standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with generally accepted auditing standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the District's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Correction of Error

As discussed in Note 10 to the financial statements, certain errors resulted in the overstatement of amounts previously reported for depreciation expense and accumulated depreciation as of 31 August 2021. Accordingly, an adjustment has been made to net position as of 31 August 2021 to correct these errors. Our opinion is not modified with respect to this matter.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's



discussion and analysis on pages 4 through 9 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Montgomery Britton Bender PC

2 December 2022
Austin, Texas

Barton Springs / Edwards Aquifer Conservation District

Management's Discussion and Analysis

Fiscal Year Ending August 31, 2022

The following **Management's Discussion and Analysis** narrative provides an overview and summary-level analysis of the significant activities and situations that have financial reporting consequence for the fiscal year. This information is provided in conjunction with our financial statements that follow. The percentages shown in the Management's Discussion & Analysis narrative are based on the comparisons of the Statements of Revenues, Expenses and Changes in Fund Net Position.

OVERVIEW OF THE FINANCIAL STATEMENTS

Since the activities of the District are financed primarily by fees charged to external parties, such activities are reported as an enterprise fund and are considered a "business-type activity." The financial statements required for an enterprise fund are the Statement of Net Position; the Statement of Revenues, Expenses, and Changes in Fund Net Position; and the Statement of Cash Flows.

The Statement of Net Position presents the District's assets and liabilities, with the difference between the two reported as net position, as of the end of the fiscal year. Over time, increases or decreases in net position are one indicator of whether the financial position of the District is improving or deteriorating.

The Statement of Revenues, Expenses, and Changes in Fund Net Position presents information showing the operating revenues and expenses of the District for the fiscal year, using the accrual basis of accounting. Therefore, revenues are recognized when earned, and expenses are recognized when incurred, regardless of when cash is received or paid.

The Statement of Cash Flows provides information about the cash receipts and cash payments of the District during the fiscal year, summarized by operating, capital and related financing, and investing activities.

Notes to the Financial Statements provide additional information that is essential to a full understanding of the data provided in the financial statements.

CONDENSED FINANCIAL INFORMATION

The following table presents comparative condensed financial information on assets, liabilities and net position.

Condensed Statement of Net Position August 31, 2022, 2021, and 2020

	<u>2022</u>	<u>2021</u>	<u>2020</u>
Current assets	\$1,689,944	\$1,724,157	\$1,373,908
Capital assets	<u>287,871</u>	<u>397,227</u>	<u>416,454</u>
Total assets	<u>\$1,977,815</u>	<u>\$2,121,384</u>	<u>\$1,790,362</u>
Total liabilities	<u>\$155,409</u>	<u>\$486,342</u>	<u>\$264,632</u>
Net position:			
Net investment in capital assets	287,871	397,227	416,454
Unrestricted	<u>1,534,535</u>	<u>1,237,815</u>	<u>1,109,276</u>
Total net position	<u>\$1,822,406</u>	<u>\$1,635,042</u>	<u>\$1,525,730</u>

The following table presents comparative condensed financial information on revenues, expenses, and changes in fund net position.

Condensed Statement of Revenues, Expenses and Changes in Fund Net Position Years Ended August 31, 2022, 2021, and 2020

	<u>2022</u>	<u>2021</u>	<u>2020</u>
Operating revenues	\$1,668,503	\$1,699,890	\$1,787,686
Operating expenses	<u>1,477,824</u>	<u>1,591,474</u>	<u>1,574,819</u>
Operating income	<u>190,679</u>	<u>108,416</u>	<u>212,867</u>
Non-operating revenues(expenses)			
Interest income	8,010	896	13,231
Lease financing expense	<u>(11,325)</u>	<u>0</u>	<u>0</u>
Total non-operating rev/(exp)	<u>(3,315)</u>	<u>896</u>	<u>13,231</u>
Change in net position	187,364	109,312	226,098
Beginning net position	<u>1,635,042</u>	<u>1,525,730</u>	<u>1,299,632</u>
Net position end of year	<u>\$1,822,406</u>	<u>\$1,635,042</u>	<u>\$1,525,730</u>

FINANCIAL HIGHLIGHTS OF CHANGES IN OPERATING REVENUES

The discussion that follows is based on August 31, 2022 (FY 2022) financial reports.

Permittees' Production Fees and Annual Permit fees, Transport (export) fees, and City of Austin/Austin Water Utility Water Use fees (exclusive of conservation credits), together decreased by \$128,611 in FY 2022 from the prior year to \$1,568,637 from \$1,697,248. This decrease is about 8% and directly attributed to the City of Austin Water Use Fee that was assessed in the amount of \$802,908 for FY 2022 and assessed in the amount of \$993,017 for FY 2021 (19.1% decrease); and the decrease in conservation credits (0 in FY22 and 43,329 in FY21) due to the termination of the program in FY21. The City of Austin water use fee was calculated for FY 2022 based on an extensive analysis of the projected permitted pumping in accordance with the statutory formula.

Included in the production revenue above are transport permit fees. There continue to be two District transport permits that generated \$124,000 in transport fees revenue in both FY 2022 and FY 2021.

All "Other Fees" includes revenue derived from variable sources such as well development fees, well application and inspection fees, well pluggings, meter reading and late fees, and drought management fees (fees applicable only during a District-declared drought). Revenue from Other Fees was budgeted to be \$12,300 for FY 2022. Actual Other Fees earned at fiscal year-end were \$41,702, including \$23,030 in overpumpage fees. Penalties and fines are not budgeted line items.

Drought management fees (mentioned above) are assessed for permittee noncompliance only during a District-declared drought of three months or longer. In FY 2022, the District declared Stage II Alarm Drought on June 9, 2022, which means the three-month period to begin assessing drought management fees won't begin until October 2022 for September 2022 pumpage (which is FY 2023), so there are no drought management fees applied to FY 2022.

In FY 2021, the District declared Stage II Alarm Drought on October 9, 2020 that lasted through July 8, 2021. Drought management fees for FY 2021 totaled \$4,700.

Interest income in FY 2022, as expected, continued to be minimal but is a substantial increase (794%) from FY 2021. Actual interest income received for FY 2022 was \$8,010 compared to \$896 in FY 2021.

Other income received was from contributions for the scholarship program. This income increased \$14,709 (708%) over FY 2021 to \$16,778 for FY 2022. The contributions for the scholarship program included donated conservation credits from the conservation credit program, which as mentioned above, has been terminated; the District will now fund its scholarship program.

FINANCIAL HIGHLIGHTS OF CHANGES IN OPERATING EXPENSES

The discussion that follows is based on August 31, 2022 (FY 2022) financial reports.

Expenses for personnel salaries and wages for FY 2022 were \$802,526 which is \$41,472 less than the FY 2021 expenses for personnel salaries and wages of \$843,998 (and \$149,142 less than what was budgeted). The decreased salary total in FY 2022 was a result of employee resignations, one unfilled AGM position, delay in new hires, and the vacancy time in-between the two.

This 5% salary decrease in FY 2022 also affected the payroll taxes with a small decrease of 4%, from \$63,371 to \$60,636; and a decrease of 6% to the District's retirement contribution, from \$51,917 in FY

2021 to \$49,003 in FY 2022. This decrease is due to two employees that were eligible participants in the retirement plan that resigned, and that the two new hires were not yet eligible to participate.

Actual expenses for employee group insurance benefits in FY 2022 were \$111,284 which is \$8,053 less than the FY 2021 expense of \$119,337. This includes employee health premiums, 25% of employee dependent health premiums, employee dental, employee life, and employee vision. This line item usually increases annually. In FY 2022, there was a required-Plan change that increased the premiums but that was offset somewhat by the time that positions were vacant during the new hire process.

Actual expense for directors' compensation for meetings in FY 2022 was \$16,050 which is less than the FY 2021 actual expenses of \$21,100 (a 24% decrease). In this category, the statutory maximum annual amount, is \$9,000 per director per fiscal year, in which \$25,000 was budgeted. The 36% less than budgeted primarily due to one board member that does not take compensation, and fewer director meetings occurred during FY 2022.

Direct expenses associated with the ongoing work of the various programmatic teams (Aquifer Science, Communication and Outreach, and Regulatory Compliance) are not meaningfully comparable on a year-on-year basis, because the work programs of each vary, and also cross over fiscal years. These teams' efforts were judged by the Board to have made sufficient progress towards achieving the District's Management Plan goals (Appendix B of the draft Annual Report) and within their budget and schedule constraints, which are the more meaningful management measures.

Since the District holds elections no more often than every two years (in odd-numbered fiscal years, if and when election contests warrant), the elections account typically shows large percentage differences from year to year. Similarly, the majority of expenses for legislative support services tend to be biennial with the Texas Legislative Regular Sessions in odd-numbered fiscal years. So, year-on-year expenses will vary. The majority of election expenses are incurred in the fiscal year building up to November elections in even-numbered calendar years.

Three director precincts (precincts 2, 3, and 5) were up for a possible election during FY 2022 for the November 8, 2022 election (FY 2023). Since there was no opposition for any of the three directors, the election was cancelled. Although \$40,000 was budgeted for FY 2022 election expenses, only \$4,116 was expended, which is much less than the \$92,597 that was spent in FY 2021, but FY 2021 had extraordinary circumstances related to the pandemic that did not continue into FY 2022.

The District contracts for legislative support services every year, following a flat-fee structure bifurcated between legislative session months and legislative interim months spread across 24 months. During legislative months (November of even-numbered years through June of odd-numbered years), the fee will be \$4,000 per month. During legislative interim months (July of odd-numbered years through October of even-numbered years), the fee will be \$1,000 per month. So, legislative support service expenses will cycle biennially with \$36,000 incurred in the year with legislative months and \$12,000 in the following year with legislative interim months. Therefore in 2022, legislative expenses were \$12,000 compared to the \$36,000 in FY 2021.

In FY 2022, actual Professional Services expenses (excluding legal expenses which are characterized below) were \$55,023 as compared to \$135,802 in FY 2021 (a 59% decrease). These professional service expenses include the annual financial audit, the Standard retirement plan administration, and election expenses (mentioned above). Retirement plan administration increased in FY 2022 to \$34,500 from \$30,205 in FY 2021 (a 14% increase). This is directly related to the employee retirement fund balances (current eligible employees and ex-employees that have chosen to leave their funds in our Plan, which we have no control over), and any market affects to those balances.

Other professional services are team-specific and are included in team budgets as contracted support expenses.

Legal Services expenses for FY 2022 were \$50,843 compared to \$89,391 in FY 2021; a decrease of 43% simply due to not needing legal services as much in FY 2022. The District budgeted \$85,000 but only expended 60% of this amount due to a contested case ending. This contested case was associated with the HB 3405 annexation of the Shared Territory.

During FY 2022, the District incurred expenses of \$83,000 to construct two wells under interlocal agreements with local counties. As a part of the agreements, the wells constructed remain the property of the county, and access for monitoring data is provided to the District for a set term.

Several expense accounts or sub-accounts showing large percentage changes reflect small dollar amounts in one or both years leading to relatively large proportional changes.

KEY FACTORS INFLUENCING CAPITAL ASSETS

Capital assets subject to depreciation include building, vehicles, and equipment with an original cost that is greater than \$5,000 and with a life exceeding one year. Land is not depreciated.

There were no facilities upgrades in FY 2022 nor FY 2021.

During FY 2022 the District determined that the database that had been created in 2019 was not feasible and assessed an impairment loss of \$55,141 to write down capitalized costs. The remaining costs of \$39,875 will be reimbursed to the District in FY2023.

KEY FACTORS INFLUENCING CHANGES IN CASH FUNDS

The available cash funds (two Truist accounts and one TexPool General account, excluding the TexPool Contingency and TexPool Reserve funds) at the end of FY 2022 totaled \$985,557 which is \$96,958 more than the \$888,599 total at the end of FY 2021.

Differences in these funds are mostly attributable to the timing of receipts of production fees and water use fee payments from permittees and the City of Austin/Austin Water Utility, and their resulting deposits.

ANTICIPATED CHANGES FOR FY 2023:

The following events and initiatives affecting the revenue, cost, and financial management have not occurred yet or have not yet substantially impacted the financial performance of the District, but are expected or potentially expected to occur and be significant to financial performance and/or condition in FY 2023.

- New Database Project – 12-month project – gets underway.
- Implementation of stakeholder discussions for Trinity Aquifer(s) Sustainable Yield.
- Trinity Aquifer(s) Sustainable Yield: both ongoing and new modeling efforts continue and get underway, respectively.
- Upgrades to Information Technology (IT) infrastructure.

CONTINGENCY PLANNING ASSETS

The cash assets include \$507,328 designated by the Board for certain unanticipated legal expenses and other contingencies. This was the balance of the Contingency Account at the end of FY 2022. In FY 2021, the balance of this account at the end of the year was \$504,771. The small increase is due to monthly interest income earned.

The Texas Legislature has by statute declared Groundwater Conservation Districts (GCD) as the preferred method of groundwater management in the state (Texas Water Code, §36.0015(b)). Chapter 36 also affirms that groundwater is private property. The common law further affirms that groundwater, as private property in place, is constitutionally protected from regulatory takings and that any lawful GCD action that is determined by a court to be a taking of private property will require just compensation.

While taking claims are very fact-specific and complex to litigate, the possibility exists that the District may take a lawful action that limits a landowner's access to their private property (groundwater) that may be determined by a court to be a regulatory taking. Such a determination will require substantial expense to litigate and/or pay for such just compensation to remedy the taking. This potential legal risk is relatively low but is planned for by the Board by reserving certain funds as a contingency for this scenario or other matters that may require substantial expense by the District.

Additionally, annexation of the Shared Territory in Hays County resulting from HB 3405 has increased the District's jurisdictional area and the number of permits that are processed and issued by the District. The increased number of permits also increases the probability of potential contested cases and the associated legal expenses.

BARTON SPRINGS/EDWARDS AQUIFER CONSERVATION DISTRICT
STATEMENT OF NET POSITION PROPRIETARY FUND
31 AUGUST 2022

ASSETS

Current assets

Cash	\$139,265
Short-term investments (including \$507,328 designated by the Board for future legal expenses)	1,477,690
Unfulfilled database project	39,875
Accounts receivable and other	<u>33,114</u>
	<u>1,689,944</u>

Noncurrent assets

Right to use lease asset	16,375
Nondepreciable capital assets	201,758
Depreciable capital assets	<u>69,738</u>
	<u>287,871</u>
	<u>1,977,815</u>

LIABILITIES

Current liabilities

Accounts payable	10,450
Accrued payroll	71,767
Current portion of lease liability	2,864
Unearned permit and fee revenue	<u>55,033</u>
	140,114

Noncurrent liabilities

Lease liability	<u>15,295</u>
	<u>155,409</u>

NET POSITION

Net investment in capital assets	287,871
Unrestricted	<u>1,534,535</u>
	<u>\$1,822,406</u>

The accompanying notes are an integral part of this financial statement presentation.

BARTON SPRINGS/EDWARDS AQUIFER CONSERVATION DISTRICT
PROPRIETARY FUND STATEMENT OF REVENUE, EXPENSES,
AND CHANGES IN FUND NET POSITION
YEAR ENDED 31 AUGUST 2022

OPERATING REVENUE	
Water permits and fees	\$1,568,637
Projects	83,000
Other	<u>16,866</u>
	<u>1,668,503</u>
OPERATING EXPENSES	
Personnel and related	1,036,576
Projects	83,000
Loss on impairment	55,141
Professional services	55,023
Legal	50,843
Aquifer science	23,359
Utilities	19,290
IT maintenance	17,248
Maintenance	16,857
Director compensation	16,050
Legislation	12,000
Depreciation and amortization	10,140
Professional development	9,888
General management	6,239
Other	<u>66,170</u>
	<u>1,477,824</u>
OPERATING INCOME	<u>190,679</u>
NONOPERATING REVENUE	
Interest income	8,010
Lease financing	<u>(11,325)</u>
	(3,315)
CHANGE IN NET POSITION	187,364
BEGINNING NET POSITION	<u>1,635,042</u>
ENDING NET POSITION	<u><u>\$1,822,406</u></u>

The accompanying notes are an integral part of this financial statement presentation.

BARTON SPRINGS/EDWARDS AQUIFER CONSERVATION DISTRICT
PROPRIETARY FUND STATEMENT OF CASH FLOWS
YEAR ENDED 31 AUGUST 2022

CASH FLOWS FROM OPERATING ACTIVITIES

Receipts from water permit and other use fees	\$1,287,818
Other cash receipts	16,866
Payments to employees for services	(1,047,770)
Payments to suppliers for goods and services	<u>(356,870)</u>
	<u>(99,956)</u>

CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES

Principal paid on capital debt	(2,129)
Interest paid on capital debt	<u>(7,412)</u>
	<u>(9,541)</u>

CASH FLOWS FROM INVESTING ACTIVITIES

Purchases of short-term investments	(73,998)
Interest received on short-term investments	8,010
	<u>(65,988)</u>

NET CHANGE IN CASH (175,485)

BEGINNING CASH 314,750

ENDING CASH \$139,265

Reconciliation of operating income to net cash provided by operating activities:

Net operating income	\$190,679
Depreciation and amortization	10,140
Loss on impairment	55,141
Change in accounts receivable and other current assets	(27,399)
Change in accrued payroll liabilities	4,856
Change in accounts payable	3,047
Change in conservation credits	(44,741)
Change in unearned fees related to water fees and projects	<u>(291,679)</u>
	<u>(\$99,956)</u>

NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES:

Loss on impairment	<u>\$55,141</u>
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The accompanying notes are an integral part of this financial statement presentation.

BARTON SPRINGS/EDWARDS AQUIFER CONSERVATION DISTRICT

NOTES TO FINANCIAL STATEMENTS

NOTE 1: ORGANIZATION

The Barton Springs/Edwards Aquifer Conservation District (District) is a Groundwater Conservation District created in 1986 by the Texas Water Commission, validated in 1987 by the 70th Legislature of the State of Texas (Senate Bill 988), and confirmed by the voters on 8 August 1987. As a Groundwater Conservation District, the District's statutory purpose and adopted mission is to conserve, preserve, protect, enhance recharge, and prevent waste of groundwater and preserving all aquifers within the District.

Upon creation, the District's jurisdictional area encompassed approximately 255 square miles and was generally defined to include all the area within the Barton Springs segment of the Edwards Aquifer with an extended utility service area to the east. 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 excluding the overlapping area in the Plum Creek Conservation District. The newly annexed area, designated as "Shared Territory," excludes the Edwards Aquifer and includes all other aquifers, including the underlying Trinity. The District's jurisdictional area now encompasses approximately 420 square miles and includes both urban and rural areas in southern Travis County, central and eastern Hays County, and portions of northwestern Caldwell County.

The District's statutory authority is derived primarily from the enabling legislation creating the District, Senate Bill 988, 70th RS, now codified at Special District Local Laws Code Chapter 8802, and Chapter 36 of the Texas Water Code. The enabling legislation creating the District provides that the District may assess fees "on an annual basis, based on the size of column pipe used in the wells, the production capacity of the well, or actual, authorized, or anticipated pumpage." The House Bill 2294 in the 74th Legislative Session further provided that the City of Austin can be required to pay a water use fee not exceeding 60% of the sum of (1) the total production fees received from all permitted users, and (2) the water use fee of the City of Austin. House Bill 3405 (HB 3405) further amended the District's enabling legislation by setting limits on the total annual water use fee assessed to the City of Austin.

The financial statements of the District are prepared in accordance with generally accepted accounting principles (GAAP). The Governmental Accounting Standards Board (GASB) is responsible for establishing GAAP for state and local governments through its pronouncements (Statements and Interpretations). Governments are also required to follow the pronouncements of the Financial Accounting Standards Board (FASB) issued through 30 November 1989 (when applicable) that do not conflict or contradict GASB pronouncements. Although the District has the option to apply FASB pronouncements issued after that date, the District has chosen not to do so. The more significant accounting policies established in GAAP and used by the District are discussed below.

BARTON SPRINGS/EDWARDS AQUIFER CONSERVATION DISTRICT

NOTES TO FINANCIAL STATEMENTS

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

MEASUREMENT FOCUS AND BASIS OF ACCOUNTING

The District's business-type activities are presented on the accrual basis of accounting. Fees and charges and other exchange revenues are recognized when earned and expenses are recognized when incurred.

REPORTING ENTITY

These financial statements present the operations of the District alone, and include no component units. As defined by GASB Statement No. 14 the *Financial Reporting Entity*, and GASB Statement No. 39, *an Amendment to Statement No. 14*, component units are legally separate entities that would be included in the District's reporting entity because of the significance of their operating or financial relationships with the District. Based on the specific criteria in the Statements, the District has no component units and is not a component unit of any other reporting entity as defined by the Statements.

GOVERNMENT-WIDE AND FUND FINANCIAL STATEMENTS

Basic financial statements of a governmental entity normally include both government-wide and fund financial statements. However, because the District only has one fund, only fund financial statements are presented.

The District's operations are accounted for in the proprietary fund type called an enterprise fund. Enterprise funds are required to be used to account for business-type operations for which a fee is charged to external users for goods or services. The focus of proprietary fund measurement is upon determination of operating income, changes in net position, financial position, and cash flows.

CAPITAL ASSETS

Capital assets purchased or acquired with an original cost of \$5,000 or more are reported at historical cost or estimated historical cost. Additions, improvements and other capital outlays that significantly extend the useful life of an asset are capitalized. Other costs incurred for repairs and maintenance are expensed as incurred.

Well monitoring access rights are capitalized at costs incurred by the District and amortized on a straight line basis over the useful life stated in the well right agreement. Well monitoring access rights with an indefinite life are not amortized; however, they are evaluated for impairment annually. The well monitoring access rights will enable the District to perform tests and collect data on the saline portion of the Edwards aquifer that will assist in evaluating the effects of pumping, and inform its feasibility as an alternative water supply.

BARTON SPRINGS/EDWARDS AQUIFER CONSERVATION DISTRICT

NOTES TO FINANCIAL STATEMENTS

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

CAPITAL ASSETS

Depreciation/amortization on all assets is provided on the straight-line basis over the following estimated useful lives:

<u>Description</u>	<u>Years</u>
Building and improvements	25-30
Office furniture and equipment	3-10
Field equipment	5-7
Database	5
Vehicles and finite life well monitoring access rights	5

UNEARNED REVENUE

Unearned revenue consists of water permit fees received in the current fiscal year which are applicable to the succeeding fiscal year. These fees will be recognized as revenue in the fiscal year to which they apply.

OPERATING REVENUE AND EXPENSES

The District proprietary fund type distinguishes between operating and nonoperating revenues and expenses. Operating revenues and expenses consist of charges for services (consisting of fees assessed for permittees' permitted pumpage) and the costs of providing those services, including depreciation. All other revenues and expenses are reported as nonoperating. There were no significant nonoperating revenues or expenses during the year.

NET POSITION

Net position represents the difference between assets, deferred outflows, liabilities, and deferred inflows. Net investment in capital assets consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of any borrowing used for the acquisition, construction or improvements of those assets.

ESTIMATES

The preparation of financial statements in conformity with U.S. generally accepted accounting principles require management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

BARTON SPRINGS/EDWARDS AQUIFER CONSERVATION DISTRICT

NOTES TO FINANCIAL STATEMENTS

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

ACCRUED PAYROLL

The District accrues accumulated unpaid vacation leave and the related payroll taxes and retirement contributions earned by the employee.

NOTE 3: DEPOSITS AND INVESTMENTS

At 31 August 2022, the carrying amount of the District's cash deposits was \$139,265, and the bank balance was \$96,183. Short-term investments of \$1,477,690 are invested with TexPool. TexPool investments are carried at amortized cost, which approximates fair value.

Chapter 2256 of the Texas Government Code (the Public Funds Investment Act) authorizes the District to invest its funds in a manner that primarily emphasizes safety of principal and liquidity, addresses investment diversification, yield, and maturity and addresses the quality and capability of investment personnel.

TexPool is a local government investment pool. The State Comptroller oversees TexPool, with Federated Investors managing the daily operations of the pool under a contract with the State Comptroller. TexPool allows shareholders the ability to deposit or withdraw funds on a daily basis. Such funds seek to maintain a constant net asset value of \$1.00, although this cannot be fully guaranteed. TexPool is rated AAAM (the highest rating a local government investment pool can achieve) and must maintain a dollar weighted average maturity not to exceed 60 days, which is the limit. At 31 August 2022, the TexPool portfolio had a weighted average maturity of 23 days. However, the District considers the holdings in this fund to have a one day weighted average maturity because the share position can usually be redeemed each day at the discretion of the shareholder, unless there has been a significant change in value. The District has adopted an investment strategy to pursue limited investment risk, the objectives of which are safety of principal, maintenance of adequate liquidity, maximization of return on investments and maintain public trust from prudent investment activities. The District is authorized to invest in its depository accounts with banks or invest in TexPool. During the year, the District complied with its investment policy.

NOTE 4: RISK MANAGEMENT

The District is exposed to various risks of loss including general liability, property damage, and workers' compensation. The District insures against risk through commercial insurance.

NOTE 5: CONCENTRATION

49% of the District's total revenue for the year is from the City of Austin.

BARTON SPRINGS/EDWARDS AQUIFER CONSERVATION DISTRICT

NOTES TO FINANCIAL STATEMENTS

NOTE 6: RETIREMENT PLAN

Effective 1 September 1991, the District's Board of Directors established a defined benefit contribution retirement plan, which is a money purchase pension plan and trust, known as the Barton Springs/ Edwards Aquifer Conservation District Retirement Plan and Trust (the Plan). The Plan is administered by Standard Retirement Services, Inc. and provides retirement benefits for all full-time employees who are at least twenty-one years of age and have twelve months of service.

The administrator separately accounts for each employee participant's interest in individual accounts, and investments are participant directed. The required employee contribution rate is 7.5% and is matched by the District in the same amount. Upon entry to the Plan, employees are 50% vested in the District's contributions. After two years of service, eligible employees become 100% vested. Forfeitures are allocated first to pay Plan administrative expenses, then used to reduce employer contributions. For fiscal year ended 31 August 2022 the District's contribution to the Plan was \$49,003.

NOTE 7: LEASES

The District has entered into leases for equipment which expire in 2026. For the fiscal year ended 31 August 2022 rent expense was approximately \$9,500. Future minimum lease payments are:

	<u>Lease Payments</u>	<u>Interest</u>	<u>Principal</u>
2023	\$9,156	\$6,292	\$2,864
2024	9,156	5,301	3,855
2025	9,156	3,963	5,193
2026	<u>8,129</u>	<u>1,882</u>	<u>6,247</u>
	<u>\$35,597</u>	<u>\$17,438</u>	<u>\$18,159</u>

In June 2017, the Governmental Accounting Standards Board (GASB) issued Statement No. 87 *Leases* to improve accounting and financial reporting for leases by governments. The District adopted the new standard effective 1 September 2021 using the retrospective approach. Analysis of the provisions of this standard resulted in no significant changes to beginning net position. Prior period financial statements were adjusted to include the right to use lease asset and lease liability for leases that were active at the implementation date.

BARTON SPRINGS/EDWARDS AQUIFER CONSERVATION DISTRICT

NOTES TO FINANCIAL STATEMENTS

NOTE 8: CAPITAL ASSETS

	<u>Beginning Balance</u>	<u>Increase</u>	<u>Decrease</u>	<u>Ending Balance</u>
Capital assets not depreciated/amortized:				
Land	\$165,415	\$0	\$0	\$165,415
Well monitoring access rights, indefinite life	<u>36,343</u>	<u>0</u>	<u>0</u>	<u>36,343</u>
	<u>201,758</u>	<u>0</u>	<u>0</u>	<u>201,758</u>
Depreciable/amortizable assets:				
Building and improvements	268,588	0	0	268,588
Office furniture and equipment	33,253	0	0	33,253
Database	95,016	0	(95,016)	0
Field equipment	386,809	0	0	386,809
Vehicles	52,363	0	0	52,363
Well monitoring access rights, finite life	127,705	0	0	127,705
Accumulated depreciation/amortization:				
Building and improvements	(188,904)	(8,668)	0	(197,572)
Office furniture and equipment	(33,253)	0	0	(33,253)
Field equipment	(386,615)	(1,472)	0	(388,087)
Vehicles	(52,363)	0	0	(52,363)
Well monitoring access rights, finite life	<u>(127,705)</u>	<u>0</u>	<u>0</u>	<u>(127,705)</u>
	<u>174,894</u>	<u>(10,140)</u>	<u>(95,016)</u>	<u>69,738</u>
Assets under financing leases:				
Equipment	21,159	0	0	21,159
Accumulated amortization	<u>(584)</u>	<u>(4,200)</u>	<u>0</u>	<u>(4,784)</u>
	<u>20,575</u>	<u>(4,200)</u>	<u>0</u>	<u>16,375</u>
	<u>\$397,227</u>	<u>(\$14,340)</u>	<u>(\$95,016)</u>	<u>\$287,871</u>

BARTON SPRINGS/EDWARDS AQUIFER CONSERVATION DISTRICT

NOTES TO FINANCIAL STATEMENTS

NOTE 9: UNFULFILLED DATABASE PROJECT

Subsequent to year end, the District terminated a contract to develop a database that started in 2018 due to a lack of functionality. At 31 August 2022 the capitalized costs to develop the database were considered impaired and written down to the amount to be refunded to the District by the developer, \$39,875. The fair value is a level 1 value, based on the actual cost to be received by the District for the asset.

NOTE 10: PRIOR PERIOD ADJUSTMENT

As of 31 August 2021 net position was understated by \$38,006, which was the result of overstated accumulated depreciation. A prior period adjustment has been recorded to correct beginning net position. The change in net position increased by \$19,003 for the year ended 31 August 2021 as a result of this adjustment.

31 August 2021 net position, as previously reported	\$1,597,036
Prior period adjustment:	
To correct accumulated depreciation	<u>38,006</u>
31 August 2021 net position, as restated	<u>\$1,635,042</u>

FY 2022

Appendix B

**Assessment of Progress Toward
Management Plan Goals and Objectives**

Board-approved December 8, 2022

GOAL 1 - PROVIDING THE MOST EFFICIENT USE OF GROUNDWATER

31 TAC 356.52(A)(1)(A)/TWC §36.1071(A)(1)

Objective 1-1. Provide and maintain on an ongoing basis a sound statutory, regulatory, financial, and policy framework for continued District operations and programmatic needs.

Performance Standards

A. Develop, implement, and revise as necessary, the District Management Plan (MP) in accordance with state law and requirements. Each year the Board will evaluate progress towards satisfying the District goals. A summary of the Board evaluation and any updates or revisions to the MP will be provided in the Annual Report.

In FY 2022, the District continued to implement its MP that was approved by the Texas Water Development Board (TWDB) on November 21, 2017. No revisions or amendments to the MP were presented or made.

In order to achieve the goals, management objectives, and performance standards adopted in the MP, on December 8, 2022, the District's Board of Directors (Board) evaluated progress made, and approved the District's FY 2022 Annual Report and Appendix B (Assessment of Progress toward Management Plan Goals and Objectives). Appendix A (the annual financial audit) was also presented at the December 8, 2022 Board Meeting.

B. Review and modify District Rules as warranted to provide and maintain a sound statutory basis for continued District operations, and to ensure consistency with both District authority and programmatic needs. A summary of any rule amendments adopted in the previous fiscal year will be included in the Annual Report.

During FY 2022, there were no new rules or rule amendments adopted by the Board.

Objective 1-2. Monitor aggregated use of various types of water wells in the District, as feasible and appropriate, to assess overall groundwater use and trends on a continuing basis.

Performance Standard

Monitor annual withdrawals from all nonexempt wells through required monthly or annual meter reports to ensure that groundwater is used as efficiently as possible for beneficial use. A summary of the volume of aggregate groundwater withdrawals permitted and actually produced from permitted wells for each Management Zone (MZ) and permit type will be provided in the Annual Report.

A summary of the actual versus permitted production volumes for each MZ is also provided below.

FY 2022 Production from Individual Permittees		
Production Zone	Actual Production	Permitted Individual Production
Edwards	1,556,550,119	2,666,452,104
Trinity	211,230,909	617,156,117
Austin Chalk or Alluvial	48,116	2,500,000
Total (Gallons)	1,767,829,114	3,286,108,221
	(5,425.27 ac ft)	(10,084.69 ac ft)

FY 2022 Production from Limited Production Permits		
Production Zone	Actual Production*	Permitted Limited 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
	(58.03 ac ft)	(277.73 ac ft)
*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		

Objective 1-3. Evaluate quantitatively at least every five years the amount of groundwater withdrawn by exempt wells in the District to ensure an accurate accounting of total withdrawals in a water budget that includes both regulated and non-regulated withdrawals, so that appropriate groundwater management actions are taken.

Performance Standards

Provide an estimate of groundwater withdrawn by exempt wells in the District using Texas Department of Licensing and Regulation (TDLR) and TWDB databases, and District well records; and update the estimate every five years with the District’s MP updates.

This is a joint effort between the Aquifer Science, Communications and Outreach, and Regulatory Compliance teams. The next estimation of exempt wells is expected to take place with the next update of the District’s MP (2022).

In the interim years between MP updates, the most current estimates of exempt well withdrawals will be included in a summary of the volume of aggregate groundwater withdrawals permitted and actually produced from permitted wells for each MZ and permit type that will be provided in the annual report.

A summary table of the estimated exempt well production volumes for the Edwards and Trinity MZs is provided below.

**Edwards Aquifer –
Estimated Exempt Wells Production**

Average Annual Volume per Exempt Well (gpy)	104,573
Total Est Volume of Exempt Well Production (gpy) *	105,827,876
<i>Est # of wells</i>	1012
<i>cfs</i>	0.45
<i>% of Permitted Production</i>	3.13%
<i>Permitted Edwards Production(gpy)</i>	3,376,547,221

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

**Trinity Aquifer –
Estimated Exempt Wells Production**

Average Annual Volume per Exempt Well (gpy)	104,573
Total Est Volume of Exempt Well Production (gpy) *	120,572,669
<i>Est # of wells</i>	1153
<i>cfs</i>	0.51
<i>% of Permitted Trinity Production</i>	18.7%
<i>Permitted Trinity Production (gpy)</i>	645,565,117

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

Objective 1-4. Develop and maintain programs that inform and educate citizens of all ages about groundwater and springflow-related matters, which affect both water supplies and salamander ecology.

Performance Standards

Publicize District drought trigger status (Barton Springs ten-day average discharge and Lovelady Monitor Well water level) in monthly eNews bulletins and continuously on the District website.

The home page of the website has the District’s drought trigger levels prominently displayed. There is a small banner at the very top of the page showing the current drought status. However, there is a much larger banner on the upper half of the page, also showing the current drought status. The Aquifer Science/Drought Status page was visited approximately 1,331 times through FY 2022. The drought status is shared under highlights on the home page of the website, on the newsroom page, and the press release page when there is a change to the drought status.

Drought status updates are also shared across all District social media channels (Twitter, YouTube, Facebook, Instagram, Nextdoor). The Lovelady and Barton Springs levels are shared a few times a month on the District’s social media channels and website to let the permittees and general audience know how high or low the levels are going, and also when we may cross into the next drought stage.

In addition, drought status information has been shared in a new monthly drought report sent out to permittees/subscribers through eNews. The report is then shared on the District’s social media channels and website. Included below are the drought reports/videos that have been released since the District went into alarm drought stage in June 2022.

Drought Update – July 20, 2022 - <https://bit.ly/3PHv5pr>

Drought Update – August 25, 2022 - <https://bit.ly/3elxFUV>

Drought Update – Sept. 22, 2022 - <https://www.youtube.com/watch?v=FfGXv474T-U&t=3s>

Drought Update – Aug. 17, 2022 - <https://www.youtube.com/watch?v=WGiQ4-aAIWs&t=5s>

Drought Update/Well Monitoring–July 26 - <https://www.youtube.com/watch?v=HpLznZZ7QYE&t=4s>

Aquifer District Declares Stage II Drought –June 9, 2022-<https://www.youtube.com/watch?v=wJ5KiC>

Provide summaries of associated outreach and education programs, events, workshops, and meetings in the monthly team activity reports in the publicly-available Board backup.

- **Protect Your Groundwater Day:** September 7, 2021. The Communications and Outreach Team put together a video with Principal Hydrogeologist Brian Smith, regarding how the District protects groundwater.
- **MyPoint.TV:** MyPoint.TV is a new online news company in Austin that uses public and eyewitness reporting to give everyone the opportunity to publish stories that matter to them. The District has an account and shares videos from time to time on their site. They don't have a huge reach, but this is another tool that gives the District access to a broader audience and allows the District to educate more than just its jurisdiction on aquifer/water related issues. This is a continued collaboration from FY 2021.
- **Explorers Guide to the Hill Country Oasis:** The District once again sponsored Save Barton Creek Association's Explorers Guide to the Hill Country Oasis. The District budgeted \$1,000 for the sponsorship.
- **Imagine a Day Without Water:** October 21, 2021. Communications and Outreach shared several posts highlighting staff, the District's mission, and other facts around groundwater.
- **2022 Summer Aquatic Science Adventure Camp Scholarship Essay/Art Contest:** The District offered several scholarships (overnight and day camp options) to attend the 2022 Edwards Aquifer Research and Data Center's Aquatic Science Adventure Camp at Texas State University in San Marcos. The Aquatic Camp returned after being canceled for two years due to covid. Scholarships were awarded to ten students. Total scholarship funding was \$6,360.
- **2022 Kent S. Butler Memorial Groundwater Stewardship Scholarship Essay Contest:** The District conducted its annual Kent. S. Butler Memorial Groundwater Stewardship Scholarship Essay Contest. Three high school scholarship winners were selected. Total scholarship funding was \$4,500.
- **Texas Alliance of Groundwater Districts (TAGD) Information and Education Committee:** Communications and Outreach Manager is part of TAGD's Information and Education Committee. As part of the committee, Communications and Outreach reviewed sections of the communications toolkit that is being worked on. This included reviewing the newsletter guide, advocacy checklist, open meetings guide, introduction to communications channels, and how to use the toolkit. Communications and Outreach also assisted TAGD with creating a media relations cheat sheet. The document serves as a guide for employees in Texas groundwater conservation districts (GCDs) on how to handle communications for a variety of platforms. It also addresses how to communicate during specific situations.
- **National Cave and Karst Management Symposium 2021:** Communications and Outreach attended this Symposium in San Marcos from November 1 to November 5. This included setting up a table at the symposium.
- **Water Well Checkup:** The District teamed up with Texas A&M Agrilife Extension and Texas Well Owner Network to provide Water Well Checkups for District well owners. The cost of the water analysis was covered by the District for the first fifty well owners to pick up a water kit. The samples were taken to Luling for analysis. Results were physically mailed to well owners and emailed. There were over twenty-five permittees that took part in the program.
- **Water Week Owners Educational Event:** Communications and Outreach Manager, and Regulatory Compliance Team Leader spoke at this event educating the audience on the District. This took place at Luling Foundation Headquarters in Luling on March 3, 2022.

- Buda Trash-Off: The District sponsored the City of Buda's Trash-Off in April 2022. People gathered to pick up trash around Buda for the event. Communications and Outreach set up an informational table at the event.
- BUDA ASR Article for Fall 2021 Newsletter: Communications and Outreach worked with City of Buda Water Resources Coordinator Blake Neffendorf on BUDA ASR article for the District newsletter. Communications and Outreach also worked with City of Buda Communications Department.
- City of Sunset Valley Public Works Open House: Communications and Outreach was invited to take part in the City of Sunset Valley Public Works Open House. The District set up an informational table and Communications and Outreach Manager answered resident questions.
- Caves, Mud, and Water Event: Communications and Outreach volunteered at the Caves, Mud, and Outreach event at the Wildflower Center on June 30, 2022. This is put on by the Austin Watershed Protection Department, Park Rangers, and Wildland Conservation Division.
- UT Jackson School of Geosciences Hydrogeological Field Trip: Students with the UT Jackson School of Geosciences visited Jacob's Well and the District's new multiport monitor well in Wimberley. Communications and Outreach took photos and shared on social media.
- TWDB Monitor Well Visit/Video Shoot: The TWDB came out on May 12, 2022, to shoot a video on a second monitor well installation near Jacob's Well. The District collaborated with TWDB on the shoot, and they interviewed Aquifer Science Principal Hydrogeologist. The video was shared on the District's social media channels and in the newsletter.
- Edwards Aquifer Authority (EAA) Research Center/Education and Outreach Center Visit: Staff went on a retreat to the EAA Research Center and visited the new Education Outreach Center. Communications and Outreach took photos and shared information about the visit on the District's social media channels.
- Regional Water Quality Planning Group Meeting: Communications and Outreach began coordinating the monthly Regional Water Quality Planning Group meetings, which take place the last Friday of every month. This group is comprised of stakeholders from various organizations focused on protecting water here in Central Texas.
- Community Meeting – Rolling Oaks Neighborhood: The District held a community meeting in the Rolling Oaks Neighborhood on August 6, 2022. The meeting focused on the current drought, along with a question-and-answer session for those in attendance. Director Dan Pickens and staff attended. Communications and Outreach set up an informational table and signed up those in attendance for the District's newsletter/press releases. The meeting was recorded and shared on the District's social media channels and website.

This summary may also be found in the Communications and Outreach Team section of the Annual Report.

Objective 1-5. Ensure responsible and effective management of District finances such that the District has the near-term and long-term financial means to support its mission.

Performance Standards

Receive a clean financial audit each year. A copy of the auditor's report will be included in the Annual Report (as Appendix A).

The Board expects to receive and approve the FY 2022 Annual Financial Audit report provided by the District's financial auditor at its Board Meeting on December 8, 2022. It will be included in the Annual Report as Appendix A.

Timely develop and approve fiscal-year budgets and amendments.

In FY 2022, there were two budget versions. The initial budget was brought before the Board in a properly-noticed public hearing held on July 8, 2021 where it was approved. The Board approved Budget Revision 1 on October 14, 2021.

Objective 1-6. Provide efficient administrative support and infrastructure, such that District operations are executed reliably and accurately, meet staff and local stakeholder needs, and conform to District policies and with federal and state requirements.

Performance Standards

Maintain, retain, and control all District records in accordance with the Texas State Library and Archives Commission-approved District Records Retention Schedule to allow for safekeeping and efficient retrieval of any and all records, and annually audit records for effective management of use, maintenance, retention, preservation and disposal of the records' life cycle as required by the Local Government Code. A summary of records requests received under the Public Information Act (PIA), any training provided to staff or directors, or any claims of violation of the PIA will be provided in the Annual Report under the General Management Team Highlights.

The Administration Team is responsible for proper maintenance, management, retention, and disposition of all District records; inventory of District property (asset management); and capital depreciation. Administration preserved and protected all public documents in accordance with state and federal laws, the adopted District Records Retention Schedule, and with the Texas State Library regulations; and maintained the District's reference material library.

District records were maintained effectively, and there were no violations of the PIA.

Develop, post, and distribute District Board agendas, meeting materials, and backup documentation in a timely and required manner; post select documents on the District website, and maintain official records, files, and minutes of Board meetings appropriately.

The Administration Team developed, posted, and distributed all materials and backup documentation for all 10 District Regular Meetings and one Special Called Meeting held in FY 2022. There were also two Public Hearings. All meeting minutes were approved by the Board at a subsequent meeting. Administrative staff maintained the officials records of each meeting on the District's website and in the District's library.

Objective 1-7. Manage and coordinate electoral process for Board members.

Performance Standard

Ensure elections process is conducted and documented in accordance with applicable requirements and timelines. Election documents will be maintained on file, and a summary of elections-related dates and activities will be provided in the Annual Report for years when elections occur.

The District holds elections no more often than every two years (in odd-numbered fiscal years, if and when election contests warrant).

There was a vacant position on the Board of Directors due to a resignation from the director in Precinct 3. Lily Lucas was appointed by the Board to fill that vacancy in December 2021.

Three director precincts (precincts 2, 3, and 5) were up for a possible election during FY 2022 for the November 8, 2022 election (FY 2023). Two directors were unopposed, and the third resigned and a new director took his place with no opposition. Since there was no opposition for any of the three directors, the election was cancelled.

GOAL 2 - CONTROLLING AND PREVENTING WASTE OF GROUNDWATER

31 TAC 356.52(A)(1)(B)/TWC §36.1071(A)(2))

Objective 2-1. Require all newly drilled exempt and nonexempt wells, and all plugged wells to be registered and to comply with applicable District Rules, including Well Construction Standards.

Performance Standard

A summary of the number and type of applications processed and approved for authorizations, permits, and permit amendments including approved use types and commensurate permit volumes for production permits and amendments will also be provided in the Annual Report.

To ensure that all firm-yield production permits are evaluated with consideration given to the District's demand-based and non-speculative permitting standards, staff completed comprehensive administrative and technical reviews of permit application requests. A summary of the number and type of applications processed and approved for authorizations, permits, and permit amendments, including approved use types and commensurate permit volumes for production permits and amendments, is provided below.

A summary of the processed permitting applications in FY 2022 is provided in the table below.

Processed Permit Applications	FY20	FY21	FY22
Minor Amendment	3	4	5
Major Amendments	0	0	0
New Exempt Well	2	9	11
Limited Production Permit (Nonexempt Domestic Wells)	9	15	10
Individual Production Permit	5	1	4
Individual Well Drilling Authorizations or Well Modification	2	1	0
Test Well	0	0	0
Well Plugging	6	5	9
Replacement Well	0	0	0
TOTAL	28	35	39

A summary of the individual production permits processed in FY 2022 is provided in the table below.

Annual Volume (gpy)	Production Permits Processed	Permit Type	Use Type	Aquifer
300,000	Confido, LLC	Class A Conditional	Commercial	Edwards
130,500	17050 S IH-35 Frontage Road, LLC	Class A Conditional	Commercial	Edwards
1,834,560	Goebler Properties, Inc.	Class A Conditional	Commercial	Edwards
943,500	Texas Legacy Masters, LLC	Historic	Commercial	Middle Trinity

Objective 2-2. Ensure permitted wells and well systems are operated as intended by requiring reporting of periodic meter readings, making periodic inspections of wells, and reviewing pumpage compliance at regular intervals that are meaningful with respect to the existing aquifer conditions.

Performance Standards

Inspect all new wells for compliance with the Rules, and Well Construction Standards, and provide a summary of the number and type of inspections or investigations in the Annual Report.

During FY 2022, the Regulatory Compliance Team conducted a number of inspections relating to the processing of permit applications. Staff completed a total of 13 inspections related to special investigations, site permittee inspections, and well permit applications. The Regulatory Compliance Team collected 3 water quality samples during routine permit inspections or from new well construction inspections. There were no formal enforcement actions initiated in FY 2022 that required special site visits.

FY 2022 Inspections/ Investigations/ Visits	
Exempt Well Inspections	0
Limited Production Permit Inspections	3
Individual Production Permit Inspections	2
Test Well Inspections	0
Plugging Inspections	1
Special Investigation Inspections	1
Other Permittee Meetings/Visits *	6
<i>*Multiple meetings were held with some permittees.</i>	
TOTAL	13

Provide a summary of the volume of aggregate groundwater withdrawals permitted and actually produced from permitted wells for each MZ and permit type in the Annual Report.

A summary of the actual versus permitted production volumes for each MZ is provided above in the Objective 1-2 Performance Standard update.

Objective 2-3. Provide leadership and technical assistance to government entities, organizations, and individuals affected by groundwater-utilizing land use activities, including support of or opposition to legislative initiatives or projects that are inconsistent with this objective.

Performance Standards

A. In even-numbered fiscal years, provide a summary of interim legislative activity and related District efforts in the Annual Report. In odd-numbered fiscal years, provide a legislative debrief to the Board on bills of interest to the District, and provide a summary in the Annual Report.

During FY 2022, the Texas State Legislature did not meet.

B. Provide a summary of District activity related to other land use activities affecting groundwater in the Annual Report.

Development Activities Over Recharge and Contributing Zones:

The District continues to monitor as many proposed/new developments as possible and Texas Pollutant Discharge Elimination System (TPDES) permits in the contributing and recharge zones of the Barton Springs segment of the Edwards Aquifer. Furthermore, the District continues to track legislation regarding wastewater discharges in the Edwards Aquifer Contributing Zone.

Texas Sunset Advisory Commission:

The Texas Commission on Environmental Quality (TCEQ) was one of the state agencies under sunset review during FY 2022, and District staff submitted a multi-point critique of the TCEQ's handling of wastewater permitting. The District's comments and recommendations were not included in the Advisory Commission's final report.

Objective 2-4. Ensure all firm-yield production permits are evaluated with consideration given to the demand-based permitting standards including verification of beneficial use that is commensurate with reasonable non-speculative demand.

Performance Standard

A summary of the number and type of applications processed and approved for authorizations, permits, and permit amendments including approved use types and commensurate permit volumes for production permits and amendments will be provided in the Annual Report.

To ensure that all firm-yield production permits are evaluated with consideration given to the District's demand-based and non-speculative permitting standards, staff completed comprehensive administrative and technical reviews of permit application requests. A summary of the number and type of applications processed and approved for authorizations, permits, and permit amendments including approved use types and commensurate permit volumes for production permits and amendments is provided below.

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Test Well	0	0	0
Well Plugging	6	5	9
Replacement Well	0	0	0
TOTAL	28	35	39

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943,500	Texas Legacy Masters, LLC	Historic	Commercial	Middle Trinity

GOAL 3 - ADDRESSING CONJUNCTIVE SURFACE WATER MANAGEMENT ISSUES

31 TAC 356.52(A)(1)(D)/TWC §36.1071(A)(4)

Objective 3-1. Assess the physical and institutional availability of existing regional surface water and alternative groundwater supplies, and the feasibility of those sources as viable supplemental or substitute supplies for District groundwater users.

Performance Standard

A summary of District activity related to this objective will be provided in the Annual Report.

Identify available alternative water resources and supplies that may facilitate source substitution and reduce demand on the Edwards Aquifer while increasing regional water supplies; and evaluate feasibility by considering available/proposed infrastructure, financial factors, logistical/engineering factors, and potential secondary impacts (development density/intensity or recharge water quality).

Staff worked cooperatively with the Ruby Ranch Water Supply Corporation (RRWSC) and their consultants to monitor water quality, water levels and water chemistry sampling and meter accounting of injection and extraction phases of their aquifer storage and recovery (ASR) operation (the 4th in Texas). The District also worked cooperatively with the TCEQ Underground Injection Control (UIC) Permits Section to assist in permit provisions. RRWSC is currently authorized to inject 15,000,000 and recover 12,300,000 gallons over a one-year period. In FY 2020, RRWSC was given a Conditional D permit for Edwards groundwater to inject into the Trinity Aquifer. In FY 2021, RRWSC began their first Conditional D permitted ASR recovery in September 2020 and from June-August 2021, with a total of 3,117,700 gallons recovered from Trinity formations. Water-quality data collected by RRWSC was shared with the District and evaluated by Aquifer Science staff.

https://bscacad.org/uploads/RubyRanchASR_Status-Report_FINAL.pdf

Objective 3-2. Encourage and assist District permittees to diversify their water supplies by assessing the feasibility of alternative water supplies and fostering arrangements with currently available alternative water suppliers.

Performance Standard

A summary of District activity related to this objective will be provided in the Annual Report.

Identify available alternative water resources and supplies that may facilitate source substitution and reduce demand on the Edwards Aquifer, while increasing regional water supplies; and evaluate feasibility by considering available/proposed infrastructure, financial factors, logistical/engineering factors, and potential secondary impacts (development density/intensity or recharge water quality).

Staff met with City of Buda staff and their consultant as they prepared a permit application for an ASR system. Staff participated in collecting cuttings and core samples from the ASR test well that Buda installed. In FY 2021, the District received an ASR Pilot Test Plan which was reviewed and found satisfactory by staff to prove the feasibility of the project.

In FY 2022, staff worked cooperatively with the City of Buda to collect data during ASR pilot testing initiated in late 2022. Aquifer Science staff will continue to work with Buda during pilot testing to ensure adequate data is collected during the tests, including monitoring of water levels with the District's Antioch Westbay well to observe potential impacts during pumping from the Buda Trinity ASR well. The Buda ASR project is much larger scale than the RRWSC ASR project. Once pilot testing has been finished, subsequent evaluation of the Buda ASR testing data, along with data from the previous RRWSC ASR testing, will give the District a better understanding of the viability of the Middle Trinity Aquifer as an ASR target reservoir and help guide policymaking decisions for future proposed ASR projects.

Regulatory Compliance and Aquifer Science Teams had discussions with Bill Walters (Gragg Tract) on additional testing of the Lower Trinity Aquifer. Staff continues to assist with data collection and pump testing.

Objective 3-3. Demonstrate the importance of the relationship between surface water and groundwater, and the need for implementing prudent conjunctive use through educational programs with permittees and public outreach programs.

Performance Standards

Provide summaries of associated outreach and education programs, events, workshops, and meetings in the monthly team activity reports in the publicly-available Board backup.

This information has been presented in the monthly status report section of the Board backups. Visit <https://bseacd.org/transparency/agendas-backup/>, click on the Agenda hyperlink beneath the month of interest, the page number of the Status Report is listed under the General Manager (GM) Report section of the meeting agenda. Please see bulleted list in Objective 1-4 for a schedule of events and programs.

Summarized outreach activities and estimate reach is in the Annual Report.

Objective 3-4. Actively participate in the regional water planning process to provide input into policies, planning elements, and activities that affect the aquifers managed by the District.

Performance Standard

Regularly attend regional water planning group meetings, and annually report on meetings attended.

In FY 2022, staff attended meetings of the Lower Colorado Regional Water Planning Group and reported on any key updates at the Board Meetings. The GM and the alternate served as the Groundwater Management Area (GMA) 10 representatives through August 31, 2022 and continue to serve as liasons. Meetings attended and their agendas are listed below.

JULY 27, 2022 - [Region+K+Meeting+Agenda+07-27-2022.pdf \(squarespace.com\)](#)

APRIL 27, 2022 - [2022-04-27_RegionK_Meeting_Agenda_FINAL.pdf \(squarespace.com\)](#)

JANUARY 26, 2022 - [2022-01-26_Region_K_Meeting_Agenda.pdf \(squarespace.com\)](#)

SEPTEMBER 15, 2021 - [2021_9_15_RWPG+Meeting+and+Public+Hearing+Agenda.pdf](#)

GOAL 4 - ADDRESSING NATURAL RESOURCE ISSUES WHICH IMPACT THE USE AND AVAILABILITY OF GROUNDWATER, AND WHICH ARE IMPACTED BY THE USE OF GROUNDWATER

31 TAC 356.52 (A)(1)(E)/TWC §36.1071(A)(5)

Objective 4-1. Assess ambient conditions in District aquifers on a recurring basis by (1) sampling and collecting groundwater data from selected wells and springs monthly, (2) conducting scientific investigations as indicated by new data and models to better determine groundwater availability for the District aquifers, and (3) conducting studies as warranted to help increase understanding of the aquifers and, to the extent feasible, detect possible threats to water quality and evaluate their consequences.

Performance Standards

Review water-level and water-quality data that are maintained by the District and/or TWDB, or other agencies, on a regular basis.

Staff visits approximately 44 monitor wells quarterly, in addition to numerous other wells throughout the year, including six multiport monitor wells. Data is collected and organized into individual spreadsheets and databases. Staff also regularly samples wells and springs for detailed geochemical analyses as a cooperator for the TWDB (13 sites in FY 2022). All data has been compiled in the TWDB database that is publicly available.

Improve existing analytical or numerical models or work with other organizations on analytical or numerical models that can be applied to the aquifers in the District.

Staff provided key technical support in the development of a conceptual model for the aquifers of the Blanco River watershed. That report (<https://bseacd.org/uploads/Martin-et-al.-2019-BRAAT.pdf>) was published at the end of FY 2019. Since then, staff have continued to work with the modeling team to provide technical guidance during ongoing model development and construction phase of the project.

Aquifer Science staff began development of an in-house numerical groundwater model (IHM) of the Trinity Aquifer in FY 2020. The IHM model domain covers parts of Travis, Hays, Blanco, and Comal counties. A steady-state version of the model was completed in late 2020. In FY 2021-2022, staff have worked to transition the model from steady-state to transient state. Transient models are substantially more complex than steady-state, and allow for simulation of the aquifer system under changing conditions such as prolonged drought and/or increases in localized or regional pumping. In FY 2022, preliminary transient model results were presented to the board to help guide discussion on the District's Trinity Sustainable Yield Project. A report summarizing these preliminary findings was produced and circulated to board and staff.

Once completed, the in-house model will provide a valuable tool which will allow policy makers and stakeholders to evaluate the potential impacts of management decisions on the Trinity Aquifer. In addition, development of the IHM will be a valuable training exercise for Aquifer Science staff, who will be better equipped to evaluate and interact with other groundwater models which are currently under development (such as the Blanco River Aquifer Assessment Tool and the new TWDB Hill Country Trinity Groundwater Availability Model).

No significant changes in water-quality data were observed during FY 2022. Aquifer conditions began with a status of No Drought thanks to a wet spring and summer 2021, narrowly keeping spring flow and aquifer levels from dipping below Stage II Alarm thresholds. However, below-average rainfall from winter 2021 through summer 2022 wasn't enough to keep levels from declining. By June 2022, Barton Springs and Lovelady crossed under their Stage II Alarm Drought thresholds and the Board declared a Stage II Alarm Drought on June 9, 2022.

Objective 4-2. Evaluate site-specific hydrogeologic data from applicable production permits to assess potential impact of withdrawals to groundwater quantity and quality, public health and welfare, contribution to waste, and unreasonable well interference.

Performance Standard

This involves evaluations of certain production permit applications for the potential to cause unreasonable impacts as defined by District rule. To evaluate the potential for unreasonable impacts, staff will (1) perform a technical evaluation of the application, aquifer test, and hydrogeological report; (2) use best available science and analytical tools to estimate amount of drawdown from pumping and influence on other water resources; and (3) recommend proposed permit conditions to the Board for avoiding unreasonable impacts if warranted.

The Aquifer Science staff continues to collect data in the southwestern portion of the District where the Trinity Aquifer is under the influence of significant non-exempt and exempt pumping. Continued monitoring of these and other locations will be critical for evaluating the Trinity Aquifer's response to pumping and drought within the District, and to what extent large pumping centers have the potential to cause unreasonable impacts. In FY 2022, staff completed drilling of two new dedicated monitoring wells in the vicinity of Jacob's Well Spring. One well is a dual-completion well and one well is a multiport well. A report summarizing data collected during drilling operations was produced and published by staff. The wells have been instrumented with water-level monitoring equipment and added to the District's monitoring well network. Going forward, data collected from these wells will improve our understanding of how recharge enters the Trinity Aquifer and travels downgradient into the confined, District portion of the aquifer, and provide a critical dataset for calibration of numerical models currently under construction.

- As indicated above, development of numerical models is underway to assist in the evaluations of potential unreasonable impacts from pumping from the large capacity wellfields and from other pumping and drought scenarios.
- The Aquifer Science staff continued data collection and analysis on the Trinity Aquifer to further expand the conceptual understanding of the Trinity groundwater system within. These data will be crucial for informing the District's ongoing efforts to develop a sustainable yield policy framework for managing the Trinity Aquifer.

Objective 4-3. Implement separate MZs and, as warranted, different management strategies to address more effectively the groundwater management needs for the various aquifers in the District.

Performance Standards

Increase the understanding of District aquifers by assessing aquifer conditions, logging wells, and collecting water quality data. A summary of the number of water quality samples performed will be provided in the Annual Report.

To increase the understanding of District aquifers and water level conditions, staff collects groundwater data from selected wells and performs field assessments such as logging wells and collecting water quality samples.

- The Aquifer Science Team collected 3 samples from sample sites including wells and springs from the Edwards and Trinity Aquifers for major ions and isotopes.
- The Regulatory Compliance Team collected 13 water quality samples during routine permit inspections or from new well construction inspections.

A summary of the volume of aggregate groundwater withdrawals permitted and actually produced from permitted wells for each MZ and permit type is provided in the Annual Report.

To ensure that all firm-yield production permits are evaluated with consideration given to the District’s demand-based and non-speculative permitting standards, staff completed comprehensive administrative and technical reviews of permit application requests. A summary of the number and type of applications processed and approved for authorizations, permits, and permit amendments including approved use types and commensurate permit volumes for production permits and amendments is provided below.

A summary of the processed permitting applications in FY 2022 is provided in the table below.

Processed Permit Applications	FY20	FY21	FY22
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Major Amendments	0	0	0
New Exempt Well	2	9	11
Limited Production Permit (Nonexempt Domestic Wells)	9	15	10
Individual Production Permit	5	1	4
Individual Well Drilling Authorizations or Well Modification	2	1	0
Test Well	0	0	0
Well Plugging	6	5	9
Replacement Well	0	0	0
TOTAL	48	26	35

A summary of the individual production permits processed in FY 2022 is provided in the table below.

Annual Volume (gpy)	Production Permits Processed	Permit Type	Use Type	Aquifer
300,000	Confido, LLC	Class A Conditional	Commercial	Edwards
130,500	17050 S IH-35 Frontage Road, LLC	Class A Conditional	Commercial	Edwards
1,834,560	Goebler Properties, Inc.	Class A Conditional	Commercial	Edwards
943,500	Texas Legacy Masters, LLC	Historic	Commercial	Middle Trinity

Objective 4-4. Actively participate in the joint planning processes for the relevant aquifers in the District to establish and refine desired future conditions (DFCs) that protect the aquifers and the Covered Species of the District Habitat Conservation Plan (HCP).

Performance Standard

Attend at least 75% of the GMA (groundwater management area) meetings, and annually report on meetings attended, GMA decisions on DFCs, and other relevant GMA business.

Staff attended 100% of the GMA 10 meetings that were held in FY 2022. The GMA discussions included the following topics:

- Annual review of individual GCD management plans.
- Discussions on possible revisions to the GMA 10 DFCs, as well as standardization of monitor well analysis and reporting occurred.
- Discussion of new planning cycle and expected Request for Qualifications for the next round of modeling and report writing.
- Submission of proposed DFCs and Explanatory Report.

Objective 4-5. Implement the measures of the Habitat Conservation Plan (HCP) and Incidental Take Permit (ITP) from the United States Fish and Wildlife Service (USFWS) for the Covered Species and covered activity to support the biological goals and objectives of the HCP.

Performance Standard

Prior to ITP permit issuance, a progress report summarizing activities related to the USFWS review of the ITP application will be provided in the Annual Report. Upon ITP issuance, the HCP annual report documenting the District's activities and compliance with ITP permit requirements will be incorporated into the Annual Report by reference.

The USFWS approved the District's HCP in July 2018, and published the Record of Decision and the final Environmental Impact Statement (EIS). On September 20, 2018, the USFWS issued a 20-year ITP. On April 11, 2019, the Board approved an Interlocal Agreement (ILA) between the District and the City of Austin (CoA) to collaborate and coordinate on routine and planned activities relative to each entity's respective HCP.

The District and the CoA meet annually to discuss their efforts, independent and joint, related to the HCP. The first annual meeting to discuss their respective HCP-related activities was held on December 10, 2019. The second annual meeting was held via Zoom during the pandemic on December 16, 2020. The third meeting was held on December 6, 2021.

On January 6, 2022, a meeting was held with the District HCP Management Advisory Committee (MAC) to discuss the District's HCP-related activities for FY 2021. On February 16, 2020, the third HCP Annual Report was submitted to the USFWS.

GOAL 5 - ADDRESSING DROUGHT CONDITIONS

31 TAC 356.52 (A)(1)(F)/TWC §36.1071(A)(6)

Objective 5-1. Adopt and keep updated a science-based drought trigger methodology, and frequently monitor drought stages on the basis of actual aquifer conditions, and declare drought conditions as determined by analyzing data from the District's defined drought triggers and from existing and such other new drought-declaration factors, especially the prevailing dissolved oxygen (DO) concentration trends at the spring outlets, as warranted.

Performance Standards

During periods of District-declared drought, prepare a drought chart at least monthly to report the stage of drought and the conditions that indicate that stage of drought. During periods of non-drought, prepare the drought charts at least once every three months.

Staff monitored the District's two drought trigger sites (the Barton Springs and Lovelady monitor wells) plus numerous other indicators of drought conditions relating to the Edwards Aquifer. The District contracts with the United States Geological Survey (USGS) for the Lovelady Well to maintain equipment, collect, and host as real-time data on their website. The CoA contracts with the USGS to maintain the data for Barton Springs.

Staff frequently verified water-level values measured by the equipment at the Lovelady monitor well (which has recorded data since 1949) and verified discharge measurements made at Barton Springs. During periods of District-declared drought, and preceding potential drought, staff provided timely updated reports of aquifer conditions at each board meeting. Data from Trinity monitor wells were also collected and evaluated at these times.

In 2018, staff evaluated the current drought trigger methodology as it relates to the Middle Trinity Aquifer. Results were published in a memo, and found that the District's established Edwards Aquifer triggers are indeed representative of drought conditions, regardless of the aquifer. In FY 2022, staff continued to monitor Trinity Aquifer water-level drops in response to the ongoing drought and evaluate whether the established Edwards drought triggers are still representative of Trinity Aquifer conditions. To date, the established triggers appear to be adequate. Staff will continue to evaluate Trinity Aquifer water levels as drought conditions persist. If Trinity Aquifer behavior deviates significantly from the Edwards, a reevaluation of established drought triggers may be warranted.

A summary of the drought indicator conditions and any declared drought stages and duration will be provided in the Annual Report.

Objective 5-2. Implement a drought management program that step-wise curtails freshwater Edwards Aquifer use to at least 50% by volume of 2014 authorized aggregate monthly use during Extreme Drought, and that designs/uses other programs that provide an incentive for additional curtailments where possible. For all other aquifers, implement a drought management program that requires mandatory monthly pumpage curtailments during District-declared drought stages.

Performance Standard

During District-declared drought, enforce compliance with drought management rules to achieve overall monthly pumpage curtailments within 10% of the aggregate curtailment goal of the prevailing drought stage. A monthly drought compliance report for all individual permittees will be provided to the Board during District-declared drought, and a summary will be included in the Annual Report.

The District implements a drought management program that requires mandatory monthly pumpage curtailments during District-declared drought stages. The District was in Alarm Drought status from June 9, 2022 – October 14, 2022 and provided the Board with a monthly compliance spreadsheet that showed which permittees were under or over curtailment targets. The District was in No Drought stage September 1, 2021 – June 8, 2022.

Objective 5-3. Inform and educate permittees and other well owners about the significance of declared drought stages and the severity of drought, and encourage practices and behaviors that reduce water use by a stage-appropriate amount.

Performance Standards

During District-declared drought, publicize declared drought stages and associated demand reduction targets in monthly eNews bulletins and continuously on the District website.

The District went into Stage II Alarm Drought on June 9, 2022. Drought stages are publicized through press releases, eNews bulletins, and continuously on the District's website. The home page of the website has the District's drought trigger levels prominently displayed. There is a small banner at the very top of the page showing the current drought status. However, there is a much larger banner on the upper half of the page, also showing the current drought status. The drought status is shared under highlights on the home page of the website, on the newsroom page, and the press release page when there is a change to the drought status. Prior to alarm drought status, the District shared the Water Conservation Period information.

Included below are The Aquifer Zone Newsletters for FY 2022. There is a drought update in every newsletter.

The Aquifer Zone – Fall 2021 - <https://bit.ly/3WGzHAI>

The Aquifer Zone – Winter 2022 - <https://bit.ly/3qYm17>

The Aquifer Zone – Spring 2022 - <https://bit.ly/3OfkCBT>

The Aquifer Zone – Summer 2022 - <https://bit.ly/3om196u>

A summary of drought and water conservation related newsletter articles, press releases, and drought updates sent to Press, Permittees, Well Owners and eNews subscribers will be provided in the Annual Report.

Articles included:

- The Aquifer Zone – Fall 2021 Newsletter: Drought and Aquifer Status Update, BSEACD Weather Station, Buda ASR Pilot Test Permit, How BSEACD Protects Groundwater, Science in 60 Seconds: Downhole Video Cameras. What is pH?, Turbidity, Water Conductivity
Link to newsletter: <https://bit.ly/3WGzHAI>

- The Aquifer Zone – Winter 2022 Newsletter: Message From General Manager, Drought and Aquifer Status Update, Edwards Aquifer Signs, How Recharge Works, How to Check the District’s Drought Status, Science in 60 Seconds: Streamflow Measurement, Aquatic Science Adventure Camp Scholarship Essay/Art Contest, 2022 Kent S. Butler Groundwater Stewardship Scholarship Essay Contest
Link to newsletter: <https://bit.ly/3qYrn17>
- The Aquifer Zone – Spring 2022 Newsletter: Message From General Manager, Drought and Aquifer Status Update, Water Conservation Period, Drought Status for Area Municipalities, New Director Precinct Boundaries, Multiport Monitor Well Installation, Dye Tracing Study, Aquatic Science Adventure Camp Scholarship Essay/Art Contest, 2022 Kent S. Butler Groundwater Stewardship Scholarship Essay Contest.
Link to newsletter: <https://bit.ly/3OfkCBT>
- The Aquifer Zone – Summer 2022 Newsletter: Message From General Manager, Drought Update, Alarm Drought (Stage II), Community Meeting on Drought, Drought Statuses for Area Municipalities, Residential Limited Production Permitted Wells – Meter Readings, Monitor Well Installation, Kent Butler Scholarship Winners
Link to newsletter: <https://bit.ly/3om196u>

Press Releases included:

- BSEACD Board Appoints Interim Director for Precinct 3 – November 22, 2021
<https://bseacd.org/uploads/BSEACD-Board-Appoints-Interim-Director-for-Precinct-3-Unexpired-Term-1-1.pdf>
- 2022 Aquatic Science Adventure Camp Application and Rules – December 29, 2021
<https://bseacd.org/uploads/Aquatic-Science-Adventure-Camp-Application-Form-with-Texas-State-Flyer-FINAL.pdf>
- BSEACD Board of Directors Names Tim Loftus General Manager – January 20, 2022
<https://bseacd.org/uploads/BSEACD-Board-of-Directors-Names-Tim-Loftus-General-Manager.pdf>
- 2022 Water Well Checkup – February 9, 2022
<https://bseacd.org/uploads/2022-Well-Water-Checkup.pdf>
- Board of Directors Adopts New Director Precinct Boundaries – March 16, 2022
<https://bseacd.org/uploads/District-Board-of-Directors-Adopts-New-Director-Precinct-Boundaries.pdf>
- BSEACD Awards Aquatic Science Adventure Camp Scholarships – April 18, 2022
<https://bseacd.org/uploads/BSEACD-Awards-Aquatic-Science-Adventure-Camp-Scholarships-.pdf>
- Regulatory Compliance Specialist Opening – June 7, 2022
<https://bseacd.org/uploads/Regulatory-Compliance-Specialist-Position.pdf>
- Aquifer District Declares Stage II Alarm Drought – June 9, 2022
<https://bseacd.org/uploads/Aquifer-District-Declares-Stage-II-Alarm-Drought.pdf>
- BSEACD Awards Kent S. Butler Memorial Groundwater Stewardship Scholarships – June 10, 2022
<https://bseacd.org/uploads/BSEACD-Awards-Kent-S.-Butler-Memorial-Groundwater-Stewardship-Scholarships-.pdf>
- Community Meeting on Drought-Related Topics – July 15, 2022
<https://bseacd.org/uploads/Community-Meeting-On-Drought-Related-Topics.pdf>

Social Media: Communications and Outreach Team shares videos, educational information, scholarship information, drought-related news, and other groundwater-related topics on the District's various social media channels. The posts are included in the social media reports below.

September 2021 - <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-September-2021.pdf>

October 2021 - <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-October-2021.pdf>

November 2021 - <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-November-2021.pdf>

December 2021 - <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-December-2021.pdf>

January 2022 - <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-January-2022.pdf>

February 2022 - <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-February-2022.pdf>

March 2022 - <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-March-2022.pdf>

April 2022 - <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-April-2022.pdf>

May 2022 - <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-May-2022.pdf>

June 2022 - <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-June-2022.pdf>

July 2022 - <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-July-2022.pdf>

August 2022 - <https://bseacd.org/uploads/BSEACD-Social-Media-Roundup-August-2022.pdf>

The District's YouTube channel provides information on drought and groundwater-related information. Videos in FY 2022 included:

District YouTube channel: <https://www.youtube.com/channel/UCqjQIZ7y708Ar0yPB2Yd4Cg>.

Drought Update – August 17, 2022

<https://www.youtube.com/watch?v=WGiQ4-aAIWs&t=5s>

Community Meeting – August 6, 2022

<https://www.youtube.com/watch?v=ybwewZIdMYI&t=199s>

Slug Testing Video Explainer

<https://www.youtube.com/watch?v=93JRkFnciSg&t=2s>

Perspective on the Current Drought – July 27, 2022

<https://www.youtube.com/watch?v=bTFhaKvB-ns>

Drought Update/Well Monitoring – July 26, 2022

<https://www.youtube.com/watch?v=HpLznZZ7QYE&t=4s>

Aquifer District Declares Stage II Alarm Drought

<https://www.youtube.com/watch?v=wJ5KiCpog2c&t=78s>

Multiport Monitor Well – Water Sample Collection

<https://www.youtube.com/watch?v=hhoZBmt2bas>

Monitor Well Installation Part 2

<https://www.youtube.com/watch?v=54xpKKo0ipg&t=107s>

Happy Teacher's Day – May 3, 2022

<https://www.youtube.com/watch?v=Kvp-wOY6pOE>

Administrative Professionals Day – April 27, 2022

<https://www.youtube.com/watch?v=Q8yCIJ8PjZU>

Well Inspection – Regulatory Compliance Team
<https://www.youtube.com/watch?v=IU-YoOIq8ZE&t=36s>

Aquatic Science Adventure Camp Scholarship Winners
<https://www.youtube.com/watch?v=GO17PzfZzOU&t=64s>

Multiport Monitor Well Installation
<https://www.youtube.com/watch?v=yDQw4HIZahY&t=6s>

Dye Tracing Study
<https://www.youtube.com/watch?v=TZ-S7kRT7oM&t=69s>

National Groundwater Awareness Week
<https://www.youtube.com/watch?v=28psb6Rvox8>

2022 Well Water Check Up – Sampling Instructions
<https://www.youtube.com/watch?v=wpHxfqvAT6o&t=1s>

The Aquifer Zone Newsletter – January 2022
<https://www.youtube.com/watch?v=c8xjNhiQOfk>

What is Aquifer Testing?
<https://www.youtube.com/watch?v=k6-0V2GfMUy&t=1s>

2022 Kent S. Butler Scholarship Groundwater Essay Contest
<https://www.youtube.com/watch?v=jNNujM27VBo>

Martin Luther King Jr. Day
<https://www.youtube.com/watch?v=5O2jwrKMZBE>

Drought Update – January 14, 2022
https://www.youtube.com/watch?v=4us_MGXWY3c&t=1s

Jacobs Well – Throwback Thursday
<https://www.youtube.com/watch?v=wurjRyWnJp4&t=1s>

Edwards Aquifer Recharge
<https://www.youtube.com/watch?v=ZOKph1R-0EY&t=18s>

Edwards Aquifer Signs – Why Should You Care?
<https://www.youtube.com/watch?v=NL04fyqGelo>

How to Check the District's Drought Status
<https://www.youtube.com/watch?v=7aU4mBFfKgM>

Do I live in the District?
<https://www.youtube.com/watch?v=jQ0XN4AhRgM&t=1s>

Drought Update – November 18, 2021
<https://www.youtube.com/watch?v=ciBfVUoKZJU&t=33s>

Streamflow Measurement: Raw Video
https://www.youtube.com/watch?v=i_J3xFOWWTE&t=1s

Science in 60 Seconds: Streamflow Measurement
<https://www.youtube.com/watch?v=QgI6WVSo9kg&t=2s>

Happy November
<https://www.youtube.com/watch?v=SJgaTDloSuU>

Throwback Thursday – What is dye tracing?
<https://www.youtube.com/watch?v=zRSfztjWlQo>

The Aquifer Zone Newsletter – Fall 2021
<https://www.youtube.com/watch?v=JrzmyDyIlg8>

Onion Creek at Twin Creeks Road – October 14, 2021
<https://www.youtube.com/watch?v=MLiG0QmuZ-g>

Slaughter Creek at Manchaca – October 14, 2021
<https://www.youtube.com/watch?v=OOmAsA3OFM4>

National Fossil Day – October 13, 2021
<https://www.youtube.com/watch?v=5PKJe9hkECI>

Science in 60 Seconds: Downhole Video Cameras
<https://www.youtube.com/watch?v=SELZvhmLhlo>

Trinity Downhole Camera
<https://www.youtube.com/watch?v=LNNBMSOs0Jk>

New BSEACD Instagram Channel
https://www.youtube.com/watch?v=wGSF_aGBmfg

Collect Rocks Day – September 16, 2021
<https://www.youtube.com/watch?v=xbDimo1buwM>

Science in 60 Seconds: Water Conductivity
<https://www.youtube.com/watch?v=ul3iPXVpZ2o>

Aquifer Status Update – September 9, 2021
<https://www.youtube.com/watch?v=nHAMyrU7th4>

Protect Your Groundwater Day – September 7, 2021
<https://www.youtube.com/watch?v=ojqVHSz5exM&t=54s>

BSEACD Weather Station
https://www.youtube.com/watch?v=7y_vIAvWs0s&t=1s

Objective 5-4. Assist and, where feasible, incentivize individual freshwater Edwards Aquifer historic-production permittees in developing drought planning strategies to comply with drought rules, including (1) pumping curtailments by drought stage to at least 50% of the 2014 authorized use during Extreme Drought, (2) “right-sizing” authorized use over the long term to reconcile actual water demands and permitted levels, and (3) as necessary and with appropriate conditions, source substitution with alternative supplies.

Performance Standards

Require an updated User Conservation Plan and User Drought Contingency Plan (UCP/UDCP) from Permittees within one year of each five-year MP Adoption.

In FY 2019, the Regulatory Compliance Team worked with interns to update 136 permit records in order to incorporate updated drought planning documents into their records. According to the District MP, all permittees must update their UDCP and UCP plans at least every five years. Therefore, since all UDCPs were updated in FY 2019, staff did not update them in FY 2022.

Provide a summary of any activity related to permit right sizing or source substitution with alternative supplies that may reduce demand on the freshwater Edwards Aquifer in the Annual Report.

After notice and an opportunity for a hearing, the Board may renew a permit with a reduced amount of the authorized production if the authorized withdrawal volume is no longer commensurate with reasonable non-speculative demand, or actual production from a well is substantially less than the authorized permit amount for multiple years without any rationale that reasonably relates to efforts to utilize alternative water supplies, conserve, or improve water use efficiency. Staff typically conducts an overpumpage analysis every few years, and conducted the analysis in FY 2019, therefore staff did not conduct an overpumpage analysis in FY 2022.

The District has been actively encouraging alternative source projects to reduce the dependency on the aquifers during drought. Staff has collaborated with water suppliers on ASR projects in providing regulatory and technical guidance. Staff has been working with the City of Buda on ASR feasibility. The Ruby Ranch ASR project was approved and has been in operation since the summer of FY 2021. Staff also assisted in assessing the feasibility of Lower Trinity Aquifer for water supply.

Objective 5-5. Implement a Conservation Permit that is held by the District and accumulates and preserves withdrawals from the freshwater Edwards Aquifer that were previously authorized with historic-use status and that is retired or otherwise additionally curtailed during severe drought, for use as ecological flow at Barton Springs during Extreme Drought and thereby increase springflow for a given set of hydrologic conditions.

Performance Standard

A summary of the volume of aggregate groundwater withdrawals permitted and actually produced from permitted wells for each MZ and permit type including the volume reserved in the freshwater Edwards Conservation Permit for ecological flows will be provided in the Annual Report.

A summary of the actual versus permitted production volumes for each MZ is provided in Objective 1-2. The amount of historical Edwards Aquifer permitted water that has been retired since 2009 is 82,025,125 gallons per year that can be targeted for a conservation permit. Additionally, 1,200,000 gallons per year of Historical Trinity Aquifer permitted water has been retired; no Conditional A permitted water has been retired.

GOAL 6 - Addressing Conservation and Rainwater Harvesting where Appropriate and Cost-Effective

31TAC 356.52 (a)(1)(G)/TWC §36.1071(a)(7)

Objective 6-1. Develop and maintain programs that inform, educate, and support District permittees in their efforts to educate their end-user customers about water conservation and its benefits, and about drought-period temporary demand reduction measures.

Performance Standards

A summary of efforts to assist permittees in developing drought and conservation messaging strategies will be provided in the Annual Report.

Each permittee is required to have an approved User Drought Contingency Plan (UDCP) that outlines conservation actions to be taken under each drought stage. Staff provides bill inserts and road signs to all permittees upon request in drought declaration to help them comply with messaging requirements set forth in the UDCP. Staff actively promotes aquifer status through eNews, press releases, the District website, and social media platforms. Permittees are encouraged to share this information with their end users. Examples of bill inserts and handouts:

- Flyer - https://bseacd.org/uploads/Critical_Poster18x24-1.pdf
- Mail Inserts - https://bseacd.org/uploads/Critical_drought_bill_insert.pdf
- Drought Handout - <https://bseacd.org/uploads/All-About-Drought-1.pdf>
- District Brochure - <https://bseacd.org/uploads/Pamphlet-FINAL.pdf>

In FY 2022 Alarm Drought (Stage II) Signage was put out throughout Permittee areas of the District. Included below are the areas where signs were put up:

FM 1626 – 10 signs (Austin)

FM 150 (including Rollingwood Neighborhood) – 7 signs

Wildwood Neighborhood (Austin) – 3 Signs

Hays Hills Baptist Church – 3 signs

PGMS – 7 signs

City of Mountain City – 4 signs

Sunfield Neighborhood in Buda – 4 signs

St. Mark's Episcopal Church – 3 signs

Buda/Kyle Church of Christ – 3 signs

Byron Townsend 3 signs

Byron covers Cimarron Park, Slaughter Creek Acres, and Village San Leanna

San Marcos

Ranch Road – 12 signs

Hilliard Area – 10 signs

Publicize declared drought stages and associated demand reduction targets monthly in eNews bulletins and continuously on the District website.

In FY 2022, the Water Well Checkup Program resumed for permittees. The District teamed up with Texas A&M Agrilife Extension and Texas Well Owner Network to provide Water Well Checkups for District well owners. The cost of the water analysis was covered by the District for the first fifty well owners to pick up a water kit. The samples were taken to Luling for analysis. Results were physically mailed to well owners and emailed. Over twenty-five permittees took part in the program.

The District was in Stage II Alarm Drought from June 9, 2022, through October 19, 2022. Prior to the District declaring Alarm Drought, the regular Water Conservation Period, which extends from May through September, was shared on the District's website social media channels, and through eNews.

Drought status updates are shared across all District social media channels (Twitter, YouTube, Facebook, Instagram, Nextdoor). The Lovelady and Barton Springs levels are shared a few times a month on the District's social media channels and website to let permittees and the general audience know how high or low the levels are going, and also when the District may cross into the next drought stage.

In addition, drought status information has been shared in a new monthly drought report sent out to permittees/subscribers through eNews. The report is then shared on the District's social media channels and website.

Conservation education webpages were updated regularly with new resources, and shared on District social media platforms. Free educational handouts, well owner education, and information on well analysis is provided on the District website and has been shared on social media. There are also hard copies in the office.

See Objective 5-3 for a summarized list of Articles, Press Releases, Drought Reports, Social Media Reports, and Videos.

Objective 6-2. Encourage use of conservation-oriented rate structures by water utility permittees to discourage egregious water demand by individual end-users during declared drought.

Performance Standard

On an annual basis, the District will provide an informational resource or reference document to all public water supply permittees to serve as resources related to conservation best management strategies and conservation-oriented rate structures.

The District is part of the CTWEN and sponsors the annual Water Conservation Symposium. Permittees are encouraged to attend. The symposium provides water utilities with the information needed to implement successful water conservation programs, effectively engage customers, and plan for the future. This program provides conservation-oriented strategies (including conservation-oriented rate structures) for mayors, city councils, board members of Municipal Utility Districts (MUDs), Regional Water Authorities, City Managers, Water Utility directors and staff, water conservation managers, program staff and other relevant staff, CFOs, finance directors, sustainability directors, business and community leaders, consultants, and advocates.

Objective 6-3. Develop and maintain programs that educate and inform District groundwater users and constituents of all ages about water conservation practices and the use of alternate water sources such as rainwater harvesting, gray water, and condensate reuse.

Performance Standard

Summarize water conservation related newsletter articles, press releases, and events in the Annual Report. Summary will describe the preparation and dissemination of materials shared with District groundwater users and area residents that inform them about water conservation and alternate water sources.

The District sponsors and supports a number of events promoting water conservation and alternate water sources such as the Central Texas Water Conservation Symposium, Austin Cave Festival, Well Water Check-Up, LBJ Wildflower Center (LBJWFC) Nature Nights Rocks-Water-Mud, City of Buda Trash-Off, City of Sunset Valley Public Works Open House, Explorers Guide to the Hill Country Oasis, and Groundwater to the Gulf: A Summer Institute for Educators. Conservation education webpages were updated regularly with new resources, and shared on District social media platforms. The District also created a District Newsroom website page with all news/conservation/drought related information.

See Objective 5-3 for a list of summarized Articles and Press Releases.

GOAL 7 - ADDRESSING RECHARGE ENHANCEMENT WHERE APPROPRIATE AND COST-EFFECTIVE

31TAC 356.52 (A)(1)(G)/TWC §36.1071(A)(7)

Objective 7-1. Improve recharge to the freshwater Edwards Aquifer by conducting studies and, as feasible and allowed by law, physically altering (cleaning, enlarging, protecting, diverting surface water) discrete recharge features that will lead to an increase in recharge and water in storage beyond what otherwise would exist naturally.

Performance Standard

Maintaining the functionality of the Antioch system will be the principal method for enhancing recharge to the freshwater Edwards Aquifer. Additional activities may be excavating sinkholes and caves within the District. A summary of all recharge improvement activities will be provided in the Annual Report.

Antioch Cave is a recharge feature on District property that is capable of contributing a significant amount of water to the Edwards Aquifer when Onion Creek is flowing. A vault constructed over the cave entrance, and automated valves allow for clean creek water to enter the cave, and contaminated stormwater to be kept out. This system was maintained by staff in FY 2022 so that the amount of clean creek water entering the cave was maximized. A regular reporting item has been added to the GM Report special topics list to provide a monthly oral update on these and other Aquifer Science activities, and satisfies this reporting requirement.

Operational equipment and hardware at Antioch Cave to improve the operation and performance of the BMP are fully functional and in good performance. Equipment is collecting water-quality readings every 15 minutes and reporting to an organized database via telemetry.

Objective 7-2. Conduct technical investigations and, as feasible, assist water-supply providers in implementing engineered enhancements to regional supply strategies, including desalination, ASR, effluent reclamation and re-use, and recharge enhancement of surface water (including floodwater) to increase the options for water-supply substitution and reduce dependence on the Aquifer.

Performance Standard

Assess progress toward enhancing regional water supplies.

In FY 2022, the District worked with other entities in the area, such as the City of Buda and RRWSC, to evaluate the potential for the Trinity Aquifers as reservoirs for ASR facilities. See above section: Objective 3-2 for a brief summary of staff's work with Buda WSC on their ASR pilot testing program.

https://bscad.org/uploads/RubyRanchASR_Status-Report_FINAL.pdf

GOAL 8 - ADDRESSING THE DESIRED FUTURE CONDITIONS OF THE GROUNDWATER RESOURCES

31TAC (A)(1)(H)/TWC §36.1071(A)(8)

Objective 8-1. Freshwater Edwards Aquifer All-Conditions DFC: Adopt rules that restrict, to the greatest extent practicable, the total amount of groundwater authorized to be withdrawn annually from the Aquifer to an amount that will not substantially accelerate the onset of drought conditions in the Aquifer; this is established as a running seven-year average springflow at Barton Springs of no less than 49.7 cfs during average recharge conditions.

Performance Standards

- A. A summary of the volume of aggregate groundwater withdrawals permitted and actually produced from permitted wells for each MZ and permit type will be provided in the Annual Report.

A summary of the actual versus permitted production volumes for each MZ is provided in Objective 1-2.

- B. Upon ITP issuance, the HCP annual report documenting the District's activities and compliance with ITP permit requirements will be incorporated into the Annual Report by reference.

The USFWS issued the District's ITP in September 2018. The District submitted its third annual report to USFWS on February 16, 2022.

- C. Upon ITP issuance, compile a summary of aquifer data including: 1) the frequency and duration of District-declared drought, 2) levels of the Aquifer as measured by springflow and indicator wells (including temporal and spatial variations), and 3) total annual and daily discharge from Barton Springs will be provided in the Annual Report.

FY 2022 began with a No Drought status and remained that way until June 9, 2022 when the Board declared Stage II Alarm drought, effective July 1, 2022. The fiscal year ended in Stage II Alarm drought status.

Discharge at Barton Springs was 66.9 cfs on September 1, 2021 and 28.1 cfs on August 31, 2022. The depth to water level (feet below land surface) at the Lovelady monitoring well began the fiscal year at 163.49 feet and ended the fiscal year at 187.73, a decline of 24.24 feet.

Objective 8-2. Freshwater Edwards Aquifer Extreme Drought DFC: Adopt rules that restrict, to the greatest extent practicable and as legally possible, the total amount of groundwater withdrawn monthly from the aquifer during Extreme Drought conditions in order to minimize take and avoid jeopardy of the Covered Species as a result of the Covered Activities, as established by the best science available. This is established as a limitation on actual withdrawals from the aquifer to a total of no more than 5.2 cfs on an average annual (curtailed) basis during Extreme Drought, which will produce a minimum springflow of not less than 6.5 cfs during a recurrence of the drought of record (DOR).

Performance Standards

- A. A summary of the volume of aggregate groundwater withdrawals permitted and actually produced from permitted wells for each MZ and permit type will be provided in the Annual Report.

A summary of the actual versus permitted production volumes for each MZ is provided above in Objective 1-2.

- B. Upon ITP issuance, the HCP annual report documenting the District's activities and compliance with ITP permit requirements, will be incorporated into the Annual Report by reference.

The USFWS issued the District's ITP in September 2018. The District submitted its third annual report to USFWS on February 16, 2022.

- C. Upon ITP issuance, compile a summary of aquifer data including: 1) the frequency and duration of District-declared drought, 2) levels of the Aquifer as measured by springflow and indicator wells (including temporal and spatial variations), and 3) total annual and daily discharge from Barton Springs will be provided in the Annual Report.

Please see Objective 8-1 above.

Objective 8-3. Implement appropriate rules and measures to ensure compliance with District-adopted DFCs for each relevant aquifer or aquifer subdivision in the District.

Performance Standard

Develop and implement a cost-effective method for evaluating and demonstrating compliance with the DFCs of the relevant aquifers in the District, in collaboration with other GCDs in the GMAs. Prior to method implementation, provide a summary of activities related to method development in the Annual Report. Once developed, provide a summary of data for each District-adopted DFC for each relevant aquifer indicating aquifer conditions relative to the DFC, and provide in the Annual Report.

For the Trinity Aquifer in GMA 10, to determine compliance with the Trinity Aquifer DFC, the data must show that the average regional well drawdown does not exceed 25 feet during average recharge conditions including exempt and nonexempt use. GMA 10 is without a means to monitor "average regional drawdown across the planning area. The District made progress in FY 2022 with an in-house numerical model that will help to inform drawdown (within the District) under a variety of conditions. One such scenario is pumping in response to the extant network of Trinity wells in combination with a drought-of-record. Results are expected in early FY 2023.

As reported last year, the average daily springflow at Barton Springs over the time period of September 1, 2014 to August 31, 2021 was 77 cfs. For the fiscal year 2022 just ended and the seven years beginning September 1, 2015, the average daily springflow declined 2 cfs to 75 cfs. Precipitation during the seven years ending August 31, 2021 was greater in Hays and Travis counties than during the seven years ending August 31, 2022. Which of the two seven-year periods best reflects average recharge conditions is uncertain without considerably more data analysis.

The DFC expression is:

“Springflow at Barton Springs during average recharge conditions shall be no less than 49.7 cfs averaged over an 84-month (7-year) period; and during extreme drought conditions including those as severe as a recurrence of the 1950’s drought of record, springflow at Barton Springs shall be no less than 6.5 cfs average on a monthly basis.”

For the Saline Edwards, Northern Subdivision, the DFC expression is no more than 75 feet of regional average potentiometric surface drawdown due to pumping when compared to pre-development conditions. Currently, there are no approved permits in the Saline Edwards.

For a summary of aquifer conditions, see Objective 8-1 above.

Performance Standards and Objectives

General Management (9 objectives)	Administration (3 objectives)	Education & Outreach (6 objectives)	Aquifer Science (8 objectives)	Regulatory Compliance (7 objectives)
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GOAL 1 - Providing the Most Efficient Use of Groundwater – 31 TAC 356.52(a)(1)(A)/TWC §36.1071(a)(1)

		Performance Standards		
1-1	Management Plan Objectives Provide and maintain on an ongoing basis a sound statutory, regulatory, financial, and policy framework for continued District operations and programmatic needs.	<p>Performance Standards</p> <p>A. Develop, implement, and revise as necessary, the District Management Plan in accordance with state law and requirements. Each year, the Board will evaluate progress towards satisfying the District goals. A summary of the Board evaluation and any updates or revisions to the management plan will be provided in the annual report.</p> <p>B. Review and modify District Rules as warranted to provide and maintain a sound statutory basis for continued District operations and to ensure consistency with both District authority and programmatic needs. A summary of any rule amendments adopted in the previous fiscal year will be included in the annual report.</p>		
1-2	Monitor aggregated use of various types of water wells in the District, as feasible and appropriate, to assess overall groundwater use and trends on a continuing basis.	<p>Monitor annual withdrawals from all nonexempt wells through required monthly or annual meter reports to ensure that groundwater is used as efficiently as possible for beneficial use. A summary of the volume of aggregate groundwater withdrawals permitted and actually produced from permitted wells for each Management Zone and permit type will be provided in the annual report.</p>		
1-3	Evaluate quantitatively at least every five years the amount of groundwater withdrawn by exempt wells in the District to ensure an accurate accounting of total withdrawals in a water budget that includes both regulated and non-regulated withdrawals, so that appropriate groundwater management actions are taken.	<p>A. Provide an estimate of groundwater withdrawn by exempt wells in the District using TDLR and TWDB databases and District well records, and update the estimate every five years with the District's management plan updates.</p> <p>B. In the interim years between management plan updates, the most current estimates of exempt well withdrawals will be included in a summary of the volume of aggregate groundwater withdrawals permitted and actually produced from permitted wells for each Management Zone and permit type that will be provided in the annual report.</p>		
1-4	Develop and maintain programs that inform and educate citizens of all ages about groundwater and springflow-related matters, which affect both water supplies and salamander ecology.	<p>A. Publicize District drought trigger status (Barton Springs 10-day average discharge and Lovelady Monitor Well water level) in monthly eNews bulletins and continuously on the District website.</p> <p>B. Provide summaries of associated outreach and education programs, events, workshops, and meetings in the monthly team activity reports in the publicly-available Board backup.</p> <p>C. A summary of outreach activities and estimated reach will be provided in the annual report.</p>		

1-5	Ensure responsible and effective management of District finances such that the District has the near-term and long-term financial means to support its mission.	<p>A. Receive a clean financial audit each year. A copy of the auditor's report will be included in the annual report.</p> <p>B. Timely develop and approve fiscal-year budgets and amendments. The dates for public hearings and Board approval of the budget and any amendments will be provided in the annual report.</p>
1-6	Provide efficient administrative support and infrastructure, such that District operations are executed reliably and accurately, meet staff and local stakeholder needs, and conform to District policies and with federal and state requirements.	<p>A. Maintain, retain, and control all District records in accordance with the Texas State Library and Archives Commission-approved District Records Retention Schedule to allow for safekeeping and efficient retrieval of any and all records, and annually audit records for effective management of use, maintenance, retention, preservation and disposal of the records' life cycle as required by the Local Government Code. A summary of records requests received under the PIA, any training provided to staff or directors, or any claims of violation of the Public Information Act will be provided in the annual report.</p> <p>B. Develop, post, and distribute District Board agendas, meeting materials, and backup documentation in a timely and required manner; post select documents on the District website, and maintain official records, files, and minutes of Board meetings appropriately. A summary of training provided to staff or directors or any claims of violation of the Open Meetings Act will be provided in the annual report.</p>
1-7	Manage and coordinate electoral process for Board members.	Ensure elections process is conducted and documented in accordance with applicable requirements and timelines. Elections documents will be maintained on file and a summary of elections-related dates and activities will be provided in the annual report for years when elections occur.

GOAL 2 - Controlling and Preventing Waste of Groundwater – 31 TAC 356.52(a)(1)(B)/TWC §36.1071(a)(2))

	Management Plan Objectives	Performance Standards
2-1	Require all newly drilled exempt and nonexempt wells, and all plugged wells to be registered and to comply with applicable District Rules, including Well Construction Standards.	A summary of the number and type of applications processed and approved for authorizations, permits, and permit amendments including approved use types and commensurate permit volumes for production permits and amendments will be provided in the <u>annual report</u> .
2-2	Ensure permitted wells and well systems are operated as intended by requiring reporting of periodic meter readings, making periodic inspections of wells, and reviewing pumpage compliance at regular intervals that are meaningful with respect to the existing aquifer conditions.	<p>A. Inspect all new wells for compliance with the Rules, and Well Construction Standards, and provide a summary of the number and type of inspections or investigations in the <u>annual report</u>.</p> <p>B. Provide a summary of the volume of aggregate groundwater withdrawals permitted and actually produced from permitted wells for each Management Zone and permit type in the <u>annual report</u>.</p>
2-3	Provide leadership and technical assistance to government entities, organizations, and individuals affected by groundwater-utilizing land use activities, including support of or opposition to legislative initiatives or projects that are inconsistent with this objective.	<p>A. In even-numbered fiscal years, provide a summary of interim legislative activity and related District efforts in the <u>annual report</u>. In odd-numbered fiscal years, provide a legislative debrief to the Board on bills of interest to the District and provide a summary in the annual report.</p> <p>B. Provide a summary of District activity related to other land use activities affecting groundwater in the <u>annual report</u>.</p>
2-4	Ensure all firm-yield production permits are evaluated with consideration given to the demand-based permitting standards including verification of beneficial use that is commensurate with reasonable non-speculative demand.	A summary of the number and type of applications processed and approved for authorizations, permits, and permit amendments including approved use types and commensurate permit volumes for production permits and amendments will be provided in the <u>annual report</u> .

GOAL 3 - Addressing Conjunctive Surface Water Management Issues – 31 TAC 356.52(a)(1)(D)/TWC §36.1071(a)(4)

	Management Plan Objectives	Performance Standards
3-1	Assess the physical and institutional availability of existing regional surface water and alternative groundwater supplies and the feasibility of those sources as viable supplemental or substitute supplies for District groundwater users.	Identify available alternative water resources and supplies that may facilitate source substitution and reduce demand on the Edwards Aquifer, while increasing regional water supplies, and evaluate feasibility by considering: <ol style="list-style-type: none"> 1. available/proposed infrastructure, 2. financial factors, 3. logistical/engineering factors, and 4. potential secondary impacts (development density/intensity or recharge water quality). A summary of District activity related to this objective will be provided in the <u>annual report</u> .
3-2	Encourage and assist District permittees to diversify their water supplies by assessing the feasibility of alternative water supplies and fostering arrangements with currently available alternative water suppliers.	Identify available alternative water resources and supplies that may facilitate source substitution and reduce demand on the Edwards Aquifer, while increasing regional water supplies, and evaluate feasibility by considering: <ol style="list-style-type: none"> 1. available/proposed infrastructure, 2. financial factors, 3. logistical/engineering factors, and 4. potential secondary impacts (development density/intensity or recharge water quality). A summary of District activity related to this objective will be provided in the <u>annual report</u> .
3-3	Demonstrate the importance of the relationship between surface water and groundwater, and the need for implementing prudent conjunctive use through educational programs with permittees and public outreach programs.	A. Provide summaries of associated outreach and education programs, events, workshops, and meetings in the monthly team activity reports in the publicly-available Board backup. B. Summarize outreach activities and estimate reach in the <u>annual report</u> .
3-4	Actively participate in the regional water planning process to provide input into policies, planning elements, and activities that affect the aquifers managed by the District.	Regularly attend regional water planning group meetings and <u>annually report</u> on meetings attended.

GOAL 4 - Addressing Natural Resource Issues which Impact the Use and Availability of Groundwater, and which are Impacted by the Use of Groundwater – 31 TAC 356.52 (a)(1)(E)/TWC §36.1071(a)(5)

	Management Plan Objectives	Performance Standards
4-1	<p>Assess ambient conditions in District aquifers on a recurring basis by:</p> <ol style="list-style-type: none"> 1. sampling and collecting groundwater data from selected wells and springs monthly; 2. conducting scientific investigations as indicated by new data and models to better determine groundwater availability for the District aquifers; and 3. conducting studies as warranted to help increase understanding of the aquifers and, to the extent feasible, detect possible threats to water quality and evaluate their consequences. 	<p>A. Review water-level and water-quality data that are maintained by the District and/or TWDB, or other agencies, on a regular basis.</p> <p>B. Improve existing analytical or numerical models or work with other organizations on analytical or numerical models that can be applied to the aquifers in the District.</p> <p>C. A review of the data mentioned above will be assessed for significant changes and reported in the <u>annual report</u>.</p>
4-2	<p>Evaluate site-specific hydrogeologic data from applicable production permits to assess potential impact of withdrawals to groundwater quantity and quality, public health and welfare, contribution to waste, and unreasonable well interference.</p>	<p>This involves evaluations of certain production permit applications for the potential to cause unreasonable impacts as defined by District rule. To evaluate the potential for unreasonable impacts, staff will:</p> <ol style="list-style-type: none"> A. Perform a technical evaluation of the application, aquifer test, and hydrogeological report; B. Use best available science and analytical tools to estimate amount of drawdown from pumping and influence on other water resources; and C. Recommend proposed permit conditions to the Board for avoiding unreasonable impacts if warranted. <p>A list of permit applications that are determined to have potential for unreasonable impacts will be provided in the <u>annual report</u>.</p>
4-3	<p>Implement separate management zones and, as warranted, different management strategies to address more effectively the groundwater management needs for the various aquifers in the District.</p>	<ol style="list-style-type: none"> A. Increase the understanding of District aquifers by assessing aquifer conditions, logging wells, and collecting water quality data. A summary of the number of water quality samples performed will be provided in the <u>annual report</u>. B. A summary of the volume of aggregate groundwater withdrawals permitted and actually produced from permitted wells for each Management Zone and permit type will be provided in the <u>annual report</u>.

4-4	<p>Actively participate in the joint planning processes for the relevant aquifers in the District to establish and refine Desired Future Conditions (DFCs) that protect the aquifers and the Covered Species of the District HCP.</p>	<p>Attend at least 75% of the GMA meetings and annually report on meetings attended, GMA decisions on DFCs, and other relevant GMA business.</p>
4-5	<p>Implement the measures of the District Habitat Conservation Plan (HCP) and Incidental Take Permit (ITP) from the U.S. Fish & Wildlife Service (USFWS) for the covered species and covered activity to support the biological goals and objectives of the HCP.</p>	<p>Prior to ITP permit issuance, a progress report summarizing activities related to the USFWS review of the ITP application will be provided in the <u>annual report</u>. Upon ITP issuance, the <u>HCP annual report</u> documenting the District's activities and compliance with ITP permit requirements will be incorporated into the <u>annual report</u> by reference.</p>

GOAL 5 - Addressing Drought Conditions – 31 TAC 356.52 (a)(1)(F)/TWC §36.1071(a)(6)

	Management Plan Objectives	Performance Standards
5-1	<p>Adopt and keep updated a science-based drought trigger methodology, and frequently monitor drought stages on the basis of actual aquifer conditions, and declare drought conditions as determined by analyzing data from the District’s defined drought triggers and from existing and such other new drought-declaration factors, especially the prevailing DO concentration trends at the spring outlets, as warranted.</p>	<p>A. During periods of District-declared drought, prepare a drought chart at least monthly to report the stage of drought and the conditions that indicate that stage of drought. During periods of non-drought, prepare the drought charts at least once every three months.</p> <p>B. A summary of the drought indicator conditions and any declared drought stages and duration will be provided in the <u>annual report</u>.</p>
5-2	<p>Implement a drought management program that step-wise curtails freshwater Edwards Aquifer use to at least 50% by volume of 2014 authorized aggregate monthly use during Extreme Drought, and that designs/uses other programs that provide an incentive for additional curtailments where possible. For all other aquifers, implement a drought management program that requires mandatory monthly pumpage curtailments during District-declared drought stages.</p>	<p>During District-declared drought, enforce compliance with drought management rules to achieve overall monthly pumpage curtailments within 10% of the aggregate curtailment goal of the prevailing drought stage. A monthly drought compliance report for all individual permittees will be provided to the Board during District-declared drought, and a summary will be included in the <u>annual report</u>.</p>
5-3	<p>Inform and educate permittees and other well owners about the significance of declared drought stages and the severity of drought, and encourage practices and behaviors that reduce water use by a stage-appropriate amount.</p>	<p>A. During District-declared drought, publicize declared drought stages and associated demand reduction targets in monthly eNews bulletins and continuously on the District website.</p> <p>B. A summary of drought and water conservation related newsletter articles, press releases, and drought updates sent to Press, Permittees, Well Owners and eNews subscribers will be provided in the <u>annual report</u>.</p>

5-4	<p>Assist and, where feasible, incentivize individual freshwater Edwards Aquifer historic-production permittees in developing drought planning strategies to comply with drought rules, including:</p> <ol style="list-style-type: none"> 1. pumping curtailments by drought stage to at least 50% of the 2014 authorized use during Extreme Drought, 2. "right-sizing" authorized use over the long term to reconcile actual water demands and permitted levels, and 3. as necessary and with appropriate conditions, the source substitution with alternative supplies. 	<p>A. Require an updated UCP/UDCP from Permittees within one year of each five-year Management Plan Adoption.</p> <p>B. Provide a summary of any activity related to permit right sizing or source substitution with alternative supplies that may reduce demand on the freshwater Edwards Aquifer in the <u>annual report</u>.</p>
5-5	<p>Implement a Conservation Permit that is held by the District and accumulates and preserves withdrawals from the freshwater Edwards Aquifer that were previously authorized with historic-use status and that is retired or otherwise additionally curtailed during severe drought, for use as ecological flow at Barton Springs during Extreme Drought and thereby increase springflow for a given set of hydrologic conditions.</p>	<p>A summary of the volume of aggregate groundwater withdrawals permitted and actually produced from permitted wells for each Management Zone and permit type including the volume reserved in the freshwater Edwards Conservation Permit for ecological flows will be provided in the <u>annual report</u>.</p>

GOAL 6 - Addressing Conservation and Rainwater Harvesting where Appropriate and Cost-Effective – 31TAC 356.52 (a)(1)(G)/TWC §36.1071(a)(7)

	Management Plan Objectives	Performance Standards
6-1	Develop and maintain programs that inform, educate, and support District permittees in their efforts to educate their end-user customers about water conservation and its benefits, and about drought-period temporary demand reduction measures.	<p>A. A summary of efforts to assist permittees in developing drought and conservation messaging strategies will be provided in <u>annual report</u>.</p> <p>B. Publicize declared drought stages and associated demand reduction targets monthly in eNews bulletins and continuously on the District website.</p>
6-2	Encourage use of conservation-oriented rate structures by water utility permittees to discourage egregious water demand by individual end-users during declared drought.	<p><u>On an annual basis</u>, the District will provide an informational resource or reference document to all Public Water Supply permittees to serve as resources related to conservation best management strategies and conservation-oriented rate structures.</p>
6-3	Develop and maintain programs that educate and inform District groundwater users and constituents of all ages about water conservation practices and the use of alternate water sources such as rainwater harvesting, gray water, and condensate reuse.	<p>Summarize water conservation related newsletter articles, press releases, and events in the <u>annual report</u>. Summary will describe the preparation and dissemination of materials shared with District groundwater users and area residents that inform them about water conservation and alternate water sources.</p>

GOAL 7 - Addressing Recharge Enhancement where Appropriate and Cost-Effective – 31TAC 356.52 (a)(1)(G)/TWC §36.1071(a)(7)

	Management Plan Objectives	Performance Standards
7-1	<p>Improve recharge to the freshwater Edwards Aquifer by conducting studies and, as feasible and allowed by law, physically altering (cleaning, enlarging, protecting, diverting surface water to) discrete recharge features that will lead to an increase in recharge and water in storage beyond what otherwise would exist naturally.</p>	<p>Maintaining the functionality of the Antioch system will be the principal method for enhancing recharge to the freshwater Edwards Aquifer. Additional activities may be excavating sinkholes and caves within the District. A summary of all recharge improvement activities will be provided in the <u>annual report</u>.</p>
7-2	<p>Conduct technical investigations and, as feasible, assist water-supply providers in implementing engineered enhancements to regional supply strategies, including desalination, aquifer storage and recovery, effluent reclamation and re-use, and recharge enhancement of surface water (including floodwater) to increase the options for water-supply substitution and reduce dependence on the Aquifer.</p>	<p>Assess progress toward enhancing regional water supplies in the <u>annual report</u>.</p>

GOAL 8 - Addressing the Desired Future Conditions of the Groundwater Resources – 31TAC (a)(1)(H)/TWC §36.1071(a)(8)

	Management Plan Objectives	Performance Standards
8-1	<p>Freshwater Edwards Aquifer All-Conditions DFC: Adopt rules that restrict, to the greatest extent practicable, the total amount of groundwater authorized to be withdrawn annually from the Aquifer to an amount that will not substantially accelerate the onset of drought conditions in the Aquifer; this is established as a running seven-year average springflow at Barton Springs of no less than 49.7 cfs during average recharge conditions.</p>	<p>A. A summary of the volume of aggregate groundwater withdrawals permitted and actually produced from permitted wells for each Management Zone and permit type will be provided in the <u>annual report</u>.</p> <p>B. Upon ITP issuance, the <u>HCP annual report</u> documenting the District's activities and compliance with ITP permit requirements will be incorporated into the <u>annual report</u> by reference.</p> <p>C. Upon ITP issuance, compile a summary of aquifer data including: 1) the frequency and duration of District-declared drought, 2) levels of the Aquifer as measured by springflow and indicator wells (including temporal and spatial variations), and 3) total annual and daily discharge from Barton Springs will be provided in the <u>annual report</u>.</p>

8-2	<p>Freshwater Edwards Aquifer Extreme Drought DFC: Adopt rules that restrict, to the greatest extent practicable and as legally possible, the total amount of groundwater withdrawn monthly from the Aquifer during Extreme Drought conditions in order to minimize take and avoid jeopardy of the Covered Species as a result of the Covered Activities, as established by the best science available. This is established as a limitation on actual withdrawals from the Aquifer to a total of no more than 5.2 cfs on an average annual (curtailed) basis during Extreme Drought, which will produce a minimum springflow of not less than 6.5 cfs during a recurrence of the drought of record (DOR).</p>	<p>A. A summary of the volume of aggregate groundwater withdrawals permitted and actually produced from permitted wells for each Management Zone and permit type will be provided in the <u>annual report</u>.</p> <p>B. Upon ITP issuance, the HCP annual report documenting the District's activities and compliance with ITP permit requirements will be incorporated into the <u>annual report</u> by reference.</p> <p>C. Upon ITP issuance, compile a summary of aquifer data including: 1) the frequency and duration of District-declared drought, 2) levels of the Aquifer as measured by springflow and indicator wells (including temporal and spatial variations), and 3) total annual and daily discharge from Barton Springs will be provided in the <u>annual report</u>.</p>
8-3	<p>Implement appropriate rules and measures to ensure compliance with District-adopted DFCs for each relevant aquifer or aquifer subdivision in the District.</p>	<p>Develop and implement a cost-effective method for evaluating and demonstrating compliance with the DFCs of the relevant aquifers in the District, in collaboration with other GCDs in the GMAs. Prior to method implementation, provide a summary of activities related to method development in the <u>annual report</u>. Once developed, provide a summary of data for each District-adopted DFC for each relevant aquifer indicating aquifer conditions relative to the DFC and provide in the <u>annual report</u>.</p>