Brazos

RIVER AUTHORITY

The Brazos River Authority
Invites Qualified Candidates to Apply for
Engineering Services Manager

The Brazos River Authority Mission

The Brazos River Authority exists to develop, manage and protect the water resources of the Brazos River basin.

The Brazos River and its tributaries begin as a trickle in the west and gain momentum as the river heads south. By the time it reaches the Gulf of Mexico, the Brazos River basin has provided billions of gallons of water each year for cities, agriculture, industry and mining. Recreational opportunities - such as boating, swimming and fishing - are abundant.

The Brazos River Authority (BRA) was created by the Texas Legislature in 1929 as the first government entity in the United States established specifically for the purpose of developing and managing the water resources of an entire river basin. The governing board of the Brazos River Authority consists of 21 members that are appointed by the Governor and subject to confirmation by the Texas Senate. Each Director serve a six-year staggered term with one-third being replaced each odd-number year.

Today, the BRA's staff of more than 250 develop and distribute water supplies, provide water and wastewater treatment, monitor water quality, and pursue water conservation through public education programs.

The BRA is entirely self-supporting except for occasional governmental grants to help pay the costs of specific projects. The BRA does not levy or collect taxes: it maintains and operates reservoirs and treatment systems using revenues from the customers it serves.

The Brazos River is the longest river flowing entirely in Texas, with its watershed stretching from New Mexico to the Gulf of Mexico. The Brazos River Basin stretches 1,050 miles and creates a basin 44,620 square miles (42,000 in Texas), which is about the size of the state of Tennessee.

BRA Guiding Principles

- **Commitment to Service and Stewardship**
- **Innovation and Continuous Improvement**
- **Quality People—The right people for the right job**
- **Integrity and Respect**

Reservoirs

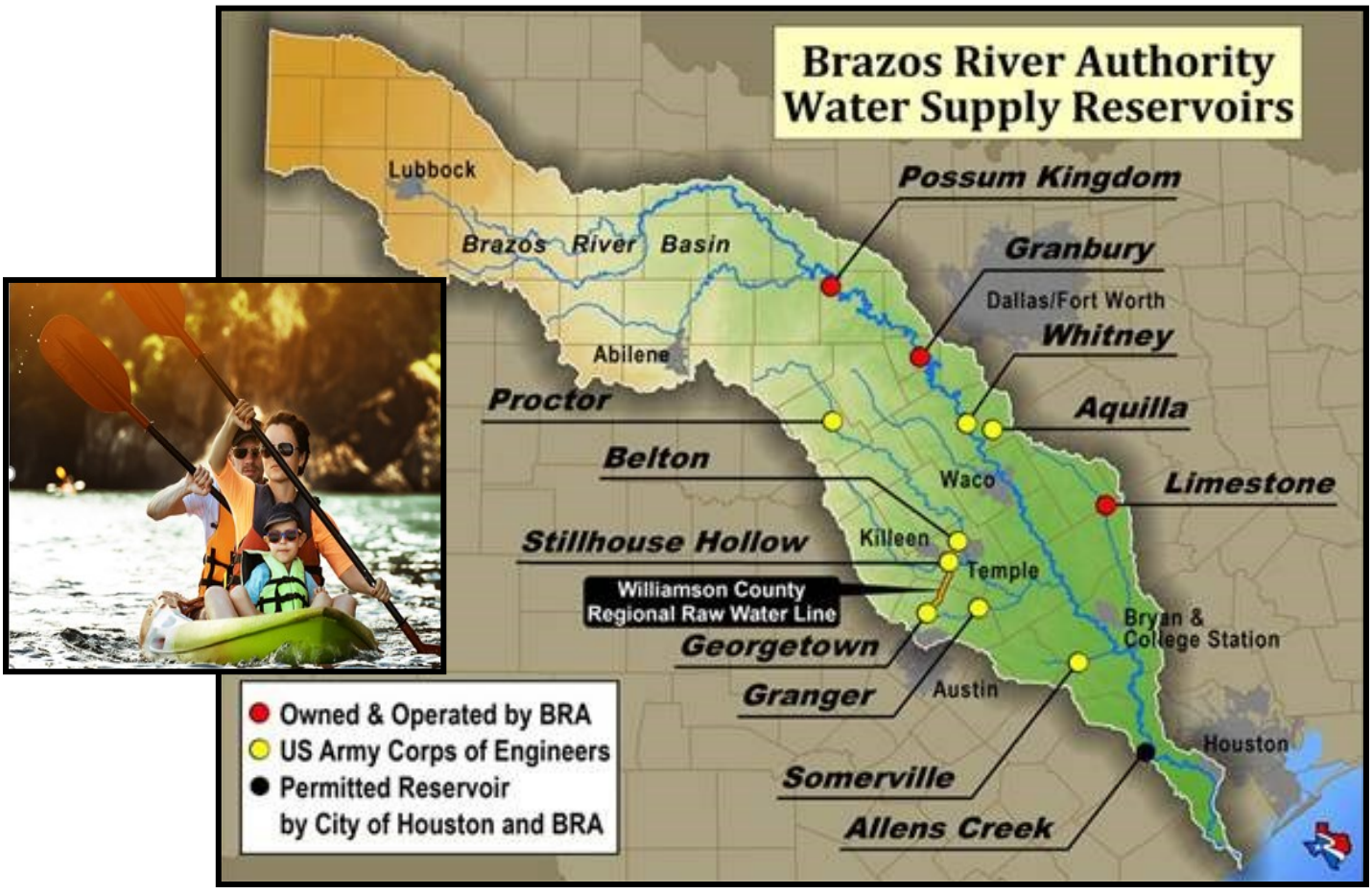
The BRA water supply system includes 11 reservoirs scattered across the 42,000 square mile river basin. Three of the man-made lakes were built and are owned and operated by the BRA while eight are owned and operated by the U.S. Army Corps of Engineers (Corps).

The BRA reservoir system includes Lakes Possum Kingdom, Granbury and Limestone. In addition, a fourth reservoir, Allens Creek, is in the planning stages. Allens Creek will be the first new reservoir and dam built in one of the largest projects that the Engineering Service Manager will be overseeing. The project is located near Houston and will begin detailed planning and permitting efforts in 2020, with design and construction to follow depending on the schedule of permitting efforts. The BRA also stores water in lakes Proctor, Whitney, Aquilla, Belton, Stillhouse Hollow, Georgetown, Granger, and Somerville, which belong to the Corps.

The three BRA reservoirs were built for water supply and, as such, when full the lake level is near the top of each dam. However, the Corps reservoirs were built primarily for flood control though they are also used for water supply. When the water supply, or conservation pool, portion of the lake is full, there is additional room available to store water in the flood pool if needed.

The reservoirs also provide an opportunity for recreation with parks and boat ramp access. Each offers a range of amenities for visitors' enjoyment on the water or lakeside. BRA reservoirs include camping and picnic areas, boat ramps, restrooms and much more.

Despite the common misconception, none of the 11 reservoirs in the BRA System are "constant level." Since they are used as a water supply source, their levels will fluctuate based on water needs and climatic conditions such as during drought or periods of heavy rain.



Water Supply

The Brazos River Authority was the first agency in the country to be tasked with managing the water resources of an entire river basin. The BRA currently holds water rights issued by the State of Texas for a system of reservoirs. Collectively, these rights authorize the BRA to supply approximately one million acre-feet of water from the Brazos River basin annually for municipal, industrial, agricultural and mining purposes.

The BRA operates two pipeline systems to transport water from reservoir storage to areas where it is needed. The Williamson County Regional Raw Water Line links Lake Stillhouse Hollow in Bell County and Lake Georgetown in Williamson County. The East Williamson County Water Transmission Line moves water supply from Lake Granger to a potable water treatment plant. The BRA recently launched a major capital project to add a third pipeline system that will link Lake Belton to Lake Stillhouse Hollow both in Bell County. Once this approximately $50M project is completed, five lakes on the western flank of the basin—Proctor, Belton, Stillhouse Hollow, Georgetown and Granger—will be linked to significantly improve flexibility in water supply for this fast growing areas

Water Quality

The Brazos River Authority works with state and federal authorities to monitor the quality of Brazos River basin surface water while providing clean, potable drinking water as well as wastewater services to the people of the Brazos basin.

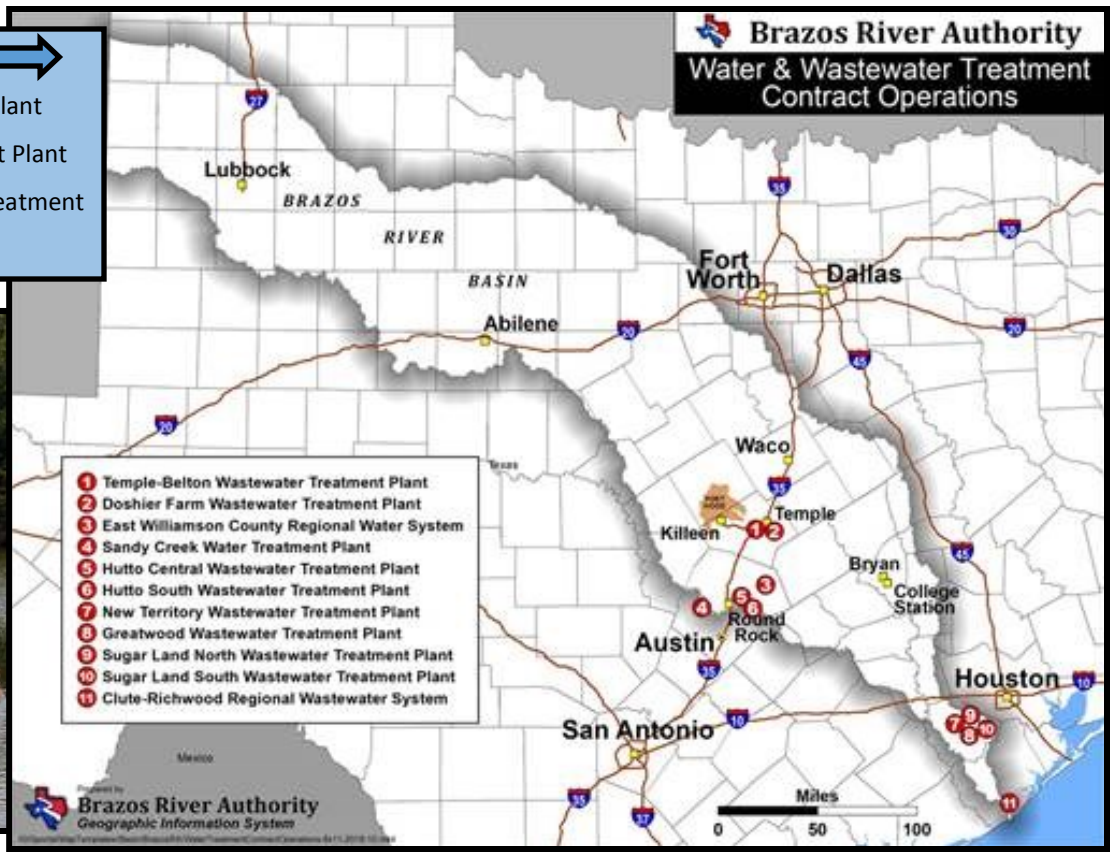
The BRA owns and operates a regional potable water treatment system in East Williamson County, operates another water treatment plant in Leander, and several wastewater treatment plants for communities across the Brazos basin. These plants are upgraded regularly to ensure their treatment systems feature the latest in treatment technology to meet both state and federal standards. Over the years they have received numerous awards from the Texas Commission on Environmental Quality (TCEQ) and the Environmental Protection Agency (EPA), recognizing the excellence of their operations, maintenance, and design.

Chart Shows:

1 owned Water Treatment Plant

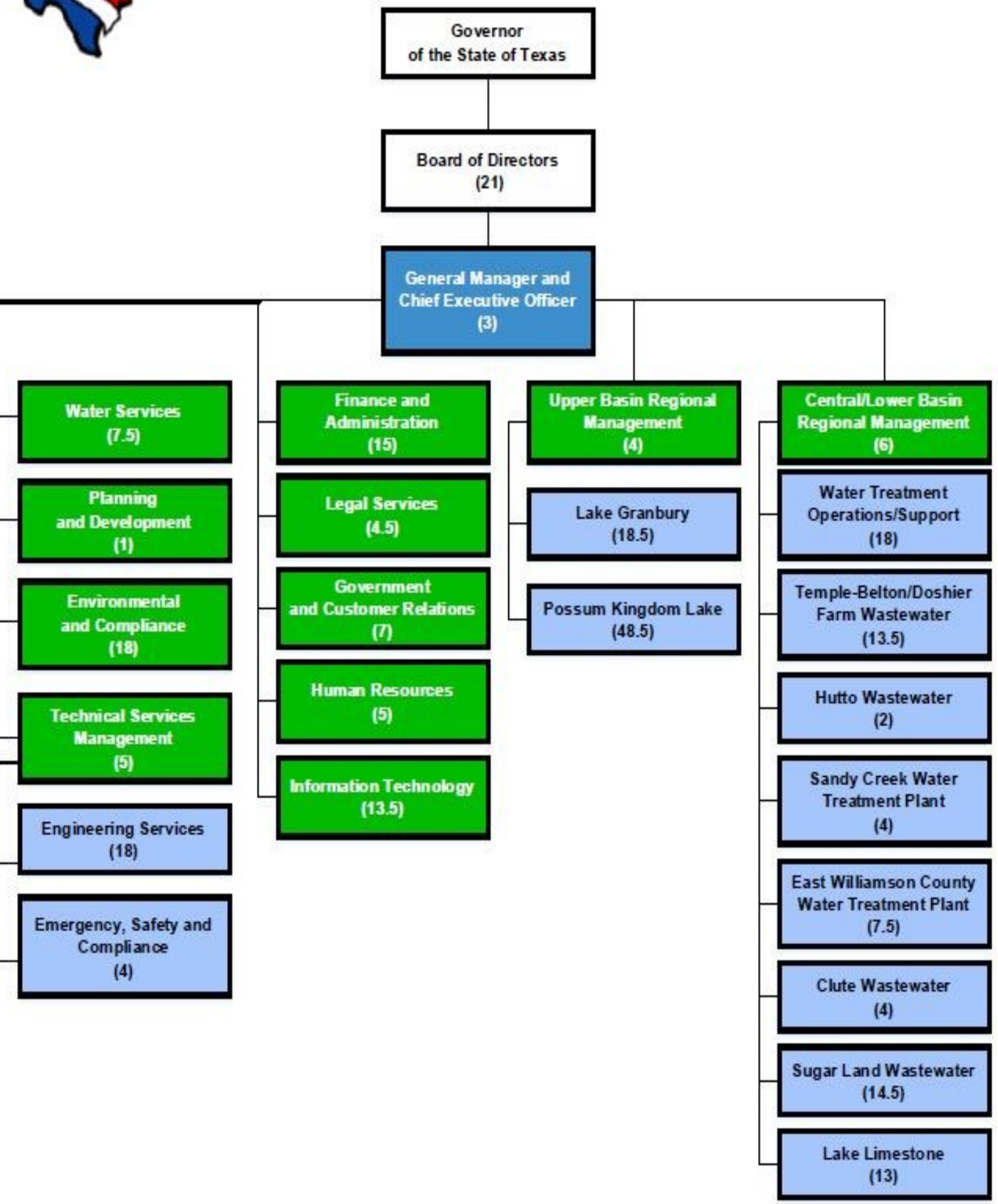
2 operated Water Treatment Plant

9 Operated Waste Water Treatment Plants



Brazos River Authority Organizational Chart

(Including position counts)



Engineering Services Manager

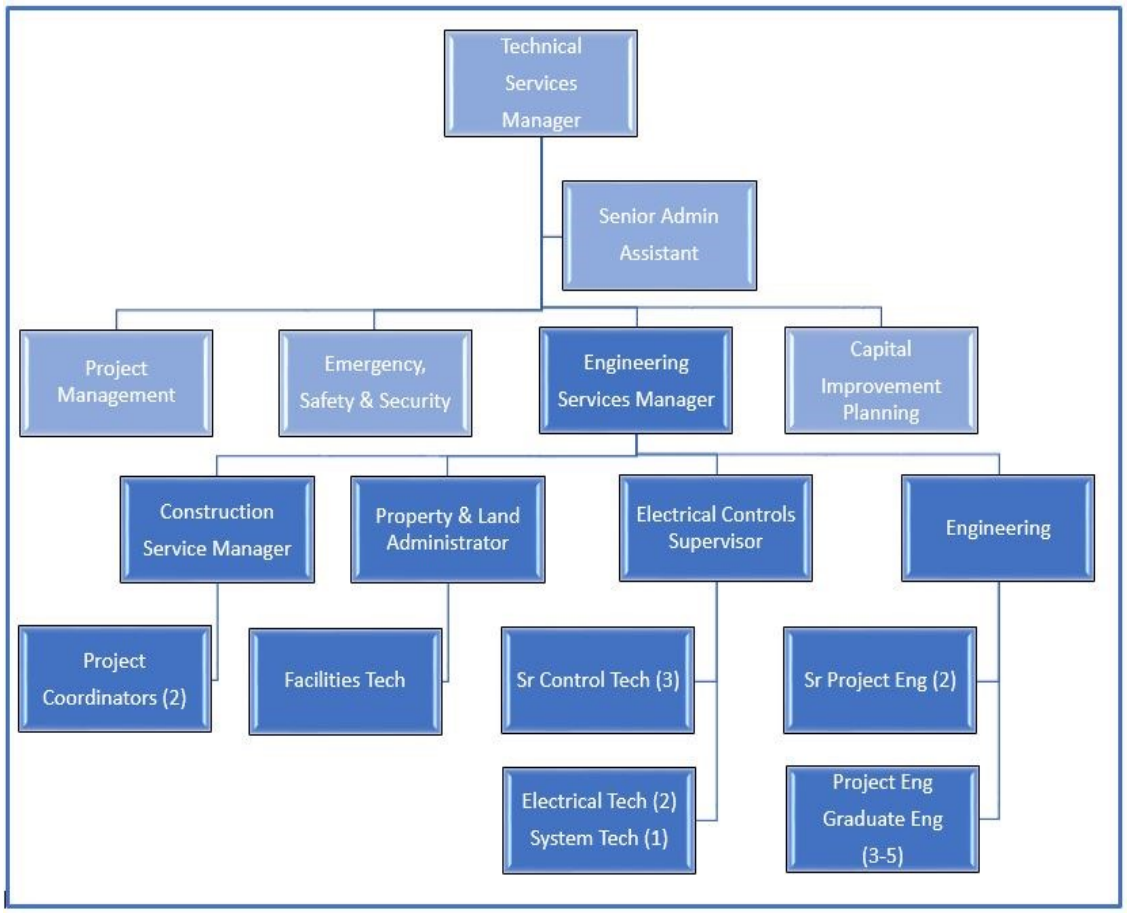
The Engineering Services Manager reports to the Technical Services Manager but works with all departments of the BRA. The purpose of the position is to manage various engineering projects and provide engineering expertise on BRA projects including dams, reservoirs, pipelines, pump stations, water treatment plants and waste water treatment plants and all related equipment and facilities. While the majority of engineering work performed for BRA will be through engineering consultants, the position also functions as the Engineer of Record providing direction and supervision of design work, preparation of technical specification and construction drawings for facility improvement projects, and signing and sealing same in accordance with the rules and regulations of the Texas Board of Professional Engineers on behalf of the BRA. For work designed and construction supervised by consultants, the position ensures that BRA is providing appropriate, owner focused engineering oversight of work. The position supervises 6 direct reports and about 17 indirect reports and is responsible for overseeing the maintenance of the central office facility and use of all property and easements, electrical and SCADA systems, construction oversight and owner monitoring of contracts. An essential function of this position is to supervise engineers and develop engineers in training. See organizational chart for Engineering. Additional responsibilities include:

⇒ Provides engineering technical expertise and support by developing and implementing special studies related to the quality, efficiency and regulatory compliance of water/wastewater and reservoir systems and other facilities; assists regional and operational managers with maintenance and repair of systems

⇒ Serves as the primary engineering contact with the many consulting engineering firms used to manage and improve the BRA assets

⇒ Supervises, hires, monitors, mentors, and coaches all staff under the Engineering Services Department

⇒ Manages engineering development, design and technical aspects for BRA facilities by planning, developing, organizing, budgeting and directing the project management of maintenance, repair and new projects



Major Capital Improvement and Renewal Efforts –Projects for the Engineering Services Manager

The BRA has a long history with major capital projects - primarily through the construction and maintenance of the three dams mentioned in this profile, but also through projects to move water around the basin and directly support customers. The next 10 to 15 years present the BRA and especially the **New Engineering Services Manager** with a major opportunity to successfully deliver several major projects that will improve the water portfolio and the major facilities that control BRA's ability to supply that water portfolio.

- Morris Sheppard Dam (MSD) - **Possum Kingdom -**Concrete Assessment and Service Life Extension (CAASLE) The multimillion dollar CAASLE project aims to identify, investigate, and improve elements of the MSD critical to extending its useful live well past is 100th anniversary in the 2040 timeframe. The project is currently in the identification phase with the recent completion of a semi-quantitative risk probable failure mode analysis that looked at over 125 different modes that could cause varying degrees of failure to the dam structure or mechanical components. The outcomes of this effort will be used in the investigation phase over the next 12 to 18 months that will target areas for improvement. During the improvement phase, structural and mechanical modifications will be made to the dam to extend its service life and provide for additional operational flexibility well into the future.

- Sterling C. Robertson Dam (SCRD) **Limestone**—Improvements. At over 40 years of age, SCRD is the youngest dam directly owned and operated by the BRA. The dam's service spillway has 5 radial gates, each approximately 40 feet wide and 25 feet tall. The BRA is currently in design of a $20M+ project to replace all 5 gates and related appurtenances. In addition, the BRA will complete a project to improve the hydrostatic relief well system for the dam, clean the drains in the hearth, and complete a structural and mechanical renewal of the dam.
- DeCordova Bend Dam (DCBD) - **Granbury**—Improvements. DCBD is approximately 10 years older than SCRD, and substantially larger with respect to maximum flow through the service spillway. The dam consists of 16 radial gates, each approximately 37 feet wide and 25 feet tall. Currently, approximately $2M in capital improvements are targeting the low-flow outlet works and construction of a gantry crane system for stop log operations. BRA will undertake a project to evaluate and likely replace the gates at DCBD. The nature of the DCBD structure itself, which has a limited service spillway bridge load carrying capacity and significant access challenges, will provide BRA and its consultants the opportunity to implement novel design and construction techniques to complete this vital project.

- Lake Belton – Lake Stillhouse Hollow Water Transmission System (Bel-House). The $50M Bel-House project is the culmination of over 20 years of planning to provide the final water supply linkage to the western flank of the Brazos Basin in Williamson County, a fast-growing suburban area between Austin and Waco. The Bel-House project will connect Lake Belton to Lake Stillhouse Hollow and the Williamson County Raw Water Line that flows from Lake Stillhouse Hollow to Lake Georgetown. This connecting artery will allow the BRA to better manage the water supply to support the area. The project will require a 6 to 8 mile pipeline through a developing area; permitting, public engagement, stakeholder coordination, and detailed construction planning will be as important as design for the completion of this project by its target end date of 2025.
- East Williamson County Regional Water System (EWCRWS) Expansion. The EWCRWS is a 12.5 mgd water treatment plant that pulls water from a 54 mgd ultimate capacity intake in Lake Granger (one of the 5 lakes connected by the Bel-House project). The facility provides treated water to three entities in East Williamson County. Growth rates in these three services areas are among the highest in Texas. As such, the plant will require a significant augmentation in its capacity in the very near future. Currently, the BRA is tackling this challenge through a multi-pronged approach: 1) a $15M+ program to develop a groundwater well to augment the treated water supply, 2) an expansion to the treatment plant (about $25 M) to provide more treated water supply, and 3) an investigation of aquifer storage and recovery options to improve long-term storage in the area.

The projects above are five of over 70 strategic planning, operational improvement, and capital improvement projects that collectively total more than $285M in effort. Delivery of these projects, alone, would present an exciting opportunity for the right Engineering Services Manager looking to build a strong technical team. Considering that the new $500M+ Allens Creek Reservoir is not in the $285M value, the opportunity is even greater. The projects the BRA will deliver over the next 15 years will not only define water supply for the Brazos Basin over the next 100 years, but they will also define the way the BRA delivers its services and its projects well into the future.

CHARACTERISTICS OF THE IDEAL CANDIDATE

- Excellent leader who can build, support and motivate a team to deliver capital infrastructure projects from conception to implementation to completion
- Ability to work with internal staff and engineering consultants and contractors; occasionally makes presentations to the Board of BRA
- Skills in coaching and mentoring staff to understand the priorities and project delivery time tables
- Previous engineering design experience to be able to monitor staff and consultants' work and review designs to meet BRA needs
- Ability to determine when and what type of staff to add to meet deadlines; ability to find the right people to fit the team
- Experience developing staff, determining appropriate continuing education and supporting attendance at appropriate conferences
- Knowledge of reservoirs, dams, water treatment plants and waste water treatment plants
- Self-starter who is technically savvy and can work independently on projects once they are approved
- Multi-tasker who can handle a large number of projects and keep staff, consultants, contractors and team accountable for keeping projects on track and on budget

OPPORTUNITIES

- Ability to make a difference and build a legacy for generations to come related to improvements to BRA and the Basin's resources, facilities and properties
- Implement over $285 million of projects for BRA in the next 5-6 years (sample of projects already listed)
- Opportunity to build a new reservoir and dam near Houston and be involved in establishing the best practices for this $500 million project
- Unique technical engineering challenges for these large capital projects which will outlive you
- Opportunity to be on the ground floor of projects that will define the success of the organization
- Challenge of finding additional engineers or up and coming engineers to join the team to assist in delivering all the infrastructure projects and hiring other staff to assist in all divisions
- Ability to build a team that can see the big picture, deal with all the details and complete projects
- Be part of Technical Services which was recently reorganized under a manager (also a PE) who has expertise in water and waste water as well as large complex construction projects, and is looking for a partner to move engineering services to the next level
- Opportunity to work with various professionals in communities along the Brazos River and with the U.S. Army Corps of Engineers

QUALIFICATIONS FOR ENGINEERING SERVICES MANAGER

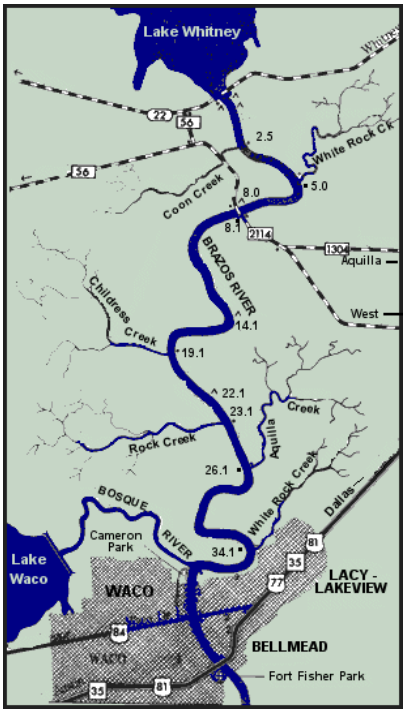
The qualifications would generally be met with a Bachelor's Degree in Engineering or ra elated field from an accredited school with preference for a Master's Degree along with over 10 years of engineering experience including 5 years at a manager's level. The position requires a P.E. in civil engineering, mechanical engineering, or structural engineering with a preference for experience with dams. Also required is a valid driver's license with a good driving record. Candidates will need to get a Texas P.E. and driver's license in a reasonable time after being hired, not to exceed 1 year. Candidates should have engineering design experience with extensive experience in managing infrastructure capital improvement projects from conception to implementation by working with a team of employees, engineering consultants and contractors.

Work Life Balance

BRA has professional staff and great working environment. The Technical Services Department operates in a results oriented work environment that emphasizes the autonomy of professionals in the team to deliver on goals and to achieve mastery in their disciplines. Accordingly, staff has the ability to work remotely as needed.

Although the BRA is very flexible on the home location between Houston and Waco the Engineering Services Manager would be expected to work at the Waco office during the first year, as necessary to build camaraderie with the existing engineering team. Also, travel to various facilities to support project and operating teams is an ongoing need of this role.

Waco, Texas Area



The main offices of BRA are located in Waco, half way between Dallas and Austin (about 1.5 hours from each). Houston, the location for the new reservoir is about 2 hours and 45 minutes away. Waco has a small-town atmosphere, is family friendly, has a low cost of living and is a rapidly developing center for education, culture, tourism and recreation.

Waco was named #2 on the list of "Destinations on the Rise for 2018' by Trip Advisor.

Besides all the many parks, trails and water sport opportunities provided by the Brazos River there are many other recreation locations including: public and private golf courses, mountain bike trails, disc golf, boat tours, horseback rides, water park, etc. Other cultural opportunities to be found in the Waco area include: Cameron Park Zoo, Texas Sport Hall of Fame, Martin Museum of Art, Texas Ranger Hall of Fame, Mammoth National Monument, Dr. Pepper Museum, Waco Symphony Orchestra, Waco Civic Theater, Heart O'Texas Fair and Rodeo, Homestead Craft Village, and Red Men Museum & Library. Downtown Waco has a shopping and restaurant area including Chip & Joanna's Gaines's Magnolia Silos which is accessible on the free trolley.

Waco is home to Baylor University, McLennan Community College and Texas State Technical College. McLennan County has 20 school districts and four charter schools serving a total student population of approximately 53,000. The area also has more than a dozen private and parochial schools.

Compensation and Application Process

Open and competitive starting salary DOQ—Salary Range $97,577-$156,123 (Midpoint $126,850)

Excellent Employee Benefits including:

- ◊ Health Benefits for Employee & Family—PPO or High Deductible Health Plan Options
- ◊ Flexible Benefits Plan (Section 125 FSA or Dependent Care)
- ◊ Life Insurance and Long Term Disability at no cost to employee
- ◊ Wellness Benefit—$20/month for health club dues or weight loss programs
- ◊ Retirement—Texas County & District Retirement System-Defined Contribution (employees contribute 6% with 7% interest guaranteed each year, 8 years for vesting, BRA will match 200% of account balance when employee begins retirement)
- ◊ 457 Deferred Comp Plan—BRA will make contributions based on 50% of employee's 457 deferral, up to 6% (3% maximum employer contribution)
- ◊ Various leave policies

(Details and rates available upon request)

Brazos River Authority is an EOE employer

If you are interested in this position and want to be considered for this great opportunity, please mail or email your resume and cover letter to Ms. Frank. Top candidates will be asked to complete a questionnaire so early applicants will have more time to prepare responses. Position open until filled with first screening August 14, 2019

More information about the BRA is available on the website: **https://www.brazos.org/**

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