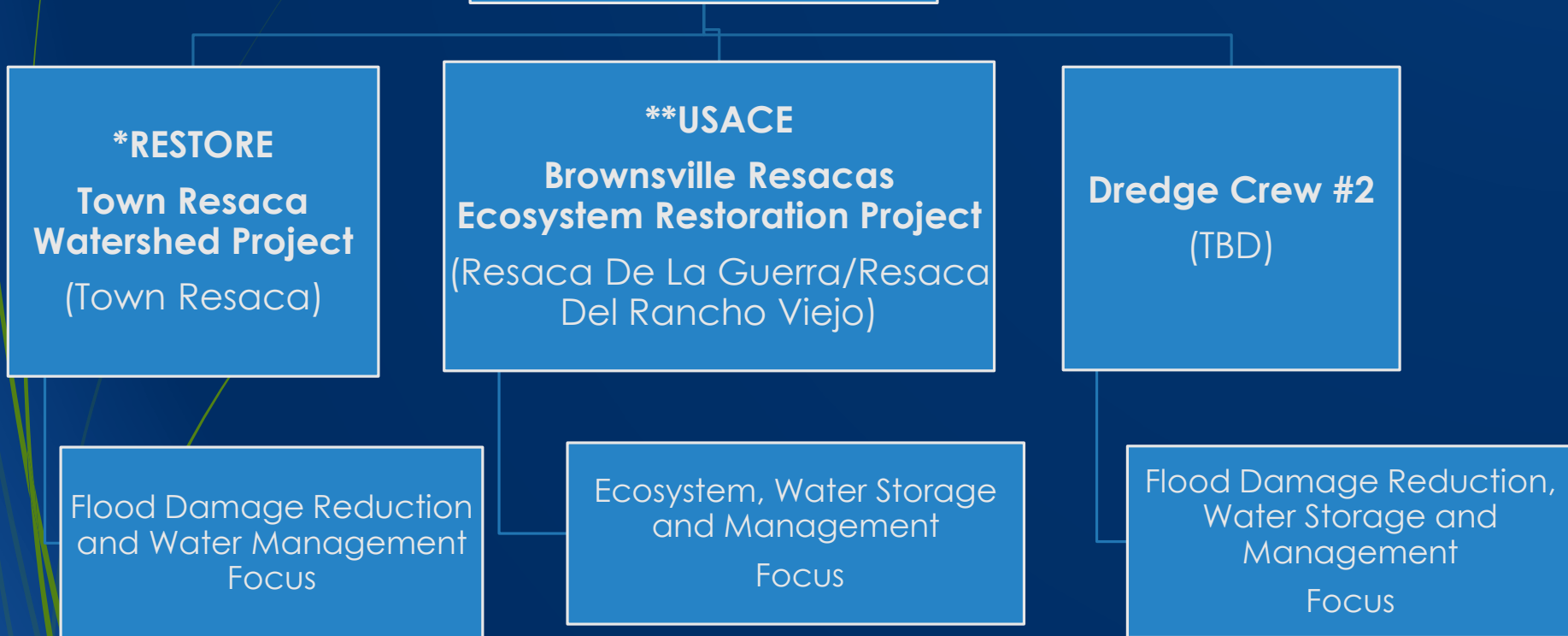




BROWNSVILLE  
PUBLIC UTILITIES BOARD

## RESACA RESTORATION PROGRAM UPDATE BOARD WORKSHOP AUGUST 3, 2023

# RESACA RESTORATION PROGRAM

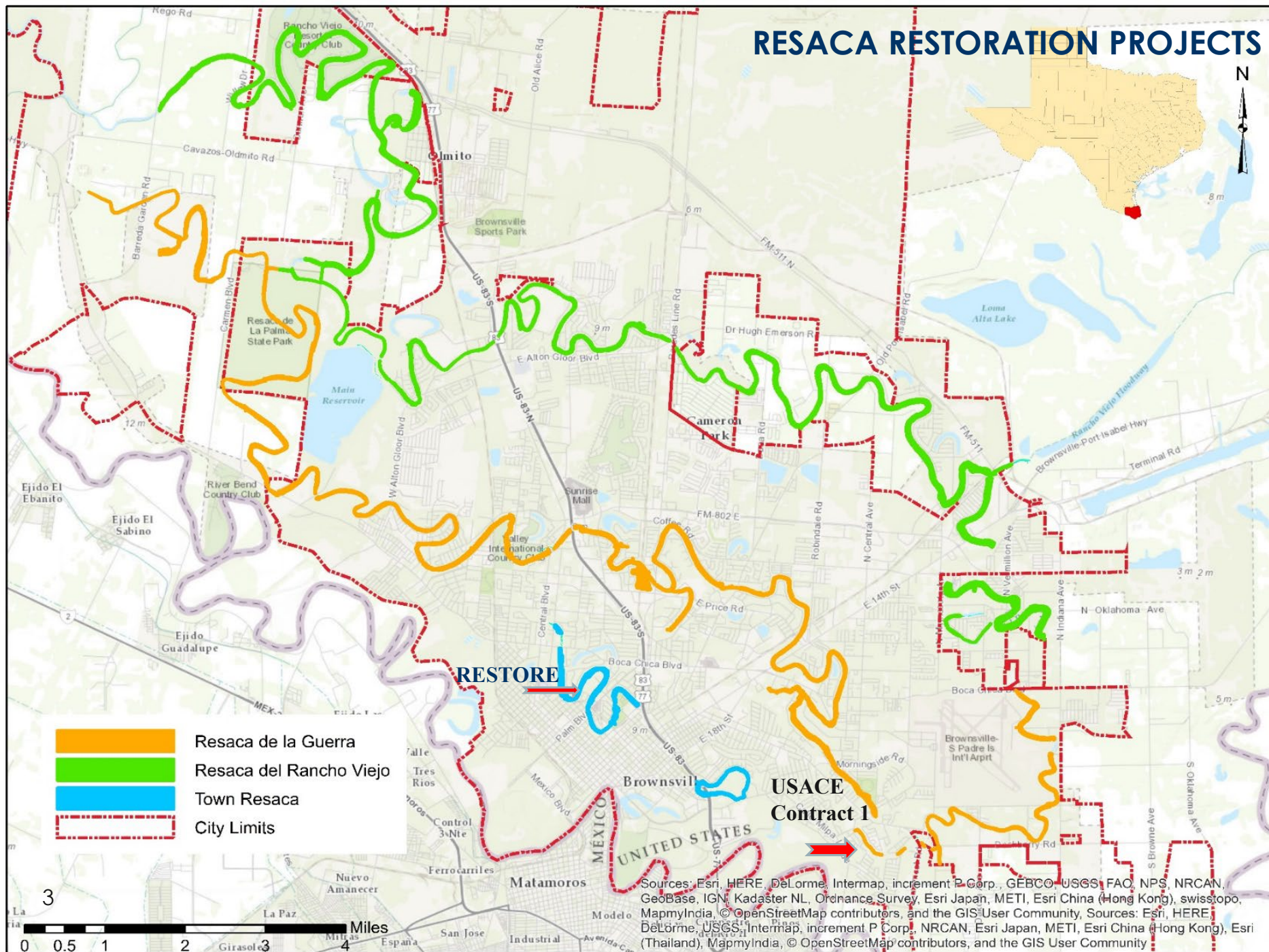


**\* Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act**

**\*\* United States Army Corps of Engineers**



# RESACA RESTORATION PROJECTS





# Resaca Restoration Program Benefits

- Increase water capacity
  - Storm drainage
  - Potable storage
- Improve water quality
- Economic development
- Recreation/ecotourism
  - Critical freshwater source
  - Central and Pacific flyways
- Environmental Benefits
  - Restores critical aquatic and riparian habitat
  - Restores habitat for federal and state listed species





# Existing Challenges

- Aging infrastructure
  - 2' -7' accumulated sediment
  - Flood control
- Development
  - Urban
  - Agriculture
- Habitat alteration/fragmentation
- Invasive species
- Pollution/nutrient enrichment



# Program Restoration Measures

- Dredging/excavation
- Incorporate dredge material as a soil supplement
- Planting native aquatic/emergent/riparian vegetation
- Re-shaping banks
- Install/modify water control infrastructure
- Invasive plant species management





# Background

- 1999
  - House Committee on Transportation & Infrastructure Resolution
- 2002 -2009
  - USACE Reconnaissance/Data Collection
- 2009
  - Imagine Brownsville Comprehensive Plan
- 2011
  - Creation of the Resaca Maintenance Department
- 2012
  - Capital equipment purchased = \$6.7 Million
  - Staff hiring = Goal of 18 FTE's
  - Staging site construction
- 2013
  - Dredging begins





# \*Initial Resaca Segments

## BROWNSVILLE RESACA RESTORATION (Group 1 Project Sites)



\* Segments dredged between 2013-2016, funded by water utility



# Initial Segments Completed

## RESACA

Cemetery  
Resaca

Dean Porter  
Park Resaca

Gladys Porter  
Zoo Resaca

Resaca Blvd.  
Resaca

Zoo Extension

**Total**

## Sediment Removed

19,528 cu-yds.

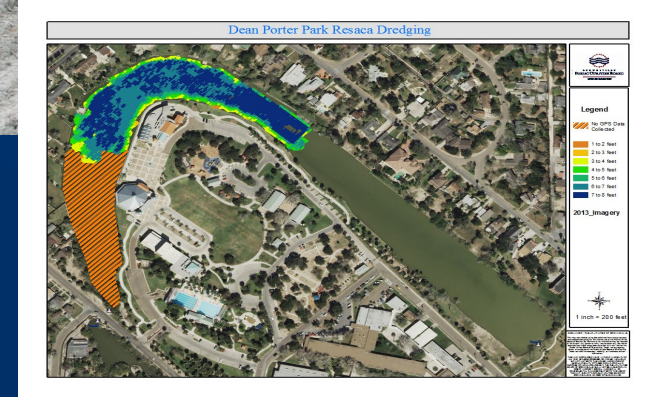
75,423 cu-yds.

21,106 cu-yds.

33,445 cu-yds.

6,716 cu-yds.

**156,218 cu-yds**



# Total Segments Completed

## RESACA

Initial Segments

RESTORE - Ongoing

---

**Total**

## Sediment Removed

156,218 cu-yds.

\*46,679 cu-yds.

---

**\*\*202,897 cu-yds**



\* As of August 1, 2023

\*\* 202,897 cu-yds = 40,979,923 gallons = 40.9 Million Gallons

Note - Rio Grande water that if not captured would otherwise flow downstream to the Gulf of Mexico.



# Town Resaca Watershed Restoration Project

# Town Resaca Watershed Restoration Project



- RESTORE Act Funding
  - Deepwater Horizon oil spill 2010
  - U.S. Treasury funding administered by the Texas Commission on Environmental Quality (TCEQ)
  - Project consists of 4 phases over a 9 year period = total of \$41 Million
  - Phase I request of \$4.6 Million
    - Phase 1 = 2 year period
    - Scope = dredging, bank improvements, staffing, weirs, gate valve, stormwater interceptors
- Grant award notification (2020)
- Dredging Began(2022)
- Infrastructure/bank design Began (2022)





# \*RESTORE Cost Estimates

PROJECT PHASE	REQUEST	**BPUB MATCH	TOTAL	TIMELINE
I	\$3,950,939	***\$730,000	\$4,680,939	2 YRS
II	\$7,783,457	\$1,069,004	\$8,852,461	2 YRS
III	\$13,740,584	\$1,750,000	\$15,490,584	2 YRS
IV	\$10,876,328	\$1,804,686	\$12,681,014	3 YRS
<b>TOTAL</b>	<b>\$36,351,308</b>	<b>\$5,353,690</b>	<b>\$41,704,998</b>	<b>9 YRS</b>

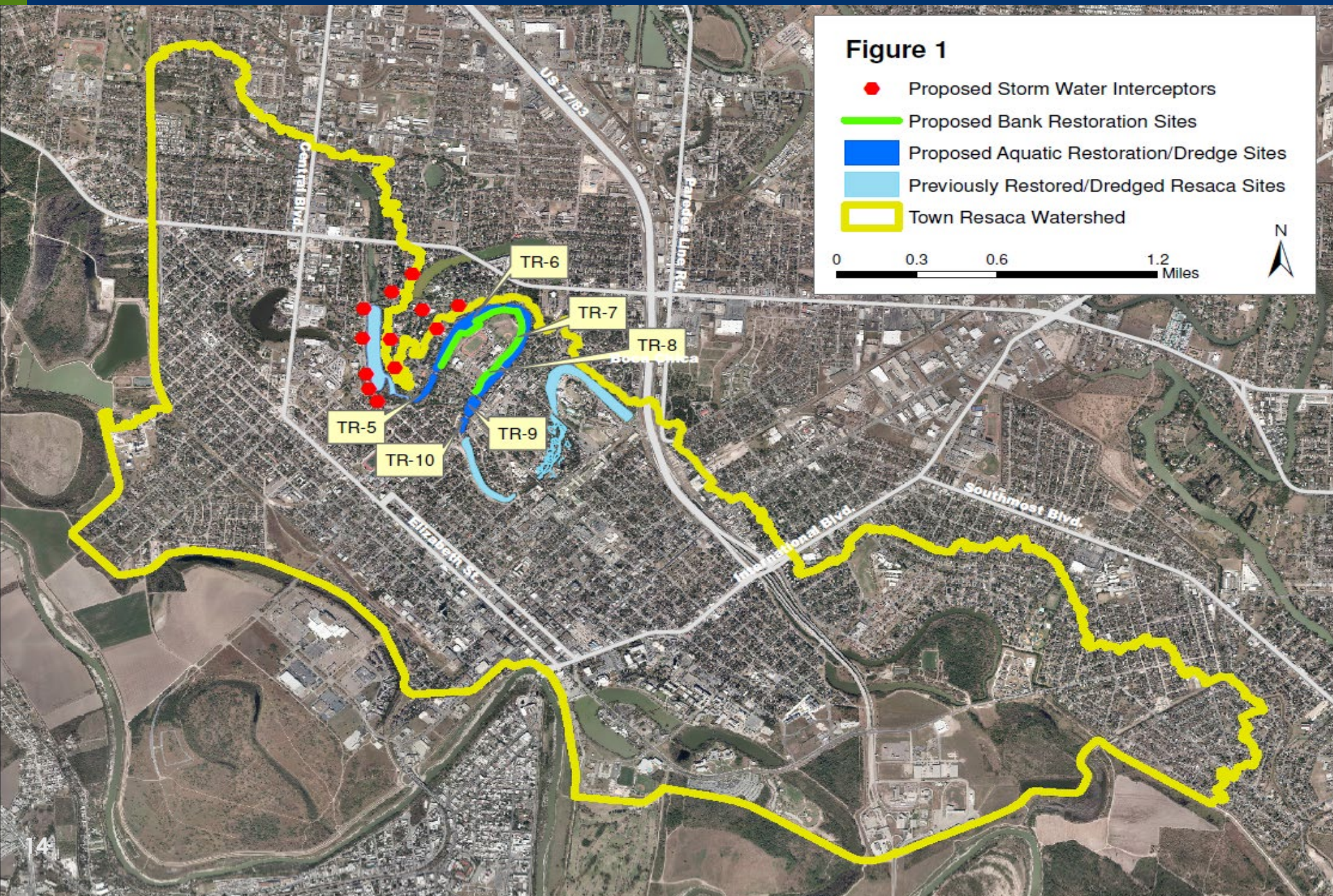
\* Cost estimates at 2017 prices

\*\* No match required for RESTORE. Sponsor match/leverage encouraged

\*\*\* Informed by TCEQ that no match required for Phase I



# RESTORE Phase I Scope

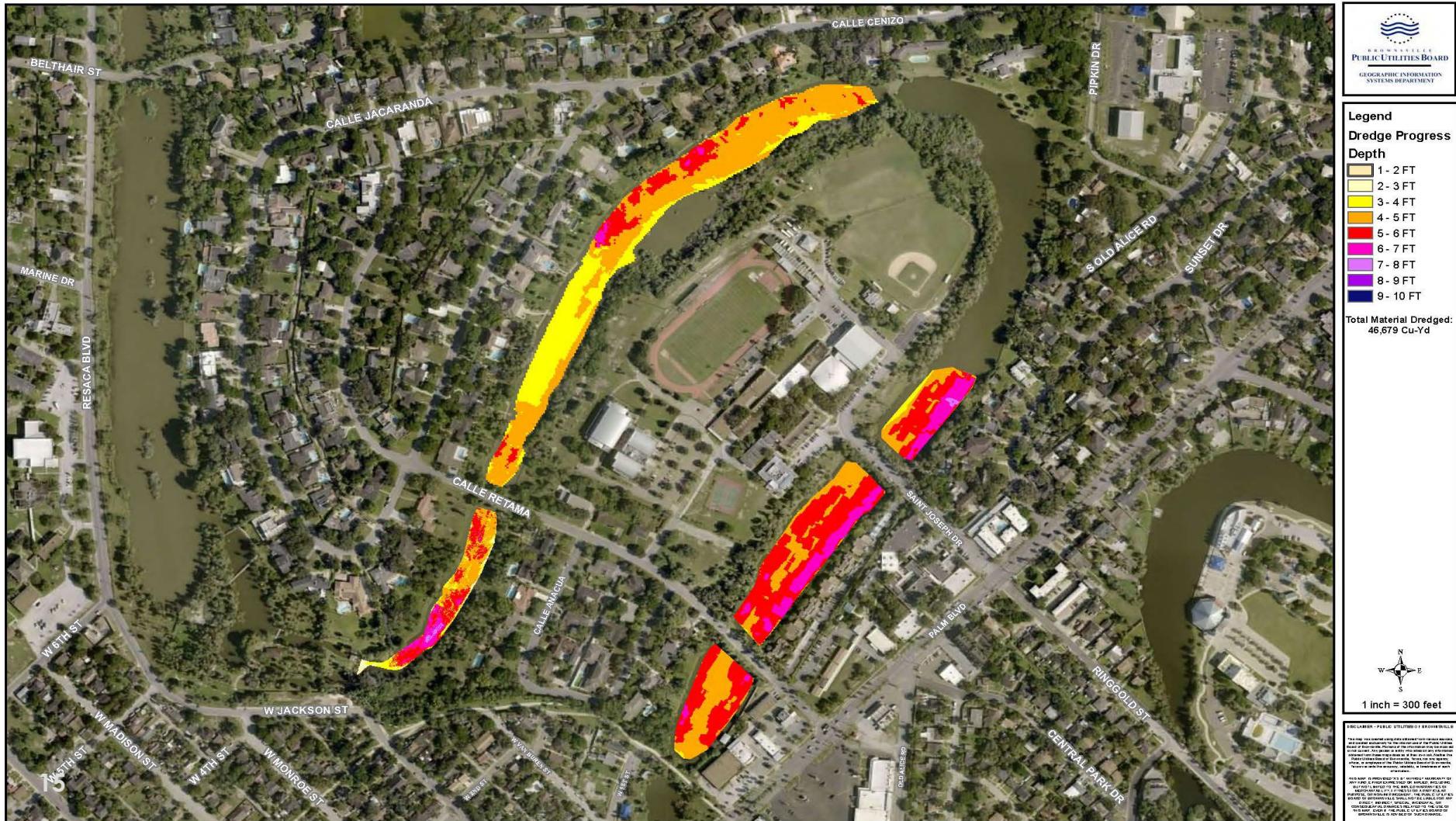




# RESTORE STATUS

Dredging = 77% Complete

## RESTORE Dredging August 1, 2023





Infrastructure/Bank Design = 100% Complete



② SECTION—FLEXIBLE RIP RAP  
Scale: 3/4" = 1'-0"



# RESTORE STATUS

## City Drainage - Infrastructure Drainage Improvements



City of Brownsville  
Automated gate valve



Wood board weir



# RESTORE STATUS

## City Drainage - Infrastructure Drainage Improvements



City of Brownsville  
Automated gate valve



Wood board weir



# \*RESTORE Phase I Funding

Description	Amount
Phase I Reimbursement Grant Award	\$4,680,939
Reimbursement Requested (Expenditures since project inception)	\$1,643,953
Reimbursement Received	**\$1,238,460
Reimbursement Pending	**\$405,493
Non-reimbursable Expenses (Local contribution)	***\$227,957
Estimated expenses pending	****\$3,036,986

\* As of June 30, 2023

\*\* Funded by grant

\*\*\* Funded by Resaca fee

\*\*\*\* Does not include additional \$1.9 Million request/amendment to U.S. Treasury

# RESTORE Project Summary

- RESTORE project focused on Town Resaca system
- Project funded primarily by U.S. Treasury grant, any matching and/or non-reimbursable amounts funded by Resaca fee
- Total project consists of 4 phases estimated over 9 years
- Phase 1 estimated completion is November 2024
- BPUB will have to apply for funding for each phase and adjust cost estimates to reflect current prices
  - Requesting 1.9 Million amendment for Phase I
- Dredging performed by BPUB Crew -1 staff
- Design of infrastructure/bank improvements performed by engineering consulting firm
- Construction of infrastructure/bank improvements completed by private contractor(s)
- RESTORE project land to be improved does not require fee simple acquisition





# U.S. Army Corps of Engineers Brownsville Resacas Ecosystem Restoration Project

# USACE Brownsville Resaca Ecosystem Restoration Project

- Brownsville Resacas Feasibility
  - Cost Share Agreement signed on August 2015
  - Study cost: \$3 Million
  - BPUB match: \$1.5 Million
  - PDT meets regularly
  - Public Meetings
  - Chief's Report signed in September 2018
  - America's Water Infrastructure Act - October 2018 – P.L. 115-270, Section 1401 (5) - authorizes construction

*Charlie Cabler*  
City Manager



August 1, 2017

Colonel Lars N. Zetterstrom  
Department of the Army  
Galveston District, Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77553-1229

**Subject: The Resacas at Brownsville, Texas Ecosystem Restoration Study**

Dear Colonel Zetterstrom:

The City of Brownsville, Texas extends its full support for the The Resacas at Brownsville, Texas Ecosystem Restoration Study. We understand that the study was conducted under the authority of the House Committee on Transportation and Infrastructure Resolution, 10 November 1999; and upon approval of the report, this project will move into the implementation phase.

The restoration plan contained in the feasibility report is an appropriate action to address the ecosystem concern in the area and is consistent with our goals. We are committed to this project and are willing, able, and fully prepared to enter into the final successive phases proceeding to completion. We look forward to executing a Project Partnership Agreement (PPA) at the earliest opportunity. We understand the provision of the PPA includes requirements for operation, maintenance, repair, replacement and rehabilitation (OMRRR) of the project.

The City of Brownsville through its Brownsville Public Utilities Board (BPUB) assumes full financial responsibility towards the project and for subsequent OMRRR.

Thank you for your assistance with this much needed restoration project. Please contact me if you need any additional information.

Sincerely,

Charlie Cabler  
City Manager

CC:bba  
xc: File

City of Brownsville, Texas

1001 E. Elizabeth St., P.O. Box 911, Brownsville, Texas 78522 Telephone: 956-548-6007 Fax: 956-546-4021 www.cob.us



23



# Brownsville Resacas Feasibility NER Plan Project Cost Estimates

Item	NER Plan Cost Estimate	Cost Share
USACE	\$202,275,010	65%
Non-Federal (COB/BPUB)	*\$108,917,313	35%
Total Cost (USACE & Non-Federal)	**\$311,192,323	

\* Local match is required to leverage federal funding

\*\* Updated cost estimate provided by USACE in December 2022. USACE recertifies cost every 5 years. Total cost to be spread over 16 contracts (each contract > 2years). A 75 year commitment to maintain improvements is required to receive federal funding



# Brownsville Resacas Contract 1

## Background

- March 5, 2021 - Project Management Plan (PMP) executed
- March 26, 2021 - Design Agreement (DA) executed
- April 2021 to Present – Pre-construction, Engineering and Design (PED) underway
  - Contract 1 Design Total cost: \*\$2,080,000 (65% Fed/35% Non-Fed share)
  - Contract 1 Design Non-Federal share: \*\*\$728,000 (35% share)


\*Cost estimates generated by the USACE

\*\*Note – Design expenses were utility funded (2021), prior to Resaca fee implementation

# USACE Contract 1



## Legend

 Resaca Construction Limit – September 2022



0 0.1 0.2 Miles

Spatial Reference  
Name: NAD 1983 2011 StatePlane Texas  
South Central FIPS 4204 FtUS





# Brownsville Resacas Contract 1 Cost Estimates\*

- Contract 1 Construction: \$3,102,470\*\*  
Breakdown:
  - 65% Federal Share: \$2,016,605
  - 35% Non-Federal Share: \$1,085,864
- Approximately 14-month construction completion schedule from Project Partnership Agreement (PPA) execution

\* Estimate update provided by USACE on May 8, 2023

\*\* Includes USACE construction management and oversight expenses



# Contract 1

## Resaca Banks





# Brownsville Resacas Contract 1 Status

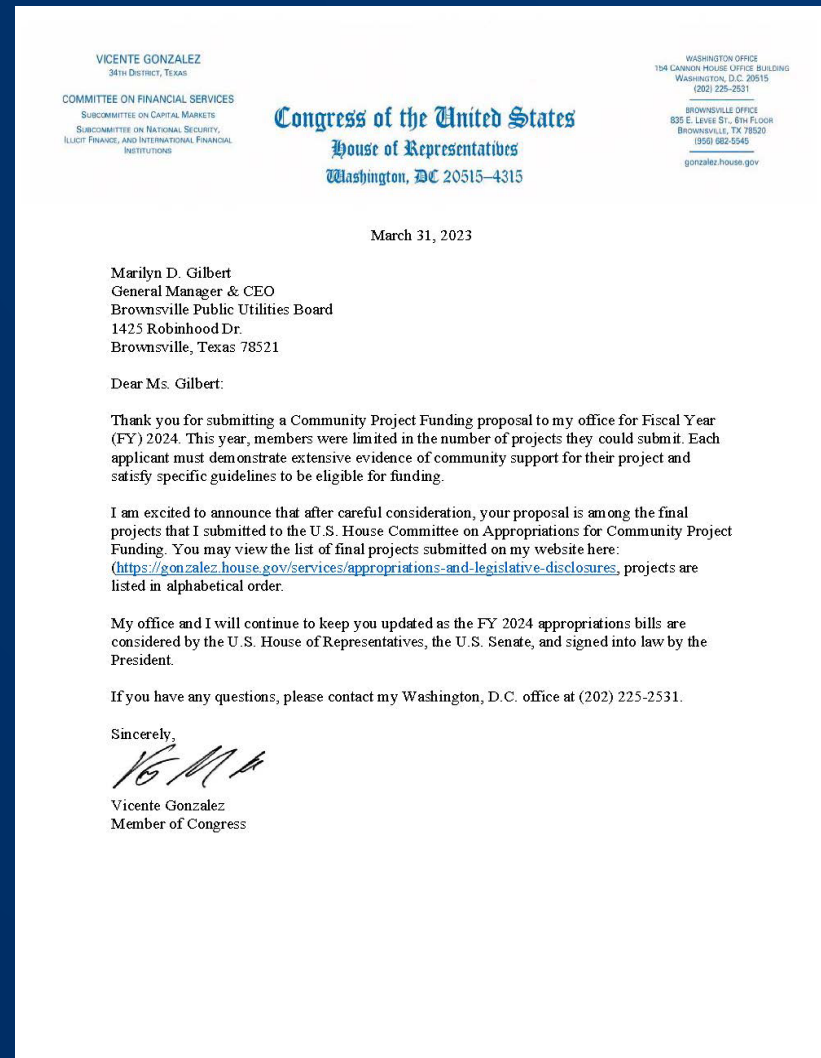
## Moving Forward

- USACE engineering design 95% complete
- Irrigation/Drainage District Agreements
- USACE/City of Brownsville MOU
- Construction pending congressional funding to proceed



# Moving Forward

- FY24 Energy and Water Development Bill (Community Project Fund)
  - July – September  
Senate Subcommittee on Energy and Water Development marks up FY24 bill
  - October – November  
House and Senate pass their version of the FY24 appropriations bill
  - December  
Congress approves FY24 appropriations act and President signs bill





# Brownsville Resacas Feasibility National Ecosystem Restoration Plan Summary

- Project focus primarily on ecosystem restoration
  - Includes elements that improve city drainage and provide economic benefit to the city through potential increase in eco-tourism
- Recommends improvements to Resaca De La Guerra and Resaca Del Rancho Viejo systems
- 16-contract construction/improvement schedule
- Each contract completion (design to construction) may be > 2 year
- Design and bidding to be performed and managed by USACE
- Construction of improvements to be performed by private contractors
- Congressional funding allocation required per contract

# Brownsville Resacas Feasibility National Ecosystem Restoration Plan Summary

## Real Estate

- USACE requires that land to be improved be acquired in fee simple
  - Land to be acquired via purchase and/or condemnation
- 646 real estate tracts to be improved
  - < 3% city owned
  - < 2% state, federal or local school district
  - 75% residential
  - 20% commercial
- Improved land must be maintained for 75 years



# USACE Real Estate Credit

Charlie Cabler  
City Manager



August 1, 2017

Colonel Lars N. Zetterstrom  
Department of the Army  
Galveston District, Corps of Engineers  
2000 Fort Point Road  
Galveston, Texas 77553-1229

**Subject: The Resacas at Brownsville, Texas Ecosystem Restoration Study**

Dear Colonel Zetterstrom:

I write to inform you that the City of Brownsville, Texas through its Brownsville Public Utilities Board (BPUB), as local sponsor of the Corps' Resacas at Brownsville Ecosystem Restoration Feasibility Study (Resaca ER), waives right to credits for Lands, Easement, Rights of Way, Relocation and Disposal (LERRD) exceeding 35 % of the recommended plan implementation cost. We understand the total current implementation cost of the recommended plan is estimated at \$239,678,000. We further understand that the non-federal minimum cost share requirement for this project is 35%, resulting in a total sponsor share of approximately \$83,887,300. The LERRD costs for this project is currently estimated at \$107,812,000. This action will enable the recommended project to be built and the City of Brownsville and BPUB will forego the reimbursement for LERRD costs above the thirty-five percent, estimated at approximately \$23,924,700, to support the project.

As you know, the Resaca ER Study has advanced to a stage that has identified a Selected Plan which has undergone a successful Public Review. Cost estimate for the Selected Plan is indicative of the challenges we face in restoring the riparian environment along long stretches of the Resaca banks in a Suburban environment. It is also indicative to a sustainable restoration for which connectivity of multiple elements be established. Consequently to attain such connectivity through terrestrial, hydrologic and spatial elements, there will be a large number of land taking along Resaca banks; thus requiring many parcels of land.

Projects such as our Resaca restoration will require high number of real estate takings along the Resaca banks to meet the criteria of a sustainable project. We are aware of similar successful positions taken by other sponsors for Environmental Restoration projects. In which cases LERRD values were high and Sponsors were willing to forego reimbursement above the 35% limit for Environmental Restoration project. The City of Brownsville and BPUB are prepared to do the same.

City of Brownsville, Texas

1001 E. Elizabeth St., P.O. Box 911, Brownsville, Texas 78522 Telephone: 956-548-6007 Fax: 956-546-4021  
www.cob.us

Colonel Zetterstrom

Page 2

August 1, 2017

Although prevailing Corps policy indicates that projects with land costs exceeding 25% of the total project cost are not likely to be given a high priority for budgetary purposes, we are hopeful that our demonstrated commitment to the Resaca ER project and our productive partnership with the Corps will enable us to transform the only remaining Resaca system in the world into a valuable sustainable system contributing to the region environmental, ecotourism, and a sustainable infrastructure assets.

Sincerely,

Charlie Cabler  
City Manager

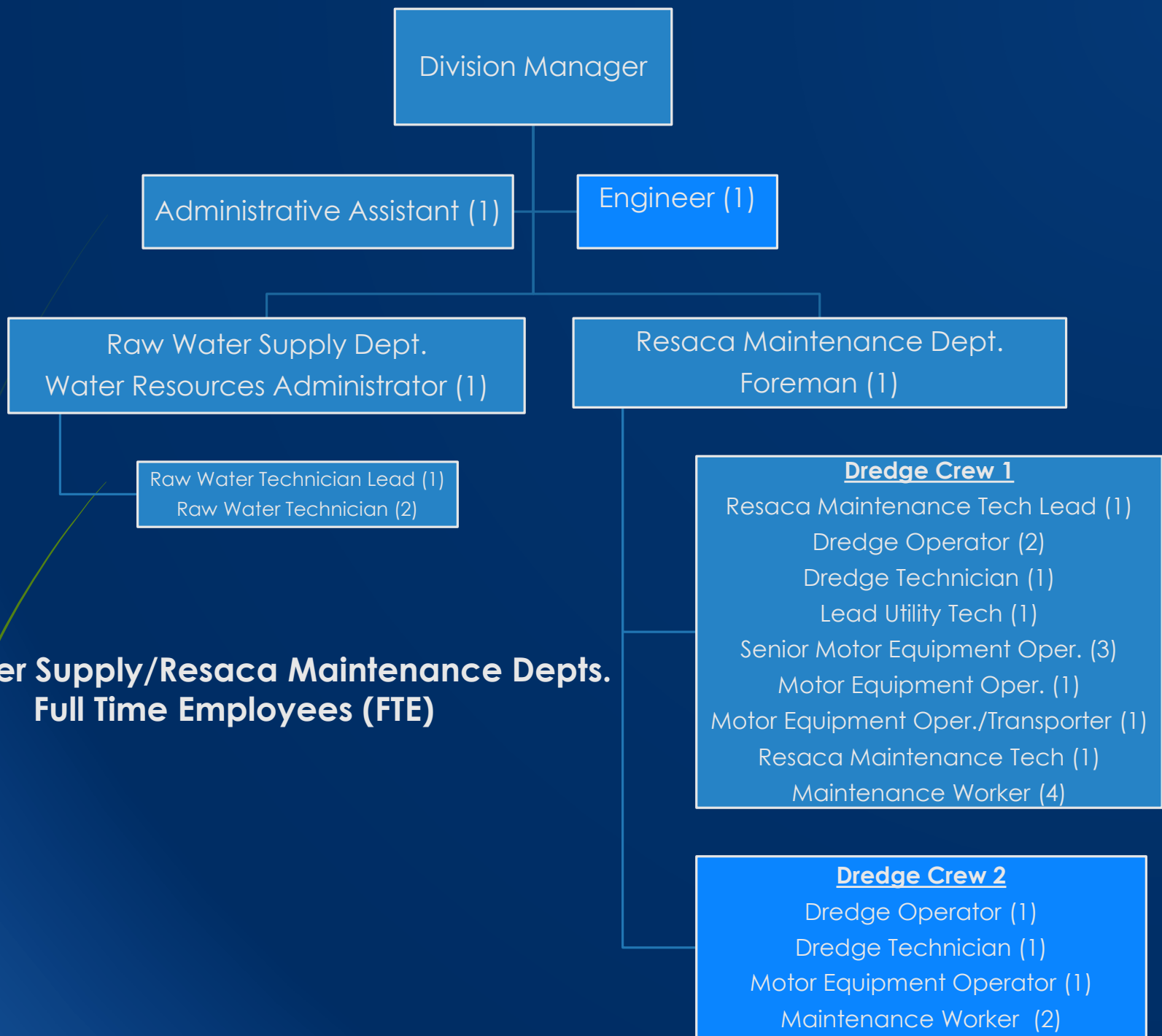
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# DREDGE CREW 2



**Raw Water Supply/Resaca Maintenance Depts.  
Full Time Employees (FTE)**

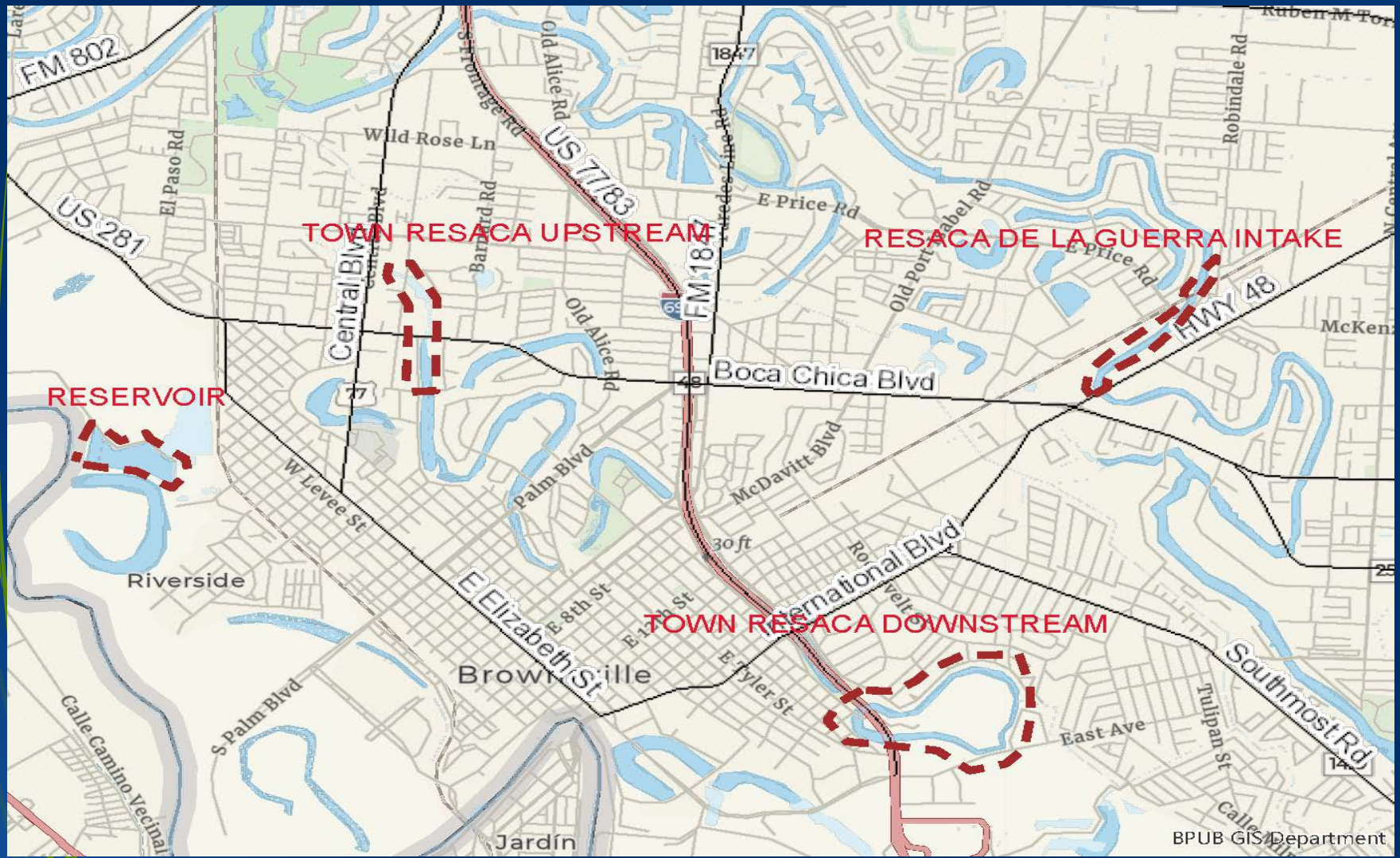


# Dredge Crew 2

- FY23 Board approved 6 FTE's
  - 3 hired/3 vacancies
- Training
- Equipment Purchases
  - Dump truck
  - Front Loader
  - Dredge pipe
- Dredge Site Selection/Planning
- Environmental Permitting

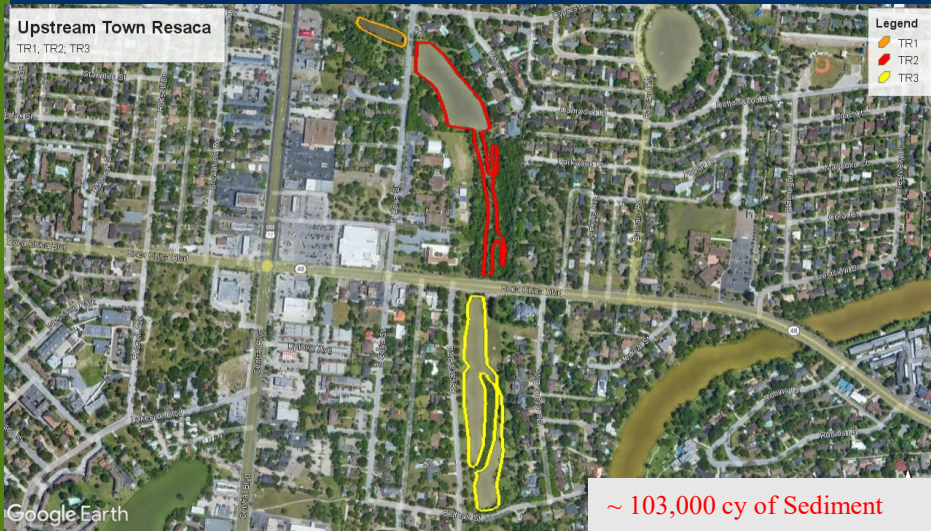


# Potential Dredge Crew 2 Sites





# Dredge Crew 2 Site Planning





# Resaca Dredging Operation Equipment Needs

Equipment Description	Cost Estimate	Comment
Crew 1 - *Dewatering System	\$4,000,000	FY24 CIP
Crew 1 – *Excavator	\$274,750	FY24 Budget
Crew 2 – Dump Truck	\$141,119	July 2023 Board Approved
Crew 2 – Front Loader	\$252,000	August 2023 Board Item
Crew 2 – Dredge pipe/floats	\$446,700	FY24 Budget
Crew 2 – Booster Pump	\$227,883	FY24 Budget
Crew 2 – Office/Trailer	\$90,935	FY24 CIP
Crew 2 – Utility Truck	\$78,415	FY24 Budget
Total	**\$5,511,802	

\* Equipment > 10 years old, exceeded useful life

\*\* Cost to be funded by Resaca fee



# Resaca Restoration Program

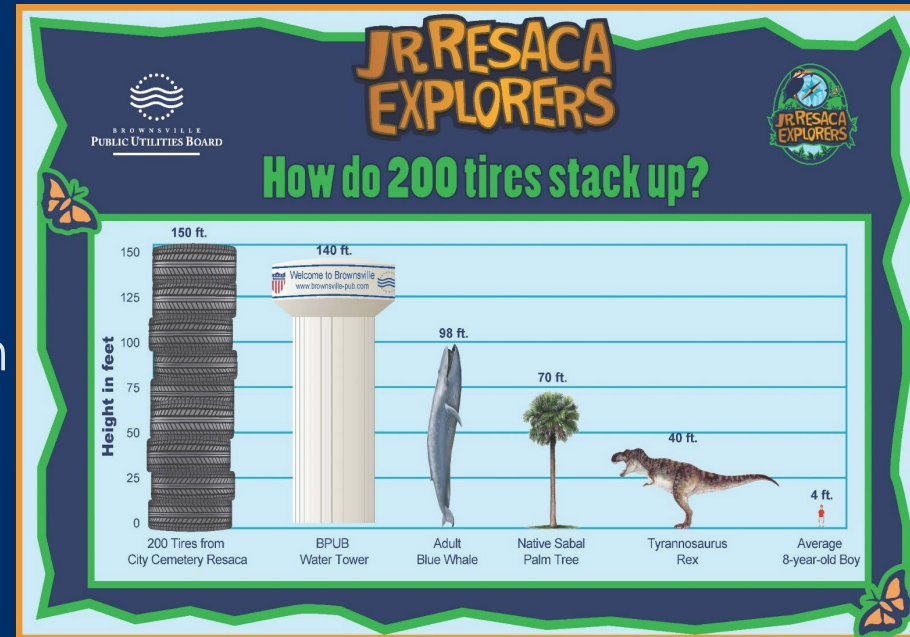
## Action Items

- Gather feedback from City Commission and community
- Inform impacted stakeholders of project progress
- Habitat/wildlife assessments to monitor impacts of restoration effort
  - RGV -Texas Master Naturalist volunteer observations
- Measure/calculate siltation rate of dredged segments



# Resaca Restoration Program Action Items

- Grow informational campaign
  - Jr. Resaca Explorers
    - BISD Outreach
    - Gladys Porter Zoo Outreach
    - ✓ Signage
    - ✓ 200 Scouts/year
    - ✓ 25,000 students/year
    - ✓ 150,000 children with parents/year





# RESACA FEE And FY24 Expenses

Description	Amount
Fees collected FY22 to present (- 10% COB Transfer)	\$3,366,160
Fee expensed in FY23	*\$409,098
Fee balance	\$2,957,062
Anticipated FY24 Fee Revenue (-10% COB Transfer)	\$5,433,794
Total	\$8,390,856
<b><u>Potential FY24 Estimated Expenses</u></b>	
RESTORE – Amendment	\$1,907,335
USACE Contract 1 Construction 35% Share	\$1,085,864
Dredging Operation Equipment Cost	\$5,511,802
Total	\$8,505,001

# RESACA FORECAST (Years 1 thru 9)

	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Water Customers	54,524	55,065	55,612	56,164	56,722	57,285	57,854	58,429	59,010
New Accounts		541	547	552	558	563	569	575	581
Avg. Annual Growth		0.99%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%
<b>FEE</b>	Eff. 6/1/22	Eff. 1/1/23	Eff. 1/1/24	Eff. 1/1/25	Eff. 1/1/26				
Resaca Fee - RESTORE	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50
Resaca Fee - USACE	\$ 2.00	\$ 3.75	\$ 7.50	\$ 7.50	\$ 10.00	\$ 10.00	\$ 10.00	\$ 10.00	\$ 10.00
Resaca Fee - Combined	\$ 4.50	\$ 6.25	\$ 10.00	\$ 10.00	\$ 12.50 <sup>2</sup>	\$ 12.50	\$ 12.50	\$ 12.50	\$ 12.50
<b>REVENUE</b>	4 months								
Resaca Revenue - RESTORE	\$ 545,240	\$ 1,637,370	\$ 1,664,258	\$ 1,680,780	\$ 1,697,475	\$ 1,714,328	\$ 1,731,353	\$ 1,748,558	\$ 1,765,943
Resaca Revenue - USACE	\$ 436,192	\$ 2,177,170	\$ 4,373,291	\$ 5,042,340	\$ 6,368,670	\$ 6,857,310	\$ 6,925,410	\$ 6,994,230	\$ 7,063,770
Resaca Revenue - Combined	\$ 981,432	\$ 3,814,540	\$ 6,037,549	\$ 6,723,120	\$ 8,066,145	\$ 8,571,638	\$ 8,656,763	\$ 8,742,788	\$ 8,829,713
Less: 10% COB Transfer	\$ (98,143)	\$ (381,454)	\$ (603,755)	\$ (672,312)	\$ (806,615)	\$ (857,164)	\$ (865,676)	\$ (874,279)	\$ (882,971)
<b>Revenue Available for Resaca Project</b>	<b>\$ 883,289</b>	<b>\$ 3,433,086</b>	<b>\$ 5,433,794</b>	<b>\$ 6,050,808</b>	<b>\$ 7,259,531</b>	<b>\$ 7,714,474</b>	<b>\$ 7,791,086</b>	<b>\$ 7,868,509</b>	<b>\$ 7,946,741</b>
<b>COST</b>									
Resaca Cost of Service - RESTORE	\$ 421,536	\$ 1,305,902	\$ 1,435,202	\$ 1,384,558	\$ 1,729,583	\$ 1,707,741	\$ 1,445,291	\$ 1,464,415	\$ 1,431,562
Resaca Cost of Service - USACE	\$ -	\$ -	\$ 4,517,949	\$ 4,661,735	\$ 6,272,909	\$ 12,743,865	\$ 10,669,297	\$ 9,120,080	\$ 13,749,231
<sup>1</sup> Resaca Maintenance - USACE	\$ -	\$ -	\$ -	\$ 25,718	\$ 52,254	\$ 87,962	\$ 160,505	\$ 221,239	\$ 273,154
<b>Resaca Costs of Service - Combined</b>	<b>\$ 421,536</b>	<b>\$ 1,305,902</b>	<b>\$ 5,953,151</b>	<b>\$ 6,072,011</b>	<b>\$ 8,054,746</b>	<b>\$ 14,539,569</b>	<b>\$ 12,275,093</b>	<b>\$ 10,805,734</b>	<b>\$ 15,453,947</b>
<b>NET REVENUE</b>									
Resaca Revenue - RESTORE, Net	\$ 69,180	\$ 167,731	\$ 62,630	\$ 128,144	\$ (201,856)	\$ (164,846)	\$ 112,926	\$ 109,287	\$ 157,786
Resaca Revenue - USACE, Net	\$ 392,573	\$ 1,959,453	\$ (581,987)	\$ (149,347)	\$ (593,360)	\$ (6,660,249)	\$ (4,596,933)	\$ (3,046,512)	\$ (7,664,992)
Resaca Revenue - Combined, Net	\$ 461,753	\$ 2,127,184	\$ (519,357)	\$ (21,203)	\$ (795,216)	\$ (6,825,095)	\$ (4,484,007)	\$ (2,937,226)	\$ (7,507,206)
<b>Cummulative</b>	<b>\$ 461,753</b>	<b>\$ 2,588,937</b>	<b>\$ 2,069,580</b>	<b>\$ 2,048,377</b>	<b>\$ 1,253,161</b>	<b>\$ (5,571,934)</b>	<b>\$ (10,055,941)</b>	<b>\$ (12,993,166)</b>	<b>\$ (20,500,372)</b>
	4 months								

<sup>1</sup> Maintenance required for 75 years (estimated at \$620,000/yr by end of USACE project) Annual costs estimated based on completed annual contracts. \$620K not adjusted for inflation.

<sup>2</sup> Pending correction of Scrivener's Error (fee approved by City Ordinance was \$12 in 2026 and should be \$12.50) This forecast reflects \$12.50 by 2026.

<sup>3</sup> RESTORE grant funding ends (costs were adjusted to match RESTORE fee net revenue)

## Notes:

Resaca fees do not cover full grant matching due to escalation of costs.

Projects will need to be deferred to future periods to accommodate available funding.



# RESACA FORECAST (Years 10 thru 17)

	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	FY 2037	FY 2038	TOTALS
Water Customers	59,596	60,186	60,782	61,384	61,991	62,605	63,225	63,851	
New Accounts	586	590	596	602	608	614	620	626	
Avg. Annual Growth	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%	
<b>FEE</b>									
Resaca Fee - RESTORE	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	
Resaca Fee - USACE	\$ 10.00	\$ 10.00	\$ 10.00	\$ 10.00	\$ 10.00	\$ 10.00	\$ 10.00	\$ 10.00	
Resaca Fee - Combined	\$ 12.50	\$ 12.50	\$ 12.50	\$ 12.50	\$ 12.50	\$ 12.50	\$ 12.50	\$ 12.50	
<b>REVENUE</b>									
Resaca Revenue - RESTORE	\$ 1,783,485	\$ 1,801,155	\$ 1,818,986	\$ 1,836,994	\$ 1,855,181	\$ 1,873,547	\$ 1,892,095	\$ 1,870,546	\$ 28,917,292
Resaca Revenue - USACE	\$ 7,133,940	\$ 7,204,620	\$ 7,275,946	\$ 7,347,978	\$ 7,420,723	\$ 7,494,188	\$ 7,568,380	\$ 7,482,184	\$ 105,166,341
Resaca Revenue - Combined	\$ 8,917,425	\$ 9,005,775	\$ 9,094,932	\$ 9,184,972	\$ 9,275,903	\$ 9,367,735	\$ 9,460,475	\$ 9,352,730	\$ 134,083,633
Less: 10% COB Transfer	\$ (891,743)	\$ (900,578)	\$ (909,493)	\$ (918,497)	\$ (927,590)	\$ (936,773)	\$ (946,048)	\$ (935,273)	\$ (13,408,363)
<b>Revenue Available for Resaca Project</b>	<b>\$ 8,025,683</b>	<b>\$ 8,105,198</b>	<b>\$ 8,185,439</b>	<b>\$ 8,266,475</b>	<b>\$ 8,348,313</b>	<b>\$ 8,430,961</b>	<b>\$ 8,514,428</b>	<b>\$ 8,417,457</b>	<b>\$ 120,675,269</b>
<b>COST</b>									
Resaca Cost of Service - RESTORE	\$ 1,605,137 <sup>3</sup>	\$ 1,621,040	\$ 1,637,088	\$ 1,653,295	\$ 1,669,663	\$ 1,686,192	\$ 1,702,886	\$ 1,683,491	\$ 25,584,580
Resaca Cost of Service - USACE	\$ -	\$ 4,513,983	\$ 12,064,385	\$ 4,983,756	\$ 5,291,953	\$ 7,202,050	\$ 1,246,030	\$ 11,880,090	\$ 108,917,313
<sup>1</sup> Resaca Maintenance - USACE	\$ 351,420	\$ 351,420	\$ 377,116	\$ 445,791	\$ 474,160	\$ 504,284	\$ 545,281	\$ 552,374	\$ 4,422,679
<b>Resaca Costs of Service - Combined</b>	<b>\$ 1,956,557</b>	<b>\$ 6,486,443</b>	<b>\$ 14,078,588</b>	<b>\$ 7,082,842</b>	<b>\$ 7,435,776</b>	<b>\$ 9,392,526</b>	<b>\$ 3,494,197</b>	<b>\$ 14,115,955</b>	<b>\$ 138,924,572</b>
<b>NET REVENUE</b>									
Resaca Revenue - RESTORE, Net	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 440,983
Resaca Revenue - USACE, Net	\$ 6,069,126	\$ 1,618,755	\$ (5,893,149)	\$ 1,183,633	\$ 912,537	\$ (961,565)	\$ 5,020,231	\$ (5,698,498)	\$ (18,690,285)
Resaca Revenue - Combined, Net	\$ 6,069,126	\$ 1,618,755	\$ (5,893,149)	\$ 1,183,633	\$ 912,537	\$ (961,565)	\$ 5,020,231	\$ (5,698,498)	\$ (18,249,303)
<b>Cummulative</b>	<b>\$ (14,431,246)</b>	<b>\$ (12,812,491)</b>	<b>\$ (18,705,640)</b>	<b>\$ (17,522,007)</b>	<b>\$ (16,609,470)</b>	<b>\$ (17,571,035)</b>	<b>\$ (12,550,804)</b>	<b>\$ (18,249,303)</b>	

<sup>1</sup> Maintenance required for 75 years (estimated at \$620,000/yr by end of USACE project) Annual costs estimated based on completed annual contracts. \$620K not adjusted for inflation.

<sup>2</sup> Pending correction of Scrivener's Error (fee approved by City Ordinance was \$12 in 2026 and should be \$12.50) This forecast reflects \$12.50 by 2026.

<sup>3</sup> RESTORE grant funding ends (costs were adjusted to match RESTORE fee net revenue)

Notes:

Resaca fees do not cover full grant matching due to escalation of costs.

Projects will need to be deferred to future periods to accommodate available funding.

# IMPLICATIONS OF RESCINDING THE FEE

- Without the fees there will be no funding to match grant opportunities and the Resaca operation will need to be abandoned
- Could lead to a reduction in workforce for those Resaca employees not placed in other departments
- Water storage will be diminished due to additional silting in of Resacas
  - Reduced diversification of water storage options for potable water treatment
- The City of Brownsville manages drainage, but there will be the potential for increased flooding due to reduced capacity levels in the Resacas





For more information visit:

[www.brownsville-pub.com](http://www.brownsville-pub.com)

<https://www.brownsville-pub.com/projects/resaca-restoration/>

USACE website:

<https://www.swg.usace.army.mil/Portals/26/docs/Planning/Resaca%20Boulevard%20Cap%20206/Resaca%20Boulevard%20Resaca%20Ecosystem%20Restoration%20Sec%20206.pdf?ver%E2%80%89=%E2%80%892017-01-10-162135-483>