

NOTICE OF OPEN MEETING OF THE SAN ANTONIO REGIONAL FLOOD PLANNING GROUP
TECHNICAL SUBCOMMITTEE

Region 12
02/25/2025
1:30 PM

TAKE NOTICE that a meeting of the Technical Subcommittee of the San Antonio Regional Flood Planning Group as established by the Texas Water Development Board will be held on Tuesday, February 25, 2025, at 1:30 PM, in-person at the San Antonio River Authority, located at 100 E. Guenther St and virtually at <https://meet.goto.com/506643973>.

Agenda:

1. (1:30 PM) Roll Call
2. Public Comments – limit 3 minutes per person
3. Review Amendment Proposals and Any Supplemental Information
4. Public Comments – limit 3 minutes per person
5. Date and Potential Agenda Items for Next Meeting
6. Adjourn

If you wish to provide written comments prior to or after the meeting, please email your comments to khayes@sariverauthority.org or physically mail them to the attention of Kendall Hayes at San Antonio River Authority, 100 E. Guenther St., San Antonio, TX, 78204 and include “Region 12 San Antonio Regional Flood Planning Group Technical Subcommittee Meeting” in the subject line.

Additional information may be obtained from: Kendall Hayes, (210) 302-3641, khayes@sariverauthority.org, San Antonio River Authority, 100 E. Guenther St., San Antonio, TX, 78204.

2025 Region 12 Amendment Received Projects Checklist

						FMP Requirements									
FMX	FMX ID	Project Study/Name	Scope Description	Sponsor	2023 FMX	Notice of Intent by December 15, 2024	Shapefile (Study Area or Project Area)	Estimated Study Cost (Non-Construction)	Estimated Construction Cost	Hydrologic & Hydraulic models	Pre & Post Project 100yr Floodplains	Benefit Cost Analysis	No Negative Impacts Certification	One Pager	
FME	121000185	Water Treatment Plant Flood Proofing	Developing a drainage study to identify flood impact to SAWS infrastructure and road access.	SAWS		✓	✓	✓						✓	
FME	121000186	Calaveras Watershed Atlas 14 Update	Update Calaveras Watershed to Atlas 14. Includes the processing and development of the terrain using latest LIDAR data, structure survey, hydrologic and hydraulics analysis, mapping, and the production of Flood Risk Products.	SARA		✓	✓	✓						✓	
FME	121000187	Future Rainfall Projection Incorporation into Urban Watershed	This project focuses on integrating projected future rainfall frequency data into urban watershed studies for the USAR, Salado, and Leon watersheds within Bexar County.	SARA		✓	✓	✓						✓	
FME	121000188	Downtown Flood Risk Assessment	The proposed study evaluates the San Antonio Downtown area with a 2D model using updated hydrology to identify the remaining flood risk to human lives and the local economy. This includes mapping the underground infrastructure with televiewing data.	CoSA		✓	✓	✓						✓	
FME	121000189	Olmos Dam Facilities Upgrades	Olmos Dam requires full replacement of main components and electrical components to ensure continual and efficient operations.	CoSA		✓	✓	✓						✓	
FME	121000190	San Antonio River Tunnel Inlet Facility Upgrades	The facility upgrades require the replacement of the gates, actuators, gate opening mechanisms (stems), and generator.	CoSA		✓	✓	✓						✓	
FME	121000191	San Antonio River Tunnel Outlet Repairs	The need to replace the ceiling grid, repair cracks on the walls, and replace actuators and gates are essential to maintaining continued operations.	CoSA		✓	✓	✓						✓	
FME	121000192	San Pedro Creek Tunnel Inlet and Outlet Repairs	Outlet gate and door replacements. System modernizing to allow for monitoring and automatic control. The inlet trash rack needs to replace aging motors to keep it operational.	CoSA		✓	✓	✓						✓	
FME	121000193	W. Commerce - LWC #106 Area Drainage Improvements PER	The proposed planning project comprises developing a Preliminary Engineering Report (PER) to identify options for accommodating the 1% annual chance storm event for ultimate development for Leon Creek at W. Commerce St. approximately 2750' west of Pinn Rd.	CoSA		✓	✓	✓						✓	
FME	121000028	Belfair Drive PER	Belfair Drive contains an underground section of Apache Creek. The PER will revisit the previous studies, update ATLAS 14 rainfall, evaluate feasibility of storm sewer diversion, and update the cost estimate.	CoSA	Updates to FME ID: 121000028	✓	✓	✓						✓	
FME	121000084	Drainage Project 58A PER	The project intends to mitigate the 100YR regulatory floodplain in Zarzamora Creek. Study area includes SAWS critical infrastructure in the floodplain. PER will revisit previous study, update to Atlas 14 rainfall, and determine an effective solution.	CoSA	Updates to FME: 121000029	✓	✓	✓						✓	
FMP	123000081	Escondido Dam 1 Rehabilitation Project	The rehabilitation project includes planning, design, and construction phases. The final construction / rehabilitation phase will implement design plans to bring the dam up to modern safety standards.	SARA	FME: 121000120	✓	✓	✓	✓	✓	✓	✓	✓	✓	
FMP	123000082	Escondido Dam 4 Rehabilitation Project	The rehabilitation project includes planning, design, and construction phases. The final construction / rehabilitation phase will implement design plans to bring the dam up to modern safety standards.	SARA	FME: 121000120	✓	✓	✓	✓	✓	✓	✓	✓	✓	
FMP	123000083	Escondido Dam 12 Rehabilitation Project	The rehabilitation project includes planning, design, and construction phases. The final construction / rehabilitation phase will implement design plans to bring the dam up to modern safety standards.	SARA	FME: 121000120	✓	✓	✓	✓	✓	✓	✓	✓	✓	
FMP	123000022	Judson and Lookout LWC Improvement	The project proposes a combination of roadway improvements, culvert upgrades, and channel improvements to eliminate flooding of the roadways.	CoSA	Updates to FMP ID: 123000022	✓	✓	✓	✓	✓	✓	✓	✓	✓	
FMP	123000084	Tributary F to Salado Creek Area Drainage Project Alt 1 Ph 1	Alternative 1 provides unroofed access for the 25-year storm event by widening the main channel, upgrading 2 stream crossings, raising road Stahl Rd, constructing offline pond and natural bypass channels. The project will remove 32 structures from the 100-year floodplain.	CoSA		✓	✓	✓	✓	✓	✓	✓	✓	✓	

FMP	12300085	Blue Wing Bridge Improvements	This project consists of realigning Blue Wing Rd. to not encroach on the 100-year future conditions Tributary F floodplain of the San Antonio River. This project will provide unroofed access to IH 37 for the residents.	CoSA		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FMP	12300086	Allsup Flagle Area Drainage Project	Drainage improvements at intersection of Allsup Street and Flagle Street. Components include: road reconstruction with inlets and underground 4'x2' SBC storm sewer system.	CoSA		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

2023 San Antonio Regional Flood Plan

Amendment #2

FMP Summary Sheets



2023 San Antonio Regional Flood Plan 2025 Amendment FMP Project Summary Sheet

Project Name: Dam No. 1 Rehabilitation and Flood Mitigation
FMP ID: 123000081
Project Sponsor: San Antonio River Authority
Project Source: San Antonio River Authority

Cost Information

Category	Cost*
Design	\$726,873
Real Estate	\$75,367
Environmental	\$70,343
Construction	\$8,141,315
Total Cost**	\$9,014,000

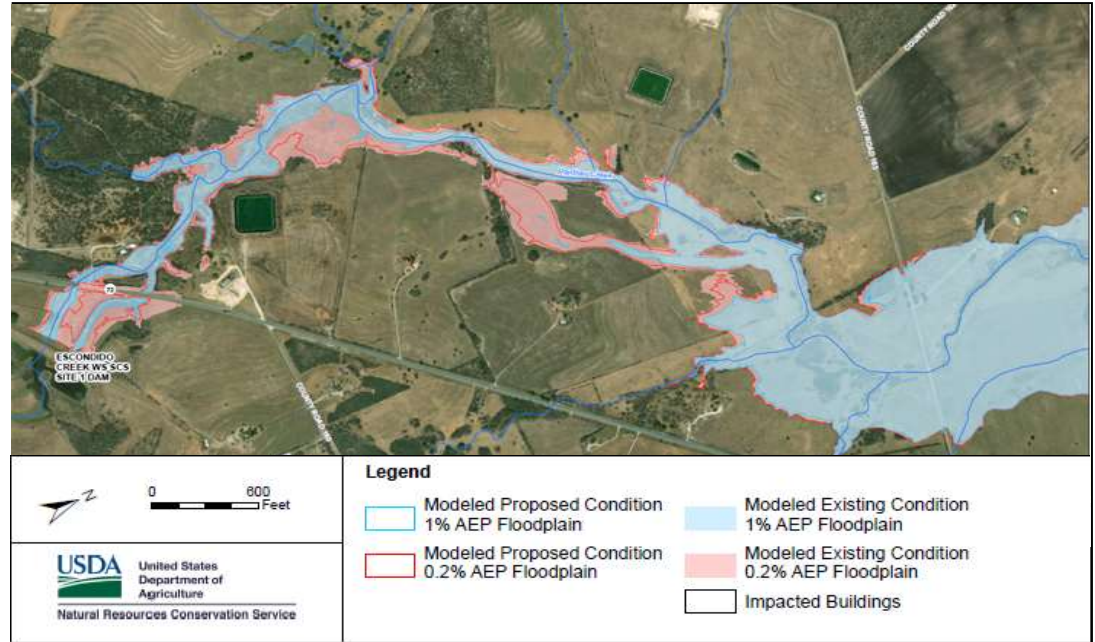
Benefit Cost Analysis (BCA)

Annual Costs	\$	330,000
Annual Benefits	\$	12,000
BCA	0.03	

*Costs are using 2020 prices
 **Rounded up to the nearest thousand

Impact Analysis

Post-Project Total Removed	Storm Event		
	2-year	10-year	Sunny Day Breach
Residential	-	-	128
Commercial	-	-	40
Flooded Road (miles)	-	-	5
Critical	-	-	-
Others Note	N/A	N/A	N/A
SVI Score			0.736



Project Description:

The Escondido Creek Dam No. 1 (FRS No. 1) was constructed in 1954 as a low-hazard dam. Significant downstream development over the past several decades has increased the potential risk posed by the dam's structural inadequacies. It has been reclassified as a high-hazard potential dam, meaning that its failure could result in significant downstream impacts, including loss of life and severe infrastructure damage. Assessments have determined that the dam no longer meets NRCS or Texas Commission on Environmental Quality (TCEQ) safety and performance standards for high-hazard structures. This project focus on the rehabilitation, construction only, of Escondido Dam 1 in Karnes County, Texas to include principal spillway replacement, auxiliary spillway improvements, and embankment enhancements.



2023 San Antonio Regional Flood Plan 2025 Amendment FMP Project Summary Sheet

Project Name: Dam No. 4 Rehabilitation and Flood Mitigation
FMP ID: 123000082
Project Sponsor: San Antonio River Authority
Project Source: San Antonio River Authority

Cost Information

Category	Cost*
Design	\$1,210,060
Real Estate	\$146,547
Environmental	\$95,465
Construction	\$13,557,692
Total Cost**	\$15,010,000

Benefit Cost Analysis (BCA)

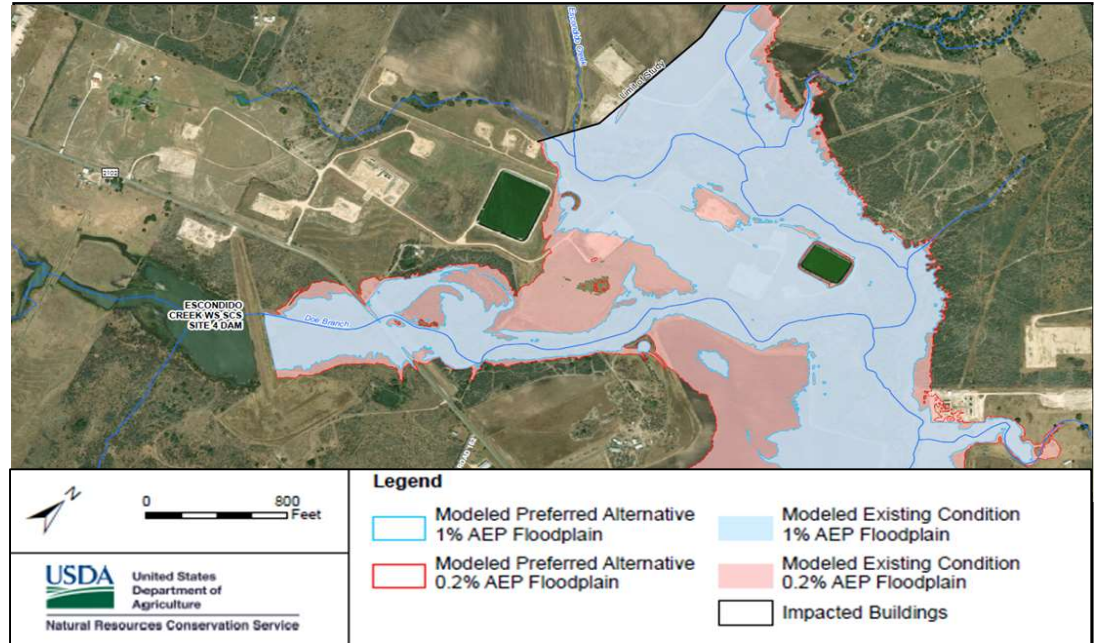
Annual Costs	\$	550,000
Annual Benefits	\$	141,000
BCA	0.26	

*Costs are using 2020 prices

**Rounded up to the nearest thousand

Impact Analysis

Post-Project Total Removed	Storm Event		
	2-year	10-year	Sunny Day Breach
Residential	-	-	52
Commercial	-	-	8
Flooded Road (miles)	-	-	6
Critical	-	-	1
Others Note	N/A	N/A	N/A
SVI Score			0.736



Project Description:

The Escondido Creek Dam No. 4 (FRS No. 4) was constructed in 1954 as a low-hazard dam. Significant downstream development over the past several decades has increased the potential risk posed by the dam's structural inadequacies. It has been reclassified as a high-hazard potential dam, meaning that its failure could result in significant downstream impacts, including loss of life and severe infrastructure damage. Assessments have determined that the dam no longer meets NRCS or Texas Commission on Environmental Quality (TCEQ) safety and performance standards for high-hazard structures. This project focus on the rehabilitation, construction only, of Escondido Dam 4 in Karnes County, Texas to include spillway and embankment enhancements, structural and erosion control updates, and emergency action and hydraulic updates.



2023 San Antonio Regional Flood Plan 2025 Amendment FMP Project Summary Sheet

Project Name: Dam No. 12 Rehabilitation and Flood Mitigation
FMP ID: 123000083
Project Sponsor: San Antonio River Authority
Project Source: San Antonio River Authority

Cost Information

Category	Cost*
Design	\$1,323,110
Real Estate	\$251,223
Environmental	\$145,710
Construction	\$14,817,997
Total Cost**	\$16,539,000

Benefit Cost Analysis (BCA)

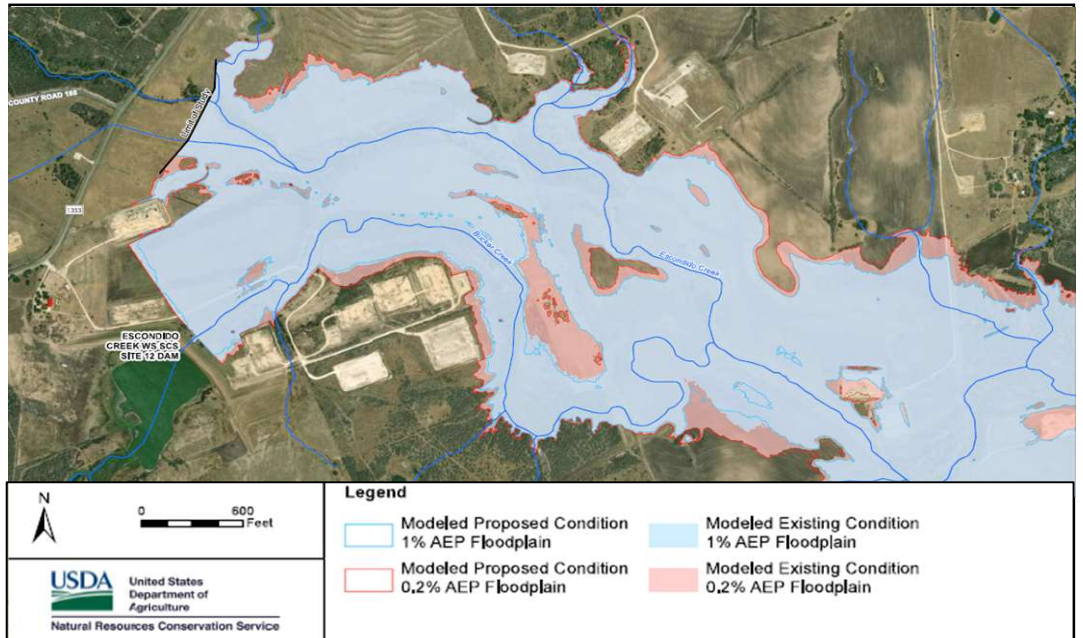
Annual Costs	\$	606,000
Annual Benefits	\$	201,000
BCA	0.33	

*Costs are using 2020 prices

**Rounded up to the nearest thousand

Impact Analysis

Post-Project Total Removed	Storm Event		
	2-year	10-year	Sunny Day Breach
Residential	-	-	31
Commercial	-	-	-
Flooded Road (miles)	-	-	4.8
Critical	-	-	-
Others Note	N/A	N/A	N/A
SVI Score			0.736



Project Description:

The Escondido Creek Dam No. 4 (FRS No. 4) was constructed in 1954 as a low-hazard dam. Significant downstream development over the past several decades has increased the potential risk posed by the dam's structural inadequacies. It has been reclassified as a high-hazard potential dam, meaning that its failure could result in significant downstream impacts, including loss of life and severe infrastructure damage. Assessments have determined that the dam no longer meets NRCS or Texas Commission on Environmental Quality (TCEQ) safety and performance standards for high-hazard structures. This project focus on the rehabilitation, construction only, of Escondido Dam 4 in Karnes County, Texas to include spillway and embankment enhancements, structural and erosion control updates, and emergency action and hydraulic updates.



2023 San Antonio Regional Flood Plan 2025 Amendment FMP Project Summary Sheet

Project Name: Judson and Lookout LWC Improvement
FMP ID: 123000022
Project Sponsor: City of San Antonio
Project Source: City of San Antonio

Cost Information

Category	Cost*
Design	\$960,618
Real Estate	\$281,776
Environmental	\$63,000
Construction	\$4,791,869
Total Cost**	\$7,010,000

Benefit Cost Analysis (BCA)

Event Damages	Baseline	Project
2-year storm	\$ 854,474	\$ -
10-year storm	\$ 1,295,003	\$ -
100-year storm	\$ 2,323,555	\$ -
Total Benefits	\$ 11,554,267	
BCA	1.4	

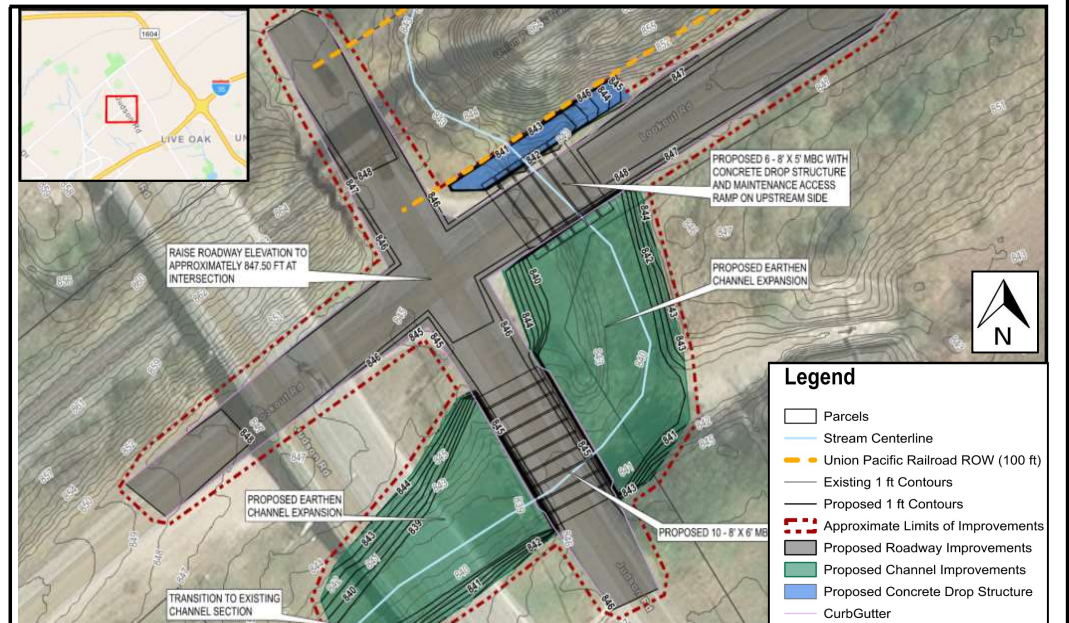
*Costs are using 2020 prices
 **Rounded up to the nearest thousand

Impact Analysis

Post-Project Total Removed	Storm Event		
	2-year	10-year	100-year
Residential	-	-	-
Commercial	-	-	-
Flooded Road (miles)	0.05	0.07	0.1
Critical	-	-	-
Others Note	N/A	N/A	N/A
SVI Score	0.338		

LWC Level of Service Existing Vs. Proposed

Condition	Level of Service	100-Yr Depth Over Road (ft)
Existing	< 2-Yr	2 ft
Proposed	100-Yr	0



Project Description:

The project was designated FMP ID No. 123000022 in the 2023 San Antonio Regional Flood Plan and 2024 State Flood Plan. Lying at the confluence of two unnamed tributaries to Beitel Creek in the Salado Creek watershed, the intersection of Judson Road and Lookout Road in San Antonio has been identified as a flood problem area in need of mitigation. The channel and culvert crossings are undersized, contributing to flooding of the intersection. To eliminate flooding of the roadways, a combination of roadway improvements, culvert upgrades, and channel improvements are proposed. The project will require local permitting, a stormwater pollution prevention plan (SWPPP), as well as additional permitting with regulatory agencies, such as FEMA and the U.S. Army Corps of Engineers (USACE).

Project Name: Tributary F to Salado Creek Area Drainage Project Alt 1 Ph 1

Council District: 10

Project Limits: Trib F 450 ft downstream of Jung Rd to 400 ft upstream of Stahl Rd near Bristow Dawn

Watershed: Salado

Potential Project #: 1038.04

2022 Bond #: N/A

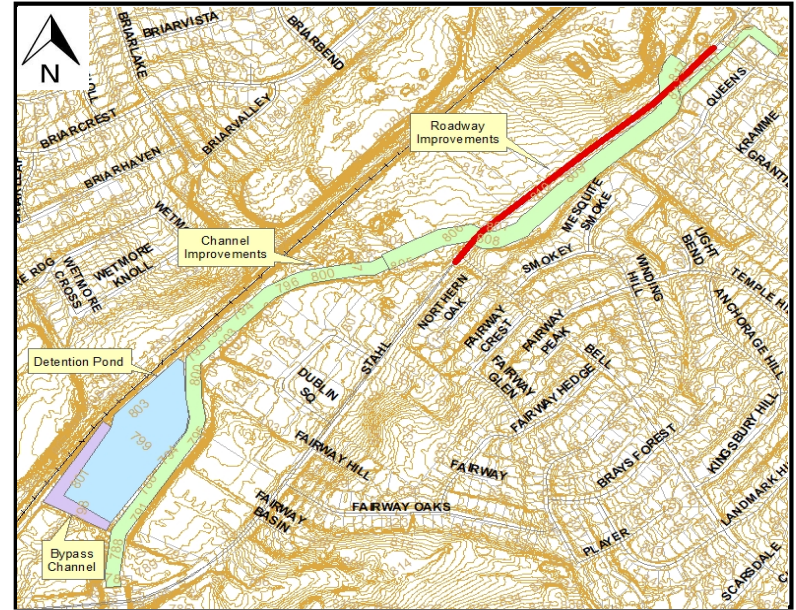
Funding Information

Fund	Year	Amount
To Be Determined (TBD)	\$	-
		-
		-
		-
Total Funding	\$	-

Cost Information

Category	Cost
Design	\$619,648
Real Estate	\$ 196,200
Environmental	\$ 132,159
Green Infrastructure	\$ -
Total Construction	\$ 2,871,778
Total Cost*	\$3,820,000

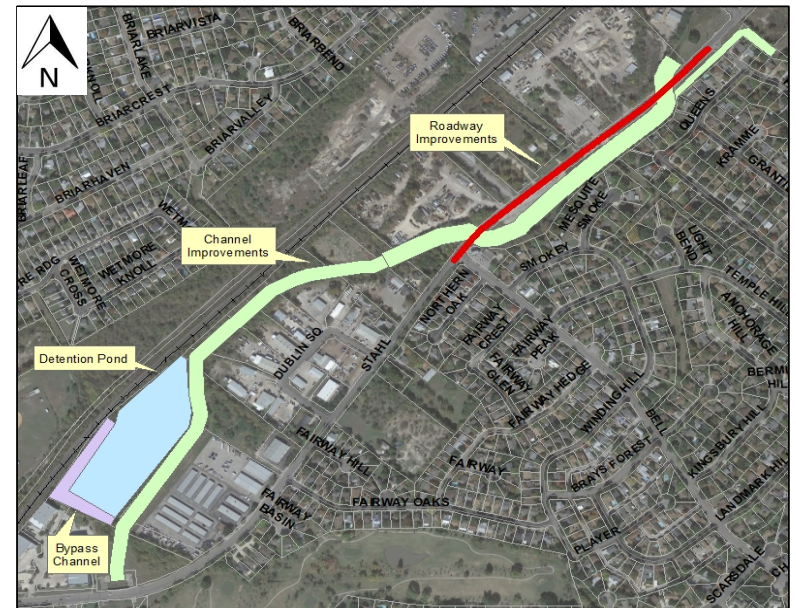
*Rounded up to the nearest \$10,000



Project Description

Tributary F to Salado Creek crosses Stahl Rd twice within 1300 feet, which is in the FEMA 100-year floodplain. The Trib F to Salado Creek Area Drainage Project will improve the channel and raise Stahl Rd to convey the 25-yr design storm event and also remove 32 structures from the 100-year floodplain. This phase constructs an offline detention facility to be located along the right overbank of Tributary F, upstream of Stahl Rd. near Bulverde Rd. in an open tract which will require acquisition. The offline facility will mitigate adverse downstream impacts caused by the proposed channel/road improvements along Stahl Rd. A proposed bypass channel along the west side of the detention facility is included to convey flows through an existing UPRR cross culvert around the detention facility to Tributary F. UPRR coordination will be required.

A project to remove Stahl Rd from the 100-yr floodplain will require \$104.5M and 40 acres of Friesenhahn Park for a large detention pond.

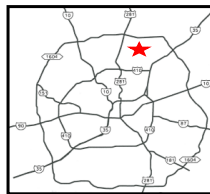


Project Type: Drainage

Type of Estimate: Planning

Project Status: Unfunded

Consultant: TBD





Project Name: Blue Wing Bridge Improvements

Council District: 3

Project Limits: Blue Wing Rd crossing at Tributary F to the San Antonio River.

Watershed: San Antonio River

Potential Project #: 2771.01

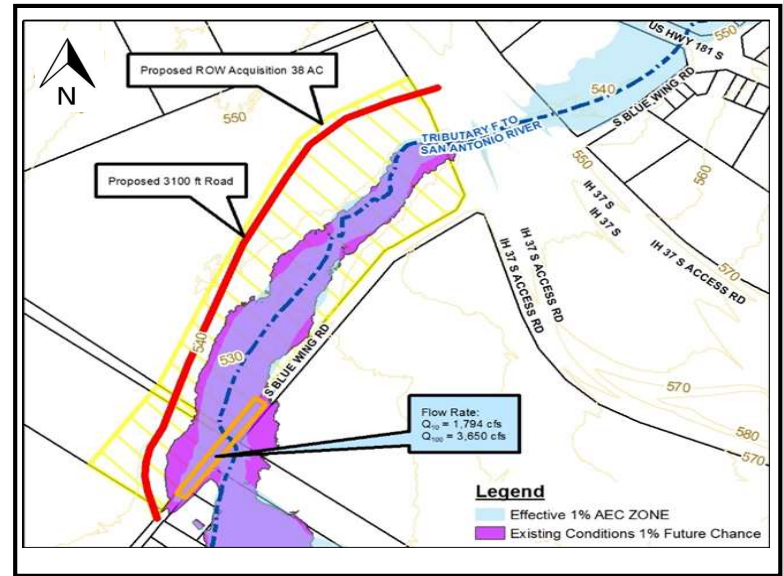
Funding Information

Fund	Year	Amount
To Be Determined (TBD)	\$	-
		-
		-
		-
		-
Total Funding	\$	-

Cost Information

Category	Cost
Design	\$566,064
Real Estate	\$ 4,525,434
Environmental	\$ 83,930
Green Infrastructure	\$ -
Total Construction	\$ 3,329,281
Total Cost*	\$8,510,000

*Rounded up to the nearest \$10,000



Project Description

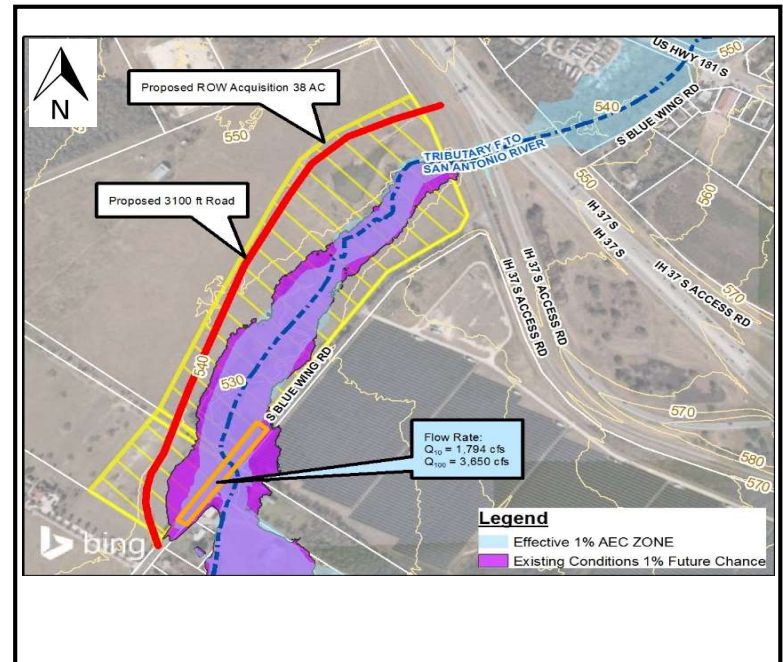
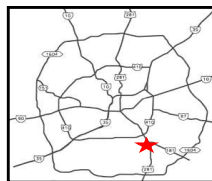
Blue Wing Rd crosses Tributary F of the San Antonio River approximately 2,700' downstream of IH 37 in south-east San Antonio. Existing cross drainage structures at Blue Wing Rd (2-8'x4') and the downstream driveway culverts do not have sufficient capacity and overtop in the 2-year storm event. This project consists of realigning Blue Wing Rd (approximately 3,100') to not encroach on the 100-year future conditions Tributary F floodplain. Road profile adjustments up to 1' will be required along the existing road section (approximately 200') to elevate above the future 100-year WSE. The project will provide unfloded access to IH 37 for the local residents. Land acquisition for the proposed alignment is estimated at 38 acres. The proposed project does not address flood risk and overtopping of the residential driveway structures just downstream of the Blue Wing Rd. existing Tributary F crossing. The project improvements are outside of the revised 100-year future conditions resulting in no downstream impacts.

Project Type: Drainage

Type of Estimate: Planning

Project Status: Unfunded

Consultant: TBD





Project Name: Allsup-Flagle Area Drainage Improvements

Council District: 5

Project Limits: Flagle St from Calle la Gloria to Dead End

Watershed: San Antonio River

Potential Project #: 2809.01

2022 Bond #: N/A

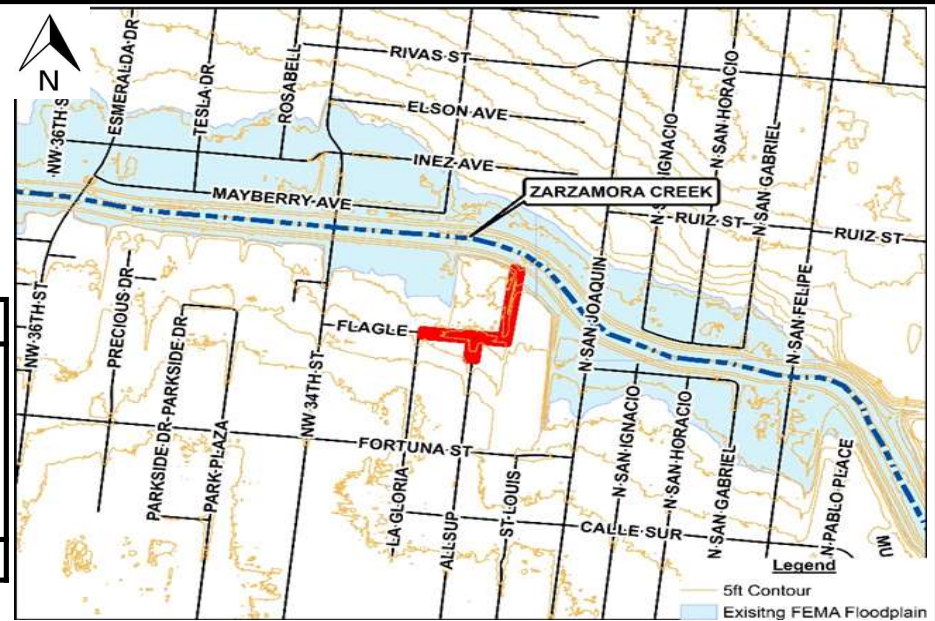
Funding Information

Fund	Year	Amount
To Be Determined (TBD)	\$	-
		-
		-
		-
		-
Total Funding	\$	-

Cost Information

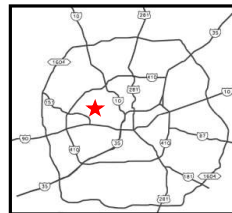
Category	Cost
Design	\$506,811
Real Estate	\$ -
Environmental	\$ 187,805
Green Infrastructure	\$ 285,897
Total Construction	\$ 2,061,471
Total Cost*	\$3,050,000

*Rounded up to the nearest \$10,000



Project Description

The focus of this project is to address drainage concerns at an apparent low at the intersection of Allsup Street and Flagle Street. The intersection is directly adjacent to Roosevelt Elementary School within Edgewood ISD, and the intersection floods during rain events. The project includes street reconstruction to raise the profile of the street approximately 2.0' at the intersection. An underground 4'x2' SBC storm sewer system with curb inlets is proposed and will outfall to an improved channel that drains to Zaramora Creek. The storm system will convey the 25-year storm event. H&H analysis shows that raising the roadway and drain improvements will remove the intersection, including 354 Allsup, from the 100-year floodplain.



Project Type: Drainage
Type of Estimate: Planning
Project Status: Unfunded
Consultant: TBD

2023 San Antonio Regional Flood Plan

Amendment #2

FME Summary Sheets



2023 San Antonio Regional Flood Plan 2025 Amendment FME Project Summary Sheet

Project Name: Water Treatment Plant Flood Proofing

FME ID: 121000185

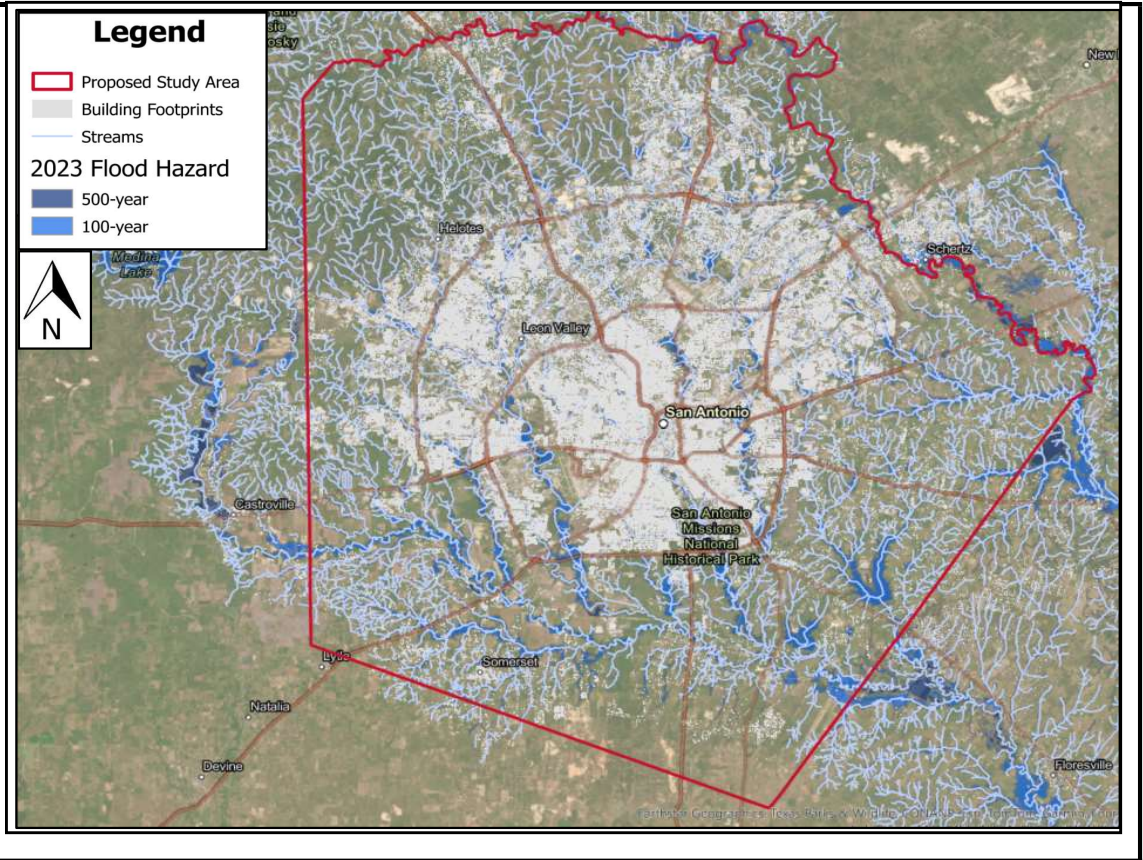
Project Sponsor: San Antonio Water System

Project Source: San Antonio Water System

Study Type: Watershed Planning

Project Cost: \$ 500,000
(2020 Prices)

Project Description:
Developing a drainage study to identify flood impacts to San Antonio Water System (SAWS) water and sewer infrastructure. The study will evaluate infrastructure flood risks, flood proofing measures, INI issues, and unflooded road access to the facilities. The project cost was developed using FME Planning Cost Estimates found in section 5.2.1.1 of the San Antonio Regional Flood Plan for Watershed Planning. SAWS infrastructure area is assumed to cover 25 square miles.





2023 San Antonio Regional Flood Plan 2025 Amendment FME Project Summary Sheet

Project Name: Calaveras Watershed Atlas 14 Update

FME ID: 121000186

Project Sponsor: San Antonio River Authority

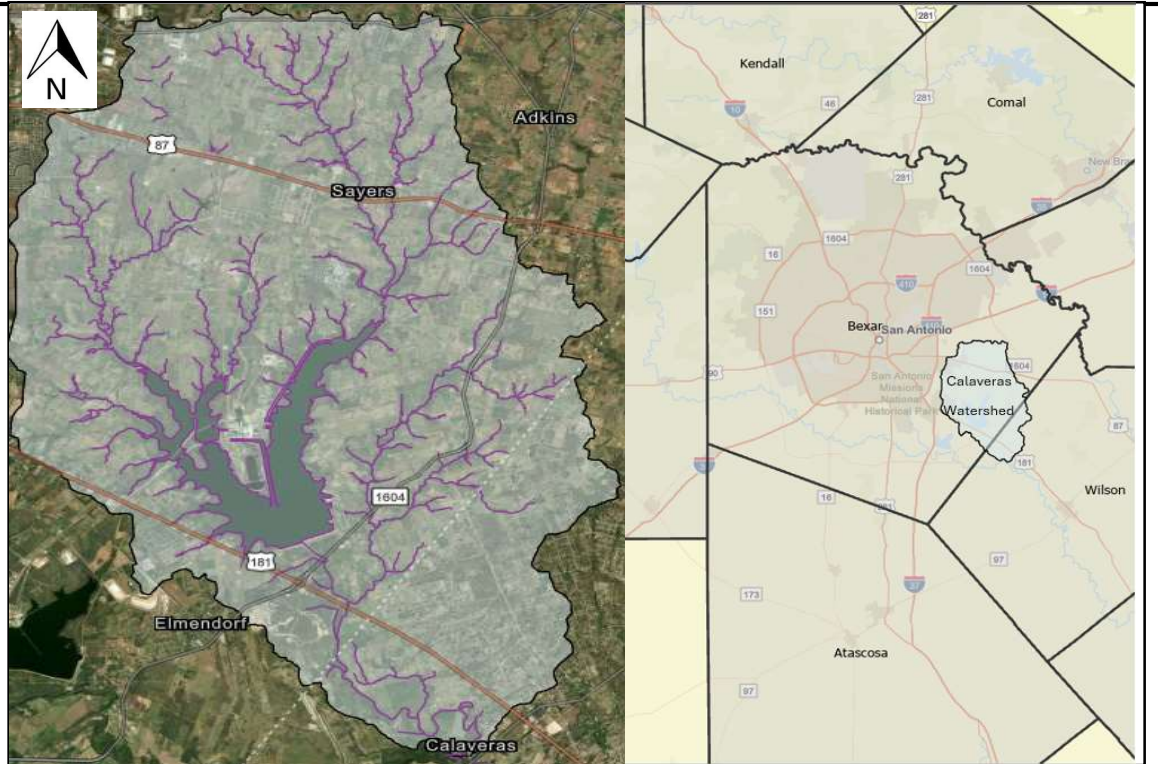
Project Source: San Antonio River Authority

Study Type: Preparedness

Project Cost: \$ 1,155,000
(2020 Prices)

Project Description:

Calaveras Watershed, covering approximately 95 square miles with 203 stream miles within it's watershed limits has not been updated with Atlas 14 rainfall. Atlas 14 precipitation estimates which increase the 1% annual chance rainfall depth for a 24-Hour period. Project will include the processing and development of the terrain using latest available LiDAR data, survey of identified structures, Hydrologic and hydraulics analysis, mapping, and the production of Flood Risk Products to support local and regional decision-making, planning, and communication. The project will follow FEMA and TWDB standards. The goal of this project is to produce data that can be used to understand flood risk and produce data that can be used for future planning.





2023 San Antonio Regional Flood Plan 2025 Amendment FME Project Summary Sheet

Project Name: Future Rainfall Projection Incorporation-Urban Watersheds

FME ID: 121000187

Project Sponsor: San Antonio River Authority

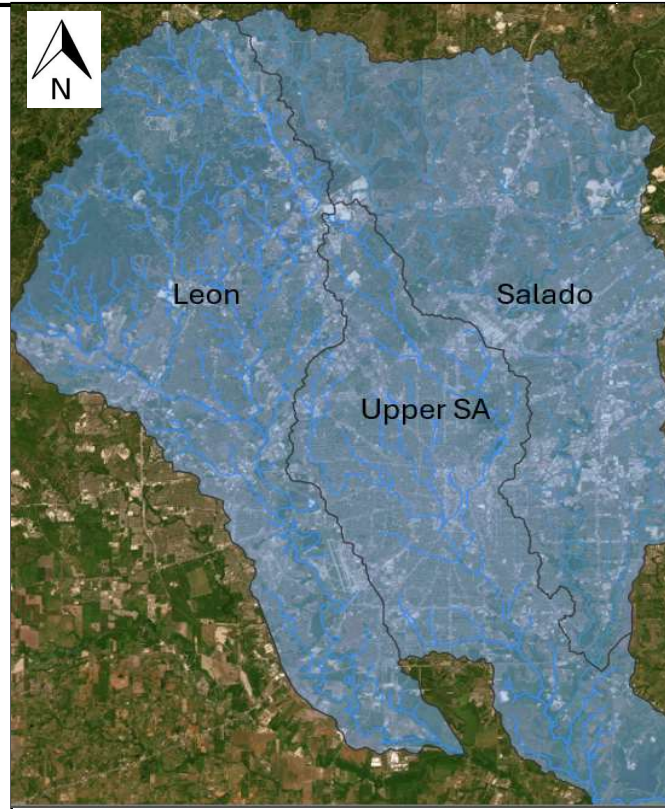
Project Source: San Antonio River Authority

Study Type: Preparedness

Project Cost: \$ 1,590,000
(2020 Prices)

Project Description:

This project focuses on integrating projected future rainfall frequency data into urban watershed studies for the USAR, Salado, and Leon watersheds within Bexar County. Covering 650 square miles with 777 stream miles, these urban watersheds are critical for flood management and urban planning. This project will use best available data available to incorporate future rainfall projections into the hydrologic and hydraulic models, mapping, and planning for these urban watersheds. The primary objective is to enhance understanding of future flood risks and support proactive community planning, infrastructure design, and regulatory updates. By addressing future climate impacts, the project will improve resilience in flood-prone areas, provide insights into future risks, and enable informed decision-making for sustainable urban development.





2023 San Antonio Regional Flood Plan 2025 Amendment FME Project Summary Sheet

Project Name: Downtown Flood Risk Assessment

FME ID: 121000188

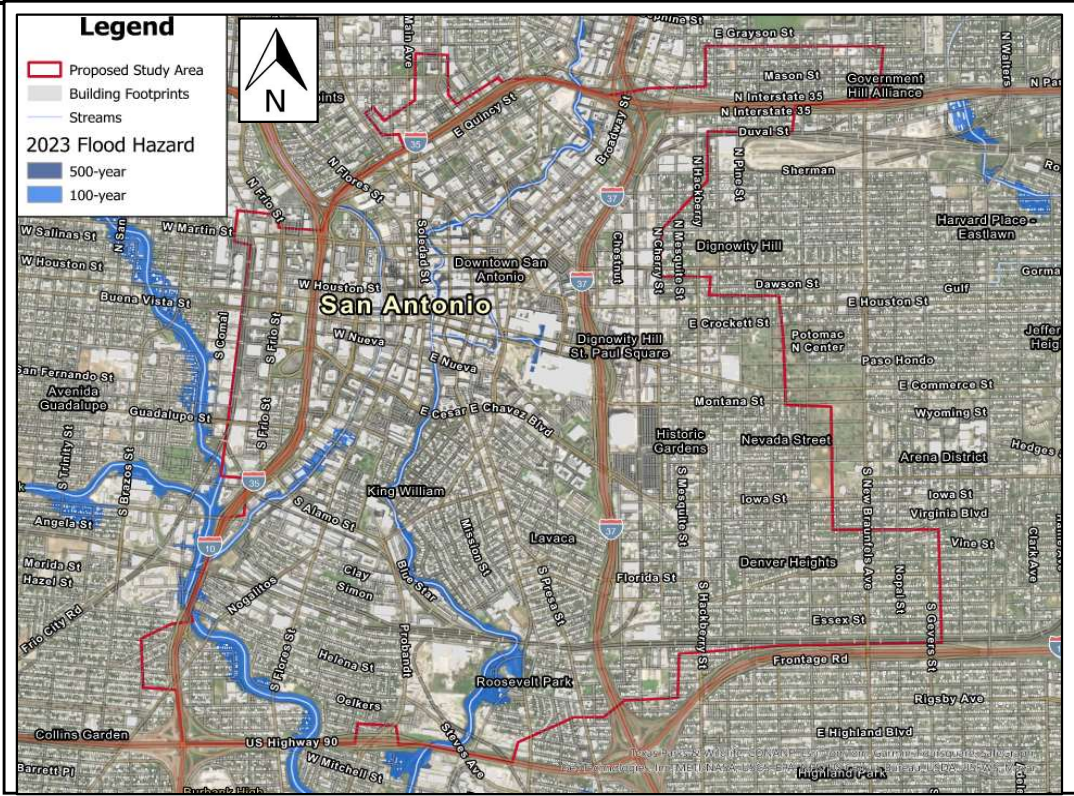
Project Sponsor: City of San Antonio

Project Source: City of San Antonio

Study Type: Project Planning

Project Cost: \$ 750,000
(2020 Prices)

Project Description:
In the past century significant investments were made to downtown San Antonio. These investments were to protect the Central Business District from flooding with the installation of the gate system and underground tunnel. With the San Antonio River being the main channel for stormwater conveyance, all the underground infrastructure outfalls into the river. The proposed study would evaluate the San Antonio Downtown area with a 2D model using updated hydrology to identify the remaining flood risk to human lives and the local economy. This would include mapping the underground infrastructure with televising data to identify the network.





2023 San Antonio Regional Flood Plan 2025 Amendment FME Project Summary Sheet

<p>Project Name: Olmos Dam Facilities Upgrades</p> <p>FME ID: 121000189</p> <p>Project Sponsor: City of San Antonio</p> <p>Project Source: City of San Antonio</p> <p>Study Type: Project Planning</p> <p>Project Cost: (2020 Prices) \$ 350,000</p> <p>Project Description: Olmos Dam was constructed in 1927 and updated in the late 80's. In the last 30 years, there has been substantial deterioration to the facility requiring significant upgrades and modifications. The facility requires a full replacement of the gates, frames, actuators, and crane. In addition to the facility's main components needing repairs, the electrical components have shown signs of failure. The electrical breaker failed and has been retrofitted to remain in operation. This puts both the facility and the operators at risk. The replacement of the electrical and transfer switches is necessary due to the current ones being obsolete. In addition to the main electrical replacements, a new generator to ensure continual operations is pertinent to efficient operations. Lastly, a replacement of the access gates and lighting for safety and security. This project would evaluate the site and prepare a 30% plan set to provide realistic options for upgrading and replacing the facility components to optimal function.</p>	<div style="display: flex; justify-content: space-between;"> <div style="width: 25%;"> <p style="text-align: center;">Legend</p> <ul style="list-style-type: none"> Proposed Study Area Building Footprints Streams <p>2023 Flood Hazard</p> <ul style="list-style-type: none"> 500-year 100-year </div> <div style="width: 25%; text-align: center;"> </div> <div style="width: 50%;"> </div> </div>
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2023 San Antonio Regional Flood Plan 2025 Amendment FME Project Summary Sheet

Project Name: San Antonio River Tunnel Inlet Facility Upgrades

FME ID: 121000190

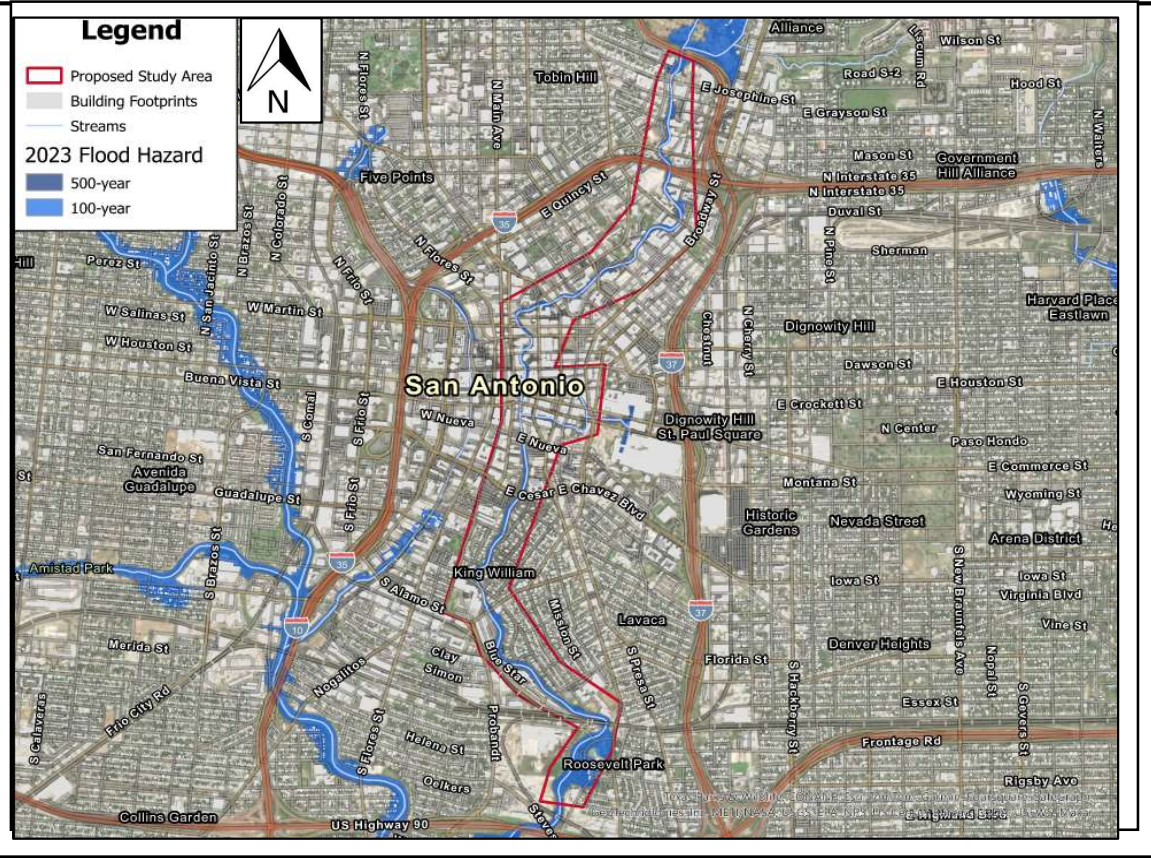
Project Sponsor: City of San Antonio

Project Source: City of San Antonio

Study Type: Project Planning

Project Cost: \$ 350,000
(2020 Prices)

Project Description:
The San Antonio River Tunnel Inlet was constructed in the mid-90's. The facility upgrades require the replacement of the gates, actuators, gate opening mechanisms (stems), and generator. The trash rack motors are original to the conception of the facility. They have long outlived their lifespan. Replacement of the motors to ensure continued operation is needed. In addition to the aging infrastructure, the foundation has shown signs of movement resulting in the need for new conduits for electrical and communications. Pavers were installed around the facility that has additionally shown signs of movement requiring replacement for safety, access, and stability. Lastly, an upgrade to the monitoring system to ensure continued monitoring during the transition to generator power. This project would identify and design, to a 30% plan, options to upgrade the facility to maintain efficient operations.





2023 San Antonio Regional Flood Plan 2025 Amendment FME Project Summary Sheet

Project Name: San Antonio River Tunnel Outlet Upgrades

FME ID: 121000191

Project Sponsor: City of San Antonio

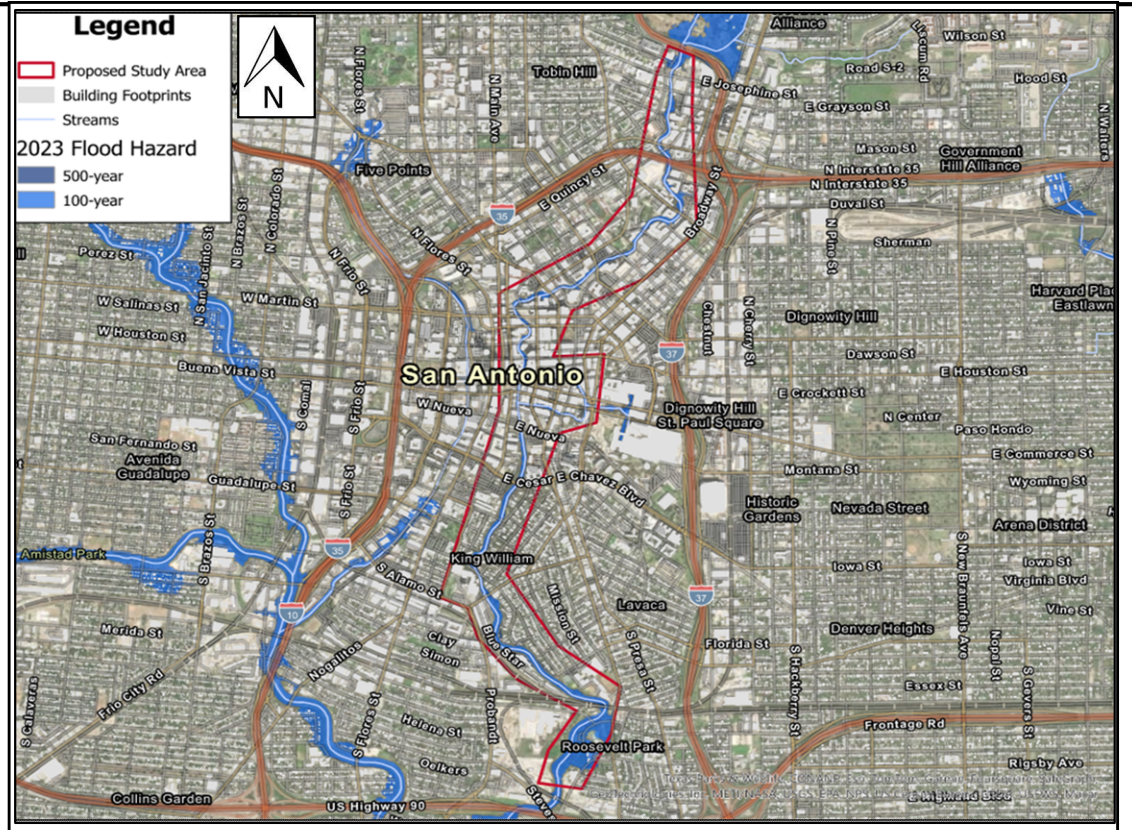
Project Source: City of San Antonio

Study Type: Project Planning

Project Cost: \$ 350,000
(2020 Prices)

Project Description:

The San Antonio River Tunnel Outlet was constructed in the late-90's. The foundation has shown signs of movement resulting in the need to replace doors. The infrastructure has shown signs of aging. The need to replace the ceiling grid, repair cracks on the walls, and replace actuators and gates are essential to maintaining continued operations. The pup valves are rusting and are also in need of replacement. The air solenoids have needed repairs that now require replacement since the parts are obsolete. This component is essential in the efficient operations of the gates. Lastly, the replacement of the exhaust fan to remove heat and chemicals is needed. This project would identify and design, to a 30% plan, options to upgrade the facility to maintain efficient operations.





2023 San Antonio Regional Flood Plan 2025 Amendment FME Project Summary Sheet

<p>Project Name: San Pedro Creek Tunnel Inlet and Outlet Facility Upgrades</p> <p>FME ID: 121000192</p> <p>Project Sponsor: City of San Antonio</p> <p>Project Source: City of San Antonio</p> <p>Study Type: Project Planning</p> <p>Project Cost: (2020 Prices) \$ 250,000</p> <p>Project Description: The San Pedro Creek flood diversion tunnel was the first flood control tunnel in downtown San Antonio. The outlet has recently had 2 gates replaced. The replacement of the other gates remains. Being built in the early-90's, the system needs to be modernized to allow for monitoring and automatic control. There have been signs of building movement that require the replacement of the rollup door at the outlet. The inlet trash rack has had the original motors since becoming operational. These aging motors require replacement. This project would identify and design, to a 30% plan, options to upgrade the facility.</p>	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p>Legend</p> <ul style="list-style-type: none"> ▬ Proposed Study Area Building Footprints ▬ Streams <p>2023 Flood Hazard</p> <ul style="list-style-type: none"> 500-year 100-year </div> <div style="width: 10%; text-align: center;"> </div> <div style="width: 55%;"> </div> </div>
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Project Name: W. Commerce - LWC #106 Area Drainage Improvements
PER

Council District: 6

Project Limits: Pinn Rd to Military Dr. W

Watershed: Leon Creek

Potential Project #: N/A

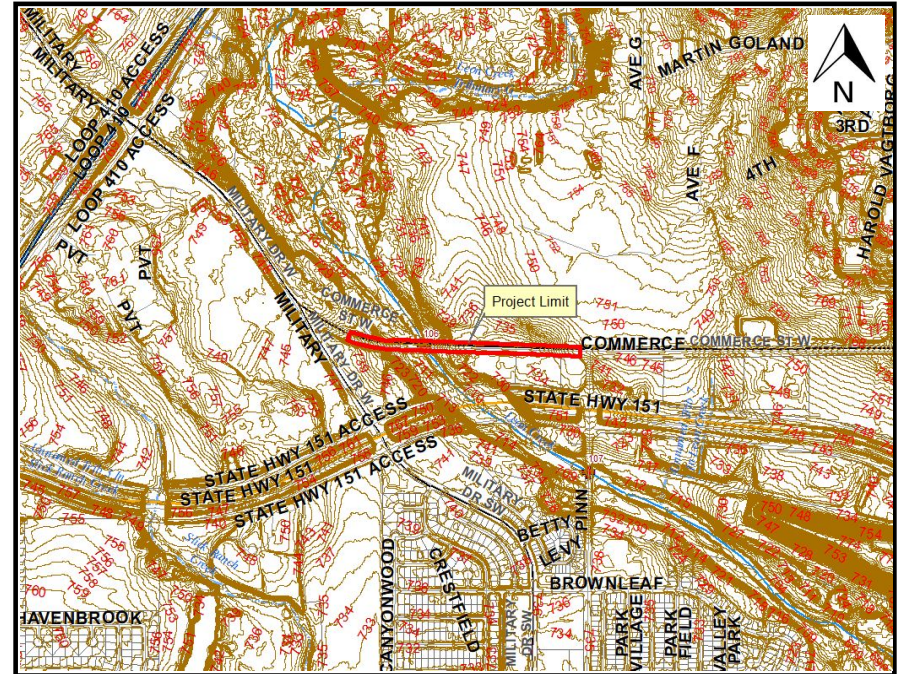
Funding Information

Fund	Year	Amount
To Be Determined (TBD)	\$	-
		-
		-
		-
		-
Total Funding	\$	-

Cost Information

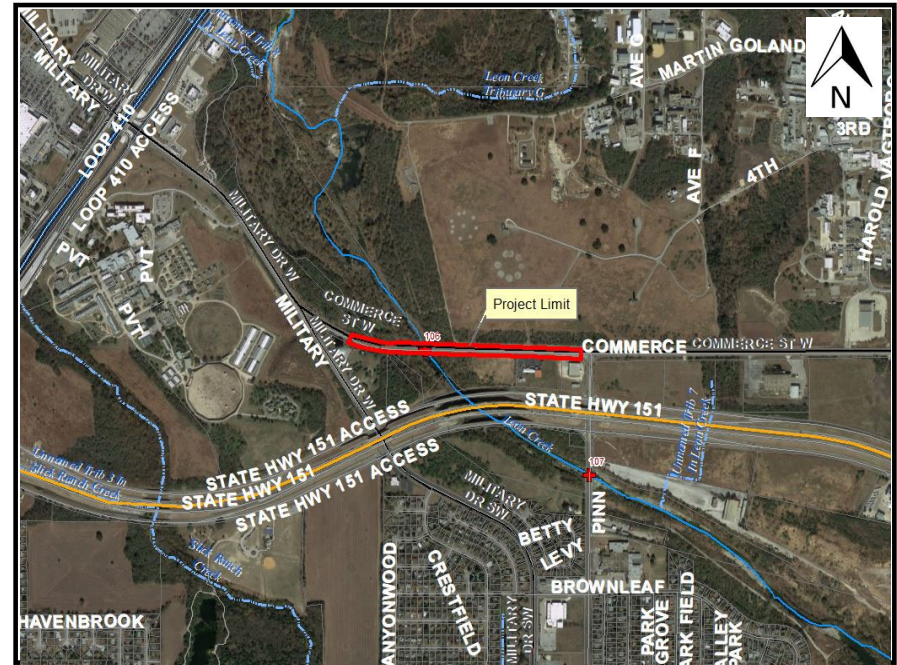
Category	Cost
Design	\$300,000
Real Estate	\$0
Environmental	\$0
Green Infrastructure	\$0
Construction	\$ -
Total Cost*	\$300,000

*Rounded up to the nearest \$10,000

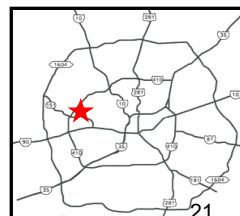


Project Description

The proposed planning project comprises developing a Preliminary Engineering Report (PER) to identify options for accommodating the 1% annual chance storm event for ultimate development for Leon Creek at W. Commerce St. approximately 2750' west of Pinn Rd. The proposed PER study will identify and recommend various drainage and structural options to mitigate and/or remove property and structure flooding within the FEMA regulated floodplain. The study will also provide a downstream analysis for each recommended option to verify the severity of impacts downstream of the low water crossing.



Project Type: Drainage
Type of Estimate: Planning
Project Status: Unfunded
Consultant: TBD





2023 San Antonio Regional Flood Plan 2025 Amendment FME Project Summary Sheet

Project Name: Belfair Drive PER

FME ID: 121000028

Project Sponsor: City of San Antonio

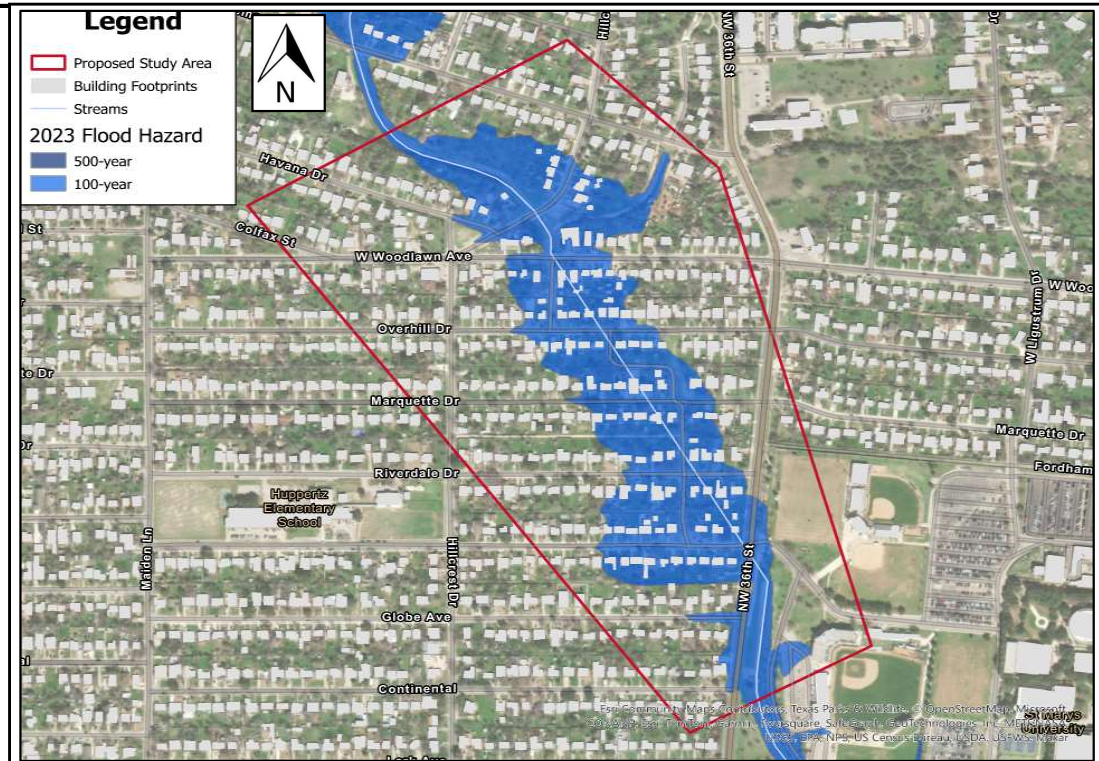
Project Source: Upper San Antonio River Watershed Master Plan

Study Type: Project Planning

Project Cost: \$ 250,000
(2020 Prices)

Project Description:

Updates to an existing 2023 San Antonio Regional Flood Plan FME ID 121000028. Belfair Drive is located on the west side of San Antonio and contains an underground section of Apache Creek from W. Woodlawn Avenue to NW 36th Street, just west of St. Mary's University. The area has experienced flooding in the past with significant damage to private property. This PER will revisit the previous studies, update them for ATLAS 14 rainfall data, evaluate the feasibility of a storm sewer diversion, and update the opinion of probable construction cost accounting for recent increases in construction prices.





2023 San Antonio Regional Flood Plan 2025 Amendment FME Project Summary Sheet

Project Name: Drainage Project 58A PER

FME ID: 121000084

Project Sponsor: City of San Antonio

Project Source: Upper San Antonio River Watershed Master Plan

Study Type: Project Planning

Project Cost: \$ 500,000
(2020 Prices)

Project Description:

Updates to an existing 2023 San Antonio Regional Flood Plan FME ID 121000084. Drainage Project 58A is intended to mitigate the 100-year regulatory floodplain in Zarzamora Creek from a pedestrian crossing near San Pablo Place to the Fortuna Street Bridge. The most recent hydraulic model for this portion of Zarzamora Creek shows 260 structures and 367 properties are in the 100-year floodplain. There is also a potable water tank/pump station site that is property of San Antonio Water System located with multiple pumps, a ground storage tank, and other structures in the floodplain. Recommends the Voluntary Property Acquisition approach, as it is the only cost-effective means at reducing flood risk. This PER will revisit the previous study, update it for ATLAS 14 rainfall data and determine if a cost-effective solution to mitigating flood risk can be determined.

