

**Barton Springs  
Edwards Aquifer**  
CONSERVATION DISTRICT

**ANNUAL REPORT  
FISCAL YEAR 2020**

(Board-approved December 10, 2020)

**BOARD OF DIRECTORS (August 31, 2020)**

Blayne Stansberry, President	Precinct 2	November 2014 – November 2022
Craig Smith, Vice President	Precinct 5	May 1998 - November 2022
Blake Dorsett, Secretary	Precinct 3	November 2012 - November 2020
Mary Stone, Director	Precinct 1	February 2008 - November 2020
Robert D. Larsen, Ph.D., Director	Precinct 4	May 2003 - November 2020

## **DISTRICT STAFF**

**August 31, 2020**

Vanessa Escobar

General Manager

### **Administration Team**

Dana Wilson

Senior Administrative Manager/Team Leader

Tammy Raymond

Senior Administrative Specialist

Shannon DeLong

Senior Accounting Specialist

### **Aquifer Science Team**

Brian Smith

Principal Hydrogeologist/Team Leader

Brian Hunt

Senior Hydrogeologist

Justin Camp

Hydrogeologist Technician

Lane Cockrell

Hydrogeologist

### **Education and Community Outreach Team**

Jackie Vay

Outreach Specialist

### **Regulatory Compliance Team**

Michael Redman

Assistant General Manager/Senior Team Leader

Kendall Bell-Enders

Senior Regulatory Compliance Coordinator

Erin Swanson

Regulatory Compliance Specialist

## Table of Contents

1.0	Background .....	1
1.1	General Information about the District.....	1
1.2	District Mission and Vision Statements .....	4
1.3	District Critical Success Factors.....	4
2.0	District Program Areas and Team Highlights for 2018.....	5
2.1	General Management Team .....	5
2.2	Administration Team.....	8
2.3	Aquifer Science Team .....	9
2.4	Education and Community Outreach Team .....	12
2.5	Regulatory Compliance Team.....	14
2.5.1	Permit Summary.....	20
2.5.2	Production Summary.....	21
3.0	Required Data and Information.....	24
3.1	Aquifer Status.....	24
3.2	Grant Programs.....	24
3.3	Professional Services.....	24
3.4	Capital Projects.....	25
3.5	Financial Report .....	25
3.6	Evaluation of District’s Long-range Plan Pursuant to §36.1071 .....	26
3.6.1	Background.....	26
3.6.2	Board Evaluation of Objectives and Progress Assessment.....	26
	Appendix A: Independent Annual Financial Audit Report.....	27
	Appendix B: Assessment of Progress toward Management Plan Objectives.....	28
	Record of Board Assessment of District Objectives	
	Staff Assessment of Performance Standards and Metrics	
	Basis for Evaluation of Progress on Objectives and Performance Standards	

## **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 2020, covering the period from September 1, 2019 to August 31, 2020.

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 2020; 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 70<sup>th</sup> 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 84<sup>th</sup> 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 Territory. Some wells in the District also produce water from the Taylor and Austin Chalk formations as well as various alluvial deposits along river and stream banks.

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.

District elections occur every two years. The next election was set to be held in November of 2020 for Director Precincts 1, 3, and 4, which occurs in FY 2021. At the time of this report presentation for Board approval, this election will have just been held.

In accordance with District Bylaws, the Board elects its officers for one-year terms in December of each year. The elected officers in December 2020 were Blayne Stansberry, President; Craig Smith, Vice President; and Blake Dorsett, 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.

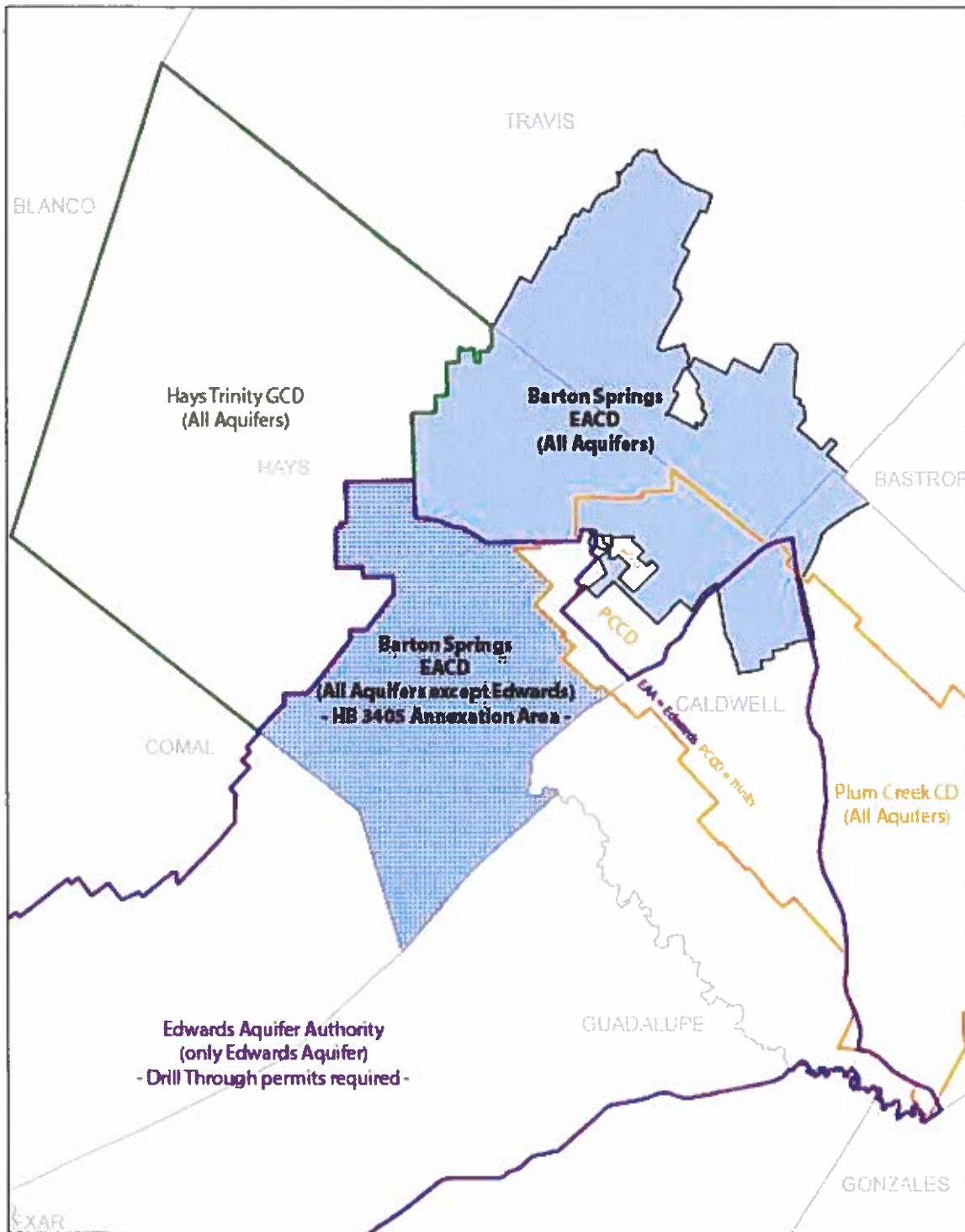


Figure 1 - The District's territory including the expanded Shared Territory and the adjacent Groundwater Conservation Districts and their respective jurisdiction over aquifers.

## 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 2020**

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 2020, 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**

Alicia Reinmund-Martinez served as the District's GM through December 2019. There was a period of transition in which the Board was conducting interviews for a new GM during the month of January 2020. In February 2020, Vanessa Escobar was selected to step into the role of GM. In June 2020, Michael Redman was hired to serve as the Assistant GM.

The GM is responsible for the day-to-day business of the District and is an *ex-officio* member of all the other teams. The key areas of functional responsibilities for the GM include staff management 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 2020, some highlights for the office of the GM:**

- **COVID-19** – In February 2020, the GM and staff began to plan for a possible quarantine and office closure due to the increasing risks and rate of positive cases of COVID-19. The GM developed internal protocols and procedures related to modified remote working policies, adjusted work schedules, emergency leave, public interfacing, in office sanitation protocols, and social distancing. In March to May 2020, the City of Austin, Travis County, Hays County, and the Governor's Office all issued public orders relating to lockdowns, school closures, quarantines, essential business operations, and mask requirements. The entire staff team implemented the necessary operational adjustments and adapted to remote workplace setups for the rest of the FY 2020 and into FY 2021. Staff has continued to carry out their workload in a consistent and timely manner, and has maintained excellence and a positive outlook during significant changes and transitions within the District.

During the COVID-19 transition, the staff was able to quickly adapt to new remote working operations and has maintained the objectives and goals of the District program areas in the following ways:



- Aims for quality work and maintains productivity.
  - Maintains engagement with colleagues and GM.
  - Provides assistance to colleagues and contributes towards solutions on projects and compliance matters.
  - Engages through virtual meeting formats and participates in webinars and network meetings.
  - Supports the essential business and discussions of the Board meetings.
- Provides timely responses to District constituents, and continues to engage remotely with regional partners to support the District's mission.
  - **Cybersecurity Policy** - Last legislative session, HB 3834 passed amending the Government Code to require the establishment of state verified cybersecurity training programs. A Board resolution was approved at the June 11<sup>th</sup> Board Meeting and 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). On June 13, 2020 the training certificates were officially submitted to the DIR.
  - **Legislative Interim** - During FY 2020, the Legislature did not convene as this was an interim year. The GM served as the primary point of contact, and coordinated with Brian Sledge of SledgeLaw Group PLLC, the District's legislative consultant, and the appointed Board Legislative Committee members to monitor the progress on the legislative interim charges and any proposed bills of interest to the District. Efforts included participating in legislative subcommittees of the Texas Water Conservation Association (TWCA) Groundwater Committee, and the Texas Alliance of Groundwater District's (TAGD) Legislative subcommittee. The District's primary charges of interest included:
    - Monitor the joint planning process for groundwater and the achievement of the desired conditions for aquifers by groundwater conservation districts.
    - Groundwater Regulatory Framework: Study the state's groundwater regulatory framework and make recommendations to improve groundwater regulation, management, and permitting.
  - **Regional and Joint Planning** – The GM attended as the District Representative to Groundwater Management Area (GMA) 10 meetings, including related interfaces with the Texas Water Development Board (TWDB). This year, discussions at meetings included desired future conditions (DFC) monitoring activities, and discussions on the GMA 10's evaluation needs for the development of the 2022 DFCs. The Assistant GM 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 drafts of Regional Water Plans.
  - **Strategic Planning Board Presentation** – The GM and staff provided strategic planning information to the Board in October 2019 and March 2020. These discussions were held to inform the priority areas of focus for meeting the objectives and goals of the District's MP.
  - **Elections Administration** – The GM supported the administration team in coordinating and verifying completion of the required election filing materials for the November 2020 Election. This six-month process involved discussions with Hays County to verify coding correction errors were fixed, tracking paperwork, and coordinating with the counties and managing Board approval of resolutions and contracts. This year was especially unique due to the new protocols and expenses associated with COVID-19 impacts.
  - **Grant Application Support** – The GM and staff from the Administration and Aquifer Science teams provided a great deal of support on the grant application effort as they prepared a federal Bureau of Reclamation (BOR) Water Smart grant application. There were several technical descriptions and

financial calculations required for the application as well as numerous meetings and planning discussions. An award decision will be made by the BOR in December 2020.

- **Kent Butler Summit Planning** – The GM and staff are participating in the planning and coordination of the 2020 Kent Butler small group discussions. The small group discussions are targeted toward local officials, key decision makers, and staff at municipalities, counties, WSCs and GCDs. The focus will be on land and water resource management and how partnerships with counties, municipalities, GCDs and nonprofit organizations can be leveraged. Small group meetings are planned for January 2021.
- **Sustainable Yield** - The GM and members of the Regulatory Compliance and Aquifer Science teams developed a process overview that outlines the timeline, milestones, and steps involved with completing the policy discussions, stakeholder aspects, and technical aspects of the sustainable yield effort. Progress continues to be made on the development of modeling tools and on the workplan framework related to the stakeholder discussions.
- **Litigation** - The District was actively involved in the following litigation matters during FY 2020.
  - **Needmore Water, LLC** - In FY 2020, the District continued the ongoing implementation of the 2015 House Bill 3405 requiring substantial legal expense primarily related to the conversion of the temporary permit into a regular permit for Needmore. In FY 2017, this permit conversion was contested and referred by the Board to the State Office of Administrative Hearings (SOAH) to conduct a contested case hearing. In FY 2018, the SOAH Administrative Law Judge (ALJ) issued a ruling dismissing the protestant's Motion for Summary Disposition in the contested case, granting Needmore and the District's Motions and cancelling the Hearing on the Merits. In FY 2019, the Board again referred the case to SOAH for further determination on the merits of the case, and the judge provided her decision. Based upon this decision, in July 2019, the Board conducted a hearing on the permit and subsequently approved it. During FY 2020, in October of 2019, Trinity Edwards Springs Protection Association (TESPA) filed a Motion for Rehearing requesting the Board to grant a new hearing on the Needmore matter and to deny the permit. In December 2019, the Board denied the request from TESPAs for a rehearing of the permit. In February 2020, TESPAs filed a lawsuit in Travis County against the District and Needmore as a necessary party/defendant. The core issues of this lawsuit are the same issues that TESPAs brought before the ALJ in the SOAH process as part of the contested case hearing, and the hearing before the Board. With that being said, the District's position, based on evidence provided by all parties, is still the same. The matter is still pending and waiting a scheduling date.
  - **Electro Purification, LLC** - In FY 2020, the recommended draft proposed permit for the Electro Purification LLC (EP) application remained in abatement at SOAH from October 2019 through August 2020. In July 2018, the Board referred the case to SOAH to conduct a contested case hearing. After a schedule postponement and period of abatement, the proceeding schedule has commenced again as of August 2020. and there is now a hearing on the merits scheduled for April 2021. In FY 2021, the District anticipates legal expenses to continue with this contested case.
  - **Kinder Morgan Permian Highway Pipeline** - The District has been actively involved in evaluating potential risk to the local aquifer resources from the activities of the Kinder Morgan Permian Highway Pipeline construction project since early 2018. In January 2020, the Board voted to join as a plaintiff in a lawsuit against U.S. Fish and Wildlife Service (USFWS), U.S. Army Corp of Engineers, and Kinder Morgan for violation of the ESA stating that because there is not a reasonable assurance that the aquifers will be protected during the construction and operation of the pipeline, the Permian Highway Pipeline should not be located within the District or any other hydrologically-sensitive area. The plaintiff's case remains as pending and awaiting a Judge's Decision in the Federal Court.

## 2.2 Administration Team

Ms. Dana Wilson, Senior Administrative Manager, serves as the Senior Administrative Team Leader, with Ms. Tammy Raymond, Senior Administrative Specialist, and Ms. Shannon DeLong, Senior Accountant Specialist, as 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 2020, some highlights for the Administration Team included:**

- District 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 Board, as required by law.
- Maintained District financial records to receive a clean financial audit in December 2020 (see Appendix A).
- Developed and monitored the District annual budgets. In FY 2020, there were two versions. The initial budget was brought before the Board in a public hearing held on August 22, 2019 where it was approved. The Board approved a Budget Revision on May 14, 2020.
- 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. In FY 2019, the District organized and scheduled the migration of all of its computer equipment to Windows 10 (due to the current operating systems no longer to be supported after January 2020). The actual migration happened in October 2019 (FY 2020).
- 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.
- The District issued a total of \$20,183.63 in conservation credits in FY 2020 (\$12,614.77 issued to 19 permittees, and \$7,568.86 issued to the CoA). Permittees donating credits back to the District's camp scholarship fund include Crestview RV (\$64.29), Oak Forest WSC (\$139.14), and Slaughter Creek Acres WSC (\$88.25). The CoA also donated their \$7,568.86 credit to the District's camp scholarship fund. Total donations combined equal \$7,860.54. Although this relates to permittees, it is a function of administration to track monthly meter readings and assess all late submittals, and to create, track, assess, and apply the conservation credits.

## **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 Brian Hunt, P.G., Senior Hydrogeologist; Justin Camp, Hydrogeologic Technician; Lane Cockrell, Hydrogeologist (two-year contract, beginning July 2018 and continuing through August 2020); 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 2020, 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:

- Attended the South Central Texas Water Research Interest Group (SCTWRIG) bi-annual meeting in San Antonio (December 3, 2019).
- Attended the EAA Distinguished Lecturer: Dr. Ron Green (October 4, 2019; Southwest Research Institute [SWRI], San Antonio).
- Attended the Bell County Water Symposium (November 6, 2019).
- Attended Capital Area Council of Governments (CAPCOG) Flood Forecasting Subcommittee Meetings.
- Brian Smith served as co-host and participated in planning for the 16<sup>th</sup> Sinkhole Conference that was to be held in San Juan, Puerto Rico in April 2020. Because of COVID-19, the conference was initially postponed until April 2021, but was ultimately canceled.

Presented technical information and studies to the public and students:

- Justin Camp presented findings from an aquifer test of the Lower Trinity Aquifer at Geological Society of America, South-Central conference, Fort Worth (March 9, 2020).
- Lane Cockrell presented on the Hydrogeologic Atlas of Southwestern Travis Co. at Geological Society of America, South-Central conference, Fort Worth (March 9, 2020).
- Justin Camp and Lane Cockrell volunteered to mentor geoscience students in Career Workshop at Geological Society of America, South-Central conference, Fort Worth (March 9, 2020).
- Friends of Blue Hole conference (January 14, 2020).
- Brian Smith presented at the Hydro-Geo Workshop, EAA sponsor, Cave Without A Name (October 5-6, 2019).
- Brian Smith led portions of field trip for hydrogeology students of the University of Texas (UT) Jackson School of Geosciences with Dr. Bayani Cardenas (November 10, 2019).
- District staff helped plan the Austin Cave Festival at the Wildflower Center (February 23, 2020).

**In FY 2020, other highlights for the Aquifer Science Team included:**

- Maintained a monitor well network of about 32 wells with instruments that collect hourly data. The District's weather station at the District office also collects hourly data.
- The District routinely measures water levels in the six multiport monitor wells that are completed in the Edwards and Trinity Aquifers.
- Field staff visited about 25 wells in the EP area for water levels and field parameter measurements. Some sites were visited multiple times.

- Determined and documented drought status, including keeping the District's drought monitor blog up to date.
- Participated with GMA 9 (November 18, 2019) and GMA 10 (September 16, 2019) in technical discussions.
- Worked cooperatively with the Ruby Ranch WSC for final permitting of the aquifer storage and recovery (ASR) project.
- Maintained the Antioch Cave Recharge Enhancement Project as an ongoing part of a 319(h) grant from the Environmental Protection Agency (EPA) and TCEQ.
- 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 2020, staff sampled about eight springs and well sites for hydrocarbon contaminants as a screening test for BTEX and TPH.
- Analyzed the results of an aquifer test and other data for the Gragg well field, Balcones Fault Zone, Hays County, Central Texas. This includes modeling and the publication of a technical memo (see Published Papers).
- District staff worked on locations for the installation of two new monitor wells upgradient of Jacob's Well.
- Collected water-quality data (major ions and isotopes) from about 23 sample locations in FY 2020 in cooperation with the TWDB.
- Cooperated with Travis County to develop a second interlocal agreement (ILA) to continue a hydrogeologic study of western Travis County. The ILA was signed by Travis County on October 1, 2019.
- Continued collecting data at the Shield Ranch in southwest Travis County. Installed a telemetered flow station on Rocky Creek, a tributary to Barton Creek.
- District staff attended webinar courses in groundwater modeling to develop an initial draft numerical model for eventual use in permit evaluations in FY 2020.
- Provided technical review and compiled comments on the draft conceptual model update for the Hill Country portion of the Trinity Aquifer (SWRI report contracted by the TWDB). See Published Papers.
- Visited and assessed potential sensitive karst features along the South MoPac Intersections construction project with the CoA and Texas Department of Transportation (TxDOT) staff. These include several caves and other karst features.
- Measured water levels in the saline Edwards multiport monitor well on November 19, 2019.
- Held the first annual meeting (December 10, 2019) between CoA and District staff to discuss status of their respective Habitat Conservation Plan (HCP) projects.
- District staff hosted the HCP Management Advisory Committee (MAC) meeting on January 28, 2020 to discuss the accomplishments of the District's HCP projects.
- Brian Smith presented a portion of a workshop on the Trinity Aquifers at the Texas Land Conservation conference on February 26, 2020.

**Published Papers and District Documents:**

- Camp, Justin P., Hunt, Brian B., Smith, Brian A., 2020, Evaluating the Potential Groundwater Availability Within A Lower Trinity Aquifer Well Field, Balcones Fault Zone, Hays County, Central Texas: 2020 Abstracts with Programs, Geological Society of America, South-Central Meeting, March 9-10, 2020, Fort Worth, Texas.
- Cockrell, L.P., Gary, R.H., Hunt, B.B., and Smith, B.A., 2020, Data Compilation and Database Structure for the Geodatabase Accompanying the Hydrogeologic Atlas of Southwest Travis County, Central Texas: Barton Springs/Edwards Aquifer Conservation District Data Series Report 2020-0721, July 2020, 15 p. + digital geodatabase.
- Smith, B.A., Hunt, B.B., Gary R.H., Wierman, D.A. and Watson, J.A., 2020, Springshed Delineation in a Karst Aquifer in Hays County, Central Texas: 16<sup>th</sup> Sinkhole Conference, NCKRI Symposium 8.
- Tian, L., Smith, B.A., Hunt, B.B., Doster, J.D., Gao, Y., 2020, Geochemical Evaluation of Hydrogeologic Interaction Between the Edwards and Trinity Aquifers Based on Multiport Well Assessment in Central Texas: 16<sup>th</sup> Sinkhole Conference, NCKRI Symposium 8.
- Cockrell, L.P., Hunt, B.B., Gary, R., Vay, J., Camp, J., and Kennedy, V., 2020, Hydrogeologic Atlas of Southwestern Travis County, Central Texas: Geological Society of America Abstracts with Programs, Vol. 52, No. 1.
- Gary, R.H., Hunt, B.B., and Cockrell, L.P., 2019, Estimating the Number of Trinity Aquifer Exempt Wells in a Recently Annexed Groundwater Conservation District Territory: Geological Society of America Abstracts with Programs, Vol. 51, No. 5.
- Zappitello, S.J., Johns, D.A., and Hunt, B.B., 2019, Summary of Groundwater Tracing in the Barton Springs Edwards Aquifer from 1996 to 2017: City of Austin, Watershed Protection, DR-19-04.

## **2.4 Education and Community Outreach Team**

Ms. Robin Gary served as the team leader of the Education Outreach team as the District's Environmental Educator, GIS Specialist, and Public Information Coordinator on the Education and Community Outreach team in FY 2020. Ms. Jackie Vay serves as Outreach Specialist on the Education team and has transitioned to the sole team member partway through the fiscal year. The team worked together effectively to coordinate duties and complete necessary tasks, in addition to establishing a transition plan and list of key programs for a smooth staff transition. Strategic planning was conducted within the team, and findings were presented to the staff and Board to help inform future team budgeting. The team continues to collaborate regularly with all teams to maintain a diverse and effective Education and Outreach program.

The District continues its active, multi-dimensional educational program that emphasizes awareness of the finite and fragile aspects of the groundwater resources in the District. To increase awareness of District programs and roles, staff applied a multi-faceted approach. Programs and events this year included Barton Springs University, Hill Country Explorer's Guide Collaboration, Austin Cave Festival, Camp and College scholarships, Kent Butler Summit Planning Committee, Fall Neighborhood Site Visits, Library Family Programming, Travis County Groundwater Atlas Project and Travis County Well Owner Guide, Trinity Groundwater Wells and Springs Library Information Sessions, and Nature Nights at the Wildflower Center. COVID-19 severely impacted public programming and in-person outreach during the latter half of the fiscal year. Certain education events were made virtual, postponed, or even cancelled in the interest of public health and safety. Significant planning and effort by all teams was put into District operations changes, teleworking, and keeping the public informed of these changes.

The District eNewsletter continued circulation in FY 2020. Feedback and metrics show that the frequent updates in the mobile-friendly, digital format has been highly popular. Subscribers receive regular updates on permitting, aquifer science, events, and programs. The eNews received over 3,400 combined 'opens' throughout the fiscal year. Each eNews was sent to about 2,800 subscribers which includes contacts from press, teachers, permittees, home owner associations (HoAs), and interested members of the public. District social media following has increased significantly through regular postings and educational content development. District Facebook followers have increased by 12%, and Twitter followers have increased by 7.5% during FY 2020. Post interactions have increased, and distribution of information is strengthened through these various platforms. The team actively increased the use and development of new video content for use on social media platforms, for increased engagement and public awareness.

The Education and Community Outreach team constantly seeks to maintain and create new partnerships with like-minded local entities to more efficiently and effectively carry out the District's mission. Through these partnerships, staff members augment their knowledge base and are able to make a contribution to efforts that reach larger and more diverse audiences. This year staff continued partnerships with TAGD, Austin Youth River Watch, Central Texas Water Efficiency Network (CTWEN), Capital Area Master Naturalists (CAMN), CoA, City of Sunset Valley, Colorado River Alliance, EAA, Greater Edwards Aquifer Alliance, Hill Country Alliance, Hill Country Conservancy, Keep Austin Beautiful, Lady Bird Johnson Wildflower Center, Lower Colorado River Authority (LCRA), Meadows Center, Save Barton Creek Association (SBCA), San Antonio River Authority, San Antonio Water System, Shield Ranch, Splash! Exhibit, Texas Cave Management Association, Texas Parks and Wildlife Department (TPWD), TWDB, UT Bureau of Economic Geology, UT Jackson School of Geosciences, and more.

**In FY 2020, some highlights of the Education and Community Outreach Team included:**

- Strategic Education Outreach team planning, alongside budgeting process to streamline programs and priorities with decreased staff.
- Participating in about 20 outreach events (including field trips, presentations, and events) that reached approximately 2,800 adults and 2,400 children.
- Co-hosting the Austin Cave Festival at the Lady Bird Johnson Wildflower Center with another year of record attendance. (February 22, 2020)
- Co-sponsoring the Central Texas Water Conservation Symposium, “Collaborating for Success: Planning and Programs that get Results” which sold out during registration and was well attended. (February 13, 2020)
- Co-sponsoring the 2020 Virtual Rainwater Revival and Hill Country Living event that brings rainwater harvesting system installers, suppliers, water haulers and other experts together to serve as a resource for homeowners and business owners that are interested in using rainwater as an alternate supply. (Note that the virtual event was postponed into the following fiscal year due to COVID-19.)
- Publishing of the Travis County Groundwater Atlas, associated Well Owner Guide for Travis County well owners, maintaining and updating the project website page with approximately 500 page views.
- District Kent Butler College Scholarships were awarded to three high school winners with the highest scoring groundwater essays. Seven prospective Aquatic Summer Camp applicants were selected to receive alternative prizes due to camp cancellations, including annual passes to the Meadows Center.
- The District web pages were viewed over 35,000 times during FY 2020. The Home page and Austin Cave Festival page were among the most-viewed web pages.
- Continuing eNews bulletin with a refreshed layout switching from monthly to quarterly releases with reduced staff. Total eNews opens totaled over 3,400.
- District Twitter posts totaled over 12,400 combined impressions.



## 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. Michael Redman, Assistant General Manager, serves as the Team Leader; with Kendall Bell-Enders, Senior Regulatory Compliance Coordinator; and Erin Swanson, 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 2020, 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. Furthermore, the District continues to participate in discussions for legislation regarding wastewater discharges in the Edwards Aquifer Contributing Zone.
- Permian Highway Pipeline - On January 16, 2020 the District's Board of Directors voted to join as a plaintiff in a lawsuit against USFWS, U.S. Army Corp of Engineers, and Kinder Morgan for violation of the ESA stating that because there is not a reasonable assurance that the aquifers will be protected during the construction and operation of the pipeline, the Permian Highway Pipeline should not be located within the District or any other hydrologically-sensitive area. Kinder Morgan's proposed natural gas pipeline—the Permian Highway Pipeline—would cross through sensitive areas within the District in Hays County. District staff worked with the litigation team on filings and testimony. The Preliminary Injunction hearing took place March 4, 2020 in Austin. The parties presented their arguments before Judge Pittman.
- Roadway Projects (SH 45 SW and MoPac Intersections) - SH 45 SW was completed and opened for public usage in June 2019. The roadway construction efforts for SH 45 SW began in November 2016, and throughout the duration of the construction project staff coordinated 24 site visits of which one was conducted in FY 2020. For each site visit, inspection reports were developed, and District recommendations were provided. District staff continued to actively participate in site inspections and technical discussions with the Central Texas Regional Mobility Authority (CTRMA) project team, TxDOT representatives, and the Environmental Compliance Manager (Hicks and Co). The District continued to work with storm water consultant, David Fowler with Alan Plummer Associates Inc., on the technical evaluation of stormwater control designs in accordance with the consent decree. The Regulatory Compliance team, along with consultant David Fowler, held a wrap-up meeting with TxDOT, CTRMA, and Hicks and Co. representatives on November 12, 2019 to discuss final inspections and recommendations, as well as, long term maintenance, and the transition of oversight and maintenance from TxDOT to CTRMA. A final inspection was planned for spring 2020 but COVID-19 has delayed in-person inspections for the immediate future.

The Regulatory Compliance team has performed periodic environmental and storm water inspections on MoPac, and the Aquifer Science team has performed numerous geologic site visits and inspections to assess discovered features, and to provide input on proposed mitigation measures.

- EP Applications - In July 2017, EP submitted a Production Permit application, a Hydrogeologic Report, and seven Well Modification applications. District 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 General Manager's Statement of Position (draft permit) on May 21, 2018. On June 18, 2018, District 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 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. Given that schedule, the parties, including the protestants, the District, and the applicant, met in Austin for a SOAH-ordered mediation in March 2019. The parties were unable to reach agreement on any issues pertaining to the draft permit and discontinued mitigation discussions. After an attempted mediation in March 2019, stakeholder discussions, and additional staff research, District staff continued to move forward with improvements and revisions to the 2018 draft permit and issued a May 2019 Revised Draft Permit. On June 12, the District submitted prefiled testimony in response to the applicant's and the protestant's previously filed testimonies. The hearing on the merits was then rescheduled for September 19-27, 2019.

On June 26, 2019, EP and TESPAs asked to modify the hearing schedule to allow them to adjust their testimonies to address the updated special provisions. The District had no objection to the modified hearing schedule. On July 2, 2019, the ALJ granted the modified schedule, reset the prehearing conference to April 24, 2020 at 10:00 am, and reset the hearing on the merits to convene at 9:00 am on April 27 – May 5, 2020 at SOAH, 300 W. 151st Street, Fourth Floor, Austin, Texas.

On September 25, 2019 the Protestants filed a Motion for Summary Disposition that asked the 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. Before responses to the Motion were due, 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 Permian Highway Pipeline.

On March 31, 2020, EP filed a motion before the ALJ to continue abatement until August 17, 2020. 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 is scheduled for April 2021.

- Needmore Water, LLC Application - At the beginning of FY 2016, staff issued an administrative completeness letter to the applicant for the conversion of a Temporary Production Permit (HB 3405) to a Regular Permit. The GM developed a Preliminary Decision which entailed information on the technical evaluation of the aquifer test data. The application was contested and sent to SOAH. In March 2018, a contested case hearing was held on the limited motion for summary disposition filed by the protestant (TESPA). In June 2019, the ALJ ruled on the matter and granted Needmore's motion. On July 23, 2018, the ALJ issued a proposal for decision (PFD) agreeing with the District and Needmore. However, the PFD did not include a recommendation for permit issuance.

In October 2018, the Board remanded the issue back to SOAH requesting the PFD to include a recommendation for the permit issues based on findings of fact and conclusion of law. On April 10,

2019 the District received the ALJ's response, which describes that SOAH does not have jurisdiction to issue a revised PFD on whether the Board should issue the Needmore permit, and the ALJ did not weigh in on the uncontested portions of the permit. A public hearing was held on July 29, 2019, for the Board to consider the application for conversion of a Temporary Production Permit to a Regular Historic Production Permit to authorize the withdrawal of an annual permitted volume of 289,080,000 gallons/year from the Middle Trinity Aquifer for agricultural uses. The Board voted to grant Needmore a Regular Permit with special provisions. In August 2019, TESPAs requested a finding of facts and conclusions of law, which the Board issued. TESPAs then filed a motion for rehearing.

On October 2, 2019, TESPAs filed a Motion for Rehearing requesting the Board to grant a new hearing on the Needmore matter and to deny the permit. On December 12, 2019 at its Regular Meeting, the Board denied the request from TESPAs for a rehearing of the Needmore permit. Therefore, the permit is active for the full volume of 289,080,000 gallons/year. Protestants filed an appeal of the Needmore permit. The District filed a response in March 2020.

- Strategic Planning – District staff identified team priorities founded on the District's core functions, management goals, and long-term project efforts. Regulatory Compliance staff presented to the Board on March 12, 2020.
- DFC Planning – District staff actively collaborated in DFC planning discussions with neighboring GCDs, GMA 10 representatives, and TWDB staff. Staff also worked on preparing a timeline and planning strategy for immediate and long-term goals related to DFC revisions and DFC monitoring compliance, as well as, attended multiple GMA 10 meetings, developed presentations, and updated the Board on DFC planning. Staff drafted a DFC memo and is looking into the revision process with GMA 10 and TWDB.
- Trinity Sustainable Yield – District staff developed a process overview that outlines the timeline, milestones, and steps involved with completing the policy discussions, stakeholder aspects, and technical aspects of the sustainable yield effort. Staff researched sustainable yield policies and guidance, as well as discussed modeling efforts necessary for completing the project. Staff met with a facilitator on July 29, 2020 to discuss stakeholder planning. Staff plans to bring on a facilitator to help with stakeholder planning and meetings which are planned to begin the spring of FY 2021.
- Habitat Conservation Plan - On December 10, 2019, staff held the first 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, regional issues.
- Regulatory Compliance team assisted in drafting the first USFWS HCP Annual Report. District staff also held the first MAC meeting since the issuance of the HCP to provide an overview of the annual report and to solicit feedback. Staff compiled the feedback and made warranted changes to the annual report. The annual report was submitted to USFWS on February 28, 2020.
- Management Plan - Per statutory requirements, the District staff and programmatic teams actively worked towards implementing the objectives of the management plan. In November 2017, the Board adopted the updated MP, and in January 2018, the TWDB approved the plan. District staff continues to fulfill their management plan and will start looking at making changes and updates for the 2022 renewal.
- Database Development and Upgrade - Throughout the fiscal year, District staff actively coordinated the technical discussions and conceptual designs for a database management and reporting system. Staff internal discussions were held to identify the scope elements, and a Board subcommittee was involved in the procurement and contract negotiation process. The project team has made significant progress on the data management system. Follow-up module meetings and discussions took place throughout the

summer of 2019 and will proceed through the spring of 2021. Additional work remains to be completed on the various meter reading, hydrogeological data components, and reporting elements of the database system. The expected database deployment was December 2019 – February 2020. While the project is over schedule, it is projected to be completed in FY 2021.

- External Communication and Coordination - Work groups and projects involving regulatory staff participation included:
  - SH 45 SW and MoPac: Coordination with TxDOT and CTRMA on project
  - ASR Technical Discussions
  - Edwards Aquifer recharge and contributing zone development activity coordination
  - Regular meetings of the Regional Water Quality Protection Plan workgroup
  - Texas Department of Licensing and Registration (TDLR) - Well Construction Standards
  - Texas Alliance of Groundwater Districts (TAGD) – Legislative Subcommittees
  - TWCA – Groundwater Subcommittee
  - GMA 10
  - BRATWURST Technical Committee
  
- Implementation and Compliance of Existing Rules – District 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 permitted wells and well systems are operated as intended. Staff also maintains an open dialogue with a Permittee when compliance matters arise, and facilitate solutions through pre-enforcement discussions.
  - Inspections and Investigations - During FY 2020, the Regulatory Compliance team conducted a number of inspections relating to the processing of permit applications. Staff completed a total of 28 inspections related to special investigations, site permittee inspections, and well permit applications. The Regulatory Compliance team collected 16 water quality samples during routine permit inspections or from new well construction inspections There were no formal enforcement actions initiated in FY 2020.

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 2020, the District 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 2020 is provided below.

Inspections/ Investigations/ Visits	FY 19	FY 20
Exempt Well Inspections	6	5
Limited Production Permit Inspections	17	12
Individual Production Permit Inspections	0	5
Test Well Inspections	0	0
Plugging Inspections	5	2
Special Investigation Inspections	2	2
Other Permittee Meetings/Visits *	5	2
<i>*Multiple meetings were held with some permittees.</i>		
<b>TOTAL</b>	<b>43</b>	<b>28</b>

- 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 by staff, and a fee was assessed to those permittees, in accordance with the Rules.

The annual meter reading requirement for all Limited Production Permits (LPPs) were due in September 2020. Email correspondence and notifications were provided to the nonexempt domestic users in an effort to ensure compliance; however, approximately 15% did not timely submit a meter reading.

- User Drought Contingency Plans, and User Conservation Plans (UDCPs and UCPs) - In FY 2019, the regulatory 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 2020.
- Conservation Credits - The District issued a total of \$20,183.63 in credits in FY 2020 with \$12,614.77 being issued to 19 permittees, and \$7,568.86 being issued to the CoA. Permittees donating credits back to the District’s camp scholarship fund included Crestview RV (\$64.29), Oak Forest WSC (\$139.14), and Slaughter Creek Acres WSC (\$88.25). The CoA also donated their \$7,568.86 credit to the District’s camp scholarship fund. Total donations combined equal \$7,860.54.
- 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 2020.

The District has been actively encouraging alternative source projects to reduce the dependency on the aquifers during drought. District staff has collaborated with water suppliers on ASR projects in providing regulatory and technical guidance. Staff has been working with Ruby Ranch WSC and the City of Buda on ASR feasibility. 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 was in No-Drought status the entirety of FY 2020.
- 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 2020, 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 4 online registration forms in FY 2020.

- 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 2020 is provided in the table below.

New Wells Drilled	FY 18	FY 19	FY 20
New Exempt Wells	4	10	2
Limited Production Permits (Nonexempt Domestic Wells)	14	15	7
Individual Wells	4	1	4
Test Wells	0	0	0
Replacement Wells	1	0	0
<b>TOTAL</b>	<b>23</b>	<b>26</b>	<b>13</b>

A summary of the processed permitting applications in FY 2020 is provided in the table below

Processed Permit Applications	FY18	FY19	FY20
Minor Amendment	6	5	3
Major Amendments	7	0	0
New Exempt Well	4	10	2
Limited Production Permit (Nonexempt Domestic Wells)	14	16	9
Individual Production Permit	4	3	5
Individual Well Drilling Authorizations or Well Modification	3	8	2
Test Well	2	1	0
Well Plugging	8	5	6
Replacement Well	1	0	0
<b>TOTAL</b>	<b>49</b>	<b>48</b>	<b>28</b>

A summary of the individual production permits processed in FY 2020 is provided in the table below.

	Annual Volume (gpy)	Production Permits Processed	Permit Type	Use Type	Aquifer
1	500,000	Aknel Enterprises, LLC	Historical Trinity	Commercial	Trinity
2	460,000	Vance Lane, LLC	Historical Trinity	Irrigation	Trinity
3	200,000	Travis County Emergency Service District #5	Class C Conditional - Edwards	Irrigation/ Commercial	Edwards
4	525,000	The Inn Above Onion Creek	Class B Conditional – Edwards – Minor Amendment	Commercial	Edwards
5	15,000,000	Ruby Ranch WSC ASR	Class D Conditional - Edwards	ASR/PWS	Edwards
6	109,114,560	**Needmore Water LLC	Historic Trinity- Conversion	Agriculture	Trinity

**\*\* After a contested case hearing Needmore Water LLC temporary permit volume (179,965,440 gallons/yr) was converted to a regular permit volume (289,080,000 gallons/yr)**

### 2.5.1 Permit Summary:

A summary of the active individual production permits to date in FY 2020 is provided in the table below.

Active Individual Permits	FY 18	FY 19	FY 20
Conditional A Edwards	22	22	22
Conditional B Edwards	2	2	2
Conditional C Edwards	4	4	5
Conditional D Edwards	0	0	2
Historical Edwards	74	74	74
Historical Trinity	29	31	33
Historical Chalk or Alluvial	2	2	2
Transport Permits	2	2	2
<b>Total</b>	<b>135</b>	<b>137</b>	<b>142</b>

A summary of the active general permits to date in FY 2020 is provided in the table below.

Active General Permits	FY 18	FY 19	FY 20
Limited Production Permits (LPP)	141	156	164
Test Permits	2	1	0
Monitoring Permits	0	0	0
<b>Total</b>	<b>143</b>	<b>157</b>	<b>164</b>

## 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.

<b>FY 2020 Permitted Pumpage by Management Zone</b>			
<b>Edwards MZs</b>	<b>Gallons</b>	<b>cfs</b>	<b>acre-feet</b>
Historical (Individual)	2,309,082,596	9.79	7,086
Historical (LPP)	2,500,000	0.011	8
<b>Total Historical</b>	<b>2,311,582,596</b>	<b>9.80</b>	<b>7,094</b>
Conditional (Individual)	367,419,948	1.56	1,128
Conditional (LPP)	57,500,000	0.24	176
<b>Total Conditional</b>	<b>424,919,948</b>	<b>1.80</b>	<b>1,304</b>
<b>Total Edwards</b>	<b>2,736,502,544 gal</b>	<b>11.60 cfs</b>	<b>8,398 ac ft</b>

<b>Trinity MZs</b>	<b>Gallons</b>	<b>cfs</b>	<b>acre-feet</b>
Historical (Individual)	616,456,117	2.61	1,892
Historical (LPP)	21,000,000	0.09	64
<b>Total Trinity</b>	<b>637,456,117 gal</b>	<b>2.70 cfs</b>	<b>1,956 ac ft</b>

<b>Other Aquifers MZs</b>	<b>Gallons</b>	<b>cfs</b>	<b>acre-feet</b>
Historical (Individual)	2,500,000 gal	0.01 cfs	8 ac ft
Historical (LPP)	0	0	0
<b>Total Other Aquifers</b>	<b>2,500,000 gal</b>	<b>0.01 cfs</b>	<b>8 ac ft</b>

<b>Total Permitted</b>	<b>3,376,458,661 gal</b>	<b>14.31cfs</b>	<b>10,362 ac ft</b>
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A summary of the actual versus permitted production volumes for each Management Zone is also provided below.

<b>FY 2020 Production from Individual Permittees</b>		
<b>Production Zone</b>	<b>Actual Production</b>	<b>Permitted Individual Production</b>
Edwards	1,826,253,544	2,676,502,544
Trinity	226,128,420	616,456,117
Austin Chalk or Alluvial	317,490	2,500,000
<b>Total (Gallons)</b>	<b>2,052,699,454</b>	<b>3,295,458,661</b>
	(6,299.5 ac ft)	(10,113 ac ft)



FY 2020 Production from Limited Production Permits		
Production Zone	Actual Production*	Permitted Limited Production
Edwards	13,779,777	60,000,000
Trinity	4,593,504	21,500,000
Austin Chalk or Alluvial	0	0
<b>Total (Gallons)</b>	<b>18,373,281</b>	<b>81,500,000</b>
	(56.39 ac ft)	(250.1 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**

Average Annual Volume per Exempt Well (gpy)	104,573
Total Est Volume of Exempt Well Production (gpy) *	105,618,730
<i>Est # of wells</i>	1010
<i>cfs</i>	0.45
<i>% of Permitted Production</i>	3.88%
<i>Permitted Edwards Production(gpy)</i>	2,719,277,544

\*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) *	120,363,523
<i>Est # of wells</i>	1151
<i>cfs</i>	0.51
<i>% of Permitted Trinity Production</i>	22.9%
<i>Permitted Trinity Production (gpy)</i>	525,881,557

\*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's 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 the current estimate of exempt Edwards wells is about 1009, the number, and therefore volumetric use of exempt Edwards is relatively constant and substantiate 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, District 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 BSEACD 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 1150 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 2020 began with a status of No Drought due to a very wet 2018, but below-average rainfall in 2019 caused water levels and spring flow to enter a downward trend beginning in late July. The declining trend continued with below-average rainfall up to 2020. The new year started out very wet with a combined 11 inches of rain from January to April (3 inches above historical average) reversing the downward trend and avoiding crossing drought thresholds in mid-March. A total of 35 inches of rain as of mid-November 2020 has provided much needed recharge to the Edwards and Trinity Aquifers, but not enough to reverse the downward trend. On October 8<sup>th</sup>, 2020, the Board declared Stage II Alarm Drought

To look back in more detail, a combined 14 inches of spring rain fell in May and June 2020 providing even more recharge to that provided January through April. Barton Springs flow quickly responded to these rains, propelling spring flow further away from drought triggers. The below-average rainfall in the fall of 2019 and additional spring 2020 rains maintained an average daily spring flow of 58 cfs throughout FY 2020.

The wet spring only temporarily held off drought as summer came with a drying trend that brought water levels and spring flow back into decline beginning in early July. September provided 7 more inches of rain, but did little to reverse the downward trend. This decrease has continued through a dry fall season and on October 8<sup>th</sup>, 2020 the Board declared Stage II Alarm Drought. The last groundwater drought declaration commenced on July 12, 2018 and ended on October 11, 2018. This dry period is projected through the winter and into spring 2021 as we enter a La Nina year bringing drier and warmer conditions to the southern United States.

To summarize, the Austin/Hill Country area has received an average 36 inches of rainfall so far in 2020, producing recharge for local aquifers. However, below-average rainfall in 2019 and a relatively dry summer and fall 2020 hasn't provided enough recharge to stay above Stage II Alarm Drought. Official forecasts point toward the La Nina effect bringing drier and milder-than-normal conditions across Central Texas, which will likely result in further declines as 2021 gets underway. We hope spring of 2021 will bring its usual upward swing of recharge to keep our aquifers well-supplied.

### **3.2 Grant Programs**

During FY 2020, Aquifer Science staff worked on a grant from Travis County to study the hydrogeology of southwest Travis County. The District was awarded \$175,000 by Travis County which paid for two years of a full-time hydrogeologist (Lane Cockrell) and a half-time education specialist (Jackie Vay) for one year, in addition to paying for supplies, sample analyses, and geophysical logging of wells, among other items. A final report on the project was completed in FY 2020. An application was submitted to the U.S. Bureau of Reclamation for a grant to help fund drought resiliency studies. This work, if awarded, would include development of a numerical model of the Trinity Aquifers, installation of monitor wells, and assistance with a stakeholder group for policy advisement.

### **3.3 Professional Services**

The District expended \$133,963 for professional services in FY 2020.

This amount included legal fees of \$93,823 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 billing categories: Needmore \$33,878; Permian Highway Pipeline \$7,607; General Matters/Personnel \$25,318; Hays County GIS Election Coding \$ 3,179, and EP \$23,841.

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

Additional professional services for FY 2020 also reported in the above amount include the District's third-party retirement plan administrator, The Standard, for \$23,554; and \$2,020 in the Elections category.

The District retained Montemayor Britton Bender PC early in 2016 to perform its annual financial audits. The fee for these professional services is \$13,000 for FY 2020, 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 86th 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 2020.

### **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, which are FDIC-insured. Monies are moved electronically between these BB&T 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, to be included here 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 (MP). 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 the staff to assist the Board's evaluation of the progress made in FY 2020 toward the goals, objectives, and performance standards identified in the prevailing District MP.

On December 11, 2020, 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 2020 as being satisfactory. The basis for that decision-making is included in this Annual Report as Appendix B.

This assessment for FY 2020 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 2021.

# APPENDIX A

## **Independent Annual Financial Audit Report**

(Board-approved December 10, 2020)



# Montemayor Britton Bender PC

CERTIFIED PUBLIC ACCOUNTANTS

**BARTON SPRINGS/ EDWARDS AQUIFER  
CONSERVATION DISTRICT**

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

**31 AUGUST 2020**

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**BARTON SPRINGS/EDWARDS AQUIFER  
CONSERVATION DISTRICT**

Independent Auditor's Report	1-2
Management's Discussion and Analysis	3-9
Statement of Net Position Proprietary Fund	10
Proprietary Fund Statement of Revenue, Expenses, and Changes in Fund Net Position	11
Proprietary Fund Statement of Cash Flows	12
Notes to Financial Statements	13-20

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**Montemayor Britton Bender PC**  
CERTIFIED PUBLIC ACCOUNTANTS

Board of Directors  
Barton Springs/Edwards Aquifer Conservation District

**INDEPENDENT AUDITOR'S REPORT**

We have audited the accompanying financial statements of Barton Springs/Edwards Aquifer Conservation District (District) as of and for the year ended 31 August 2020, and the related notes to the financial statements, which collectively comprise the District's basic financial statements as listed in the table of contents.

**Management's Responsibility 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; this includes the design, implementation, and maintenance of internal control relevant to the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

**Auditor's Responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements 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 we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the District as of 31 August 2020, and the changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3 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*

14 December 2020  
Austin, Texas

# **Barton Springs / Edwards Aquifer Conservation District**

## **Management Discussion and Analysis**

**Fiscal Year Ending August 31, 2020**

The following **Management 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 Discussion & Analysis narrative are based on the comparisons of the Statements of Revenues, Expenses and Changes in 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 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 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, 2020, 2019, and 2018

	<u>2020</u>	<u>2019</u>	<u>2018</u>
Current assets	\$1,373,909	\$1,052,553	\$1,266,839
Capital assets	<u>397,452</u>	<u>456,188</u>	<u>494,337</u>
Total assets	<u>\$1,771,361</u>	<u>\$1,508,741</u>	<u>\$1,761,176</u>
Total liabilities	<u>\$264,634</u>	<u>\$209,109</u>	<u>\$282,171</u>
Net position:			
Net investment in capital assets	397,452	456,188	494,337
Unrestricted	<u>1,109,275</u>	<u>843,444</u>	<u>984,668</u>
Total net position	<u>1,506,727</u>	<u>1,299,632</u>	<u>1,479,005</u>
Total liabilities, and net position	<u>\$1,771,361</u>	<u>\$1,508,741</u>	<u>\$1,761,176</u>

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

### Condensed Statement of Revenues, Expenses and Changes in Net Position Years Ended August 31, 2020, 2019, and 2018

	<u>2020</u>	<u>2019</u>	<u>2018</u>
Operating revenues	\$1,787,686	\$1,695,028	\$1,772,448
Operating expenses	<u>1,593,822</u>	<u>1,903,511</u>	<u>1,845,398</u>
Operating income	<u>193,864</u>	<u>(208,483)</u>	<u>(72,950)</u>
Non-operating revenues(expenses)			
Interest income	13,231	29,110	17,308
Interest expense	<u>0</u>	<u>0</u>	<u>0</u>
Total non-operating rev/(exp)	<u>13,231</u>	<u>29,110</u>	<u>17,308</u>
Change in net position	207,095	(179,373)	(55,642)
Beginning net position	<u>1,299,632</u>	<u>1,479,005</u>	<u>1,534,647</u>
Ending net position	<u>\$1,506,727</u>	<u>\$1,299,632</u>	<u>\$1,479,005</u>

## FINANCIAL HIGHLIGHTS OF CHANGES IN OPERATING REVENUES

The discussion that follows is based on August 31, 2020 (FY 2020) 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 increased by \$128,649 in FY 2020 from the prior year to \$1,695,929 from \$1,567,280. This increase is directly attributed to the City of Austin Water Use Fee that was assessed in the amount of \$982,284 for FY 2020 but was assessed in the amount of \$870,501 for FY 2019. The City of Austin fee was calculated for FY 2020 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 2020 and FY 2019.

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 \$9,800. Actual Other Fees earned at fiscal year-end were \$13,897 which was a \$400 (2.79%) decrease from the previous year of \$14,297.

Drought management fees are assessed for permittee noncompliance only during a District-declared drought of three months or longer. The District declared Stage II Alarm Drought on July 12, 2018 which means the three-month period to begin assessing drought management fees would begin with August 1, 2018. Stage II Alarm Drought ended on October 11, 2018 (the beginning of FY 2019) so no drought management fees were assessed or collected for FY 2018 nor FY 2019. The District was in No Drought status for the entire FY 2019, and for the entire FY 2020, therefore there were no drought management fees assessed or collected for FY 2019 or FY 2020. The District did declare Drought on October 8, 2020 which will apply to FY 2021.

Interest income in FY 2020 continues to be minimal but is a substantial decrease (54.55%) from the prior year. Actual interest income received for FY 2020 was \$13,231 as compared to \$29,110 in FY 2019 (a difference of \$15,879).

There was no grant revenue in FY 2020, as there were no active grants.

In October of FY 2020, there was a Board-approved ILA signed with Travis County for the Southwestern Travis County Hydrogeologic Project for work to be done throughout the entire year of FY 2020. This project generated \$75,000 in revenue, although this was spent on the project.

Two numbers show up in unearned revenue. One is a deposit for a contested case hearing that has been referred to the State Office of Administrative Hearings (SOAH). In FY 2018, Electro Purification (EP) deposited \$70,000. These funds are to pay the SOAH invoices that are charged to the District. Any funds not used will be returned to the applicants, as of August 31, 2020 \$54,301 is remaining. The second is for a contract to construct a well to monitor the Middle and Lower Trinity Aquifers located in Hays County, TX. In FY 2020, Hays County deposited \$58,000, and Hays Trinity Groundwater Conservation District deposited \$25,000 for a total of \$83,000. These funds are to be used in the construction of these wells. Construction is scheduled to begin in FY 2021.

The EP deposit held in a sub - category of the TexPool General Fund, has been reduced by \$7,259 (the total paid to SOAH for FY 2020) and currently has a balance of \$54,301.

## FINANCIAL HIGHLIGHTS OF CHANGES IN OPERATING EXPENSES

The discussion that follows is based on FY 2020 financial reports.

Expenses for personnel salaries and wages for FY 2020 were \$900,408 which is \$98,077 more than the previous year's expense of \$998,485 (an approximate 9.8% decrease, that also affected the payroll taxes with a decrease of 11.5%, from \$75,917 to \$67,179; and an approximate 2% decrease to the District's retirement contribution, from \$63,745 in FY 2019 to \$62,467 in FY 2020). The decreased salaries in FY 2020 were a result of the resignation of two employees.

Actual expenses for employee group insurance benefits in FY 2020 were \$138,742 which is \$14,296 less than the FY 2019 expense of \$153,038. This includes employee premiums, employee dental, employee life insurance, and employee vision. This line item usually increases annually. The area which decreased the most was employee health premiums, due to the resignation of two employees.

Actual expense for directors' compensation for meetings in FY 2020 is \$24,000 which is less than the FY 2019 actual expenses of \$35,300 (a 32% decrease). In this category, the statutory maximum annual amount, which has not increased, is \$9,000 per director per fiscal year, in which \$40,000 was budgeted for.

Direct expenses associated with the ongoing work of the various programmatic teams (Aquifer Science, Education 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. The District cancelled the November 2018 since there was no opposition to incumbent directors for precinct 2 and precinct 5. Although the November 2018 election day is actually in FY 2019, the \$2,974 in expenses occurred in FY 2018. The final payment for the election for FY 2018 was paid out in FY 2019 for an additional \$2,020.

There was an election in FY 2020 for precincts 1, 3, and 4 held on November 3, 2020. Two of the three directors were unopposed, so the election was held for precinct 4 only, which is in both Travis and Hays counties. In FY 2020, there was \$2,847 in preliminary election expenses. As of October 2020 (which is FY 2021), an initial payment was made to the Travis County Clerk for an approximated 50% of total Travis County election costs for \$93,636, and an additional large invoice for the final payment is expected in December 2020. These election costs are extraordinary due to the pandemic, and were not budgeted nor expected, as election costs don't usually exceed \$20,000. These amounts will show up in next year's audit report.

The election expenses are included in the Professional Services expenses.

The legislature support services agreement establishes 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 2020, legislative expenses were \$12,000 compared to the \$36,000 in FY 2019.

In FY 2020, actual Professional Services expenses (excluding legal expenses which are characterized below) were \$40,140 as compared to \$38,579 in FY 2019 (which is a 4.05% increase). These professional services include the annual financial audit, the Standard retirement plan administration, and incidental election expenses.

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

Legal Services actual expenses for FY 2020 were \$108,945 compared to \$152,237 in FY 2019; a decrease of 28.4% or \$43,292. This continued level of expense is due to ongoing efforts associated with the HB 3405 annexation of the Shared Territory, prospective contested case hearings, and other extraordinary legal matters.

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.

One of the District vehicles was totaled in FY 2020 so it is being removed from the fixed assets.

In Facilities Repairs and Maintenance for FY 2019, \$5,000 was spent on a new HVAC unit. Additionally, in FY 2020, \$5,000 was again spent on a new HVAC unit (there are a total of 4 units).

#### **KEY FACTORS INFLUENCING CHANGES IN CASH FUNDS**

The available cash funds (two BB&T-now TRUIST accounts and one TexPool General account, excluding the contingency, and reserve funds) at the end of FY 2020 totaled \$934,993 which is \$708,970 more than the prior year's total of \$226,023. Differences in these funds are generally attributable to the timing of receipts of water use fee payments from permittees and the City of Austin and their resulting deposits. But in this instance, it is directly attributable to the cash flow deficit (due to unrealized projected revenues) that occurred in FY 2019.

In July 2019, the District cancelled all further FY 2019 expenses except for those necessary. This included some major budget cuts for FY 2019. This was due to the growth projections and projected new permits not being realized, a process that has been an issue for several years. From this issue, a new process was born, and the budgeted projected income at the beginning of the year are now reduced by those projected amounts.

Reasons for the substantial balance increase in FY 2020 compared to FY 2019, include the \$150,000 Board-approved transfer from the TexPool Contingency Fund to a newly-created sub-account of the TexPool General Fund, a Cash Flow Reserve account, to cover payables should it become necessary (since in FY

2019 there were limited funds and a smaller annual budget); the actual expenses in FY 2020 were approximately \$300,000 less than budgeted (this unspent budget was in part due to the loss of three employees, although the General Manager position was filled quickly; and the delay of a monitor well project that \$83,000 has been received and deposited, to put toward the project expected to be started and completed in FY 2021.

### **ANTICIPATED CHANGES FOR FY 2021:**

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 potentially significant to financial performance and/or condition in FY 2021.

- Installation (completion) of Hays County multipoint wells – Jacobs Well Project.
- Creation of a Board three-year fiscal policy.
- Continuation of one contested case/legal challenges associated with controversial permit applications in the Shared Territory – Electro Purification.
- Elimination of the objectives-based incentive compensation salary program (which was 5% per employce).
- Consideration of FY 2021 COLA and merit raises.
- Contracting with a Meeting Facilitator.
- Redistricting.
- Bureau of Reclamation Grant (application has been made and possible award in December 2020).
- Implementation of stakeholder discussions for Sustainable Yield.
- Rulemaking, and possible changes to our Habitat Conservation Plan.

### **CONTINGENCY PLANNING ASSETS**

The cash assets included \$716,588 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 2019.

The cash assets decreased in FY 2020 to \$598,092. This was the balance of the Contingency Account at the end of FY 2020. As mentioned above, this is due to the \$150,000 transferred out of TexPool Contingency fund to be used as a Cash Flow Reserve within the TexPool General fund.

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 landowners access to their private property (groundwater) that may be determined by a court to be a regulatory takings. Such a determination will require substantial expense to litigate and/or pay for such just compensation to remedy the takings. 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 2020**

**ASSETS**

Current assets

Cash	\$111,249
Short-term investments (including \$598,092 designated by the Board for future legal expenses)	1,256,808
Other	<u>5,852</u>
	<u>1,373,909</u>

Noncurrent assets

Nondepreciable capital assets	201,758
Depreciable capital assets	<u>195,694</u>
	<u>397,452</u>
	<u><u>1,771,361</u></u>

**LIABILITIES**

Current liabilities

Accounts payable	804
Conservation credits payable (Note 5)	21,502
Accrued payroll	66,525
Unearned project revenue	83,000
Amounts held for others (Note 11)	54,301
Unearned permit and fee revenue	<u>38,502</u>
	<u>264,634</u>

**NET POSITION**

Net investment in capital assets	397,452
Unrestricted	<u>1,109,275</u>
	<u><u>\$1,506,727</u></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 2020**

<b>OPERATING REVENUE</b>	
Water permits and fees	\$1,695,929
Travis County inter-local agreement	75,000
Other	<u>16,757</u>
	<u>1,787,686</u>
<b>OPERATING EXPENSES</b>	
Personnel and related	1,174,190
Legal	96,945
Depreciation and amortization	58,808
Aquifer science	43,379
Professional services	40,140
Director compensation	24,000
Utilities	19,216
Maintenance	13,513
Legislation	12,000
IT maintenance	12,000
General management	10,793
Office supplies	10,746
Other	<u>78,092</u>
	<u>1,593,822</u>
<b>OPERATING INCOME</b>	<u>193,864</u>
<b>NONOPERATING REVENUE</b>	
Interest income	<u>13,231</u>
<b>CHANGE IN NET POSITION</b>	207,095
<b>BEGINNING NET POSITION</b>	<u>1,299,632</u>
<b>ENDING NET POSITION</b>	<u>\$1,506,727</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 2020**

**CASH FLOWS FROM OPERATING ACTIVITIES**

Receipts from water permit and other use fees	\$1,702,892
Other cash receipts	144,388
Payments to employees for services	(1,198,484)
Payments to suppliers for goods and services	<u>(344,177)</u>
	<u>304,619</u>

**CASH FLOWS FROM INVESTING ACTIVITIES**

Purchases from sale of short-term investments	(315,220)
Interest received on short-term investments	<u>13,231</u>
	<u>(301,989)</u>

<b>NET CHANGE IN CASH</b>	2,630
<b>BEGINNING CASH</b>	<u>108,619</u>
<b>ENDING CASH</b>	<u><u>\$111,249</u></u>

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

Net operating income	\$193,864
Depreciation and amortization	58,736
Change in accounts receivable	(4,573)
Change in prepaid expense	1,067
Change in accrued payroll liabilities	(294)
Change in accounts payable	(8,348)
Change in unearned fees related to water fees	<u>64,167</u>
	<u><u>\$304,619</u></u>

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
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, 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 2020, the carrying amount of the District's cash deposits was \$111,249, and the bank balance was \$83,981. Short-term investments of \$1,256,808 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. These investments are carried at amortized cost, which approximates fair value. 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 2020, the TexPool portfolio had a weighted average maturity of 32 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.



## **BARTON SPRINGS/EDWARDS AQUIFER CONSERVATION DISTRICT**

### **NOTES TO FINANCIAL STATEMENTS**

#### **NOTE 5: CONSERVATION CREDITS PAYABLE**

The District supports and encourages a permittee's efforts to conserve water and to reduce annual pumpage as a result of conservation efforts by providing a credit to the permittee's account for the ensuing fiscal year. To be eligible for the credit, the permittee's reported pumpage volume must be less than the maximum amount pumped on an annual basis in the last three fiscal years, and the permittee must meet other requirements regarding submission of timely payments and meter readings. Conservation credits awarded for fiscal year ending 31 August 2020 amounted to \$21,502.

#### **NOTE 6: CONCENTRATION**

53% of the District's total revenue for the year is from the City of Austin.

#### **NOTE 7: 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 2020 the District's contribution to the Plan was \$62,467.

#### **NOTE 8: OPERATING LEASE**

The District has entered into leases for equipment which expire in 2021. For the fiscal year ended 31 August 2020 rent expense was approximately \$9,400. Future minimum lease payments for the operating leases are \$7,782 for the fiscal year ending 31 August 2021.

**BARTON SPRINGS/EDWARDS AQUIFER CONSERVATION DISTRICT**

**NOTES TO FINANCIAL STATEMENTS**

**NOTE 9: 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	0	95,016
Field equipment	386,809	0	0	386,809
Vehicles	78,339	0	(25,976)	52,363
Well monitoring access rights, finite life	127,705	0	0	127,705
Accumulated depreciation/amortization:				
Building and improvements	(171,495)	(8,706)	0	(180,201)
Database	0	(19,033)	0	(19,033)
Office furniture and equipment	(33,252)	0	0	(33,252)
Field equipment	(375,469)	(5,558)	0	(381,027)
Vehicles	(78,339)	0	25,976	(52,363)
Well monitoring access rights, finite life	<u>(76,623)</u>	<u>(25,541)</u>	<u>0</u>	<u>(102,164)</u>
	<u>254,532</u>	<u>(58,838)</u>	<u>0</u>	<u>195,694</u>
	<u>\$456,290</u>	<u>(\$58,838)</u>	<u>\$0</u>	<u>\$397,452</u>

**NOTE 10: LITIGATION**

The District was not actively involved in any litigation during FY 2019. However, there were other legal matters beyond general matters (discussed below) that required material expenditures for legal services in FY 2020.

## BARTON SPRINGS/EDWARDS AQUIFER CONSERVATION DISTRICT

### NOTES TO FINANCIAL STATEMENTS

#### NOTE 10: LITIGATION

- A. In FY 2020, the District continued the ongoing implementation of the 2015 House Bill 3405 requiring substantial legal expense primarily related to the conversion of the temporary permit into a regular permit for Needmore Water, LLC. In FY 2017, this permit conversion was contested and referred by the Board to the State Office of Administrative Hearings (SOAH) to conduct a contested case hearing. In FY 2018, the SOAH Administrative Law Judge issued a ruling dismissing the protestant's Motion for Summary Disposition in the contested case, granting Needmore and BSEACD's Motions and cancelling the Hearing on the Merits. In FY 2019, the Board again referred the case to SOAH for further determination on the merits of the case and the judge provided her decision. Based upon this decision, in July 2019, the Board conducted a hearing on the permit and subsequently approved it. During FY 2020, in October of 2019, TESPAs filed a Motion for Rehearing requesting the Board to grant a new hearing on the Needmore matter and to deny the permit. In December 2019, the Board denied the request from TESPAs for a rehearing of the permit. In February 2020, (TESPA) filed a lawsuit in Travis County against the District and Needmore, LLC as a necessary party/defendant. The core issues of this lawsuit are the same issues that TESPAs brought before the Administrative Law Judge (ALJ) in the SOAH hearing process as part of the contested case hearing and the hearing before the BSEACD Board of Directors. With that being said, the District's position, based on evidence provided by all parties, is still the same. The matter is still pending and waiting a scheduling date.
- B. In FY 2020, the recommended draft proposed permit for the Electro Purification LLC application remained in abatement at the SOAH from October 2019 through August 2020. In July 2018, the Board referred the case to the SOAH to conduct a contested case hearing. After a schedule postponement and period of abatement, the proceeding schedule has commenced again as of August 2020, and there is now a hearing on the merits scheduled for April 2021. In FY 2021, the District anticipates legal expenses to continue with this contested case.
- C. The District has been actively involved in evaluating potential risk to the local aquifer resources from the activities of the Kinder Morgan Permian Highway Pipeline construction project since early 2018. In January 2020, the District's Board of Directors voted to join as a plaintiff in a lawsuit against U.S. Fish and Wildlife Service, U.S. Army Corp of Engineers and Kinder Morgan for violation of the Endangered Species Act stating that because there is not a reasonable assurance that the aquifers will be protected during the construction and operation of the pipeline, the Permian Highway Pipeline should not be located within the District or any other hydrologically-sensitive area. The plaintiff's case remains as pending and awaiting a Judge's Decision in the Federal Court.

**BARTON SPRINGS/EDWARDS AQUIFER CONSERVATION DISTRICT**

**NOTES TO FINANCIAL STATEMENTS**

**NOTE 11: AMOUNTS HELD FOR OTHERS**

The District received a \$70,000 payment from Electro Purification as a deposit in the amount of \$70,000 to cover the costs of the SOAH hearing (see Note 10 paragraph B). Any portion of the deposit not spent will be refunded to Electro Purification. The unspent balance held as of year-end is \$54,301.

**FY 2020**

**Appendix B**

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

**Board-approved December 10, 2020**

# 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

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 2020, 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 were presented or made.

In order to achieve the goals, management objectives, and performance standards adopted in the MP, on December 10, 2020, the District's Board of Directors (Board) evaluated progress made, and approved the District's FY 2020 Annual Report, including Appendix A (the annual financial audit), and Appendix B (Assessment of Progress toward Management Plan Goals and Objectives).

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 2020, there were no rule amendments adopted or considered.

**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 provided below.

FY 2020 Production from Individual Permittees		
Production Zone	Actual Production	Permitted Individual Production
Edwards	1,826,253,544	2,676,502,544
Trinity	226,128,420	616,456,117
Austin Chalk or Alluvial	317,490	2,500,000
<b>Total (Gallons)</b>	<b>2,052,699,454</b>	<b>3,295,458,661</b>
	(6,299.5 ac ft)	(10,113 ac ft)

FY 2020 Production from Limited Production Permits		
Production Zone	Actual Production*	Permitted Limited Production
Edwards	13,779,777	60,000,000
Trinity	4,593,504	21,500,000
Austin Chalk or Alluvial	0	0
<b>Total (Gallons)</b>	<b>18,373,281</b>	<b>81,500,000</b>
	(56.39 ac ft)	(250.1 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>		

**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, Education 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)	<b>104,573</b>
Total Est Volume of Exempt Well Production (gpy) *	<b>105,514,157</b>
<i>Est # of wells</i>	1009
<i>cfs</i>	0.45
<i>% of Permitted Production</i>	<b>4.26%</b>
<i>Permitted Edwards Production(gpy)</i>	2,719,277,544

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

**Trinity Aquifer –  
Estimated Exempt Wells Production**

Average Annual Volume per Exempt Well (gpy)	<b>104,573</b>
Total Est Volume of Exempt Well Production (gpy) *	<b>120,258,950</b>
<i>Est # of wells</i>	1150
<i>cfs</i>	0.51
<i>% of Permitted Trinity Production</i>	<b>23%</b>
<i>Permitted Trinity Production (gpy)</i>	525,881,557

*\*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 drought status graphic on the District home page was updated frequently to indicate drought trigger levels and associated drought conditions. The dynamic graphics shown on the Aquifer Data page were live and visited approximately 900 times throughout the fiscal year. Similar drought stage updates were shared on District social media platforms and included as a banner and articles in the regular eNews, as well as highlighted in Press Releases.

The District announced its regular Water Conservation Period which extends from May through September when in non-drought stage, generally when water use is at its peak. The voluntary conservation period was publicized through drought status icons on the District website, and included as a banner and in articles in the regular eNews. Conservation education webpages were updated regularly with new resources, and shared on District social media platforms.

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

- Strategic Education Outreach team planning, alongside budgeting process to streamline programs and priorities with decreased staff.
- Participating in about 20 outreach events (including field trips, presentations, and events) that reached approximately 2,800 adults and 2,400 children.
- Co-hosting the Austin Cave Festival at the Lady Bird Johnson Wildflower Center with another year of record attendance. (February 22, 2020)



- Co-sponsoring the Central Texas Water Conservation Symposium, “Collaborating for Success: Planning and Programs that get Results” which sold out during registration and was well attended. (February 13, 2020)
- Co-sponsoring the 2020 Virtual Rainwater Revival and Hill Country Living event that brings rainwater harvesting system installers, suppliers, water haulers and other experts together to serve as a resource for homeowners and business owners that are interested in using rainwater as an alternate supply. (Note that the virtual event was postponed into the following fiscal year due to COVID-19.)
- Publishing of the Travis County Groundwater Atlas, associated Well Owner Guide for Travis County well owners; maintaining and updating the project website page with approximately 500 page views.
- District Kent Butler College Scholarships were awarded to three high school winners with the highest scoring groundwater essays. Seven prospective Aquatic Summer Camp applicants were selected to receive alternative prizes due to camp cancellations, including annual passes to the Meadows Center.
- The District web pages were viewed over 35,000 times during FY 2020. The Home page and Austin Cave Festival page were among the most-viewed web pages.
- Continuing the eNews bulletin with a refreshed layout switching from monthly to quarterly releases with reduced staff. Total eNews opens totaled over 3,400.
- District Twitter posts totaled over 12,400 combined impressions.

This summary may also be found in the Education 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 received and approved the FY 2020 Annual Financial Audit report provided by the District’s financial auditor at its Board Meeting on December 10, 2020. It is included in this Annual Report as Appendix A.

Timely develop and approve fiscal-year budgets and amendments.

In FY 2020, there were two budget versions. The initial budget was brought before the Board in a properly-noticed public hearing held on August 22, 2019 where it was approved. The Board approved Budget Revision 1 on May 14, 2020.

**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.

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 12 District Board meetings held in FY 2020. All meeting minutes meeting were approved by the Board at each 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 an election in FY 2021 (November 3, 2020) for Director Precincts 1, 3, and 4; however, the election processes began in June/July (FY 2020).

Having no opposition in Precincts 1 and 3, the election was cancelled for those two precincts, and an election was held for Precinct 4, which is in both Travis and Hays counties.

## 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 2020 is provided in the table below.

Processed Permit Applications	FY18	FY19	FY20
Minor Amendment	6	5	3
Major Amendments	7	0	0
New Exempt Well	4	10	2
Limited Production Permit (Nonexempt Domestic Wells)	14	16	9
Individual Production Permit	4	3	4
Individual Well Drilling Authorizations or Well Modification	3	8	2
Test Well	2	1	0
Well Plugging	8	5	6
Replacement Well	1	0	0
<b>TOTAL</b>	<b>49</b>	<b>48</b>	<b>26</b>

A summary of the individual production permits processed in FY 2020 is provided in the table below.

	Annual Volume (gpy)	Production Permits Processed	Permit Type	Use Type	Aquifer
1	500,000	Aknel Enterprises, LLC	Historical Trinity	Commercial	Trinity
2	460,000	Vance Lane, LLC	Historical Trinity	Irrigation	Trinity
3	200,000	Travis County Emergency Service District #5	Class C Conditional - Edwards	Irrigation/ Commercial	Edwards
4	525,000	The Inn Above Onion Creek	Class B Conditional - Edwards - Minor Amendment	Commercial	Edwards
5	15,000,000	Ruby Ranch WSC ASR	Class D Conditional - Edwards	ASR/PWS	Edwards
6	109,114,560	**Needmore Water LLC	Historic Trinity- Conversion	Agriculture	Trinity

\*\* After a contested case hearing Needmore Water LLC temporary permit volume (179,965,440 gallons/yr) was converted to a regular permit volume (289,080,000 gallons/yr)

**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 2020, the Regulatory Compliance team conducted a number of inspections relating to the processing of permit applications. District staff completed a total of 25 inspections related to special investigations, site permittee inspections, and well permit applications. The Regulatory Compliance team collected 16 water quality samples during routine permit inspections or from new well construction inspections. There were no formal enforcement actions initiated in FY 2020.

FY 2020 Inspections/ Investigations/ Visits	
Exempt Well Inspections	5
Limited Production Permit Inspections	12
Individual Production Permit Inspections	5
Test Well Inspections	0
Plugging Inspections	2
Special Investigation Inspections	2
Other Permittee Meetings/Visits *	2
<i>*Multiple meetings were held with some permittees.</i>	
<b>TOTAL</b>	<b>28</b>

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 in Objective 1-2.

**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

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 2020, the Legislature did not convene, as this was an interim year. The GM served as the primary point of contact, and coordinated with Brian Sledge of SledgeLaw Group PLLC, the District's legislative consultant, and the appointed Board Legislative Committee members to monitor the progress on the legislative interim charges and any proposed bills of interest to the District. Efforts included participating in legislative subcommittees of the Texas Water Conservation Association (TWCA) Groundwater Committee and the Texas Alliance of Groundwater Districts (TAGD) Legislative subcommittee.

#### *House Natural Resource Committee Charges of Interest:*

- Monitor the joint planning process for groundwater and the achievement of the desired conditions for aquifers by groundwater conservation districts (GCDs).
- Monitor and oversee the agencies' implementation of relevant legislation passed by the 86th Legislature. Conduct active oversight of all associated rulemaking and other governmental actions taken to ensure intended legislative outcome of all legislation, including the following:
  - HB 720, which relates to appropriations of water for recharge of aquifers and for use in ASR projects. Monitor the rulemaking process for the permitting of unappropriated flows for aquifer storage and recovery projects by the Texas Commission on Environmental Quality (TCEQ).
  - HB 721, which relates to reports on aquifer storage and recovery (ASR) and aquifer recharge projects. Monitor the implementation by the TWDB of legislation to encourage the development of ASR and aquifer recharge projects, including the completion of a statewide study of the state's aquifers' suitability for ASR and aquifer recharge projects.
  - HB 722, which relates to the development of brackish groundwater. Monitor the designation of Brackish Groundwater Production Zones by the TWDB, and the adoption of rules by GCDs for the production of brackish groundwater from those Zones.
  - HB 807, which relates to the state and regional water planning process. Monitor the appointment of the Interregional Planning Council by the TWDB, and the Council's progress toward increasing coordination among Regional Water Planning Groups.

*Senate Natural Resource Committee Interim Charges of Interest:*

The Senate Committee on Water and Rural Affairs are all joint charges with Senate Natural Resources.

- Eminent Domain: Examine current law regarding the balance of private property rights, and continued improvement in oil and gas infrastructure. Make recommendations to ensure stability between private property owner protections and emergent oil and gas infrastructure.
- Future Water Supply: Examine current laws, processes, and water storage options and availability. Make recommendations promoting the state's water supply, storage, availability, valuation, movement, and development of new sources.
- Groundwater Regulatory Framework: Study the state's groundwater regulatory framework and make recommendations to improve groundwater regulation, management, and permitting.

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 for proposed 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 participate in discussions for legislation regarding wastewater discharges in the Edwards Aquifer Contributing Zone.

*Kinder Morgan - Permian Highway Pipeline:*

On January 16, 2020 the Board voted to join as a plaintiff in a lawsuit against U.S. Fish and Wildlife Service (USFWS), U.S. Army Corp of Engineers, and Kinder Morgan for violation of the Endangered Species Act (ESA) stating that because there is not a reasonable assurance that the aquifers will be protected during the construction and operation of the pipeline, the Permian Highway Pipeline should not be located within the District or any other hydrologically-sensitive area. Kinder Morgan's proposed natural gas pipeline, the Permian Highway Pipeline, would cross through sensitive areas within the District in Hays County. District staff worked with the litigation team on filings and testimony. The plaintiffs' case remains as pending, and awaiting a judge's decision in Federal Court.

*Roadway Projects (SH 45 SW and MoPac Intersections):*

SH 45 SW was completed and opened for public usage in June 2019. District staff continued to actively participate in final wrap up inspections and technical discussions with the Central Texas Regional Mobility Authority (CTRMA) project team, TxDOT representatives, and the Environmental Compliance Manager (Hicks and Co). The District continued to work with storm water consultant, David Fowler – Alan Plummer Associates Inc., on the technical evaluation of stormwater control designs in accordance with the consent decree. The Regulatory Compliance team, along with consultant David Fowler, held a wrap-up meeting with TxDOT, CTRMA, and Hicks and Co. representatives on November 12, 2019 to discuss final inspections and recommendations, as well as long term maintenance and the transition of oversight and maintenance from TxDOT to CTRMA. A final inspection was planned for spring 2020 but COVID-19 has delayed in-person inspections for the immediate future. The MoPac Intersection project experienced delays in FY 2020 due to mitigation of karst feature impacts and also due to COVID-19.

District staff has minimized any in-person site inspections during this time. The project continued to see construction progress in the latter part of FY 2020, and is near completion.

**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, District 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 are provided in the tables in Objective 2-1.

See the summary of processed permitting applications in FY 2020 in Objective 2-1.

See the summary of the individual production permits processed in FY 2020 in Objective 2-1.



## **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).

Worked cooperatively and closely with the Ruby Ranch Water Supply Corporation (RRWSC) and their consultants to conduct phase four of ASR pilot testing initiated in 2017 and ending in 2019 with an ASR application to the TCEQ (the 4<sup>th</sup> in Texas). The District assisted with hydrogeologic evaluations, and water level and water chemistry sampling throughout all phases of pilot testing. In FY 2020, RRWSC was given a Conditional D permit for Edwards groundwater to inject into the Trinity Aquifer.

[https://bseacd.org/uploads/RubyRanchASR\\_Status-Report\\_FINAL.pdf](https://bseacd.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).

District staff met with City of Buda staff and their consultant as they prepared a permit application for an ASR system. District staff participated in collecting cuttings and core samples from the ASR test well that Buda installed.

Regulatory Compliance and Aquifer Science teams had discussions with Bill Walters (Gragg Tract) on the pilot-testing of the Lower Trinity Aquifer. District staff assisted with data collection during two pump tests that Bill Walters conducted.



**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, generally in the first meeting of each month. 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 2020, District staff attended meetings of the Lower Colorado Regional Water Planning Group (RWPG K) and reported on any key updates at the Board Meetings. The District GM and the alternate served as the GMA 10 representative on the RWPG through December 2019. In January 2020, the GM from Medina County GCD served as the GMA 10 representative on the RWPG through December 2020.

August 12, 2020 - [http://www.regionk.org/wp-content/uploads/2020\\_8\\_12\\_Region\\_K\\_Mtg\\_Minutes.pdf](http://www.regionk.org/wp-content/uploads/2020_8_12_Region_K_Mtg_Minutes.pdf)

July 15, 2020 - [http://www.regionk.org/wp-content/uploads/2020\\_7\\_15\\_Region\\_K\\_Mtg\\_Minutes.pdf](http://www.regionk.org/wp-content/uploads/2020_7_15_Region_K_Mtg_Minutes.pdf)

April 22, 2020 - [http://www.regionk.org/wp-content/uploads/2020\\_4\\_22\\_PublicMeetingNotes\\_Final.pdf](http://www.regionk.org/wp-content/uploads/2020_4_22_PublicMeetingNotes_Final.pdf)

February 18, 2020 - [http://www.regionk.org/wp-content/uploads/2020\\_2\\_18\\_Region\\_K\\_Mtg\\_Minutes.pdf](http://www.regionk.org/wp-content/uploads/2020_2_18_Region_K_Mtg_Minutes.pdf)

February 5, 2020 - [http://www.regionk.org/wp-content/uploads/2020\\_2\\_5\\_Region\\_K\\_Mtg\\_Minutes.pdf](http://www.regionk.org/wp-content/uploads/2020_2_5_Region_K_Mtg_Minutes.pdf)

January 15, 2020 - [http://www.regionk.org/wp-content/uploads/2020\\_1\\_15\\_Region\\_K\\_Mtg\\_Minutes.pdf](http://www.regionk.org/wp-content/uploads/2020_1_15_Region_K_Mtg_Minutes.pdf)

November 13, 2019 - [http://www.regionk.org/wp-content/uploads/2019\\_11\\_13\\_Region\\_K\\_Mtg\\_Minutes.pdf](http://www.regionk.org/wp-content/uploads/2019_11_13_Region_K_Mtg_Minutes.pdf)

October 9, 2019 - [http://www.regionk.org/wp-content/uploads/2019\\_10\\_9\\_Region\\_K\\_Mtg\\_Minutes.pdf](http://www.regionk.org/wp-content/uploads/2019_10_9_Region_K_Mtg_Minutes.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.

District staff visits approximately 34 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. District staff also regularly samples wells and springs for detailed geochemical analyses as a cooperator for the TWDB (23 sites in FY 2020). All data has been compiled in the TWDB database that is publicly available. In addition, District staff has repeatedly visited and sampled numerous wells in areas reporting or anticipating problems such as the Electro Purification LLC (EP), Summer Mountain Ranch, and Permian Highway Pipeline areas.

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.

District staff provided key technical support in the development of a conceptual model for the aquifers of the Blanco River watershed. That report (Martin et al., 2019<sup>1</sup>) was published at the end of FY 2019. Since then, District staff have continued to work with the modeling team to help with logistics for project start-up. The District took a key role in applying for a grant from the U.S. Bureau of Reclamation to provide some portion of the funding for the model.

District staff completed Phase 2 of a cooperative study with Travis County on the groundwater resources of Southwestern Travis County. Results provide key insights into the Middle and Lower Trinity Aquifers within and adjacent to the District. These studies will help inform conceptual and numerical models of the region.

- <https://bseacd.org/2020/08/data-compilation-and-database-structure-for-the-geodatabase-accompanying-the-hydrogeologic-atlas-of-southwest-travis-county-central-texas/>

District staff performed a cooperative aquifer test study with Bee Cave Drilling and Mr. Bill Walters, with three test wells installed in the Lower Trinity Aquifer. Results and analytical modeling provide insights to characterize the Lower Trinity in the north-eastern portion of Hays County.

- <https://bseacd.org/2019/11/blanco-river-aquifer-assessment-tool-a-tool-to-assess-how-the-blanco-river-interacts-with-its-aquifers-creating-the-conceptual-model/>
- <https://bseacd.org/projects/travis-county-groundwater-study/>

No significant changes in water-quality data were observed during FY 2020, though water levels in the Edwards and Trinity Aquifers started dropping on July 15, 2019 due to a very dry summer and fall 2019. Barton Springs and Lovelady crossed under Stage II Alarm Drought thresholds in early October, and the Board declared Stage II drought on October 8, 2020 (FY 2021).

**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 team continues to collect data in the EP and Needmore areas, and are working with Hays County and Hays Trinity Groundwater Conservation District (HTGCD) to install additional monitor wells near Jacobs’s Well and west of EP. As additional data become available, further analyses will be conducted.
- As indicated above, development of numerical models is underway to assist in the evaluations of potential impacts from pumping from the EP wells and from other pumping and drought scenarios.
- The Aquifer Science team discussed and presented suggested revisions to the Trinity desired future condition (DFC) statement to increase the ability to accurately monitor and assess its compliance considering large permit requests.

**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, District 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 32 samples from sample sights including wells and springs from the Edwards and Trinity Aquifers for major ions and isotopes.
- The Regulatory Compliance team collected 16 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, District 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 in the tables in Objective 2-1.

See summary of the [processed permitting applications](#) in FY 2020 Objective in 2-1.

See summary of the [individual production permits](#) processed in FY 2020 in Objective 2-1.

**Objective 4-4.** Actively participate in the joint planning processes for the relevant aquifers in the District to establish and refine 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.

District staff attended 100% of the GMA 9 and GMA 10 meetings that were held in FY 2020. The GMA discussions included the following main topics:

- Resolutions regarding administrative boundary of the northern Medina County.
- Annual review of individual GCD management plans.
- Discussions on possible revisions to the GMA 9 and GMA 10 DFCs as well as standardization of monitor well analysis and reporting occurred.
- Discussion on the further standardization of monitor well analysis and reporting to aid monitoring compliance of DFCs.
- Administrative work and the selection of consultants to compile the next Explanatory Report.
- Timeline and schedule for proposed DFCs and Explanatory report.

**Objective 4-5.** Implement the measures of the District HCP and Incidental Take Permit (ITP) from the 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. On December 10, 2019, the CoA Technical Committee staff and District staff met to discuss commitments of the ILA and exchange scientific research. On February 15, 2020, the first 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.

District 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.

District 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, District 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.

District 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 triggers are indeed representative of drought conditions, regardless of the aquifer.

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

FY 2020 began with a status of No Drought due to a very wet 2018, but below-average rainfall in 2019 caused water levels and spring flow to enter a downward trend beginning in late July. The declining trend continued with below-average rainfall up to 2020. The new year started out very wet with a combined 11 inches of rain from January to April (3 inches above historical average) reversing the downward trend and avoiding crossing drought thresholds in mid-March. A total of 35 inches of rain as of mid-November 2020 has provided much needed recharge to the Edwards and Trinity Aquifers, but not enough to reverse the downward trend. On October 8, 2020, the Board declared Stage II Alarm Drought (FY 2021).

To look back in more detail, a combined 14 inches of spring rain fell in May and June 2020 providing even more recharge to that provided January through April. Barton Springs flow quickly responded to these rains, propelling spring flow further away from drought triggers. The below-average rainfall in the fall of 2019 and additional spring 2020 rains maintained an average daily spring flow of 58 cfs throughout FY 2020.



The wet spring only temporarily held off drought as summer came with a drying trend that brought water levels and spring flow back into decline beginning in early July. September provided 7 more inches of rain, but did little to reverse the downward trend. This decrease has continued through a dry fall season and on October 8, 2020 (FY 2021), the Board declared Stage II Alarm Drought. The last groundwater drought declaration commenced on July 12, 2018 and ended on October 11, 2018. This dry period is projected through the winter and into spring 2021, as we enter a La Nina year bringing drier and warmer conditions to the southern United States.

To summarize, the Austin/Hill Country area has received an average 36 inches of rainfall so far in 2020, producing recharge for local aquifers. However, below-average rainfall in 2019 and a relatively dry summer and fall 2020 hasn't provided enough recharge to stay above Stage II Alarm Drought. Official forecasts point toward the La Nina effect bringing drier and milder-than-normal conditions across Central Texas, which will likely result in further declines as 2021 gets underway. Hopefully, spring of 2021 will bring its usual upward swing of recharge to keep the aquifers well-supplied.

**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 No-Drought status the entirety of FY 2020.

**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 announced its regular Water Conservation Period which extends from May through September when in non-drought stage, generally when water use is at its peak. The voluntary conservation period was publicized through drought status icons on the District website, and included as a banner and articles in the regular eNews. Conservation education webpages were updated regularly with new resources and shared on District social media platforms.

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:

- September/October 2019: Trinity Aquifer Sustainable Yield Study, Pipeline Update, Neighborhood Site Visits, Trinity Groundwater, Education Presentations
- November: Neighborhood Site Visits Summary, Needmore Index Well, Permitting Tools
- December: Hays Co. Trinity Groundwater Presentation, Needmore Permit Update, Travis Co. Groundwater Study, Blanco River Aquifer Assessment Tool
- January: Aquifer Update, Water Conservation Symposium, Education Programs
- March: Operations Changes and District Points of Contact
- Spring 2020: Water Conservation Period & Aquifer Update, District Publications, ASR Interest
- Summer 2020: Monitoring Tools, DFC Planning

Press Releases included:

- Press Release: Trinity Aquifer Sustainable Yield Study Receives Strong Support (October 2019)
- Press Release: BSEACD Board of Directors Denies Motion for Rehearing of the Needmore Water, LLC Permit (December 2019)
- Press Release: BSEACD Board of Directors passes vote to join as a plaintiff in a lawsuit against U.S. Fish and Wildlife Service, U.S. Army Corp of Engineers and Kinder Morgan for violation of the Endangered Species Act (January 2020)
- Press Release: Aquifer District Names Vanessa Escobar General Manager (February 2020)
- Press Release: BSEACD Receives Motion to Appeal Needmore Permit Decision (February 2020)

**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, they were not updated in FY 2020.

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. District staff typically



conducts an overpumpage analysis every few years, and conducted the analysis in FY 2019, therefore District staff did not conduct an overpumpage analysis in FY 2020.

The District has been actively encouraging alternative source projects to reduce the dependency on the aquifers during drought. District staff has collaborated with water suppliers on ASR projects in providing regulatory and technical guidance. District staff has been working with RRWSC and the City of Buda on ASR feasibility. District staff also assisted in assessing the feasibility of the 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 UDCP that outlines conservation actions to be taken under each drought stage. District 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. District 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.

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

Well Water Checkup & Neighborhood Site Visits included free educational handouts, in-person well owner education, and free well water analyses.

The District announced its regular Water Conservation Period which extends from May through September when in non-drought stage, generally when water use is at its peak. The voluntary conservation period was publicized through drought status icons on the District website, and included as a banner and articles in the regular eNews. Conservation education webpages were updated regularly with new resources and shared on District social media platforms.

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

**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. This year the theme was: "Collaborating for Success: Planning and Programs

that get Results.” The symposium is structured to provide information about 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 Rainwater Revival and Hill Country Living Festival, the Central Texas Water Conservation Symposium, Austin Cave Festival, LBJ Wildflower Center (LBJWFC) Nature Nights Rocks-Water-Mud, 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.

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 District staff in FY 2020 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 2020, the District worked with other entities in the area, such as City of Buda, City of Kyle, and RRWSC, to evaluate the potential for the Trinity Aquifers as reservoirs for ASR facilities. District staff met with City of Buda staff and their consultant as they prepared a permit application for an ASR system. District staff participated in collecting cuttings and core samples from the ASR test well that Buda installed. RRWSC was given a Conditional D permit for Edwards groundwater to inject into the Trinity Aquifer.

[https://bseacd.org/uploads/RubyRanchASR\\_Status-Report\\_FINAL.pdf](https://bseacd.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 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.

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 first annual report to USFWS in February 2020.

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 2020 began with a status of No Drought due to a very wet 2018, but below-average rainfall in 2019 caused water levels and spring flow to enter a downward trend beginning in late July. The declining trend continued with below-average rainfall up to 2020. The new year started out very wet with a combined 11 inches of rain from January to April (3 inches above historical average) reversing the downward trend and avoiding crossing drought thresholds in mid-March. A total of 35 inches of rain as of mid-November 2020 has provided much needed recharge to the Edwards and Trinity Aquifers, but not enough to reverse the downward trend. On October 8, 2020 (FY 2021), the Board declared Stage II Alarm Drought.

To look back in more detail, a combined 14 inches of spring rain fell in May and June 2020 providing even more recharge to that provided January through April. Barton Springs flow quickly responded to these rains, propelling spring flow further away from drought triggers. The below-average rainfall in the fall of 2019 and additional spring 2020 rains maintained an average daily spring flow of 58 cfs throughout FY 2020.

The wet spring only temporarily held off drought as summer came with a drying trend that brought water levels and spring flow back into decline beginning in early July. September provided 7 more inches of rain, but did little to reverse the downward trend. This decrease has continued through a dry fall season

and on October 8<sup>th</sup>, 2020 the Board declared Stage II Alarm Drought. The last groundwater drought declaration commenced on July 12, 2018 and ended on October 11, 2018. This dry period is projected through the winter and into spring 2021 as we enter a La Nina year bringing drier and warmer conditions to the southern United States.

To summarize, the Austin/Hill Country area has received an average 36 inches of rainfall so far in 2020, producing recharge for local aquifers. However, below-average rainfall in 2019 and a relatively dry summer and fall 2020 hasn't provided enough recharge to stay above Stage II Alarm Drought. Official forecasts point toward the La Nina effect bringing drier and milder-than-normal conditions across Central Texas, which will likely result in further declines as 2021 gets underway. Hopefully, spring of 2021 will bring its usual upward swing of recharge to keep our aquifers well-supplied.

**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 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.

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 first annual report to USFWS in February 2020.

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 9, a technical subcommittee, including District staff, prepared a proposed common methodology to track water levels for DFC compliance. The proposed methodology will require each GCD to maintain a summary spreadsheet for each aquifer. It was further proposed that every five years, in the GMA 9 Explanatory Report, the GCDs could combine these individual results by using the location of each well to produce a grid of the monitored drawdowns resulting in an average monitored drawdown throughout GMA 9 for each aquifer. A summary of these drawdowns will be provided to each GCD.

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. In FY 2020, District staff developed and discussed a proposal to modify this DFC expression with the goal to establish a means for measuring compliance. The District presented and discussed this proposal at the GMA 10 meetings, a District-hosted meeting with neighboring GCDs, and with the TWDB.

With this stated, the average daily springflow at Barton Springs over the time period of September 1, 2013 to August 31, 2020 was 79 cfs. The DFC expression is springflow at Barton Springs during average recharge conditions shall be no less than 49.7 cfs over an 84-month period.

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)**

	Management Plan Objectives	Performance Standards
1-1	Provide and maintain on an ongoing basis a sound statutory, regulatory, financial, and policy framework for continued District operations and programmatic needs.	<p><b>A.</b> 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 <u>annual report</u>.</p> <p><b>B.</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 <u>annual report</u>.</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.	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 <u>annual report</u> .
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><b>A.</b> 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>B.</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 <u>annual report</u>.</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><b>A.</b> 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>B.</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><b>C.</b> A summary of outreach activities and estimated reach will be provided in the <u>annual report</u>.</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 <u>annual report</u>.</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 <u>annual report</u>.</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 <u>annual report</u> 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)**

	<b>Management Plan Objectives</b>	<b>Performance Standards</b>
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)**

	<b>Management Plan Objectives</b>	<b>Performance Standards</b>
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"> <li>1. available/proposed infrastructure,</li> <li>2. financial factors,</li> <li>3. logistical/engineering factors, and</li> <li>4. potential secondary impacts (development density/intensity or recharge water quality).</li> </ol> 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"> <li>1. available/proposed infrastructure,</li> <li>2. financial factors,</li> <li>3. logistical/engineering factors, and</li> <li>4. potential secondary impacts (development density/intensity or recharge water quality).</li> </ol> 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.	<ol style="list-style-type: none"> <li>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.</li> <li>B. Summarize outreach activities and estimate reach in the <u>annual report</u>.</li> </ol>
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)**

	<b>Management Plan Objectives</b>	<b>Performance Standards</b>
4-1	<p>Assess ambient conditions in District aquifers on a recurring basis by:</p> <ol style="list-style-type: none"> <li>1. sampling and collecting groundwater data from selected wells and springs monthly;</li> <li>2. conducting scientific investigations as indicated by new data and models to better determine groundwater availability for the District aquifers; and</li> <li>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.</li> </ol>	<ol style="list-style-type: none"> <li>A. Review water-level and water-quality data that are maintained by the District and/or TWDB, or other agencies, on a regular basis.</li> <li>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.</li> <li>C. A review of the data mentioned above will be assessed for significant changes and reported in the <u>annual report</u>.</li> </ol>
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"> <li>A. Perform a technical evaluation of the application, aquifer test, and hydrogeological report;</li> <li>B. Use best available science and analytical tools to estimate amount of drawdown from pumping and influence on other water resources; and</li> <li>C. Recommend proposed permit conditions to the Board for avoiding unreasonable impacts if warranted.</li> </ol> <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"> <li>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>.</li> <li>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>.</li> </ol>

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 &amp; 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 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>

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

	<b>Management Plan Objectives</b>	<b>Performance Standards</b>
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"> <li>1. pumping curtailments by drought stage to at least 50% of the 2014 authorized use during Extreme Drought,</li> <li>2. “right-sizing” authorized use over the long term to reconcile actual water demands and permitted levels, and</li> <li>3. as necessary and with appropriate conditions, the source substitution with alternative supplies.</li> </ol>	<p>A. Require an updated UCP/JDCP 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)**

	<b>Management Plan Objectives</b>	<b>Performance Standards</b>
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.	<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.
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.	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.



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

	<b>Management Plan Objectives</b>	<b>Performance Standards</b>
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)**

	<b>Management Plan Objectives</b>	<b>Performance Standards</b>
8-1	<p><b>Freshwater Edwards Aquifer All-Conditions DFC:</b> 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 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>
8-2	<p><b>Freshwater Edwards Aquifer Extreme Drought DFC:</b> 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>

