



# ***Projects Update***

***Presented by  
Blake Kettler  
Technical Services Manager***

***Meeting Date: September 26, 2022***

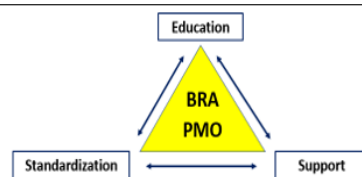


# Project Management Office

## Strategic Plan IV.b.1.

### PMO Mission Statement

*To support the BRA mission by developing and implementing best practice methodologies to train, equip and enable project managers to deliver projects that exceed stakeholder expectations.*



**Standardization:** establishing and maintaining policies, procedures and templates to improve BRA project delivery

**Education:** provide training and knowledge dissemination to benefit BRA project delivery staff

**Support:** assist project delivery staff to implement and execute project management methods

### Objectives

- Collaborate with the BRA team to develop project leadership methodology to standardize and improve project delivery
- Support BRA project delivery staff with training and implementation assistance
- Facilitate communication across projects to standardize approach and improve efficiency
- Provide project scheduling support across BRA departments for planning, uniformity and accuracy
- Develop consistency and efficiency to deliver projects within scope, schedule and budget
- Identify industry best practices and standards to improve BRA project delivery
- Develop methods to measure PMO success

### PMO Enablers

- Leadership and support has been critical
- MT's "buy-in" of process improvement has given credibility to the "cause"
- Technical knowledge and customer-service attitude has made the PMO truly supportive
- Collaborative spirit of BRA staff and project delivery teams' input to the PMO

### Support

- Developed and maintain BRA Portfolio Schedule; tracks all CIP/OP projects at the task level on one schedule; enables accurate historical view of project delivery task completion and reliable forecast of future project task planning
- Developed and maintain BRA Project Planner: higher level view of BRA projects broken down by Fiscal Quarter; enables project budget planning; resource planning and project flow comparison
- Worked with CIPA to develop Project Prioritization Process for FY 2023 Annual Operation Plan
- Developed Project Update system to keep BRA leadership and the public informed
- Routinely work with project managers in various ways to answer questions and provide support

### Standardization

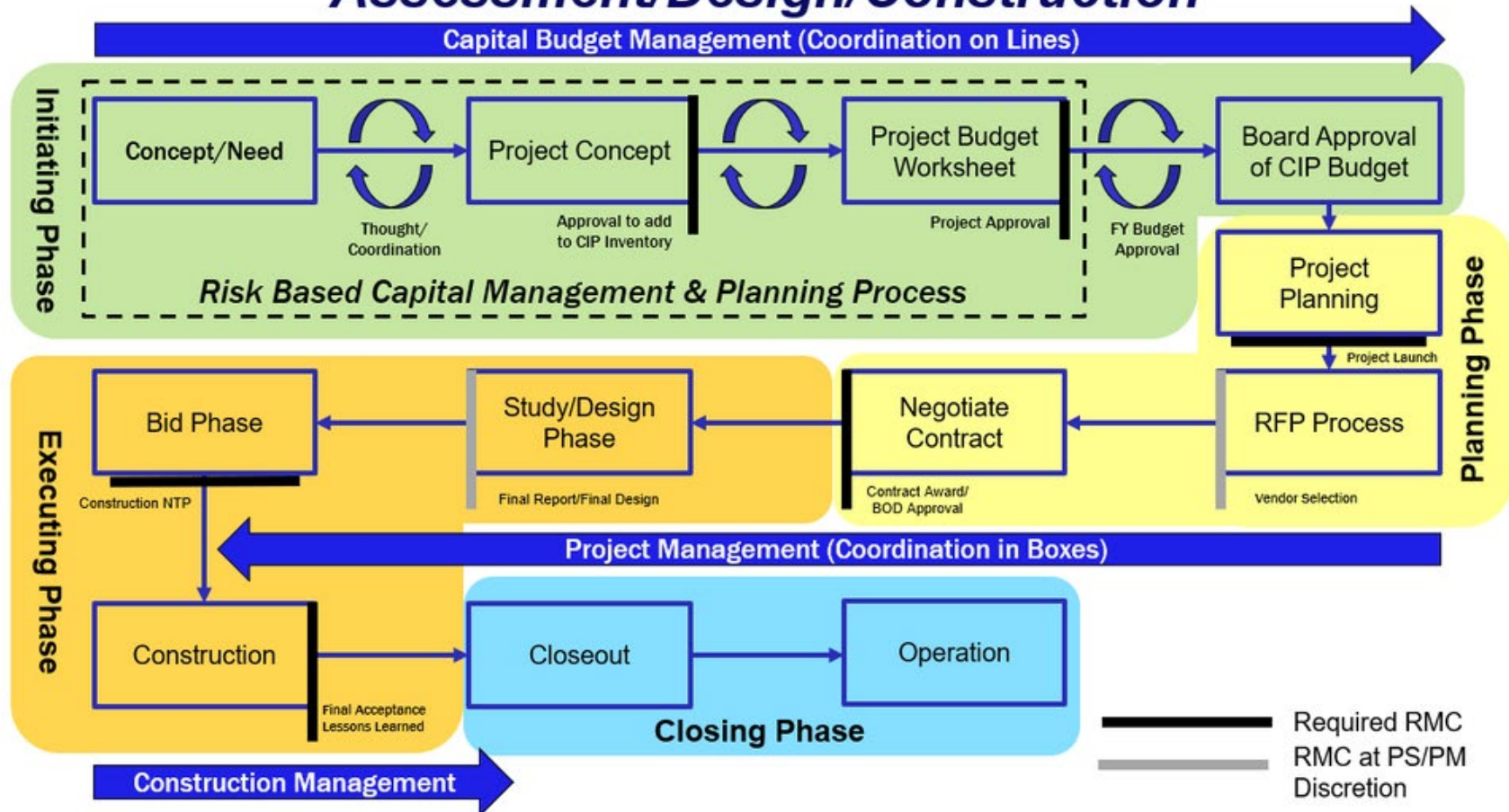
- Developing checklists, templates and processes for project delivery teams to reduce workload and improve standardization
- Facilitating crossflow of information between Basins and departments to increase corporate knowledge and standardization
- Developing Project Leadership Handbook for project team education and promote standardization

### Education

- Conduct monthly project management training sessions – focus on one project delivery topic; 50+ invitees
- Periodic "one-pagers" on a BRA project delivery step for training and standardization
- Developing a Lessons Learned Library to develop corporate knowledge and provide easy access for reference by other project teams
- Small group training as required for new PMs or PMs entering a new phase of project delivery
- Revamped Project Leadership Portal for easy/intuitive access to info
- Developing a collaborative effort with other authorities and districts

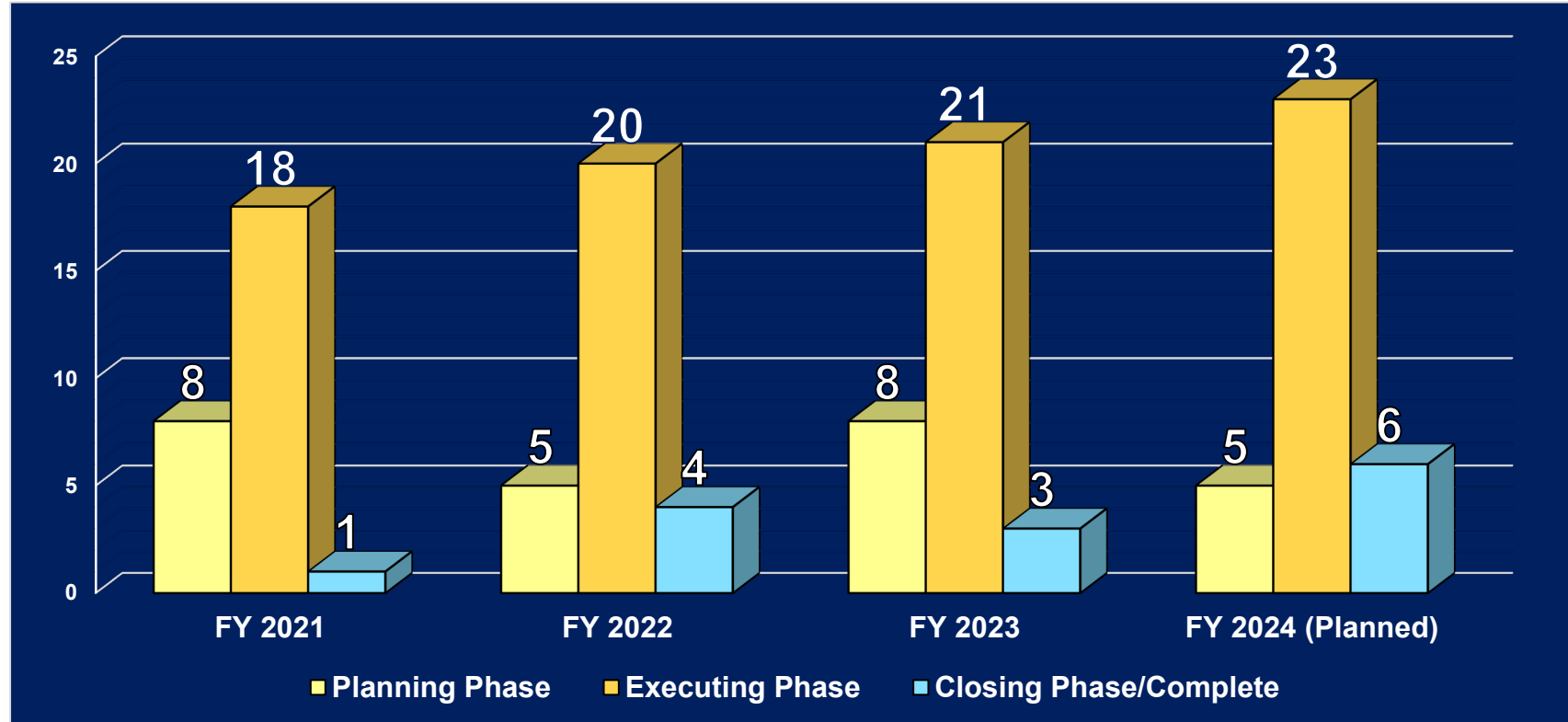


# Assessment/Design/Construction





# Active Projects Performance





# Brazos River Authority

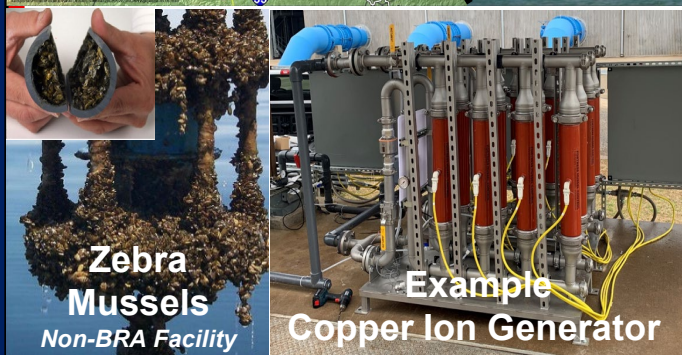
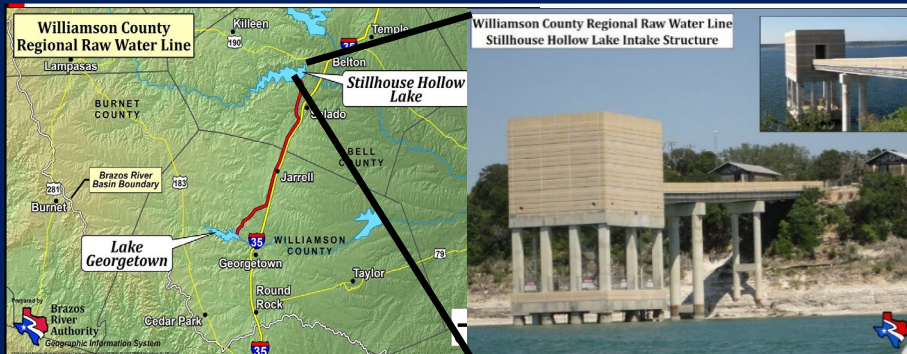
		Project Planning/RFP/Selection/Contract Phase	Design Phase																															
		Evaluation/Study Phase	RFB & Construction Contract																															
		Design/Bid Phase/Construction Contract	Construction Phase																															
			FY20				FY21				FY22				FY23				FY24				FY25				FY26				FY27			
Basin	Location	Project	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
BW	TS	Property Master Plan																																
BW	WS	Integrated Water Resources Plan																																
BW	TS	Risk Based Capital Planning & Management Support																																
BW	ES	Brazos Water Snake Study																																
BW	WS	Brazos River Alluvium Study																																
CO	ES	Environmental Services Building																																
CO	ES	Mussel Study																																
CB	BE	Belhouse Drought Preparedness																																
CB	WCR	WCRRWL Copper Ion Generator																																
CB	EW	EWCRWS Expansion Phase 2																																
CB	EW	EWCRWS Intake Slope Stabilization																																
CB	WCR	WCRRWL Phase 3 Pumps/Pipeline Evaluation																																
CB	WH	Lake Whitney Reallocation Study																																
LB	AC	Allens Creek Reservoir																																
LB	LL	Tainter Gate Replacement & Improvements																																
LB	LL	Hydrostatic Relief System Assessment & Replacement																																
LB	LL	Park 5 Access Pier & Loading Dock																																
LB	LL	Lake Limestone Fiber Optic Cable Upgrade																																
LB	LL	Low Flow Facility Modification & Improvements																																
LB	LL	Administrative Complex Architectural Assessment, Design & Replacement																																
UB	LG	Road Repairs																																
UB	LG	Reinforced Concrete Components																																
UB	LG	Trolley Replacement																																
UB	LG	Low Flow Facilities																																
UB	LG	Two Slip Boathouse Replacement																																
UB	LG	Hunter Park Bulkhead Extention																																
UB	LG	Workspace Needs Assessment																																
UB	LG	Electric Vulnerability Assessment																																
UB	LG	Hearth Stability Analysis																																
UB	PK	CAASLE (Concrete Assessment & Service Life Extension)																																
UB	PK	Operating Pier Trash Rack Replacement																																
UB	PK	Spillway Pump & Piping																																
UB	PK	Flow Control Gate Replacement																																
UB	PK	Recreational Development																																
UB	PK	COC Recoating***																																
UB	PK	Bay 9 Transition Beam Leak Remediation																																
UB	PK	Bay 9 Wier Box																																

# ***Planned Agenda Items Upcoming***

- ***CB-WCR-WCRRWL Copper Ion Generator-  
Construction Contract Approval***
- ***LB-LL-Park 5 Access Pier and Park Upgrades-  
Construction Contract Approval***
- ***UB-PK-Spillway Pump and Piping –  
Construction Contract Approval***



# WCRRWL Copper Ion Generator



The Williamson County Regional Raw Water Line connects Stillhouse Hollow Lake and Lake Georgetown providing water supply to the City of Georgetown, the City of Round Rock and the Brushy Creek Municipal Utility District.

## The Project

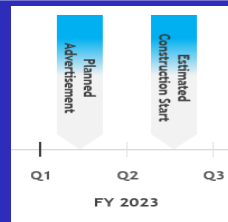
The purpose of this project is to design and install a copper ion generator at the Stillhouse Hollow Lake intake structure to control zebra mussels. Zebra Mussels are an invasive species that colonize and damage water supply equipment. Zebra Mussels were discovered in Stillhouse Hollow Lake and Lake Georgetown in 2016 and 2017, respectively. A 2019 study evaluated solutions to control zebra mussels for the Williamson County Regional Raw Water Line (WCRRWL) and its associated intake structure at Stillhouse Hollow Lake. The primary recommendation from that study is the installation of a copper ion generator to allow for dosing of a copper solution into the feed pipes at each of the intake screens. The increased copper concentration will inhibit veliger settlement on pump station components and destroy existing mussels. The project will protect this critical infrastructure; reduce maintenance labor and costs; and increase reliability of water transportation to meet customer needs.

## Current Project Status 8/12/2022

- The 100% design documents are complete
- Design has been submitted to the United States Army Corps of Engineers for approval. Awaiting timeline for Corps review
- BRA is currently preparing the Request for Bids package

## Planned Schedule

Note: BRA Fiscal Year Runs Sept to Aug



## Budget Summary

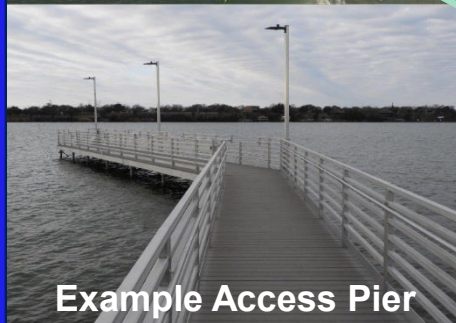
FY 2022 Budget	\$1,592,000
FY 2022 Project Expenses (As of 7/31/2022)	\$137,606

# Lake Limestone

## Park 5 Access Pier, Loading Pier and Park Upgrades



Park 5 is one of two parks owned and operated by the BRA at Lake Limestone. It includes campsites, picnic tables, restroom, boat ramp, and personal piers. The park needs upgrades to better serve the public including replacement of a boat loading pier that was removed due to deterioration, a separate access pier for fishing and lake access without impacting the boat ramp/loading area, and other safety enhancements.



Example Access Pier



### The Project

The BRA will construct a new loading pier in the same location as the previous loading pier. A separate access pier will be constructed in a different location to accommodate a new setback requirement that boat loading operations and access piers be a minimum of 100 feet apart. Other park upgrades will consist of an Americans with Disabilities Act (ADA) compliant pathway between the parking lot and the new access pier; new dusk to dawn lighting for the ADA pathway and access pier; and improvements to pavement in the parking areas.

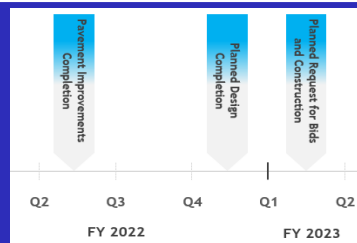
### Current Project Status 8/19/2022

- Park #5 Paving Project reached Final Completion 2/18/2022
- Planned Request for Bids finalization and beginning of construction for the new piers will occur in FY 23 Q1



### Planned Schedule

Note: BRA Fiscal Year Runs Sept to Aug

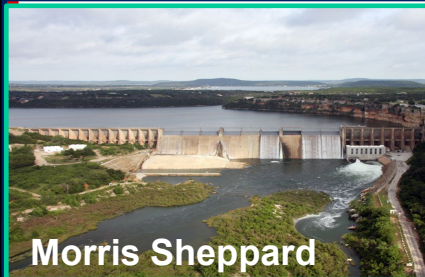


### Budget Summary

FY 2022 Budget	\$750,000
FY 2022 Project Expenses (As of 7/31/2022)	\$360,759



# Possum Kingdom Spillway Pump and Piping Project



The Morris Sheppard Dam spillway section consists of nine bear-trap gates that pass floodwater downstream. To assist with gate maintenance activities during low reservoir conditions, a spillway pump and piping system was utilized to supply pressurized water into the underside of the gates to assist the gates for maintenance operations. Due to modifications to the spillway piping in the dam (as part of a previous project), the spillway pump and piping system was disconnected, and some components removed.

The piping system also provides both cold and warm water to the Texas Parks and Wildlife Department (TPWD) Possum Kingdom Fish Hatchery located downstream of the dam. This is accomplished through two waterlines that run from the Powerhouse to the fish hatchery.

## The Project

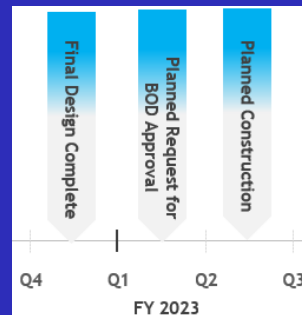
The purpose of the Spillway Pump and Piping Project is to 1) perform a condition assessment of the spillway pump and piping system and develop recommendations to bring the system to fully functional operation and 2) design the approved repairs, modifications and improvements to the system. A successful project will provide BRA's RSMU maintenance department the ability to test gates and ensure they are operable prior to bringing back into service and to ensure a continued supply of cold and warm water to the TPWD Fish Hatchery.

## Current Project Status 8/31/2022

- Design is at 95% completion
- TCEQ has reviewed and approved
- Planned Request for Bids advertisement is FY23 Q1
- Planned request for Board of Director approval November 2022
- Planned construction Notice to Proceed FY23 Q2

## Planned Schedule

Note: BRA Fiscal Year Runs Sept to Aug



## Budget Summary

FY 2022 Budget	\$450,000
FY 2022 Project Expenses (As of 7/31/2022)	\$139,326



**Brazos  
River  
Authority**