



2023-2024

*Capital Improvement
Plan*

Adopted December 19, 2022

AECOM

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SECTION I – INTRODUCTION

The North Harris County Regional Water Authority (the “Authority”) is responsible for securing a long-term supply of quality surface water and to facilitate the transition to surface water in compliance with Harris-Galveston Subsidence District (the “HGSD”) requirements. The mandate requires a 30% reduction of groundwater usage by 2010, 60% reduction of groundwater usage by 2025, and an 80% reduction of groundwater usage by 2035. The Authority is the single entity to negotiate for a supply of surface water for the municipal utility districts, small municipalities and other permitted well owners within its boundaries. The most critical task is developing and constructing the infrastructure to bring surface water to the participants within the boundaries of the Authority. The Authority does not have taxing ability; but rather funds the conversion to surface water from pumpage fees charged to well owners and the sale of surface water.

The Authority continues to construct projects to achieve compliance with the HGSD Regulatory Plan. If the Authority does not meet the requirements of the HGSD Regulatory Plan, the Authority will be subject to the disincentive fee which is currently \$9.80/1,000 gallons. The Authority has met all applicable deadlines to date.

The 2023-2024 Capital Improvement Plan (the “2023-2024 CIP”) provides for enhancements to the Authority’s system to facilitate a continuous satisfactory level of conversion to surface water. It also focuses on the planning and development of the infrastructure needed to achieve the HGSD 2025 and 2035 conversion mandates.

SECTION II – THE 2023-2024 CAPITAL IMPROVEMENT PLAN

Overview

The 2023-2024 CIP continues the systematic planning and development process and is based on the conversion schedule and prioritized based on cost effectiveness. The primary focus of the 2023-2024 CIP is to continue to complete the infrastructure required to enable the Authority to meet the HGSD's 2025 conversion requirement and initiate projects to meet the 2035 conversion requirement.

Considerations

To prepare the CIP, it was necessary to determine the most cost-effective sequencing of capital projects to meet the requirements of the HGSD Regulatory Plan to reduce the use of groundwater within the boundary of the Authority. The sequencing analysis includes consideration of the amount of additional surface water delivered to districts and the capital costs to construct the waterlines to deliver the surface water. Project costs were considered in developing the schedule of improvements with the goal of delaying costs as long as possible while still achieving HGSD requirements.

Financial

The Authority has applied for, and was granted, financing through the Texas Water Development Board ("TWDB") via the State Water Implementation Fund for Texas ("SWIFT") program. During SWIFT program years 2015-2018 the TWDB has committed \$2.076 billion of financial support to the Authority.

As seen in the following table, approximately \$6 million of Revenue Bonds will be used to implement the 2023-2024 CIP. Additionally, approximately \$469 million of SWIFT funds are committed to implement the 2023-2024 CIP. Approximately \$15 million of Participation funding will be provided by other entities via cost sharing agreements. The remaining approximately \$33 million of the near \$524 million needed to implement the 2023-2024 CIP will be funded through other sources to be determined, i.e., bonds, capital contributions, etc.

SUMMARY OF 2023-2024 CAPITAL IMPROVEMENT PLAN

Category	Fiscal Year Planned Authorizations		Total
	(Thousands \$)		
	2023	2024	
Acquisition	26,911	16,092	43,003
Design	24,547	21,156	45,703
Construction	206,299	55,123	261,422
Equipment	0	0	
Other	87,695	85,689	173,384
Total Authorizations	345,452	178,060	523,512
Source of Funds			
Revenue Bonds	2,995	3,389	6,384
SWIFT Funds	318,408	150,782	469,190
Participation Funds	3,192	11,535	14,727
Other	20,858	12,354	33,212
Total Funds	345,452	178,060	523,512

APPENDIX A
GLOSSARY OF TERMS

GLOSSARY OF TERMS

Acquisition	Includes the cost to purchase land and easements and the acquisition services (i.e. ROW Services, appraisals, legal, etc.) required to accomplish the purchase
Authorization	Amount designated for or authorized for the performance of work, service, equipment or participation agreements - the values typically do not represent actual expenditure of funds
Design	Includes the cost for program management, project planning, design related services, design management and other engineering and planning activities
Construction	Includes the cost of the construction contract, contingencies, construction administration, construction observation and materials testing
Equipment	Includes the cost of any equipment that may be purchased separately from a construction contract
FWSD	Fresh Water Supply District
ID	Improvement District
MUD	Municipal Utility District
N/A	Not Applicable or Contingency C.I.P. Number
Other	A general category that may include other sources to be determined, i.e., bonds, capital contributions, etc.
PUD	Public Utility District
SWIFT	State Water Implementation Fund for Texas
TWDB	Texas Water Development Board
UD	Utility District
VAR	Various districts or key map locations as applicable
WCID	Water Control & Improvement District

APPENDIX B
PROJECT DETAIL FORMS

**2023 – 2024
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY
REGIONAL WATER AUTHORITY**

Project: Bammel UD AND CHAMPIONS MUD	District:	C.I.P. Number	1
	VAR		
Description: Costs provide for the real estate acquisition and construction to extend a portion of the North Harris County Regional Water Authority's system to connect to Bammel UD and Champions MUD. *Bammel UD and Champions MUD will each pay for half the costs of their respective projects.			
Category	Fiscal Year Planned Authorizations (Thousands)		Project Total
	2023	2024	
Acquisition	340		340
Design			
Construction	4,049		4,049
Equipment			
Other			
Total Authorizations	4,389		4,389
Source of Funds			
Revenue Bonds			
SWIFT Funds			
Participation Funds*	2,195		2,195
Other	2,195		2,195
Total Funds	4,389		4,389

Project: JIMMIE SCHINDEWOLF REGIONAL PUMP STATION (FORMERLY KNOWN AS SPEARS ROAD REGIONAL PUMP STATION)	District:	C.I.P. Number	2
	VAR		
Description: Costs provide for upgrades/enhancements of this regional pump station.			
Category	Fiscal Year Planned Authorizations (Thousands)		Project Total
	2023	2024	
Acquisition			
Design			
Construction			
Equipment			
Other	200	200	400
Total Authorizations	200	200	400
Source of Funds			
Revenue Bonds			
SWIFT Funds			
Participation Funds			
Other	200	200	400
Total Funds	200	200	400

**2023 – 2024
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY
REGIONAL WATER AUTHORITY**

Project: REGIONAL WELLS	District:	C.I.P. Number	3
	VAR		
Description: Costs provide for the real estate acquisition of well sites and design and construction of new wells and appurtenances and/or the purchase of existing wells. The wells will be constructed or purchased for emergency supplies of water as needed by the Authority to facilitate operation of its System.			
Category	Fiscal Year Planned Authorizations (Thousands)		Project Total
	2023	2024	
Acquisition			
Design			
Construction			
Equipment			
Other	2,500		2,500
Total Authorizations	2,500		2,500
Source of Funds			
Revenue Bonds			
SWIFT Funds			
Participation Funds			
Other	2,500		2,500
Total Funds	2,500		2,500

Project: LOUETTA REGIONAL WATER PLANT	District:	C.I.P. Number	5
	2, 4		
Description: Costs provide for the design, construction and upgrades/enhancements of this regional water plant.			
Category	Fiscal Year Planned Authorizations (Thousands)		Project Total
	2023	2024	
Acquisition			
Design		3,342	3,342
Construction			
Equipment			
Other			
Total Authorizations		3,342	3,342
Source of Funds			
Revenue Bonds			
SWIFT Funds		3,342	3,342
Participation Funds			
Other			
Total Funds		3,342	3,342

**2023 – 2024
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY
REGIONAL WATER AUTHORITY**

Project: 2025 DISTRIBUTION SYSTEM (6C-1 AND 6C-2)	District:	C.I.P. Number	6
	1		
Description: Costs provide for the construction of Projects 6C-1 and 6C-2. The Projects will serve Faulkey Gully MUD and Northwest Harris County MUD No. 5.			
Category	Fiscal Year Planned Authorizations (Thousands)		Project Total
	2023	2024	
Acquisition			
Design			
Construction	4,492		4,492
Equipment			
Other			
Total Authorizations	4,492		4,492
Source of Funds			
Revenue Bonds			
SWIFT Funds	4,492		4,492
Participation Funds			
Other			
Total Funds	4,492		4,492

Project: 2025 DISTRIBUTION SYSTEM (7D-1)	District:	C.I.P. Number	7
	4		
Description: Costs provide for the construction of Project 7D-1. The Project will serve Northwest Harris County MUD No. 32.			
Category	Fiscal Year Planned Authorizations (Thousands)		Project Total
	2023	2024	
Acquisition			
Design			
Construction	4,296		4,296
Equipment			
Other			
Total Authorizations	4,296		4,296
Source of Funds			
Revenue Bonds			
SWIFT Funds	4,296		4,296
Participation Funds			
Other			
Total Funds	4,296		4,296

**2023 – 2024
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY
REGIONAL WATER AUTHORITY**

Project: HARDY ROAD TRANSMISSION SYSTEM	District:		C.I.P. Number	23
	VAR			
Description: Costs provide for the site study, real estate acquisition, design and construction for the transmission line and the regional pump station. This facility will be part of the 2025 Water Distribution and Transmission System. This project will be cost shared by the City of Houston. *To be funded by the City of Houston.				
Category	Fiscal Year Planned Authorizations (Thousands)		Project Total	
	2023	2024		
Acquisition	5,948	6,699	12,647	
Design	5,150		5,150	
Construction		55,023	55,023	
Equipment				
Other				
Total Authorizations	11,098	61,722	72,820	
Source of Funds				
Revenue Bonds				
SWIFT Funds	10,101	50,187	60,288	
Participation Funds*	997	11,535	12,532	
Other			0	
Total Funds	11,098	61,722	72,820	

Project: WATER SUPPLY	District:		C.I.P. Number	26
	ALL			
Description: Provides funding to pay the City of Houston for water in accordance with the Authority's Water Supply Contract and Supplement No. 2 to the Contract with the City. Funding included herein will help pay for the Authority's portion of the cost to expand the Northeast Water Purification Plant (NEWPP).				
Category	Fiscal Year Planned Authorizations (Thousands)		Project Total	
	2023	2024		
Acquisition				
Design				
Construction				
Equipment				
Other	75,000	75,000	150,000	
Total Authorizations	75,000	75,000	150,000	
Source of Funds				
Revenue Bonds				
SWIFT Funds	75,000	75,000	150,000	
Participation Funds				
Other				
Total Funds	75,000	75,000	150,000	

**2023 – 2024
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY
REGIONAL WATER AUTHORITY**

Project: LUCE BAYOU INTERBASIN DIVERSION PROJECT	District:	C.I.P. Number	27
	ALL		
Description: Provides funding to pay the City of Houston for the Authority's portion of the project costs. The project will deliver surface water from the Trinity River to Lake Houston.			
Category	Fiscal Year Planned Authorizations (Thousands)		Project Total
	2023	2024	
Acquisition			
Design			
Construction			
Equipment			
Other	2,995	3,389	6,384
Total Authorizations	2,995	3,389	6,384
Source of Funds			
Revenue Bonds	2,995	3,389	6,384
SWIFT Funds			
Participation Funds			
Other			
Total Funds	2,995	3,389	6,384

Project: 2025 DISTRIBUTION SYSTEM (Project 28 Series)	District:	C.I.P. Number	28
	VAR		
Description: Costs provide for the construction of the Project 28 series.			
Category	Fiscal Year Planned Authorizations (Thousands)		Project Total
	2023	2024	
Acquisition			
Design			
Construction	27,495		27,495
Equipment			
Other			
Total Authorizations	27,495		27,495
Source of Funds			
Revenue Bonds			
SWIFT Funds	27,495		27,495
Participation Funds			
Other			
Total Funds	27,495		27,495

**2023 – 2024
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY
REGIONAL WATER AUTHORITY**

Project: 2025 DISTRIBUTION SYSTEM (Project 31 Series)	District:	C.I.P. Number	31
	VAR		
Description: Costs provide for the completion of easement acquisition and construction of the Project 31 series.			
Category	Fiscal Year Planned Authorizations (Thousands)		Project Total
	2023	2024	
Acquisition	4,964		4,964
Design			
Construction	109,087		109,087
Equipment			
Other			
Total Authorizations	114,051		114,051
Source of Funds			
Revenue Bonds			
SWIFT Funds	114,051		114,051
Participation Funds			
Other			
Total Funds	114,051		114,051

Project: 2025 DISTRIBUTION SYSTEM (Project 35 Series)	District:	C.I.P. Number	35
	VAR		
Description: Costs provide for the design, real estate acquisition and construction of the Project 35 series.			
Category	Fiscal Year Planned Authorizations (Thousands)		Project Total
	2023	2024	
Acquisition	10,150		10,150
Design	410		410
Construction	52,880		52,880
Equipment			
Other			
Total Authorizations	63,440		63,440
Source of Funds			
Revenue Bonds			
SWIFT Funds	63,440		63,440
Participation Funds			
Other			
Total Funds	63,440		63,440

**2023 – 2024
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY
REGIONAL WATER AUTHORITY**

Project: 2025 DISTRIBUTION SYSTEM (Project 37 Series)	District:	C.I.P. Number	37
	VAR		
Description: Costs provide for the site study, design, real estate acquisition and construction of the of the Project 37 series.			
Category	Fiscal Year Planned Authorizations (Thousands)		Project Total
	2023	2024	
Acquisition	5,509	4,133	9,642
Design	13,174		13,174
Construction			
Equipment			
Other			
Total Authorizations	18,683	4,133	22,816
Source of Funds			
Revenue Bonds			
SWIFT Funds	18,683	4,133	22,816
Participation Funds			
Other			0
Total Funds	18,683	4,133	22,816

Project: 2025 DISTRIBUTION SYSTEM (Project 38 Series)	District:	C.I.P. Number	38
	VAR		
Description: Costs provide for the site study, design, real estate acquisition and construction of the Project 38 series.			
Category	Fiscal Year Planned Authorizations (Thousands)		Project Total
	2023	2024	
Acquisition		5,260	5,260
Design		12,236	12,236
Construction			
Equipment			
Other			
Total Authorizations		17,496	17,496
Source of Funds			
Revenue Bonds			
SWIFT Funds		17,496	17,496
Participation Funds			
Other			
Total Funds		17,496	17,496

**2023 – 2024
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY
REGIONAL WATER AUTHORITY**

Project: SYSTEM IMPROVEMENTS	District:	C.I.P. Number	100
	VAR		
Description: Costs provide funding for possible required improvements to the distribution system and/or transmission system, including but not limited to the Authority's emergency repair contract.			
Category	Fiscal Year Planned Authorizations (Thousands)		Project Total
	2023	2024	
Acquisition			
Design			
Construction			
Equipment			
Other	2,000	2,000	4,000
Total Authorizations	2,000	2,000	4,000
Source of Funds			
Revenue Bonds			
SWIFT Funds			
Participation Funds			
Other	2,000	2,000	4,000
Total Funds	2,000	2,000	4,000

Project: CENTRAL CONTROL SYSTEM	District:	C.I.P. Number	101
	VAR		
Description: Costs provide the design and construction of the Supervisory Control and Data Acquisition (SCADA) System and implementation of an Advanced Metering Infrastructure (AMI) System.			
Category	Fiscal Year Planned Authorizations (Thousands)		Project Total
	2023	2024	
Acquisition			
Design	200		200
Construction	4,000	100	4,100
Equipment			
Other		100	100
Total Authorizations	4,200	200	4,400
Source of Funds			
Revenue Bonds			
SWIFT Funds			
Participation Funds			
Other	4,200	200	4,400
Total Funds	4,200	200	4,400

**2023 – 2024
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY
REGIONAL WATER AUTHORITY**

Project: SUPPORT AND SPECIALTY	District:	C.I.P. Number	200
	VAR		
Description: Provides various support and specialty professional services such as program management, control surveying, well location assessments, corrosion protections analysis, surge analysis, GIS and Technical Advisor services.			
Category	Fiscal Year Planned Authorizations (Thousands)		Project Total
	2023	2024	
Acquisition			
Design	5,613	5,578	11,191
Construction			
Equipment			
Other			
Total Authorizations	5,613	5,578	11,191
Source of Funds			
Revenue Bonds			
SWIFT Funds	850	624	1,474
Participation Funds			
Other	4,763	4,954	9,717
Total Funds	5,613	5,578	11,191

Project: CONTINGENCY	District:	C.I.P. Number	N/A
	VAR		
Description: Provides funding for costs in excess of original program estimates and unexpected necessary expenses such as those to facilitate escalation of program components, to facilitate system operations and to enable payment of exceptional real estate judgements.			
Category	Fiscal Year Planned Authorizations (Thousands)		Project Total
	2023	2024	
Acquisition			
Design			
Construction			
Equipment			
Other	5,000	5,000	10,000
Total Authorizations	5,000	5,000	10,000
Source of Funds			
Revenue Bonds			
SWIFT Funds			
Participation Funds			
Other	5,000	5,000	10,000
Total Funds	5,000	5,000	10,000