



Possum Kingdom Bay 9 Transition Beam and Weir Box

***Presented by
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Chief Projects Officer***



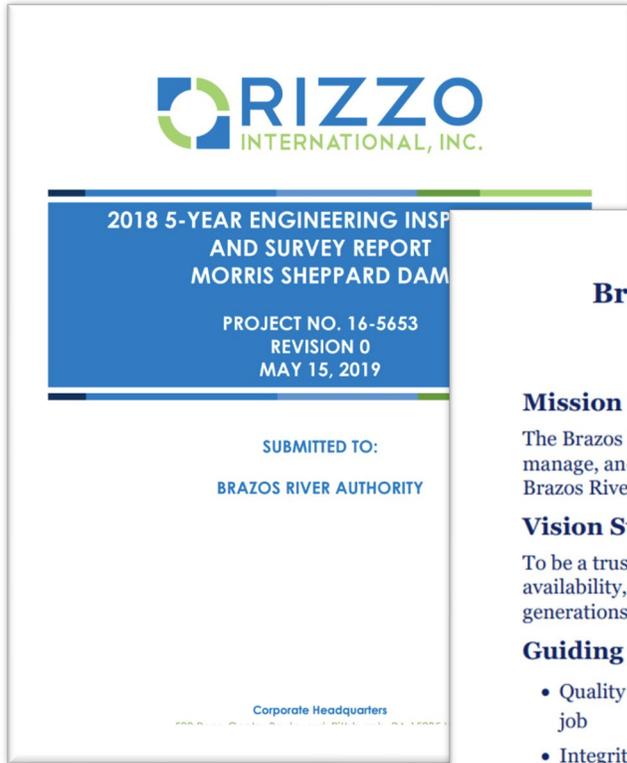
Background/History

- Documented movement of MSD mid 1980's
- Multiple measures undertaken to monitor and alleviate/mitigate.
 - Installation of Weir Box was one measure undertaken





Project Necessity



Brazos River Authority Strategic Plan FY2024 – 2029

Mission Statement
The Brazos River Authority (BRA) exists to develop, manage, and protect the water resources of the Brazos River Basin.

Vision Statement
To be a trusted leader in water resource quality, availability, and resiliency for current and future generations of the Brazos River Basin.

Guiding Principles

- Quality People – The right people for the job
- Integrity and Respect
- Ownership and Accountability
- Commitment to Service and Stewardship
- Innovation and Continuous Improvement

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

As a river cuts a path through the heart of Texas, it provides a water source for thousands of homes and businesses.

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 America, 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 was created by the Texas Legislature in 1929 as the first government entity in the United States created specifically for the purpose of developing and managing the water resources of an entire river basin.

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 Brazos River Authority 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; rather, it operates reservoirs and treatment systems using revenues from the customers it serves.

DAM SAFETY PROGRAM

Texas Commission on Environmental Quality

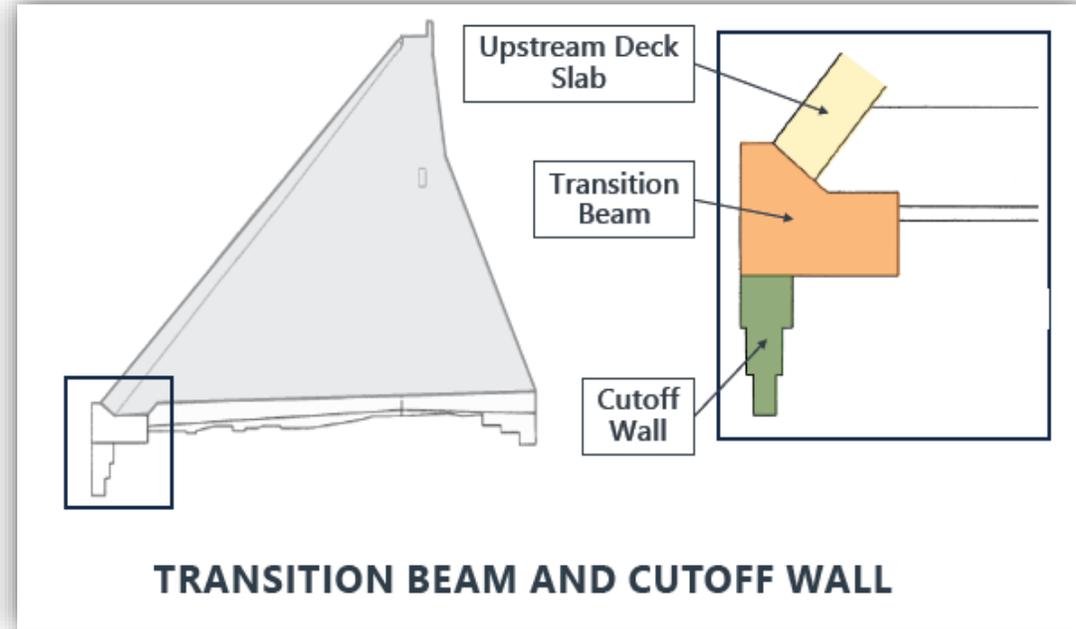
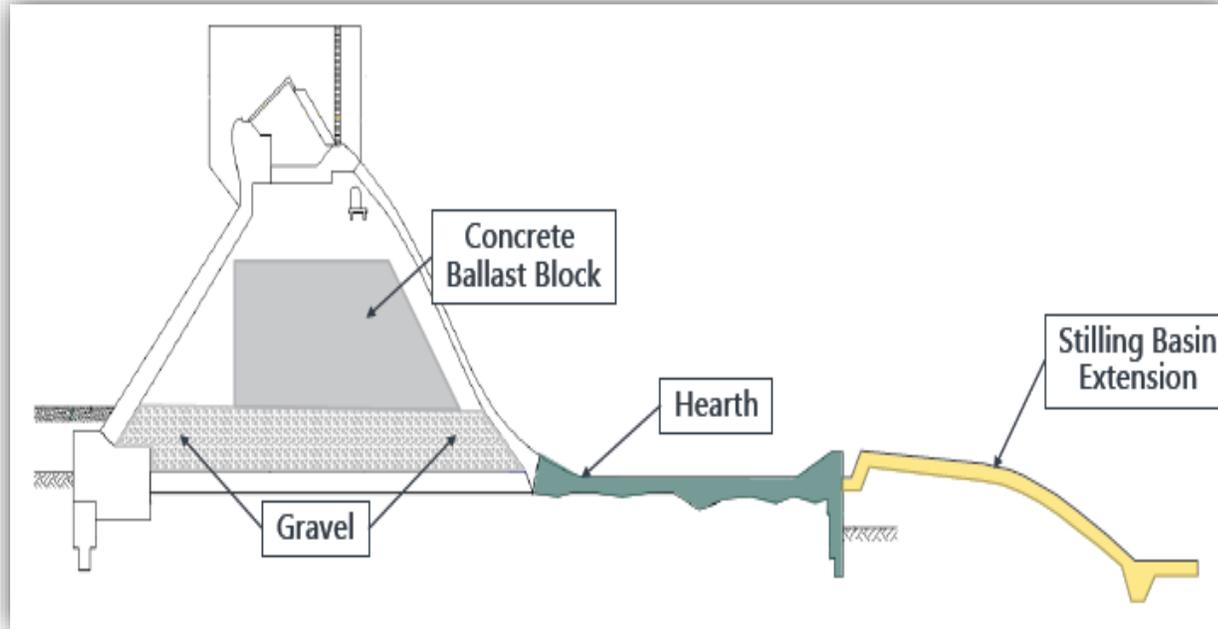
The Dam Safety Program monitors and regulates both private and public dams in Texas. The program periodically inspects dams that pose a high or significant hazard and makes recommendations and reports to dam owners to help them maintain safe facilities.

- Dam Safety Workshop
- Dam Exemption
- Emergency Action Plans
- Procuring the Services of a Professional Engineer and List of Engineers
- Probable Maximum Precipitation (PMP) Study
- Regulations

[Texas Administrative Code Title 30, Part 1, Chapter 299: Dams and Reservoirs](#)



Project Location



Recommendation

An upstream examination should be completed to assess the flow followed by the development and assessment of remediation options.

Recommendation

Improvements to the Bay 9 monitoring weir should be completed to accurately monitor the flows



Project Objective

- **Perform comprehensive assessment of Bay 9 Transition Beam and Bay 9 Weir Box and collector pipe.**
- **Provide recommendation for future monitoring, management, or mitigation measures.**
- **Provide recommendations for repair or replacement of Bay 9 Weir Box and collector pipe.**
- **If necessary, future phases (design, construction)**
- **Comply with TCEQ Dam Safety Requirements**



Project Scope and Fee

Task	Fee
Task 1	\$ 238,419
Task 2	\$ 659,776
Task 3	\$ 631,543
Total	\$ 1,529,737
Duration	2 years

Document Review, Staff Interviews, Contractor Coordination, and Materials Research

Condition Assessment

- Planning and Coordination
- Visual Documentation
- Bi-monthly Sampling and Testing of Air and Water
- Collector Pipe Scoping
- Remote ROV Survey of Upstream Face dam

Repair Feasibility and Construction Study

- Transition Beam Leak
- Bay 9 Weir Box
- Bay 9 Collector Pipe
- H2S/sulfuric Acid Attack on Buttress
- H2S/sulfuric acid mitigation, monitoring and Control
- Will include a workshop to evaluate up to 3 detailed repair or mitigation concepts for each of the above.



“BE IT RESOLVED that the Board of Directors of the Brazos River Authority hereby authorizes the General Manager/CEO to negotiate and execute a contract with Walter P. Moore for engineering services for the Possum Kingdom Bay 9 Transition Beam and Weir Box Project for a total not to exceed amount of \$1,682,710 which includes a 10% contingency for unanticipated conditions.”



RFP No. 24-1330

Received (2) Proposals

- Simpson Gumpertz & Heger
- **Walter P Moore and Associates, Inc.**

