

ACTIVITY SINCE HARVEY

By the Numbers (as of August 2021)

TOTAL BOND PROJECTS APPROVED BY VOTERS

ACTIVE BOND PROJECTS
175 of 181

TOTAL BOND AMOUNT
\$2.5 billion

BOND FUNDS AUTHORIZED
\$578 million

HARVEY-RELATED GRANT FUNDING

\$1.1 billion

Total application amount
(includes requested \$827 million grant
and \$265 million local share)

LOCAL PARTNER FUNDING

\$111 million

Total Non-Federal Partnership Projects
(includes local share)

VOLUNTARY HOME BUYOUTS

Home buyouts are used to reduce flood damages in areas several feet deep in the floodplain where structural projects to reduce flooding are not cost-effective and/or beneficial.

- 660 buyouts completed
- 662 Additional buyouts in Process
- \$516 million home buyout funding secured
- 615 demolitions completed

PROFESSIONAL SERVICE CONTRACTS AWARDED

\$251 million

across 458 consultant agreements

CONSTRUCTION CONTRACTS AWARDED

\$552 million

across 96 contracts for capital improvements
and repairs

COMPLETED SINCE HARVEY

27 projects valued at \$221 million that
removed approximately 11,000 homes from
the 100-year floodplain

ACTIVITY SINCE HARVEY

By the Numbers (as of August 2021)

Construction of flood damage reduction projects and home buyouts means a reduced risk of flooding for Harris County residents. While the devastation from Harvey was widespread, it is estimated that more than 24,100 homes and businesses avoided flooding during that storm because of construction projects completed in the past 20 years in the Brays, Sims and White Oak Bayou watersheds alone, plus buyouts. For more Hurricane Harvey information, log on to www.hcfcd.org/hurricaneharvey.

COMMUNITY ENGAGEMENT

Community engagement is a critical component of our work to ensure residents are aware of and understand the flood damage reduction projects in their neighborhoods.

- 150 Bond Program Community Engagement Meetings
- 12,000+ Registered attendees
- 8,000+ Bond Program comments received
- 1.5 million+ HCFCD.ORG visitors
- 20,000+ Twitter
- 9,000+ Facebook

SELECTIVE CLEARING

Selective clearing allows for more efficient conveyance during an event, which helps reduce flood risks. It also helps to manage invasive species from over competing with desirable native species and makes it easier for the Flood Control District to access our channels when needed to perform maintenance.

- 328 acres cleared
- \$966,000 spent

FLOODPLAIN PRESERVATION

By preserving the floodplain from development, floodwaters can spread out safely without structures that can flood.

- 20,531 acres preserved for projects, floodplain preservation and buyouts.

TURF ESTABLISHMENT

Turf establishment makes our green infrastructure green – the turf helps prevent erosion, which keeps silt and soil from accumulating in our channels, which increases long-term maintenance costs.

- 1,977 acres established
- \$3.2 million spent

4 Years Since Harvey



Telephone Bridge Construction

2020 – 2021

*NOTE: This infographic represents major milestones and activities of the Flood Control District but does not include all activities and accomplishments during this period.

1st Year After Hurricane Harvey

2017
2018

This infographic represents major milestones and activities of the Flood Control District but does not include all activities and accomplishments during this period

AUGUST 1: Harris County Flood Control District construction underway on numerous channels and detention basins in the Greens, Sims, Brays, Addicks, Little Cypress and Clear Creek watersheds

AUGUST 7: Construction begins on channel improvements and third phase of a stormwater detention basin project in the Hunting Bayou watershed

AUGUST 17: Tropical Storm Harvey forms in the Atlantic

WEEK OF AUGUST 21: Storm Debris Contractor notified of potential activation. Flood Control District begins permitting process for Temporary Debris Reduction and Disposal Sites; conducts assessment; removes debris at bridge crossings countywide; orders removal of obstructions from construction sites

AUGUST 22: Harvey forecasted to become major rainfall event for Texas coast and Harris County

AUGUST 24: Flood Control District completes pre-storm actions, confirms proper operation of 153 rainfall and bayou level gages

AUGUST 25: Harvey makes landfall near Rockport, Texas, as a Category 4 Hurricane.

AUGUST 25: Round-the-clock Flood Control District Flood Watch Team mobilizes, opens phone bank

SEPTEMBER 6: Flood Control District begins collecting thousands of "Notice of Voluntary Interest" forms from homeowners who want a home buyout

SEPTEMBER 6: Flood Control District begins flights to provide high-resolution aerial photos for post-storm channel assessment

SEPTEMBER 11: Countywide assessment of bayou blockages completed; est. 135,000 cubic yards of storm debris to be removed

SEPTEMBER 12: Harris County Commissioners Court approves \$572,898 design contract to extend Stella Link Bridge, replace Ardmore Street Bridge as part of Project Brays

SEPTEMBER 13: Completed: Largest high water mark documentation effort since Hurricane Ike, visiting 444 bridges, 61 regional basins, more than 500 locations

OCTOBER: Completed county-wide assessment of infrastructure damages. Initial damage estimate = \$74 million

OCTOBER 10: Harris County Commissioners Court acknowledges substantial completion of channel improvements on Brays Bayou from approximately Bertner Avenue to Buffalo Speedway, for control structures at Willow Waterhole Stormwater Detention Basin and for a weir and valve replacement at Arthur Storey Park



NOVEMBER 13: First public meeting on Cedar Bayou Flood Risk Reduction Study

DECEMBER 11: Construction begins on \$8.3 million project to remove sediment from channels in Precinct 2 (East Harris County)

JANUARY 3: Emergency Repair completed - Buffalo Bayou erosion at Deliver Drive

JANUARY 8: Additional debris removal contract awarded to remove an estimated 12 tons of debris on Buffalo Bayou

FEBRUARY 1: Emergency Repair completed - Buffalo Bayou erosion at Longmont Drive

FEBRUARY 9: Bipartisan Budget Act signed into law, appropriates \$89 billion in emergency supplemental disaster funding, including approximately \$17.4 billion to the Corps, \$23.5 billion to FEMA, \$541 million to NRCS, \$29 billion to HUD

MARCH 14: Emergency repair completed - White Oak Bayou erosion at Fallbrook Drive

MARCH 19: Construction begins on Horseshoe Creek to de-silt four channels that drain into Addicks Reservoir, part of future larger project

APRIL 5: Notice To Proceed issued to 15 engineering consultants to begin design for \$84 million in repair projects. Surveying for Harvey drainage infrastructure repairs begins in Harris County

APRIL 10: Harris County Commissioners Court approves agreement with Brazoria Drainage District No. 4 to add eight new stream elevation and rainfall data gage stations to the Flood Warning System

MAY 1: Flood Control District approved to submit FEMA grant application for \$2.5 million San Jacinto River Regional Watershed Study

MAY 16: FEMA awards first \$26.6 million of the Flood Control District's \$163.5 million grant request to buy out approximately 120 homes damaged during Harvey

MAY 22: Design begins to replace bridges over Brays Bayou at Telephone Road, Lawndale Street, and South 75th Street with Harris County Commissioners Court approval of a \$758,676 contract for design, bidding and construction phase engineering services as part of Project Brays

JUNE 1: Start of 2018 Hurricane Season

JUNE 5: First of 23 Community Engagement Meetings for the proposed 2018 HCFC Bond Program: Sims Bayou watershed.

Eleven more Bond Program Community Engagement Meetings in the Armand Bayou, White Oak Bayou, Carpenters Bayou, Cypress Creek, Greens Bayou, Halls Bayou, Addicks Reservoir, Hunting Bayou, Jackson Bayou, Spring Creek and Spring Gully/Goose Creek watersheds

JUNE 12: Harris County Commissioners Court officially calls \$2.5 billion HCFC Bond Election for August 25, 2018

JUNE 12: Flood Control District approved to submit FEMA grant application for \$1.84 million in Flood Warning System upgrades

JULY: Community Engagement Meetings for the proposed 2018 HCFC Bond Program held in the Brays Bayou, San Jacinto River, Clear Creek, Willow Creek, Cedar Bayou, Luce Bayou, San Jacinto River/Galveston, Vince Bayou, Buffalo Bayou and Little Cypress Creek watersheds

JULY 5: Corps releases work plan for \$17.4 billion from the Bipartisan Budget Act of 2018, including funding to complete active Harris County flood risk reduction projects: \$295 million Clear Creek, \$75 million Brays Bayou, \$45 million White Oak Bayou, \$95 million Hunting Bayou

AUGUST 1: Barker Reservoir Bond Program Meeting, final of 23 Community Engagement Meetings held in 23 Harris County watersheds on the 2018 HCFC Bond Program

AUGUST 3: Flood Control District publishes list of approximately 237 projects that could be built with bond funding, including 38 resulting from Community Engagement Meetings

AUGUST 8: Early voting begins on \$2.5 billion Harris County Flood Control District Bond Program

AUGUST 14: Harris County Commissioners Court approves Bond Program project list

Aug

Sep

Oct

Nov

Dec

Jan

Feb

Mar

Apr

May

Jun

Jul

Aug

AUGUST 26: Harvey rainfall begins in Harris County

AUGUST 28: Flood Control District activates Storm Debris Contractor to remove storm-caused blockages from bayous and channels

AUGUST 29: Flood Control District partners with Houston-Galveston Area Council for aerial assessments, high-resolution photos of flooding in the immediate storm aftermath

AUGUST 30: Harvey rainfall substantially ends in Harris County. Flooding deaths: 36 in Harris County. Rainfall: 1 trillion gallons over four days, enough to cover the county with an average of 33.7 inches of stormwater. Total Statewide Damages: \$125 billion estimated.

AUGUST 30: Flood Control District begins repairs and replacements of damaged Flood Warning System gages

AUGUST 30: Flood Control District begins authorizing emergency repairs in the Greens Bayou, Brays Bayou, White Oak Bayou, Cypress Creek, Sims Bayou, Armand Bayou, Horseshoe Creek and other watersheds

AUGUST 30: Flood Control District begins largest high water mark documentation effort since Hurricane Ike, visiting more than 500 locations for data important in flood risk reduction planning

SEPTEMBER 15: Completed: Repairs and replacements of damaged Flood Warning System gages; all FWS repairs completed in 17 days

SEPTEMBER: Emergency Repairs completed - Inverness Forest levee in Cypress Creek watershed; Washouts near cemetery on Brays Bayou; Concrete weir at Lower Greens Bayou Stormwater Detention Basin; White Oak Bayou erosion and sinkholes at West 43rd, West 34th, Wynwood streets; South Richey Stormwater Detention Basin in the Sims Bayou watershed

OCTOBER: Emergency Repairs completed - Horseshoe Creek at Trailside Drive, Addicks Reservoir watershed; Ditch #7, Sims Bayou watershed; Big Island Slough near North P Street, Armand Bayou watershed; Ditch #9, upstream of Allwood Street, Greens Bayou watershed; Horseshoe Creek downstream of Sunny Ridge Drive, Addicks Reservoir watershed; Horseshoe Creek downstream of Huffmeister Road, Addicks Reservoir watershed; Cypress Creek at Cypresswood Drive; Horseshoe Creek at West Road, Addicks Reservoir watershed; Brays Bayou near Calhoun and Brays Bayou tributary D120-00-00; Dinner Creek at Barker Cypress Road, Addicks Reservoir watershed; Mason Creek tributary near Franz Road, Barker Reservoir watershed

NOVEMBER 16: Second public meeting on Cedar Bayou Flood Risk Reduction Study

NOVEMBER: Emergency Repairs completed - Erosion on South Mayde Creek, upstream of Greenhouse Road in the Addicks Reservoir watershed; Sinkhole and manhole repair on a Latham Creek tributary at Smithstone Drive in the Addicks Reservoir watershed; Concrete panel at Bering Ditch in the Buffalo Bayou watershed

DECEMBER 19: Harris County Commissioners Court approves \$598,000 contract to design Brays Bayou channel improvements between South Rice Avenue and Fondren Road as part of Project Brays

DECEMBER 28: Emergency Repair completed - Buffalo Bayou erosion at Deliver Drive

JANUARY 8: Construction begins on the third phase of improvements to Buffalo Bayou tributary W129-00-00, from Richmond Avenue to Westpark Drive

JANUARY 29: Construction begins on Little Cypress Creek channel improvement project L172-01-00-E501

FEBRUARY 14: Completed: Removal of 10,000 cubic yards of debris blockages from Harris County bayous (all but Buffalo Bayou and Cypress Creek)

FEBRUARY 20: Flood Control District submits Notice of Intent to apply for FEMA voluntary home buyouts, following Governor's announcement opening the program on February 14

MARCH 27: Harris County Commissioners Court approve agreement with City of Mont Belvieu to add two additional stream elevation and rainfall data gage stations to the Flood Warning System

MARCH 27: Flood Control District approved to submit FEMA grant application for \$165 million in Hurricane Harvey voluntary home buyouts

APRIL 12: Flood Control District submits grant application to FEMA Hazard Mitigation Grant Program for voluntary buyout of approx. 1,000 flood-prone homes damaged in Harvey; \$218 million total, including \$163.5 million in federal funding, \$54.5 million in local match

APRIL: Emergency Repairs completed - Buffalo Bayou erosion at Woodstone Street, White Oak Bayou slope failure at Wortham Boulevard

MAY 22: Flood Control District assumes maintenance through an interlocal agreement with The Woodland Joint Power Agency of four additional gages for the Flood Warning System for a total of seven gages in The Woodlands area

MAY 22: Flood Control District approved to submit FEMA grant application for \$14.4 million for South Belt Stormwater Detention Basin construction

JUNE 14: FEMA awards \$51.8 million to buy out 254 homes damaged during Harvey. This is the second allotment from the Flood Control District's \$163.5 million grant request for Harvey buyouts

JUNE 15: Flood Warning System adds new inundation mapping showing current and historical bayou flooding

JUNE 18: De-silt begins on Bear Creek, part of project to de-silt channels that drain into Addicks Reservoir

JUNE 25: Interim excavation begins at Lauder Stormwater Detention Basin

JUNE 26: Flood Control District approved to submit \$25.7 million FEMA grant application for Little Cypress Creek Frontier Program

JUNE 26: Flood Control District approved to submit \$400,000 federal grant application for Stormwater Tunnel Feasibility Study

JUNE: Emergency Repairs completed - Greens Bayou tributary P127-00-00; Outfall near confluence of Green Bayou tributaries G103-38-01, G103-38-00

JULY 10: Construction Begins on Final Project: Brays Channel Segment, South Rice to Fondren

JULY 20, 2018: Flood Control District participates in press briefing with U.S. Sen. John Cornyn and Harris County Judge Ed Emmett to address restarting of the Clear Creek federal project; joined by U.S. Reps. John Culberson and Pete Olson, Texas Rep. Larry Taylor and others.

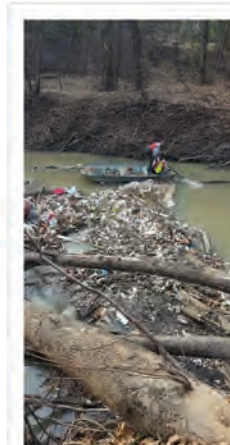
JULY 31: Harris County Commissioners Court approves final design contracts to complete Hunting Bayou and White Oak Bayou federal projects

AUGUST 14: Harris County Commissioners Court approves right-of-way acquisition process for Clear Creek federal project

AUGUST 20: Bids due for first three of 15 packages of Harvey drainage infrastructure repair projects as part of \$14 million NRCS partnership project

AUGUST 25: One year anniversary of Hurricane Harvey landfall in Texas

AUGUST 25: Election Day for \$2.5 billion HCFC Bond Program



2018 Bond Program Monthly Update

Harris County Commissioners Court – August 2021



Agreements Awarded

Last Month – Count

6

Last Month – Amount

\$1.5M

Total – Count

364

Total – Amount

\$220M

Projects Changing Stages

PROJECT ID	PROJECT NAME	STAGE STARTING
B509-04-00-E001	Excavation of the Genoa Red Bluff Stormwater Detention Basin	Preliminary Engineering
M500-10-00-E001	Stormwater Detention Basin and Preservation Site	Preliminary Engineering
E100-00-00-X164	2021 White Oak Bayou Federal Repairs	Design

Construction Starts & Completions

PROJECT ID	PROJECT NAME	STAGE STARTING
n/a		

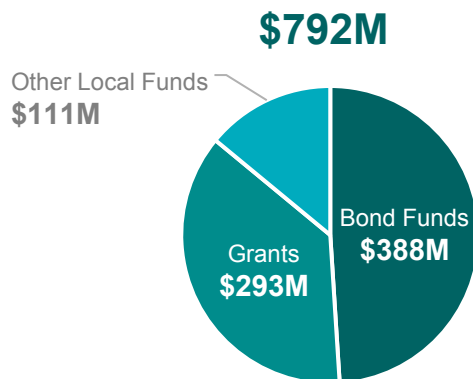
Key Performance Indicators*

CPI
1.37

SPI
0.99

*CPI is Cost Performance Index and SPI is Schedule Performance Index. Closest to 1 is the best, with anything above or below that as indicators for trending. For CPI, anything above 1 indicates a trend of being over budget and under 1 under budget. For SPI, anything above 1 indicates behind schedule and under 1 ahead of schedule.

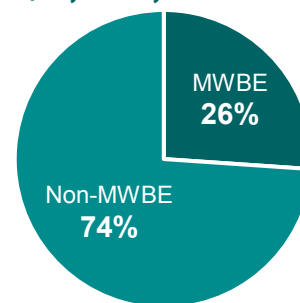
Total Spending through July 2021



Invoices paid to MWBE*

Total Invoiced – 6/1/2021 to 7/22/2021

\$5,224,705.57



*Minority- and/or Women Owned Business Enterprises (MWBE)

In the News

Construction Advisory – Halls Bayou Tributary P118-21-00 and Related Stormwater Detention

In an effort to keep you informed about the Harris County Flood Control District's continuing improvements in the Halls Bayou watershed, we want to notify you of an upcoming project. In July 2021, the Flood Control District will begin construction of the P518-11-00 stormwater detention basin, located between Halls Bayou and Isom Street.

Bond Project C-25 is part of the Halls Implementation Program, a watershed-wide effort to implement the 12 flood risk reduction projects identified in the 2018 Bond Program. This approximately 180 acre foot wet-bottom stormwater detention basin is expected to hold approximately 59 million gallons of water, or 89 Olympic-sized swimming pools, once complete.

This project is funded by the 2018 Bond Program and the U.S. Department of Housing and Urban Development's Community Development Block Grant for Disaster Recovery program.

Construction equipment will access the work area via Aldine Westfield Road. The contractor will use heavy construction equipment such as dump trucks, excavators, and bulldozers to remove trees, vegetation, and excavated soil. Motorists are urged to be alert to truck traffic when passing near construction access points and along truck routes.

Project ID: P518-11-00-E001
Contractor: Lecon, Inc.
Contract Amount: \$5,913,715.10
Construction Start: July 2021
Construction Duration: 234 calendar days

Project Web Page:
www.hcfc.org/C25

Construction Update for Drainage Repairs in Cedar Bayou Watershed

In an effort to keep you informed about the Harris County Flood Control District's continuing maintenance in the Cedar Bayou watershed, we want to notify you of a construction project.

In Summer 2021, the Flood Control District will begin construction in your area on a maintenance project that will address slope erosion along Cary Bayou (HCFC Unit# Q112-00-00) from East Archer Road to 1,400ft upstream of the channel.

Construction equipment will access the work area via East Archer Road. Motorists are urged to be alert to truck traffic when passing near construction access points and along truck routes.

Project ID: Q112-00-00-X021
Package ID: Z100-00-00-X280
Contractor: LECON, Inc.
Contract Amount: Approx. \$85,500
Construction Start: Summer 2021
Construction Duration: 38 days

Project Web Page:
www.hcfc.org/maintenance

Construction Update for Drainage Repairs in Armand Bayou Watershed

In an effort to keep you informed about the Harris County Flood Control District's continuing maintenance in the Armand Bayou watershed, we want to notify you of a construction project.

In Summer 2021, the Flood Control District will begin construction in your area on a maintenance project that will address erosion and desilt the channel from El Dorado Boulevard to HCFC Unit #B104-03-02.

Construction equipment will access the work area via El Dorado Boulevard. Motorists are urged to be alert to truck traffic when passing near construction access points and along truck routes.

Project ID: B104-03-02.1-X008
Package ID: Z100-00-00-X281
Contractor: LECON
Contract Amount: Approx. \$980,000
Construction Start: Summer 2021
Construction Duration: 140 days

Project Web Page:
www.hcfc.org/maintenance

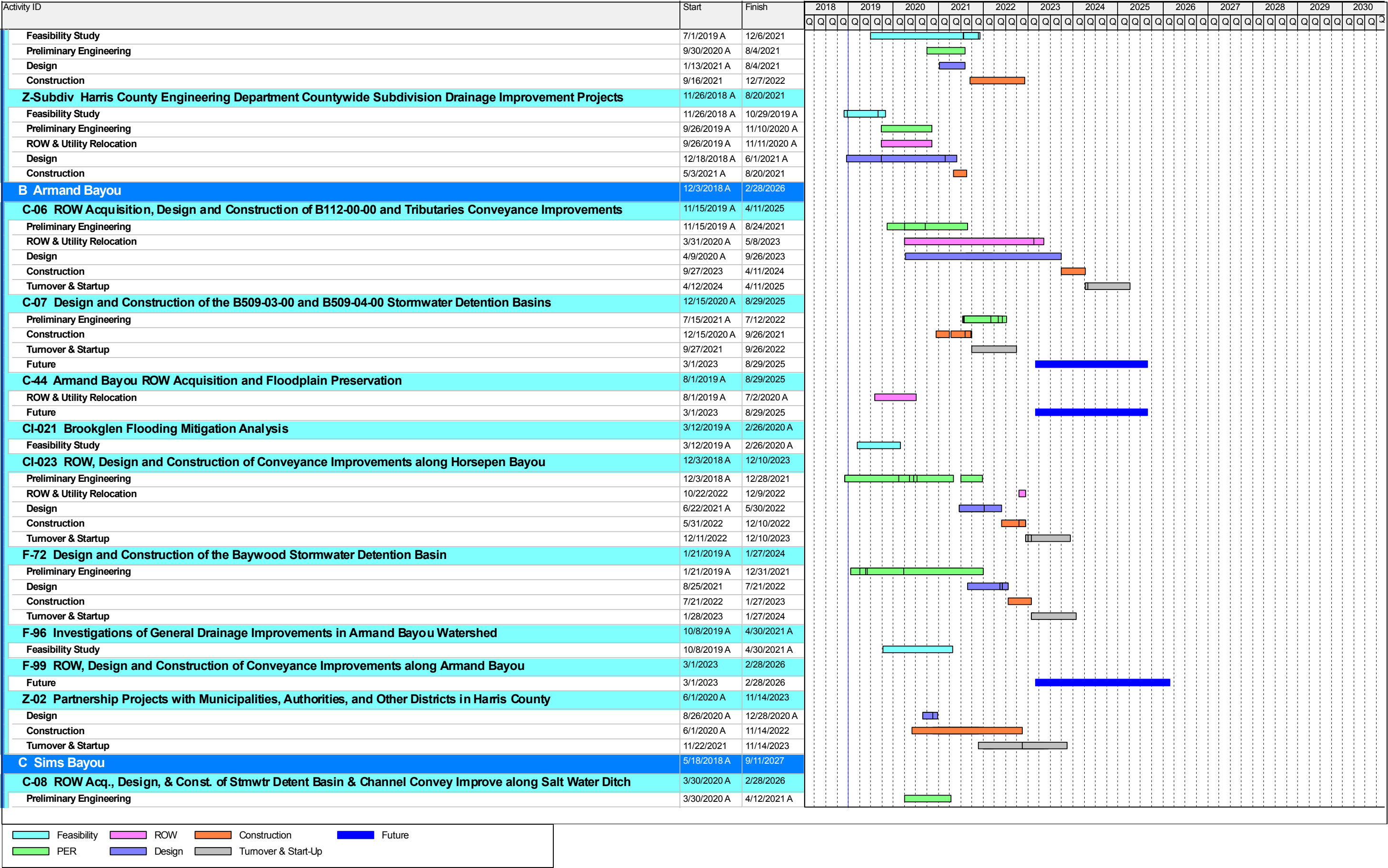


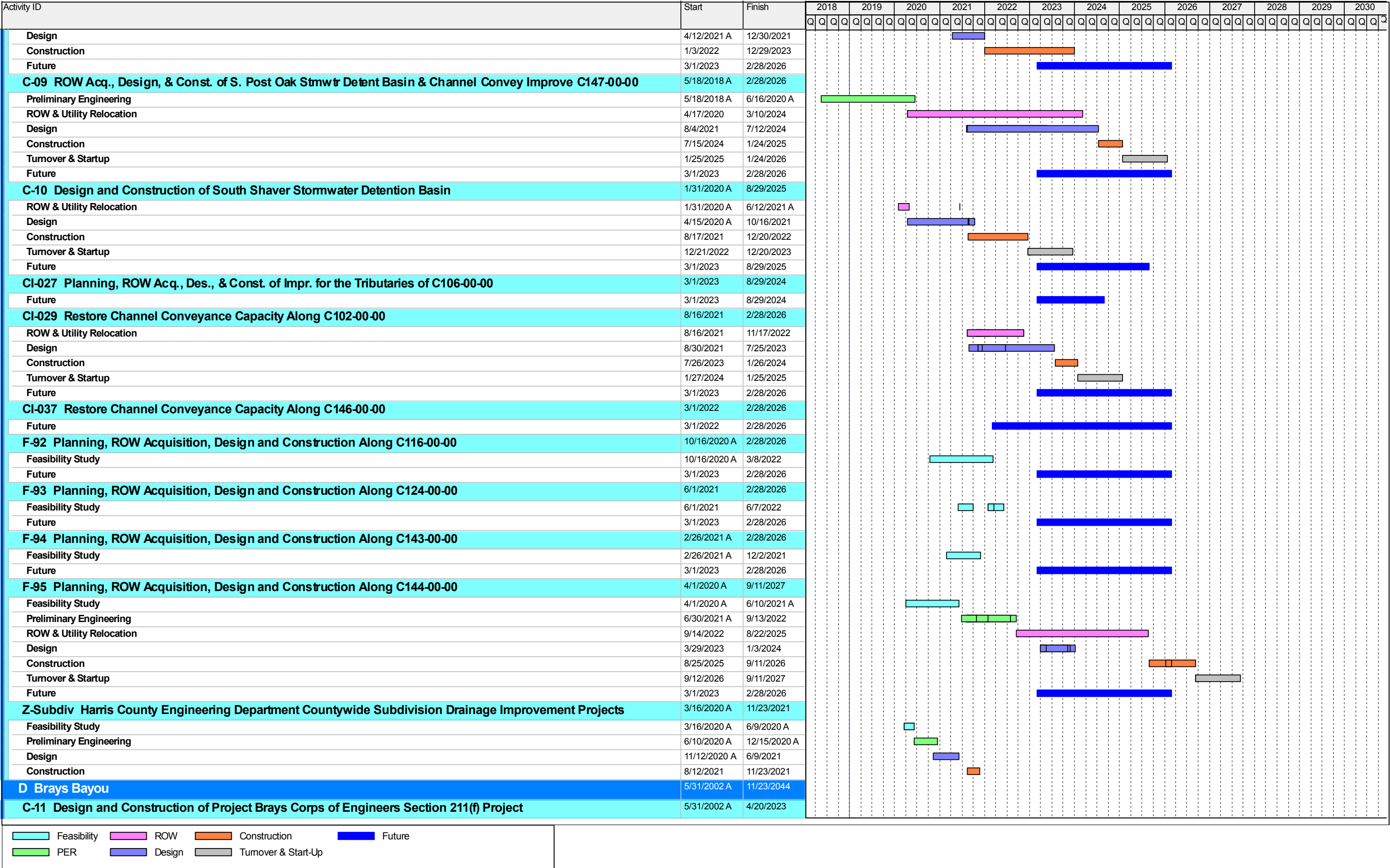
2018 Bond Program Master Schedule

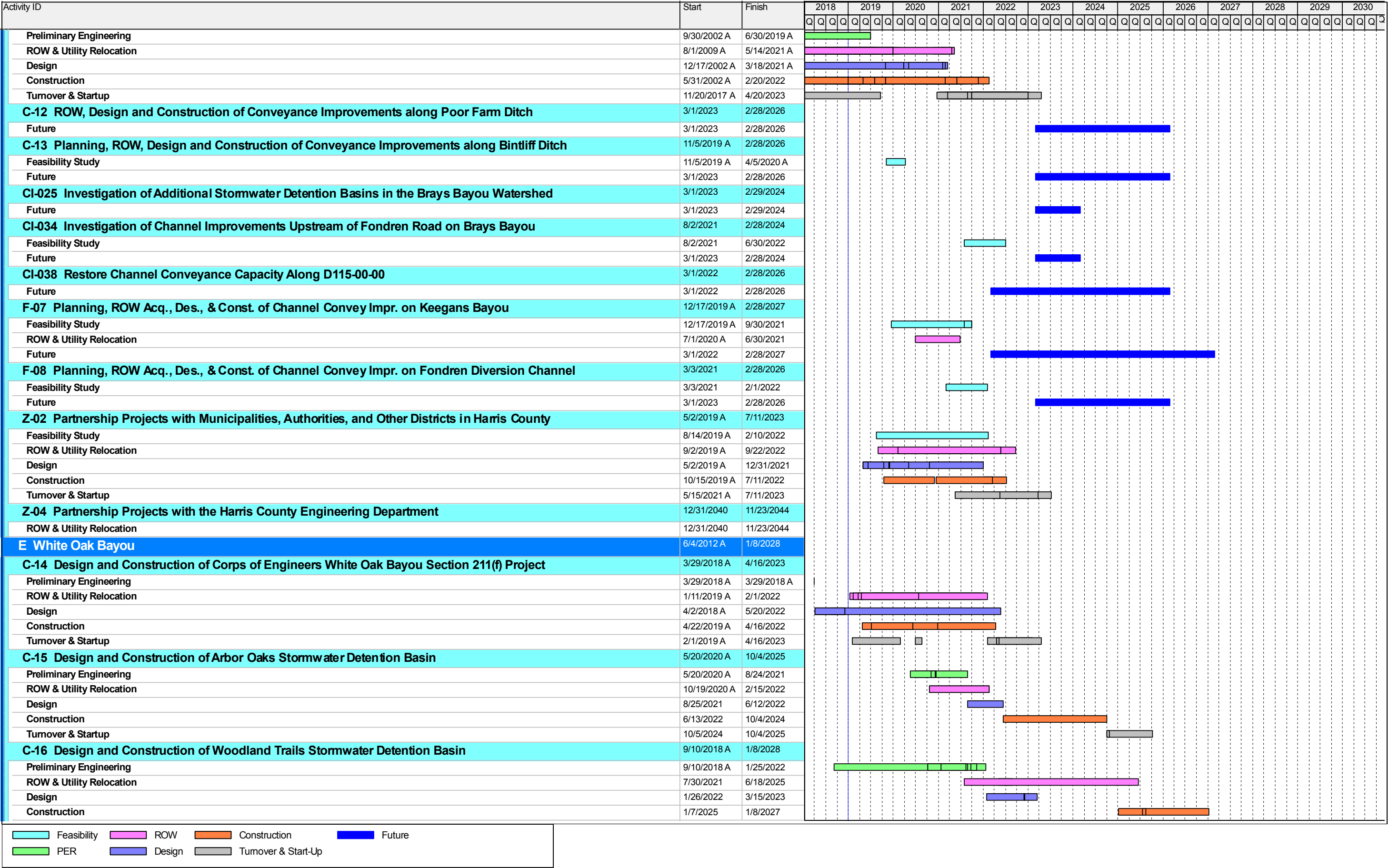
Flood Control District

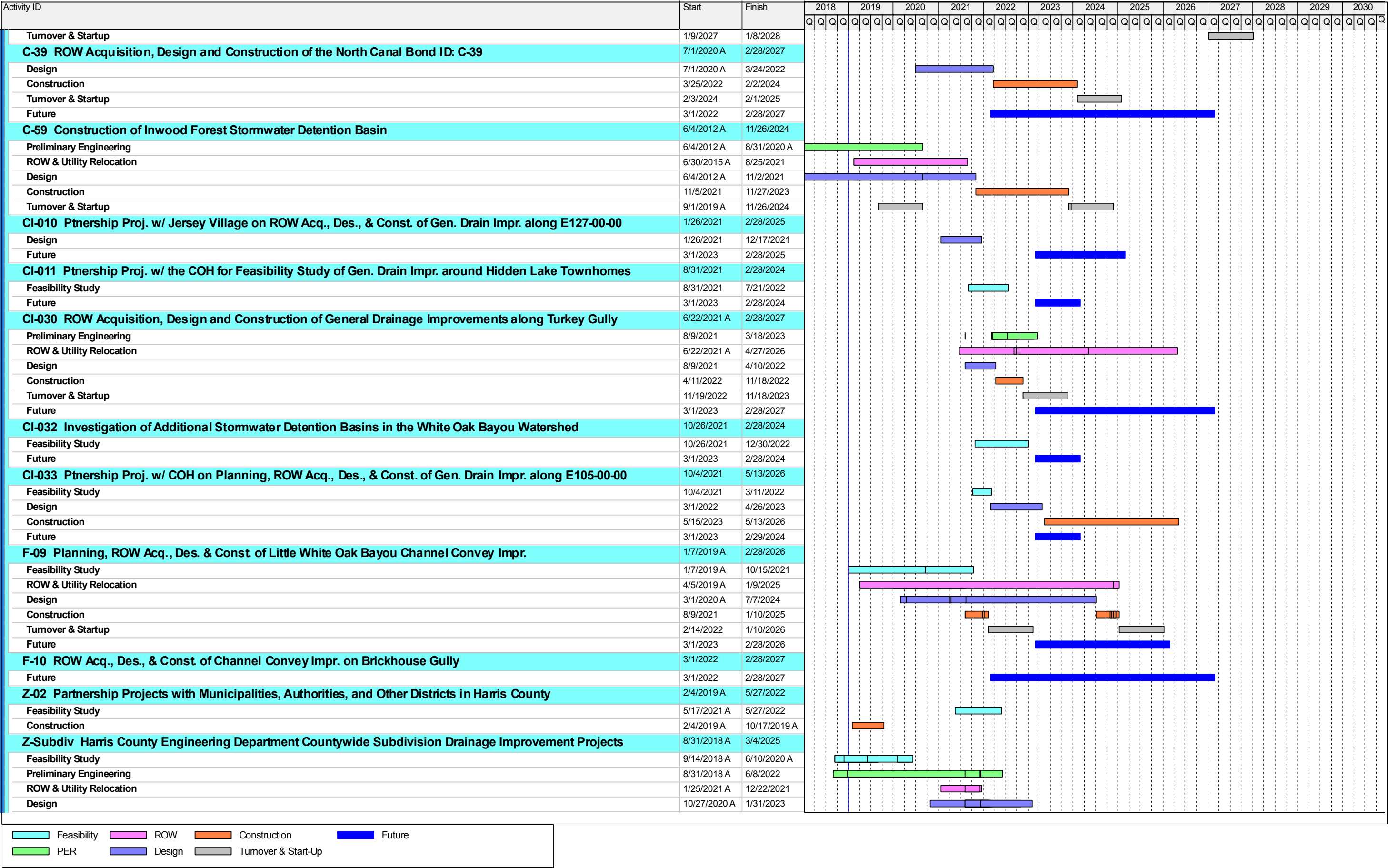
Activity ID	Start	Finish	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
			Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
A Clear Creek															
C-03 ROW Acq., Design & Const. of Corps of Engineers Clear Cr Federal Flood Risk Management Project	6/6/2019 A	12/28/2028													
ROW & Utility Relocation	6/6/2019 A	12/8/2023													
Design	6/6/2019 A	8/2/2024													
Construction	11/11/2020 A	10/13/2022													
Turnover & Startup	1/15/2021 A	8/24/2022													
Future	3/1/2022	12/28/2028													
C-05 Const. of S. Belt Stmwtr Detent Basin Along Beamer Rd & Dagg Rd Stmwtr Detent Basin on Clear Cr	4/20/2018 A	12/31/2022													
ROW & Utility Relocation	7/29/2019 A	12/7/2021													
Design	4/20/2018 A	12/30/2022													
Construction	10/24/2019 A	10/3/2021													
Turnover & Startup	10/4/2021	12/31/2022													
CI-001 Rehabilitation of the Clear Creek channel to Restore Channel Conveyance Capacity	1/1/2019 A	2/28/2027													
Turnover & Startup	1/1/2019 A	6/14/2019 A													
Future	3/1/2023	2/28/2027													
CI-003 Rehabilitation of the A214-00-00 channel to Restore Channel Conveyance Capacity	3/1/2023	8/29/2024													
Future	3/1/2023	8/29/2024													
CI-013 Restore Channel Conveyance Capacity on A104-00-00	3/1/2023	2/28/2025													
Future	3/1/2023	2/28/2025													
CI-039 Partnership Project with Nassau Bay to Reduce the Risk of Flooding	2/19/2019 A	2/26/2019 A													
Construction	2/19/2019 A	2/26/2019 A													
CI-62 Construction of Stormwater Detention Basins Near FM 528 and Dixie Farm Road in Friendswood	12/1/2018 A	2/27/2026													
Feasibility Study	12/1/2018 A	10/31/2019 A													
ROW & Utility Relocation	4/22/2019	4/21/2020													
Design	1/1/2019	8/31/2021													
Future	3/1/2023	2/27/2026													
F-01 ROW Acquisition, Design, and Construction of Channel Conveyance Improvements on A135-00-00	5/11/2020 A	6/14/2024													
ROW & Utility Relocation	6/15/2020 A	11/3/2021													
Design	5/11/2020 A	10/9/2022													
Construction	9/8/2022	6/15/2023													
Turnover & Startup	6/16/2023	6/14/2024													
F-02 ROW Acquisition, Design and Construction of Hughes Stormwater Detention Basin on Clear Creek	5/16/2016 A	7/31/2024													
Preliminary Engineering	1/28/2020 A	11/9/2021													
ROW & Utility Relocation	5/16/2016 A	1/28/2021 A													
Design	11/10/2021	7/12/2022													
Construction	7/13/2022	8/1/2023													
Turnover & Startup	8/2/2023	7/31/2024													
F-76 Identification, Design and Construction of the A700-01 Environmental Mitigation Bank	12/4/2018 A	3/20/2027													
Feasibility Study	12/4/2018 A	4/19/2021 A													
Preliminary Engineering	7/1/2020 A	6/11/2025													
ROW & Utility Relocation	7/29/2019 A	5/4/2023													
Design	4/21/2022	9/2/2025													
Turnover & Startup	3/21/2026	3/20/2027													
Z-02 Partnership Projects with Municipalities, Authorities, and Other Districts in Harris County	7/1/2019 A	12/7/2022													

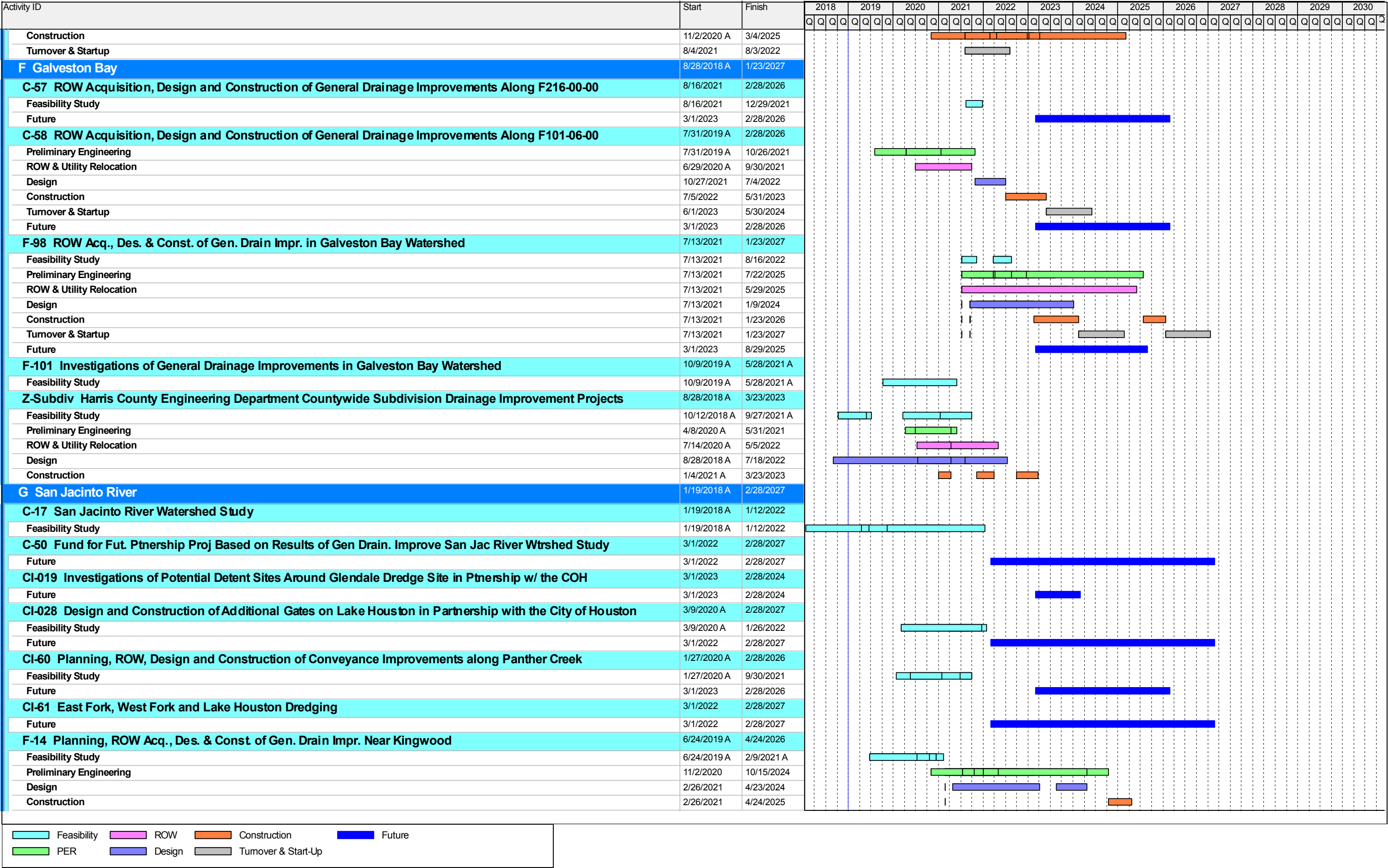


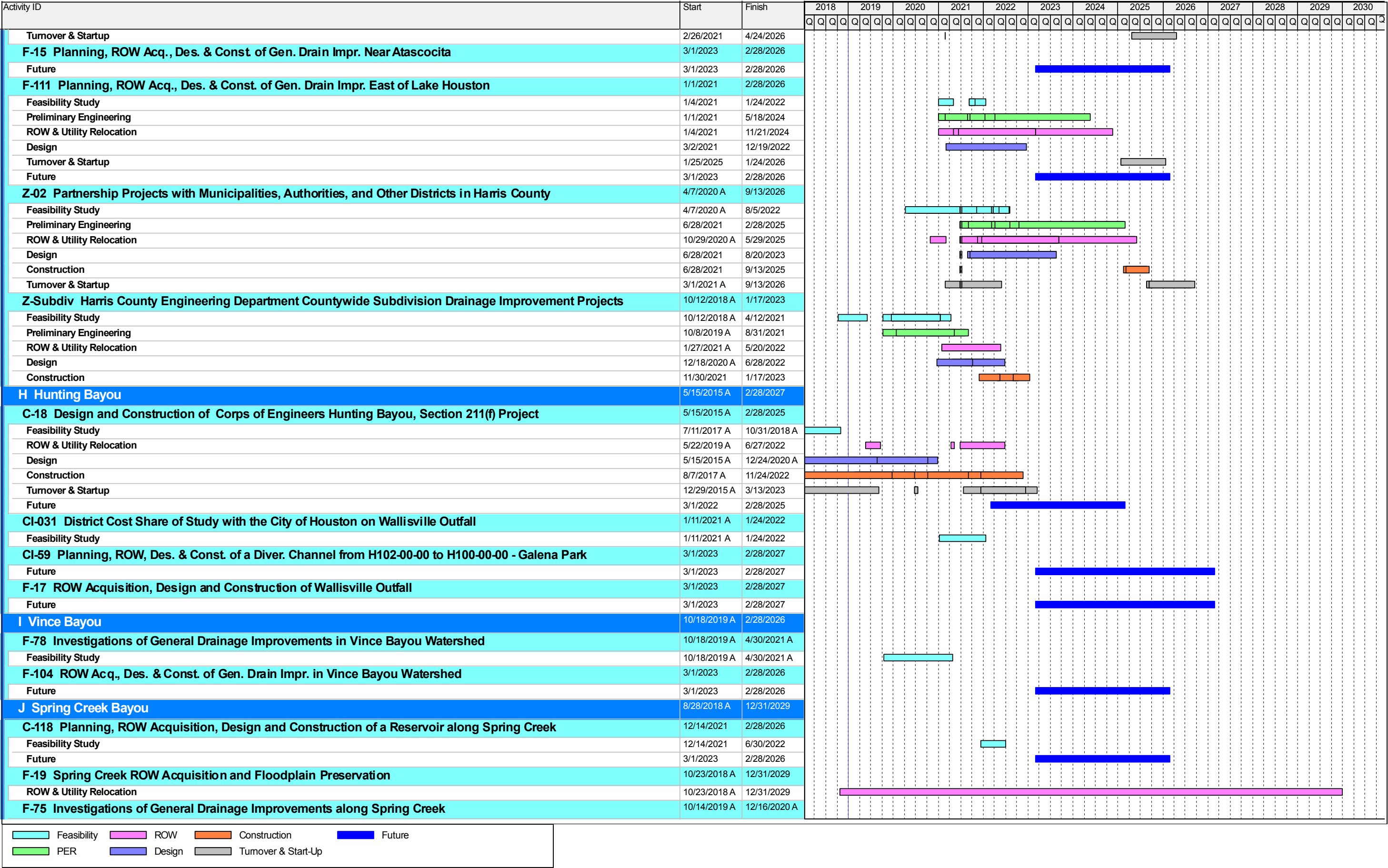


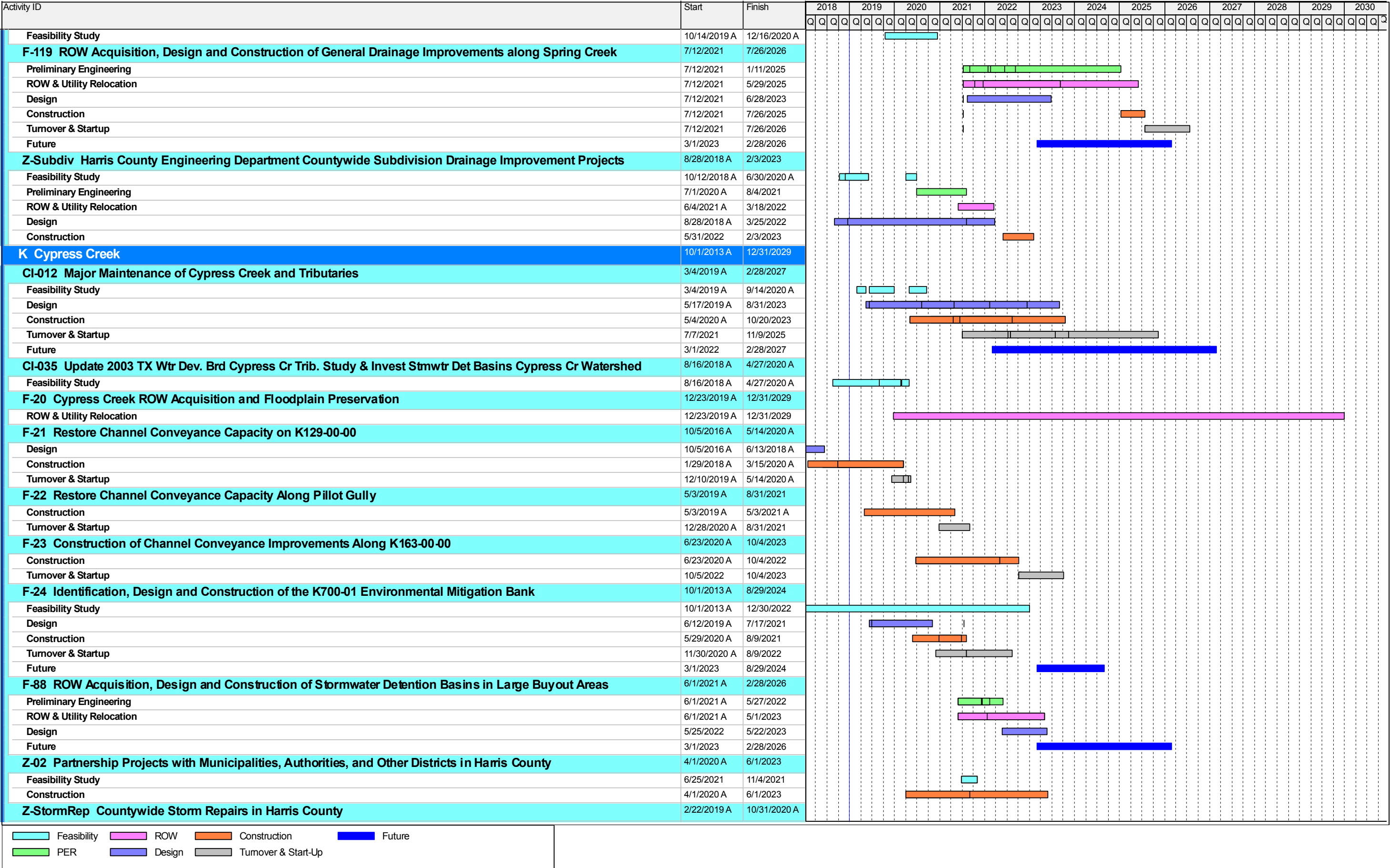


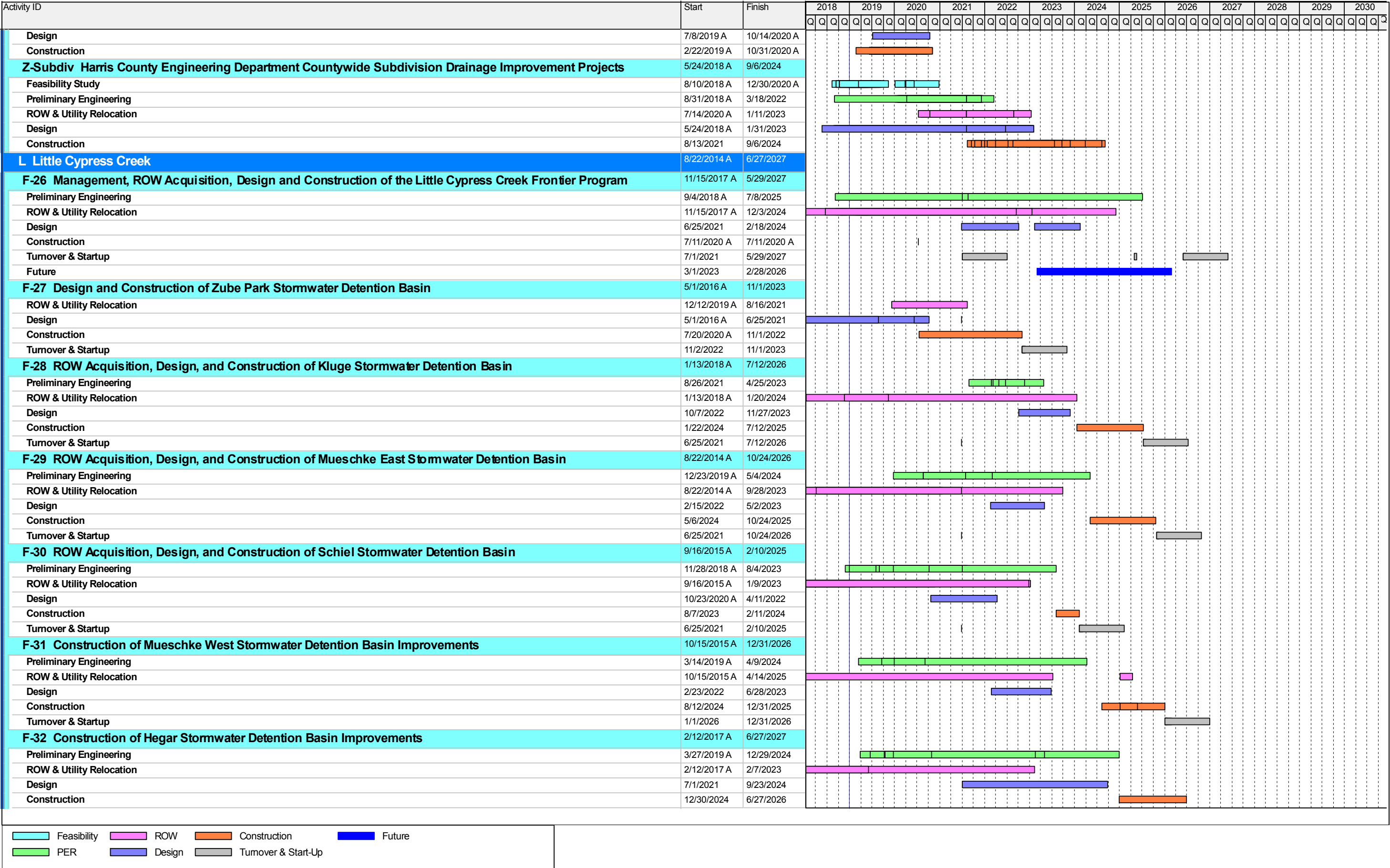


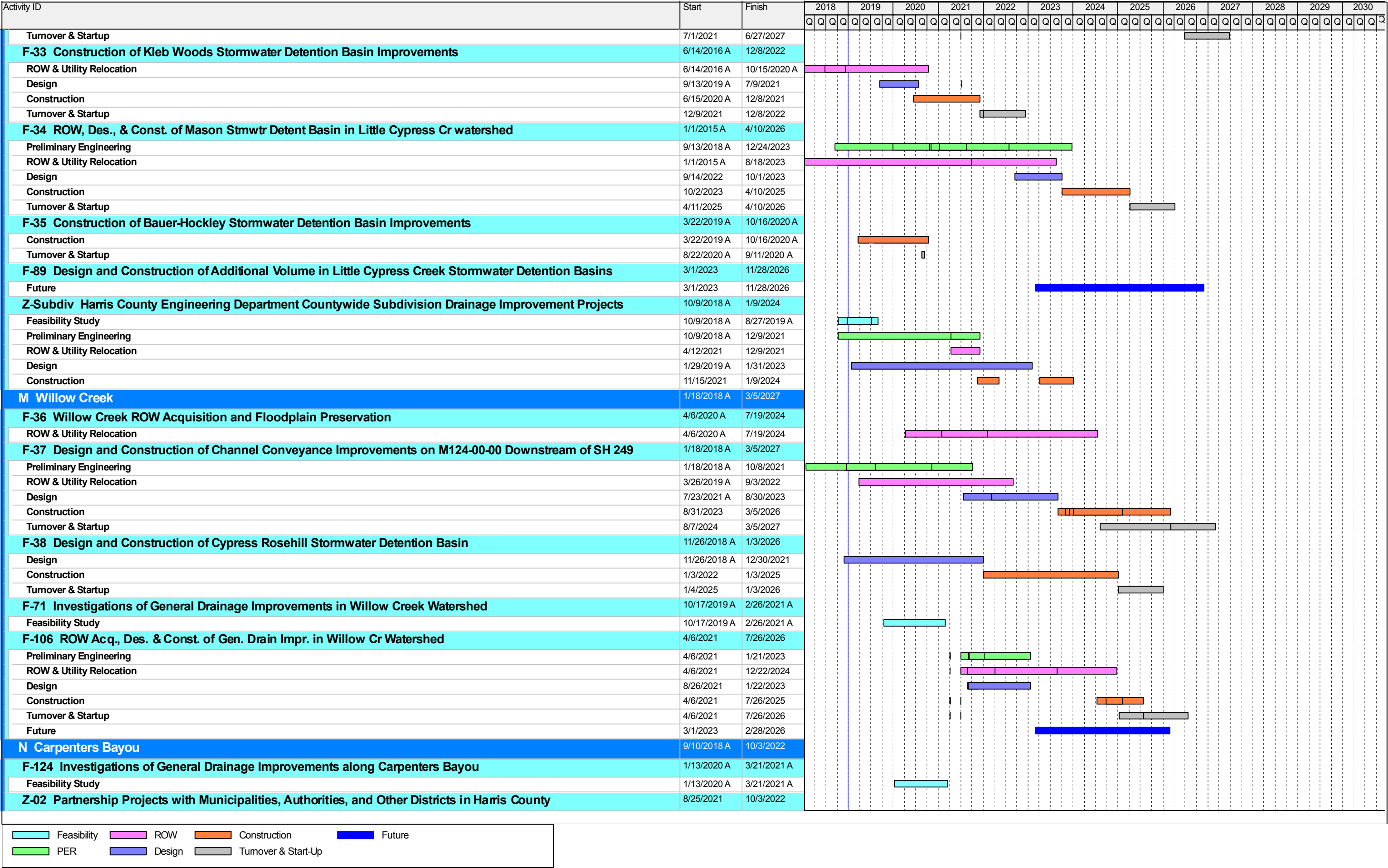


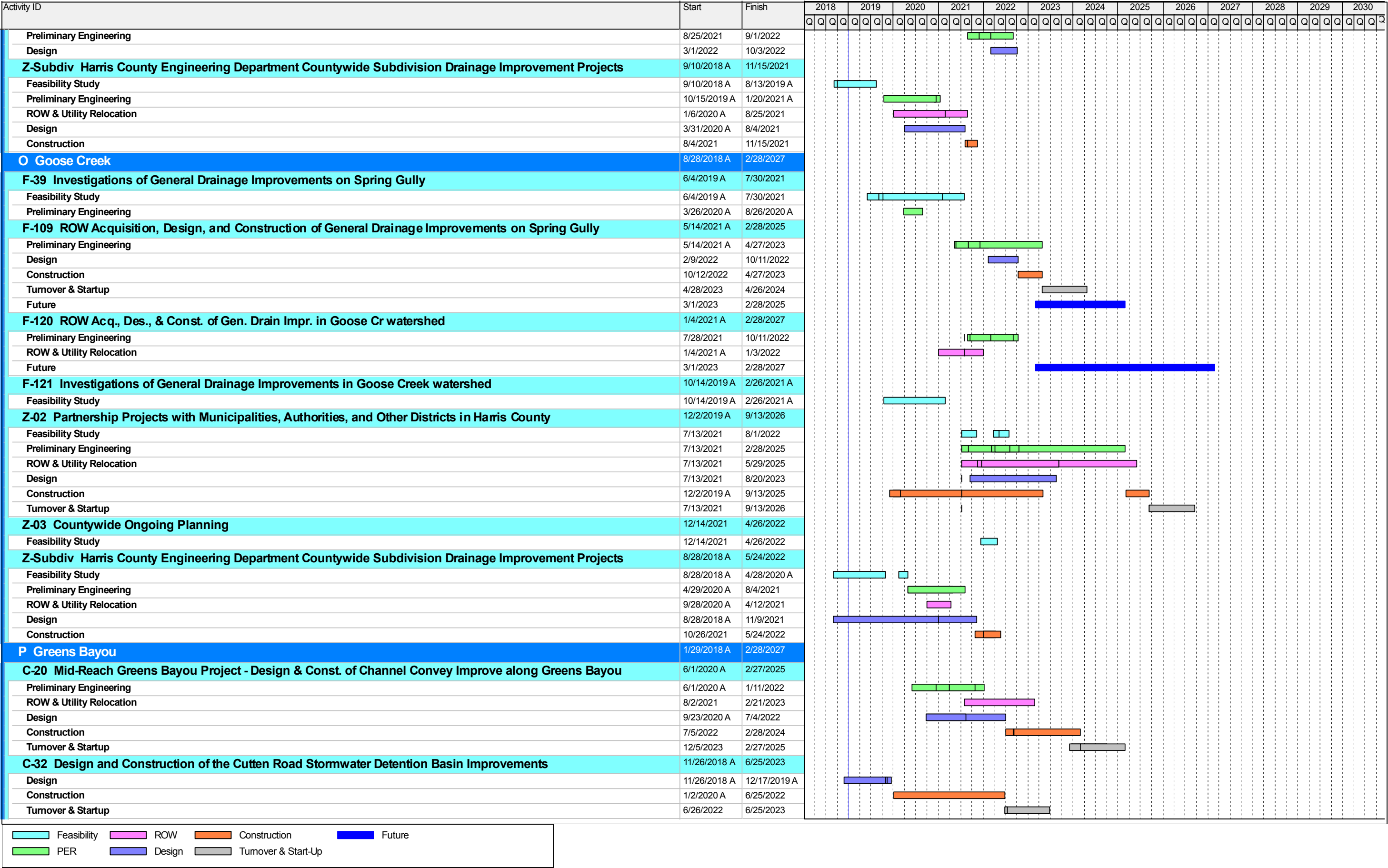


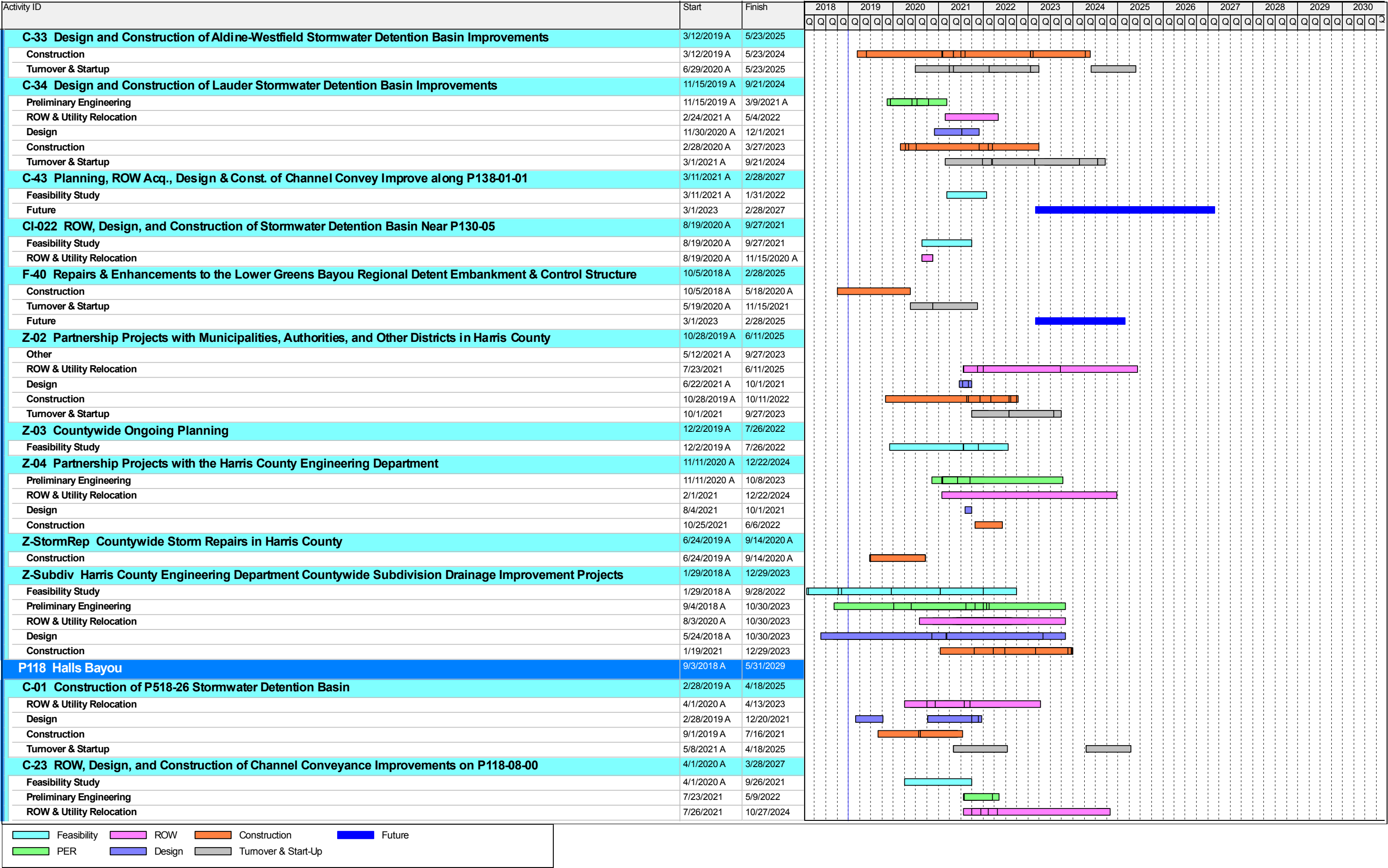


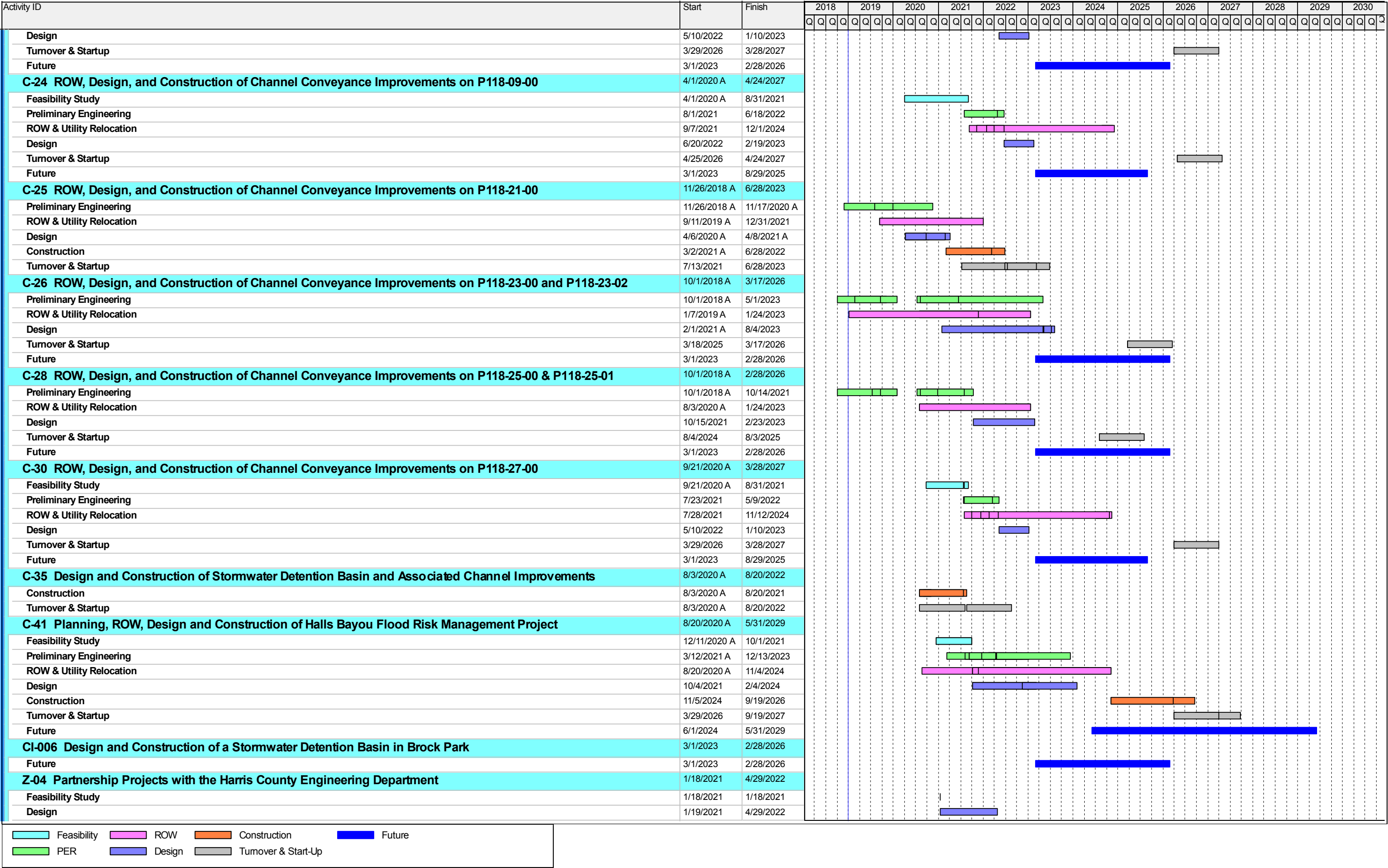












Activity ID	Start	Finish	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
			Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Construction	1/19/2021	4/29/2022													
Z-StormRep Countywide Storm Repairs in Harris County	6/25/2019 A	11/13/2020 A													
Construction	6/25/2019 A	9/21/2020 A													
Turnover & Startup	9/8/2020 A	11/13/2020 A													
Z-Subdiv Harris County Engineering Department Countywide Subdivision Drainage Improvement Projects	9/3/2018 A	4/28/2023													
Feasibility Study	9/3/2018 A	1/8/2020 A													
Preliminary Engineering	7/29/2020 A	11/2/2021													
ROW & Utility Relocation	1/15/2021 A	8/29/2022													
Design	1/7/2021 A	11/10/2022													
Construction	11/29/2021	4/28/2023													
Q Cedar Bayou	9/13/2018 A	12/31/2040													
F-41 ROW Acq., Des. & Const. of Channel Convey Impr. along Clawson Ditch & Q124-00-00	9/1/2020 A	2/28/2026													
Preliminary Engineering	9/1/2020 A	4/25/2022													
ROW & Utility Relocation	1/11/2021 A	7/19/2023													
Future	3/1/2023	2/28/2026													
F-42 ROW Acquisition, Design and Construction of Channel Conveyance Improvements along Magee Gully	3/1/2022	2/28/2027													
Future	3/1/2022	2/28/2027													
F-43 ROW Acquisition, Design and Construction of Channel Conveyance Improvements along Adlong Ditch	1/27/2021 A	8/29/2025													
Preliminary Engineering	1/27/2021 A	2/22/2022													
ROW & Utility Relocation	6/15/2021 A	2/25/2025													
Future	3/1/2023	8/29/2025													
F-44 ROW Acquisition, Design and Construction of Channel Conveyance Improvements along Q130-00-00	3/13/2019 A	2/28/2026													
Preliminary Engineering	3/13/2019 A	10/12/2021													
ROW & Utility Relocation	6/15/2021 A	8/9/2023													
Design	10/12/2021	8/27/2022													
Future	3/1/2023	2/28/2026													
F-45 Planning, ROW Acq., Des. & Const of Channel Convey Impr. on Q134-00-00 & Q134-00-01	3/13/2019 A	12/31/2040													
Preliminary Engineering	3/13/2019 A	11/3/2021													
ROW & Utility Relocation	10/31/2019 A	12/31/2040													
Design	1/4/2021 A	10/18/2022													
Construction	6/2/2021 A	5/15/2023													
Turnover & Startup	7/10/2022	5/14/2024													
Future	3/1/2023	2/28/2026													
F-46 ROW Acquisition, Design and Construction of the Q500-01 Stormwater Detention Basin	12/22/2021	11/27/2023													
Preliminary Engineering	2/2/2022	1/31/2023													
ROW & Utility Relocation	12/22/2021	11/27/2023													
F-47 ROW Acq., Des. & Const. of Stmwtr Detent Basins near Coastal Water Authority canals & IH 10	6/7/2019 A	1/20/2025													
Feasibility Study	6/7/2019 A	11/27/2019 A													
Preliminary Engineering	2/7/2022	2/3/2023													
ROW & Utility Relocation	2/6/2023	1/20/2025													
F-48 Design and Construction of Crosby Eastgate Environmental Mitigation Bank	5/12/2020 A	5/13/2025													
Preliminary Engineering	5/15/2020 A	9/15/2022													
ROW & Utility Relocation	5/13/2020 A	7/23/2022													
Design	5/12/2020 A	5/13/2025													
F-69 ROW Acq., Des. & Const. of chan Convey Impr. on Q136-00-00 Part of the Upstream Cedar Bayou Proj.	6/29/2020 A	6/30/2028													
Preliminary Engineering	4/1/2021 A	9/2/2022													
ROW & Utility Relocation	6/29/2020 A	6/30/2028													
F-70 Upstrm Cedar Bayou Proj. ROW Acq. Des. & Const. Chan Convey Impr. & Stmwtr Det Basin Upstrm 1960	10/13/2020 A	2/28/2027													
Preliminary Engineering	2/1/2022	1/31/2023													
ROW & Utility Relocation	10/13/2020 A	7/18/2024													

Feasibility

ROW

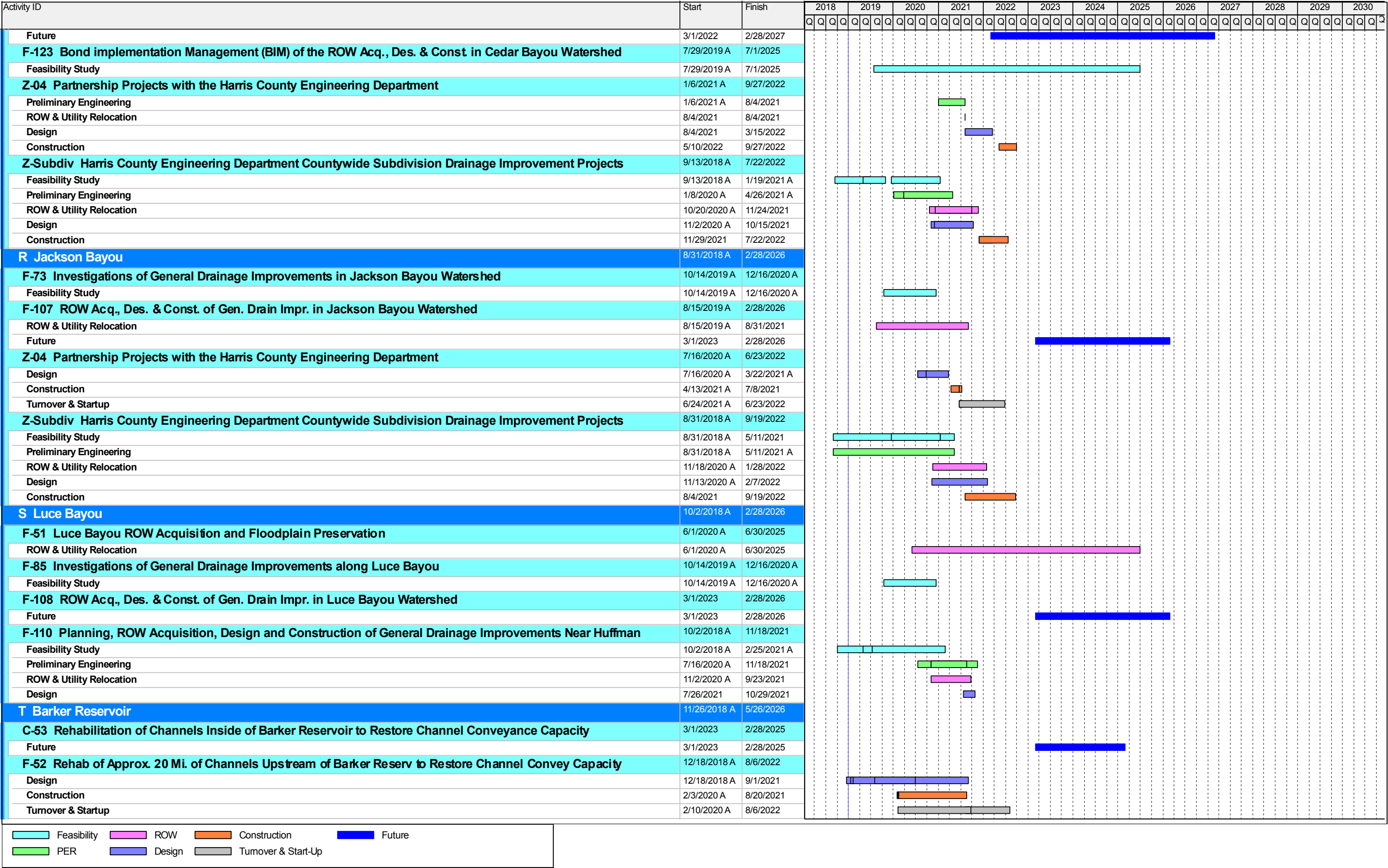
Construction

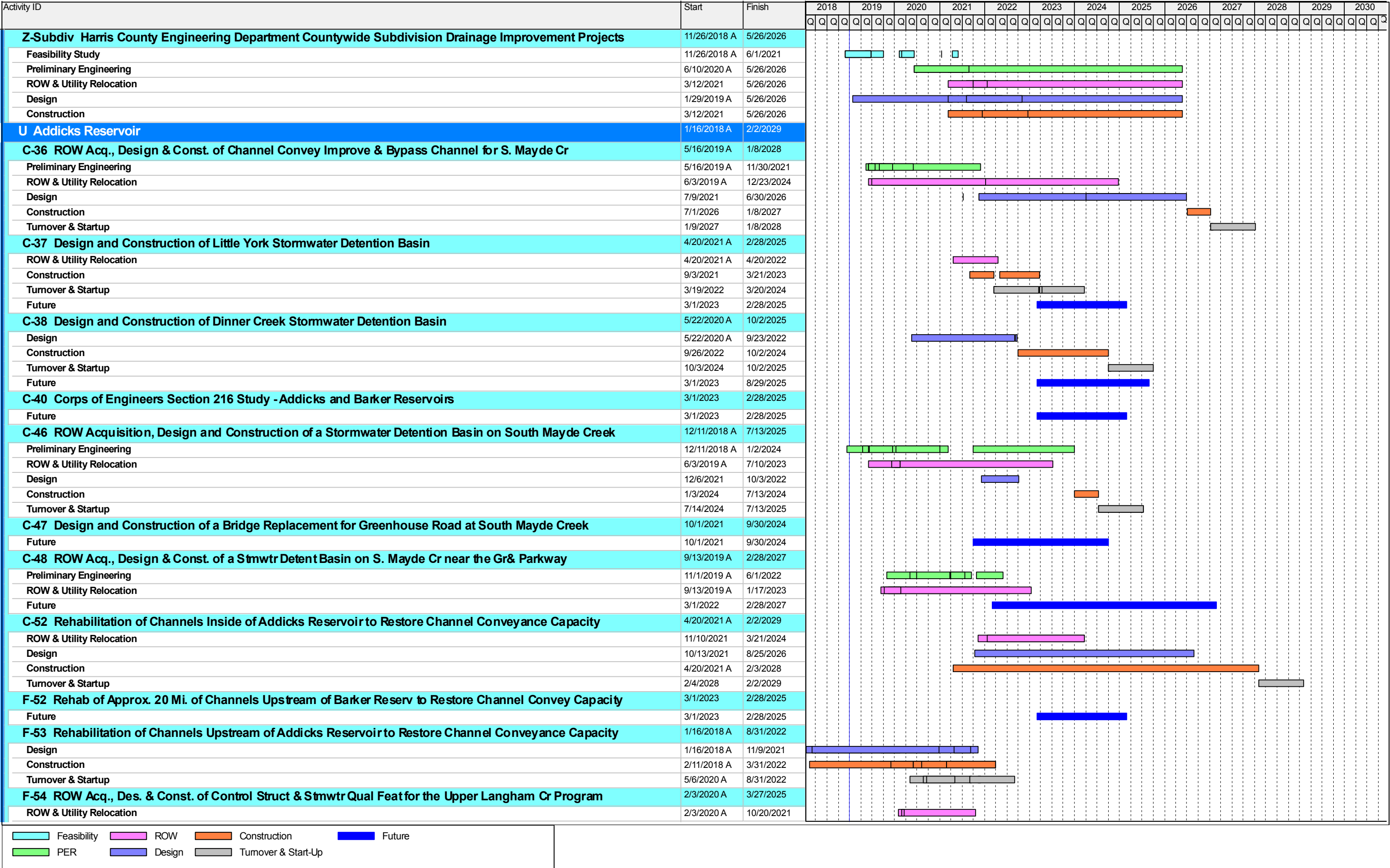
Future

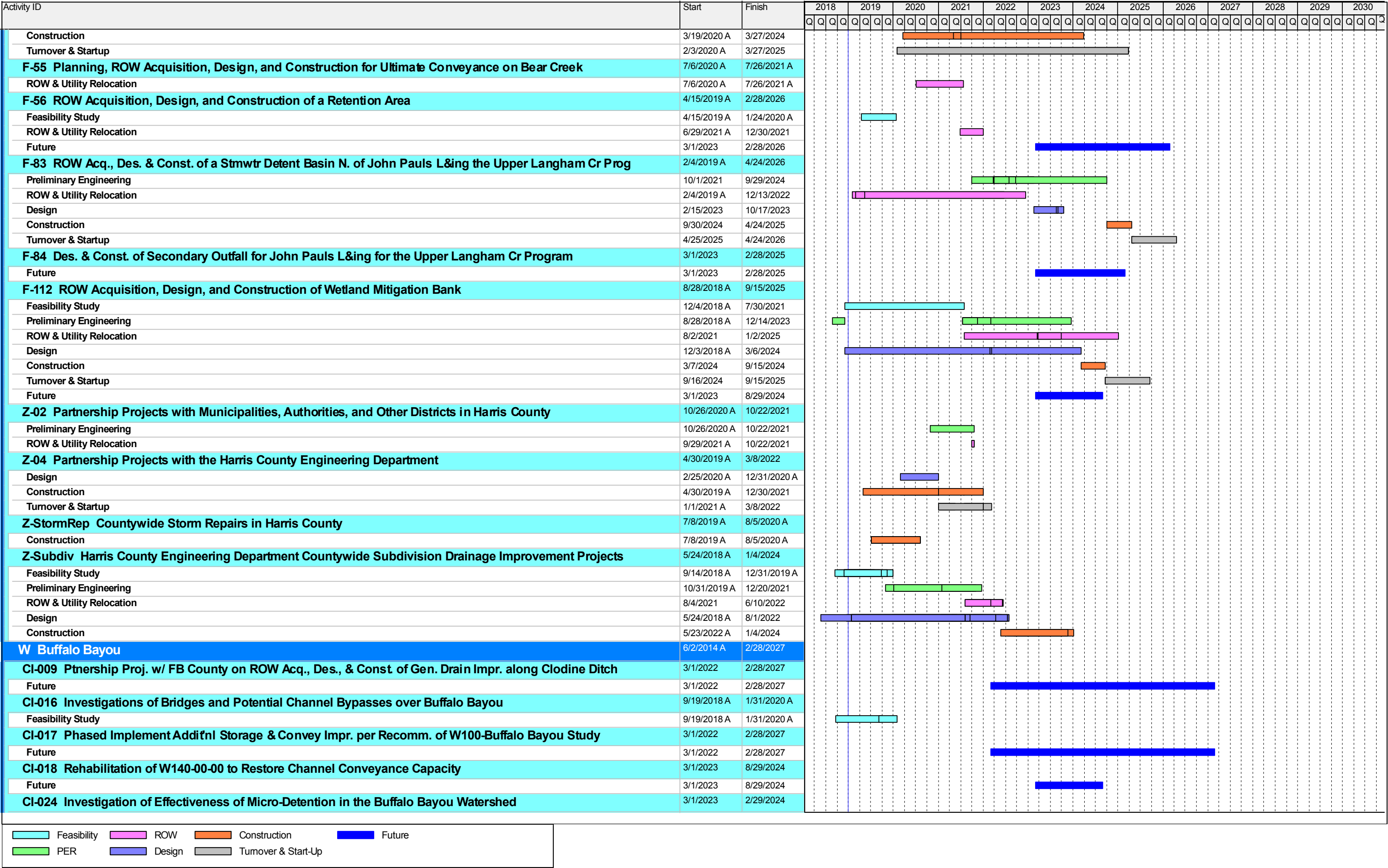
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Design

Turnover & Start-Up







Activity ID	Start	Finish	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
			Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Future	3/1/2023	2/29/2024													
F-58 Construction of Linear Detention on Buffalo Bayou	3/1/2023	2/28/2026													
Future	3/1/2023	2/28/2026													
F-59 Spring Branch Creek Stabilization	6/2/2014 A	12/10/2019 A													
Preliminary Engineering	6/2/2014 A	12/31/2018 A													
ROW & Utility Relocation	12/18/2015 A	2/15/2017 A													
Design	10/29/2014 A	11/21/2019 A													
Turnover & Startup	3/21/2015 A	12/10/2019 A													
F-79 Planning, ROW Acquisition, Design and Construction Along W157-00-00	3/1/2023	2/28/2026													
Future	3/1/2023	2/28/2026													
F-80 Planning, ROW Acquisition, Design and Construction Along Soldiers Creek	3/1/2023	2/28/2026													
Future	3/1/2023	2/28/2026													
F-81 Planning, ROW Acquisition, Design and Construction Along W151-00-00 and W153-00-00	9/17/2018 A	2/28/2026													
Feasibility Study	9/17/2018 A	8/31/2022													
Future	3/1/2023	2/28/2026													
F-82 Demolition of 1119 Commerce Street and Slope Stabilization Along Buffalo Bayou	1/3/2020 A	7/16/2022													
ROW & Utility Relocation	1/3/2020 A	7/17/2021													
Turnover & Startup	3/11/2021 A	7/16/2022													
Z-02 Partnership Projects with Municipalities, Authorities, and Other Districts in Harris County	11/8/2019 A	11/9/2021													
Feasibility Study	11/8/2019 A	11/9/2021													
Z-05 Advanced Emerging Technologies for Flood Damage Reduction	11/1/2019 A	5/2/2022													
Feasibility Study	11/1/2019 A	5/2/2022													
Z-StormRep Countywide Storm Repairs in Harris County	4/26/2019 A	11/5/2020 A													
Construction	4/26/2019 A	11/5/2020 A													
Z County-Wide Projects	2/17/2015 A	12/31/2029													
C-40 Corps of Engineers Section 216 Study -Addicks and Barker Reservoirs	10/10/2018 A	12/22/2023													
Feasibility Study	10/10/2018 A	12/22/2023													
CI-026 Investigation of City of Houston Properties for Conversion to Stormwater Detention Basins	3/1/2023	2/28/2024													
Future	3/1/2023	2/28/2024													
F-14 Planning, ROW Acq., Des. & Const. of Gen. Drain Impr. Near Kingwood	3/1/2023	2/28/2026													
Future	3/1/2023	2/28/2026													
F-52 Rehab of Approx. 20 Mi. of Channels Upstream of Barker Reserv to Restore Channel Convey Capacity	11/11/2021	5/11/2024													
Construction	11/11/2021	5/12/2023													
Turnover & Startup	5/13/2023	5/11/2024													
F-53 Rehabilitation of Channels Upstream of Addicks Reservoir to Restore Channel Conveyance Capacity	11/29/2021	8/6/2023													
Construction	11/29/2021	8/6/2022													
Turnover & Startup	8/7/2022	8/6/2023													
Z-01 Countywide Floodplain Preservation and Right of Way Acquisition	10/30/2017 A	12/31/2024													
ROW & Utility Relocation	10/30/2017 A	12/31/2024													
Z-02 Partnership Projects with Municipalities, Authorities, and Other Districts in Harris County	3/1/2022	2/28/2027													
Future	3/1/2022	2/28/2027													
Z-03 Countywide Ongoing Planning	9/23/2019 A	2/28/2026													
Feasibility Study	9/23/2019 A	3/9/2023													
Preliminary Engineering	5/4/2021	10/12/2021													
Future	3/1/2023	2/28/2026													
Z-04 Partnership Projects with the Harris County Engineering Department	3/1/2022	2/28/2027													
Future	3/1/2022	2/28/2027													
Z-05 Advanced Emerging Technologies for Flood Damage Reduction	6/6/2016 A	2/28/2026													

Feasibility

ROW

Construction

Future

PER

Design

Turnover & Start-Up

Activity ID	Start	Finish	2018	2019			2020			2021			2022			2023			2024			2025			2026			2027			2028			2029			2030		
			Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q				
Feasibility Study	6/6/2016 A	12/29/2023																																					
Turnover & Startup	4/1/2021 A	3/31/2023																																					
Future	3/1/2023	2/28/2026																																					
Z-06 Bond Administration	8/28/2018 A	2/23/2029																																					
Turnover & Startup	8/28/2018 A	2/23/2029																																					
Z-08 Preliminary Engineering for Large Diameter Tunnels for Stormwater Conveyance	2/27/2019 A	2/28/2025																																					
Feasibility Study	2/27/2019 A	6/11/2021 A																																					
Design	7/11/2019 A	10/5/2019 A																																					
Future	3/1/2023	2/28/2025																																					
Z-09 Upgrades and Expansion of the Harris County Flood Warning System	2/17/2015 A	2/28/2025																																					
Preliminary Engineering	2/17/2015 A	12/3/2021																																					
Design	7/8/2020 A	9/30/2022																																					
Future	3/1/2023	2/28/2025																																					
Z-10 Maapnext - Harris County Floodplain Mapping Updates	8/26/2018 A	12/12/2023																																					
Feasibility Study	8/26/2018 A	12/12/2023																																					
Z-11 Countywide Communications Relating to 2018 Bond and CIP Projects	8/1/2019 A	12/31/2029																																					
Design	8/1/2019 A	12/31/2029																																					
Z-Buyout Federal Grant-Funded Volunteer Home Buyouts	5/16/2018 A	10/4/2028																																					
ROW & Utility Relocation	5/16/2018 A	5/27/2022																																					
Future	3/1/2022	10/4/2028																																					
Z-StormRep Countywide Storm Repairs in Harris County	4/5/2019 A	10/20/2021																																					
Construction	4/5/2019 A	1/18/2021 A																																					
Turnover & Startup	7/1/2020 A	10/20/2021																																					
Z-Subdiv Harris County Engineering Department Countywide Subdivision Drainage Improvement Projects	1/7/2021 A	1/3/2022																																					
Feasibility Study	1/7/2021 A	1/3/2022																																					

Feasibility

PER

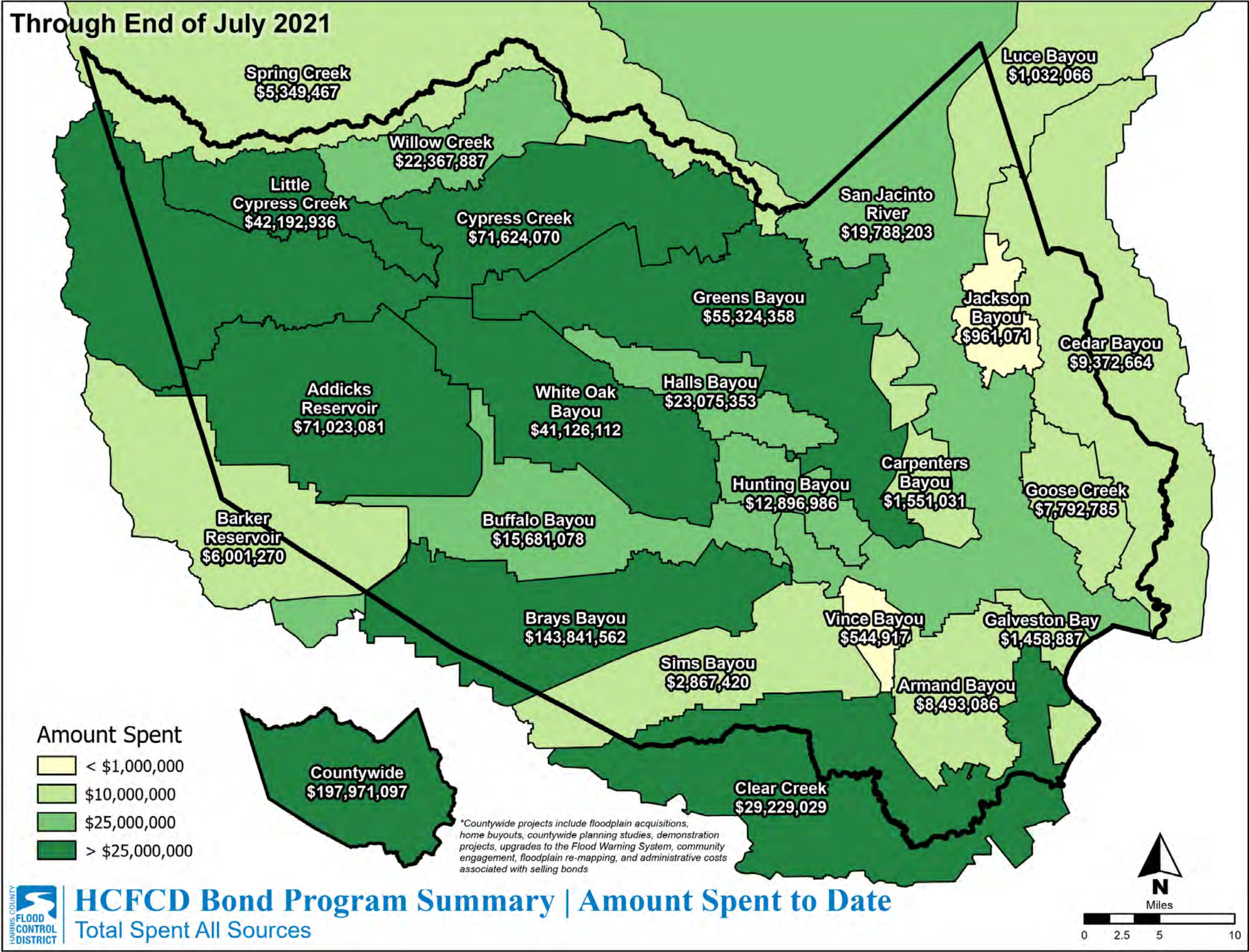
ROW

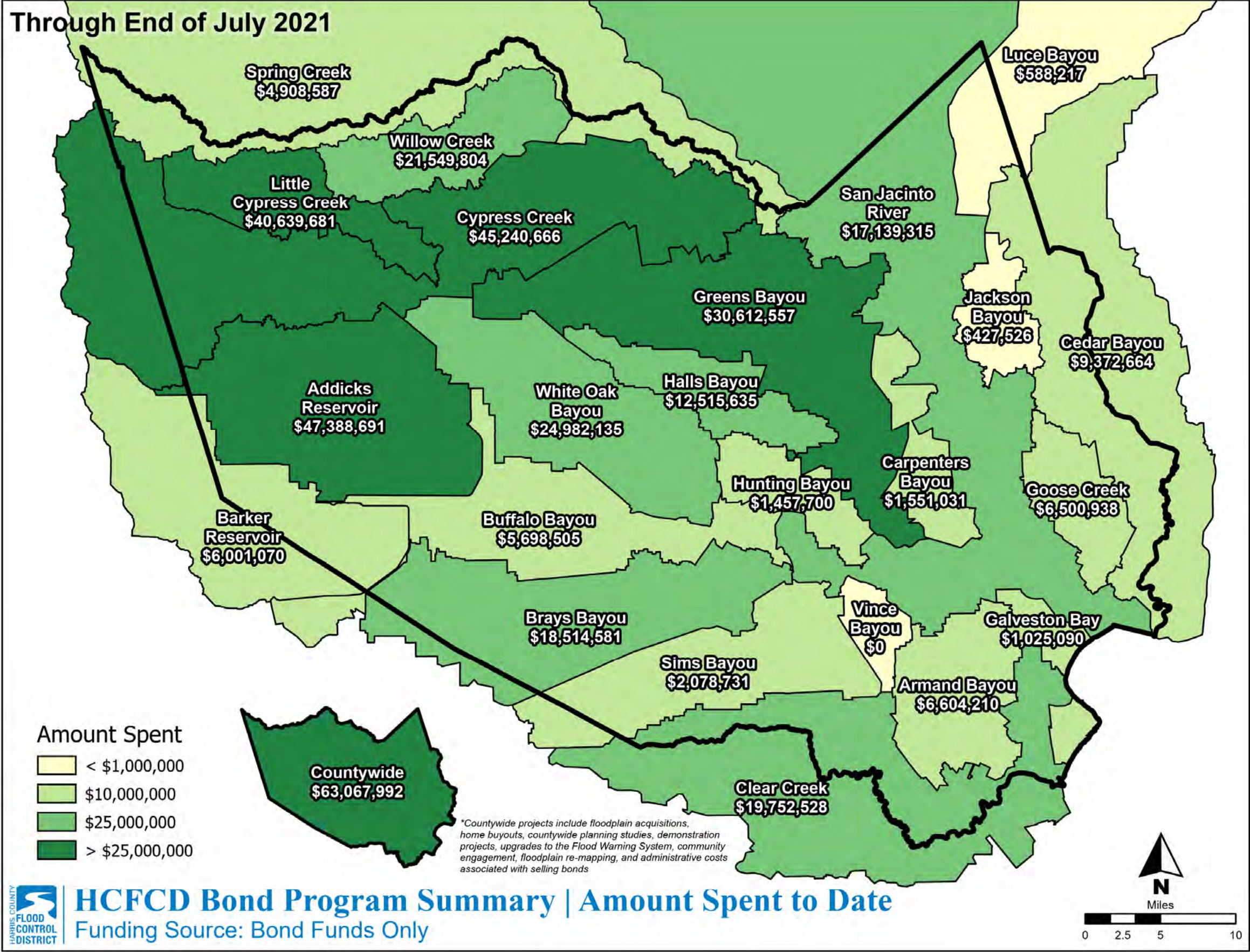
Design

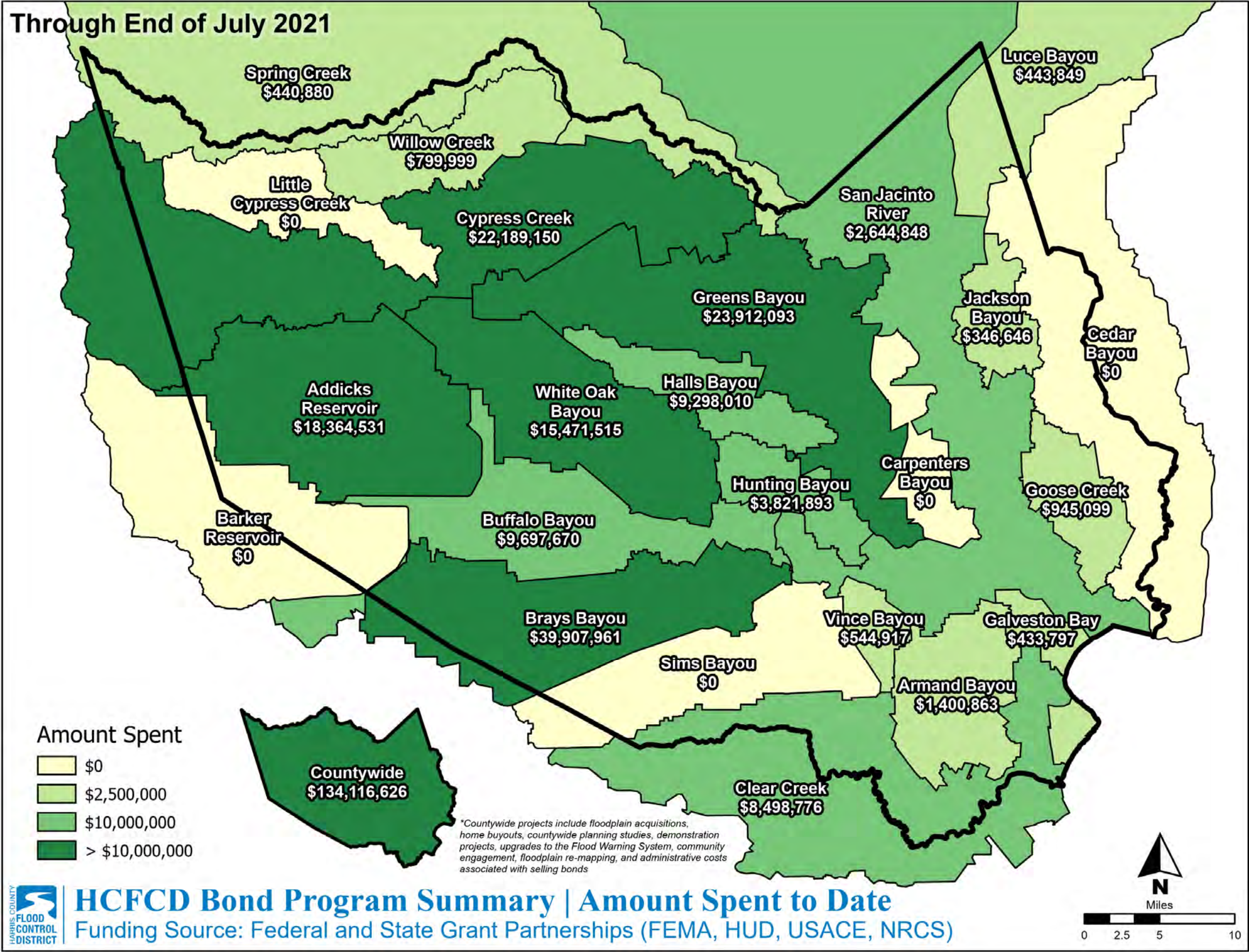
Construction

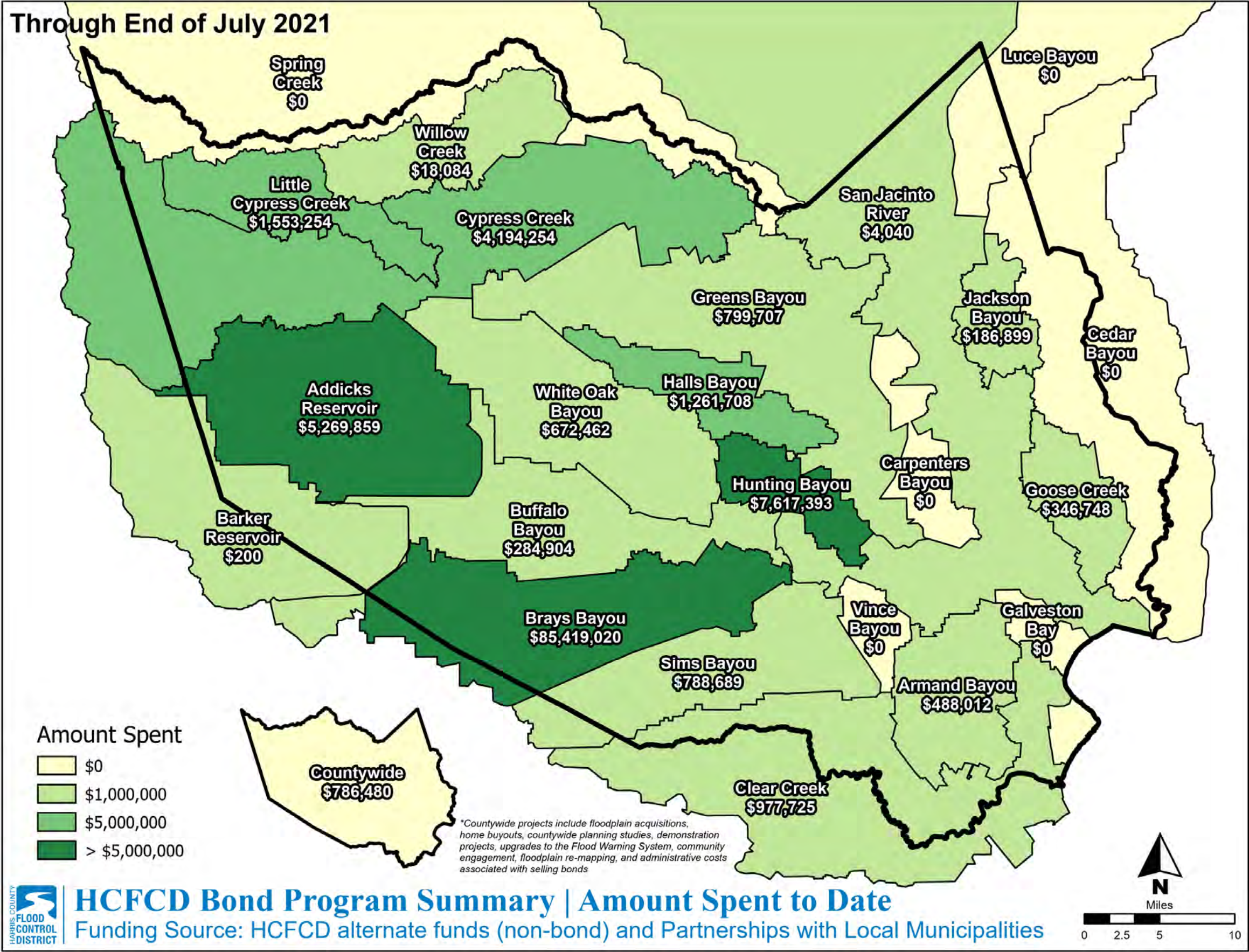
Turnover & Start-Up

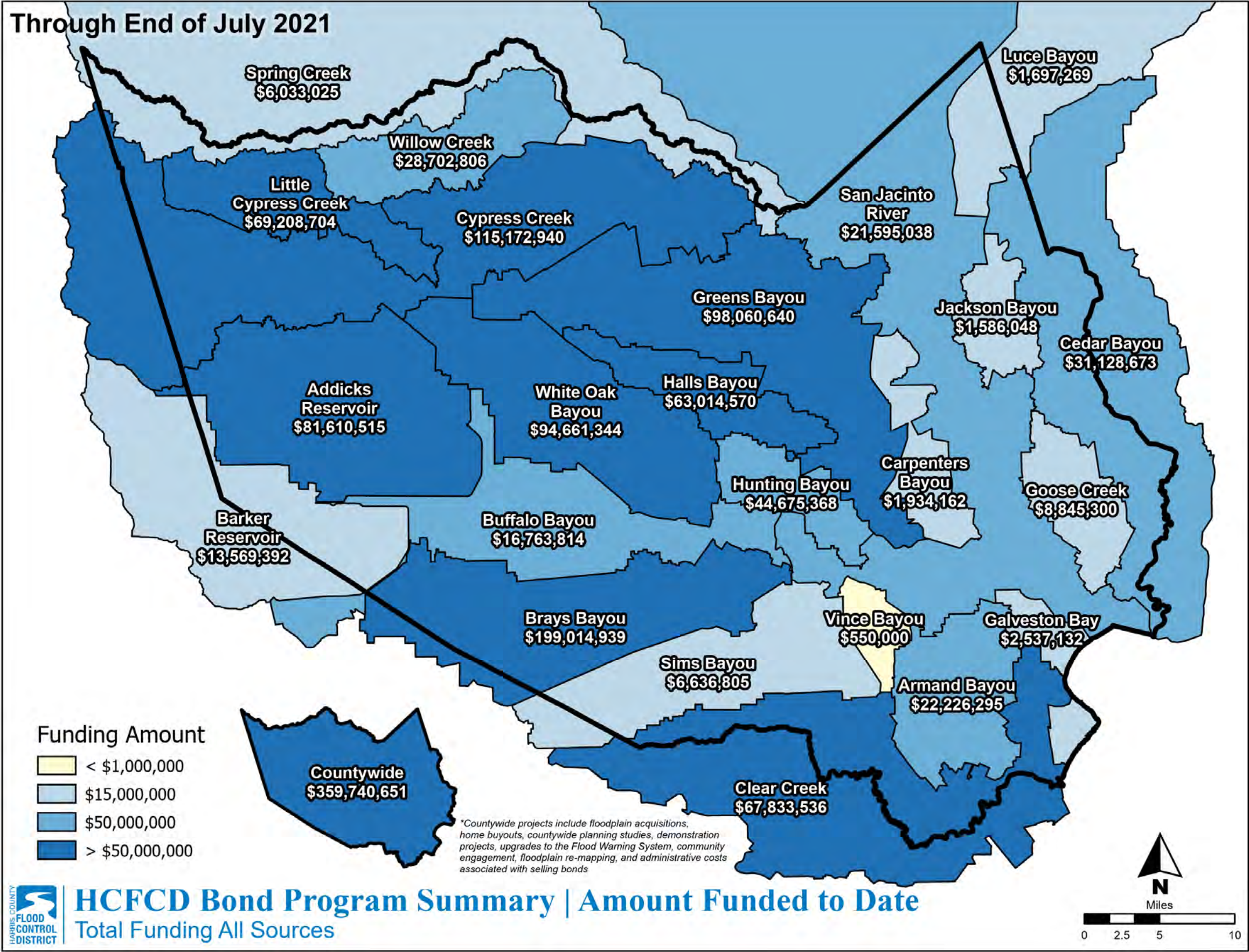
Future

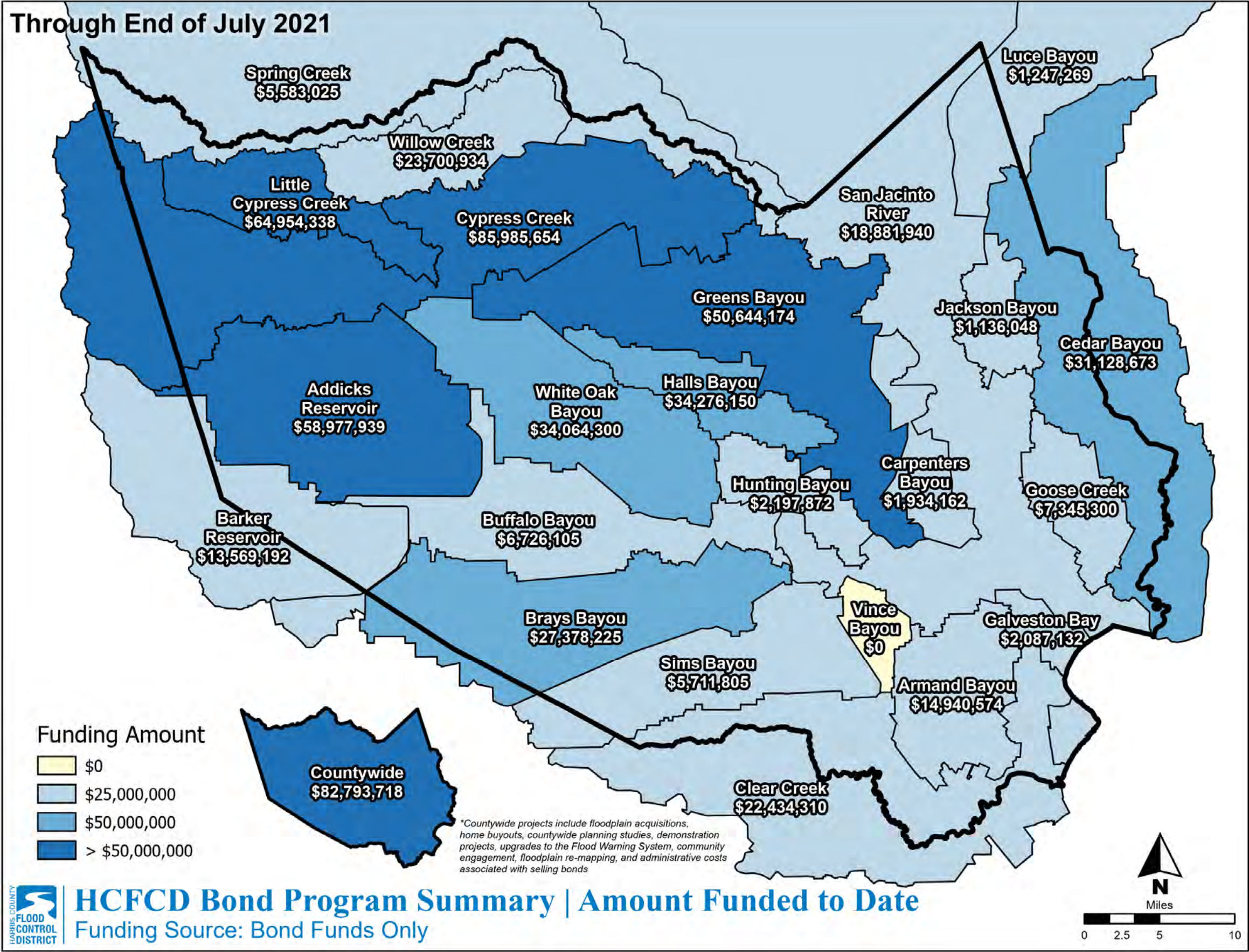


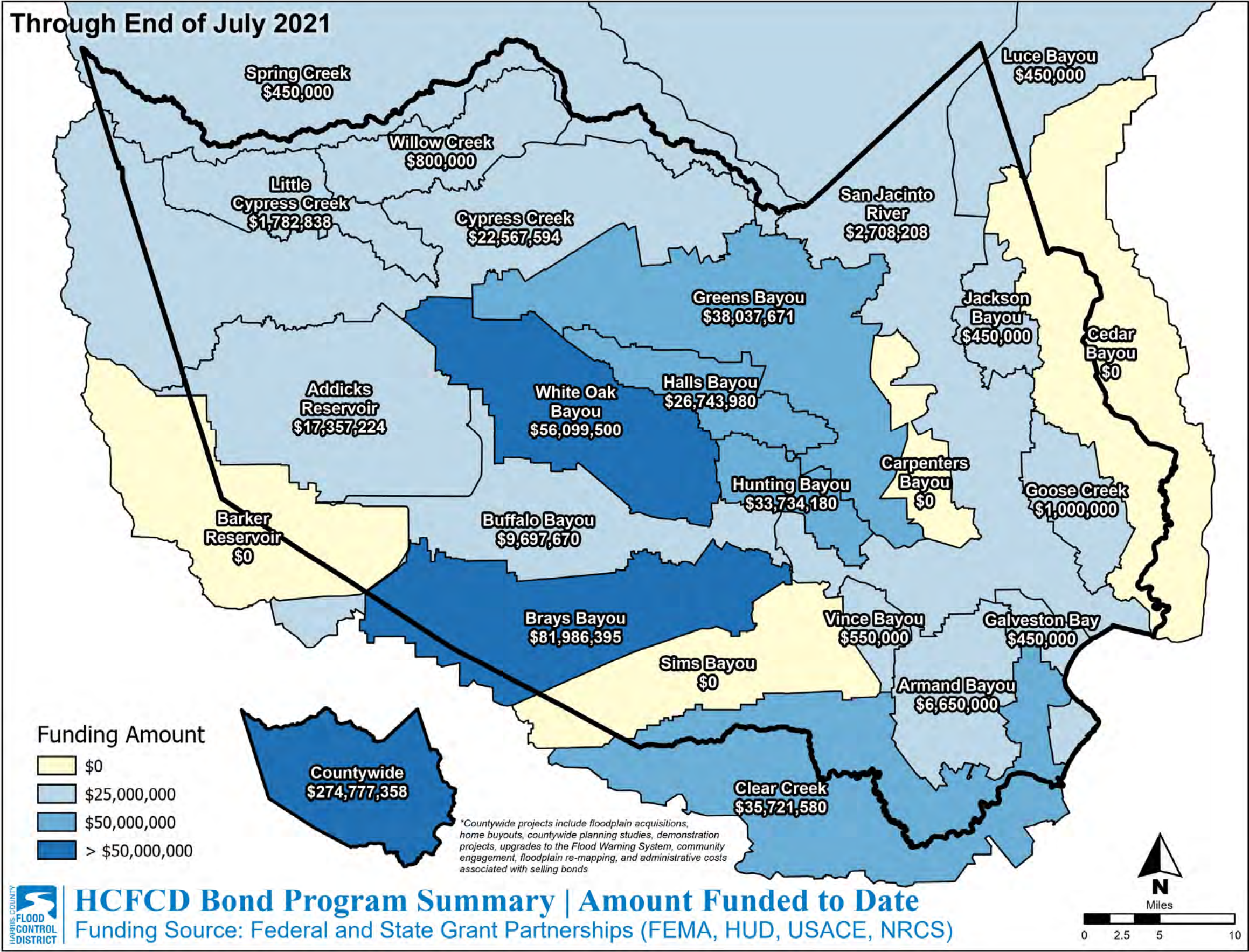


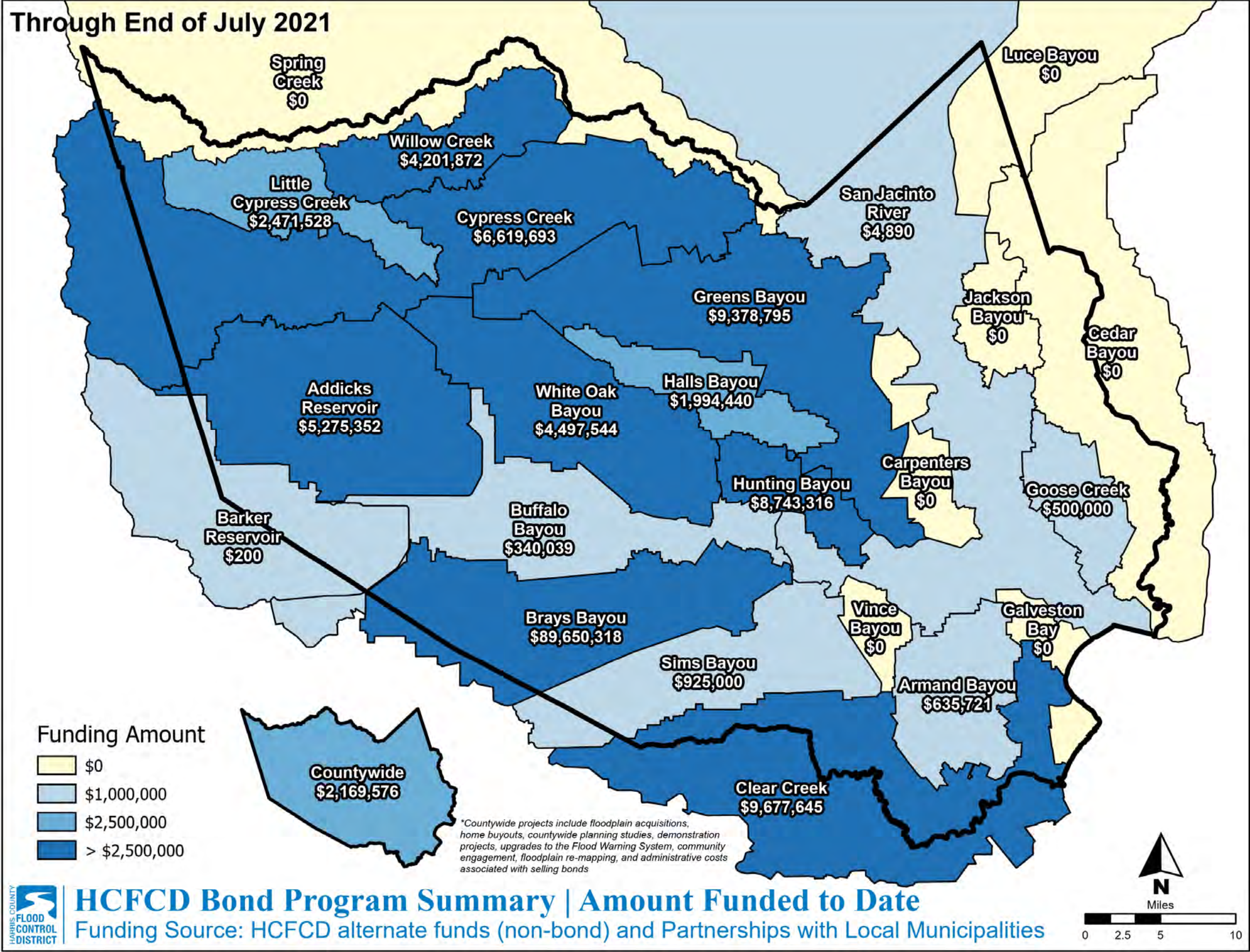














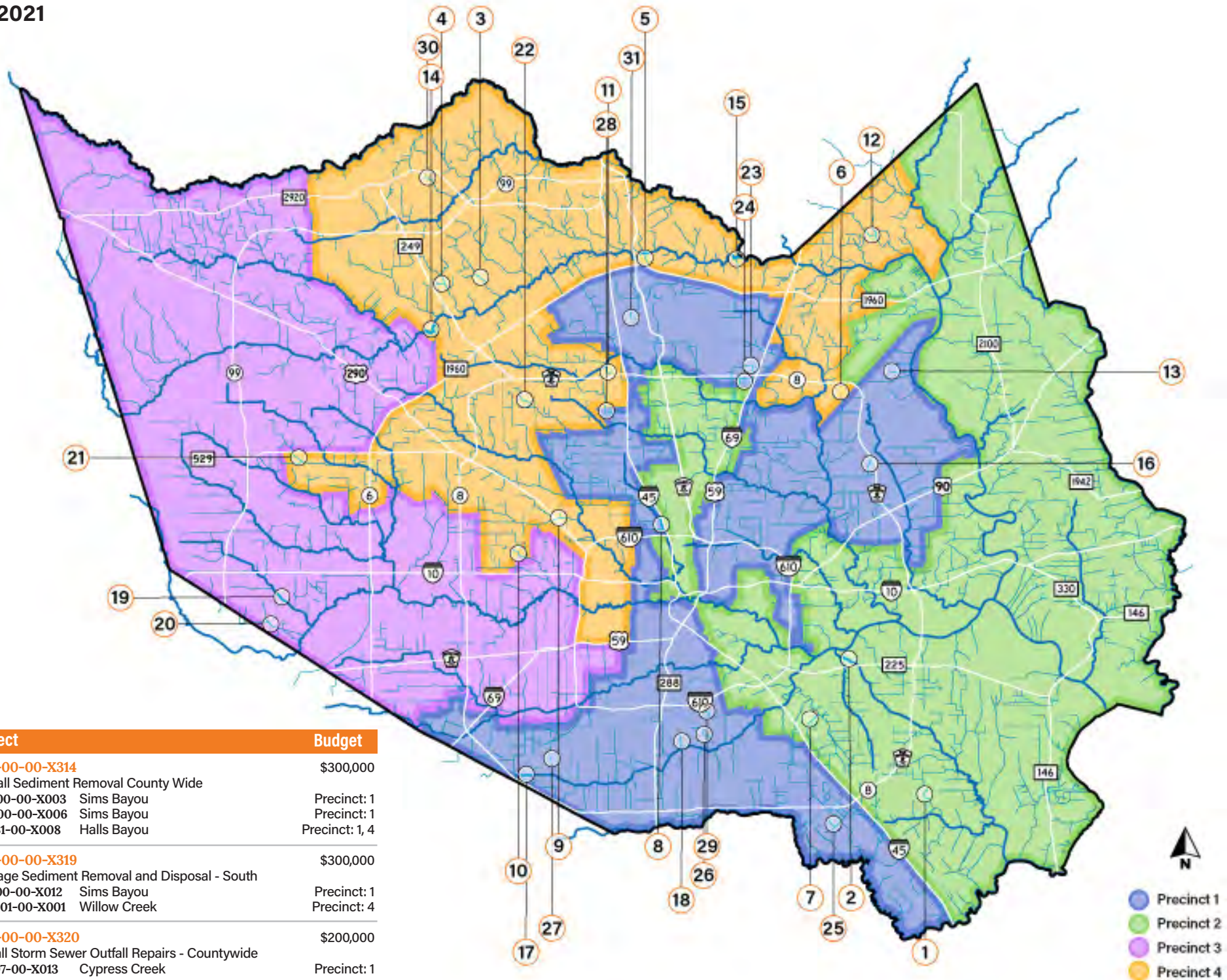
Maintenance Projects

Total Budget: \$207,656,643

Active Construction Projects - August 2021

Project	Budget
1 B504-01-00-X003 Armand Bayou Basin modifications to reduce standing water	\$949,577 Precinct: 2
2 I101-00-00-X018 Vince Bayou Erosion Repairs from Richey St. to Shaver St.	\$1,770,850 Precinct: 2
3 K100-00-00-X084 Cypress Creek Major Maintenance of Cypress Creek Tributaries	\$13,430,031 Precinct: 4
4 K100-00-00-X085 Cypress Creek Major Maintenance of Cypress Creek Tributaries	\$3,158,160 Precinct: 4
5 K117-00-00-X003 Cypress Creek Reinforced Concrete Spillway and Stilling Basin	\$1,770,850 Precinct: 4
6 P700-01-00-X018 Greens Bayou Wetland Mitigation Bank access road repairs	\$1,350,283 Precinct: 4
Z100-00-00-X261 Addicks Watershed De-Silt Project	\$2,703,890
7 C106-03-00-X016 Sims Bayou	Precinct: 2
8 E115-00-00-X048 White Oak Bayou	Precinct: 4
9 W140-00-00-X012 Buffalo Bayou	Precinct: 3, 4
10 E115-00-00-X048 White Oak Bayou	Precinct: 1
Z100-00-00-X278 Sediment Removal from Concrete Lined	\$714,550
11 P137-00-00-X006 Halls Bayou	Precinct: 4
Z100-00-00-X280 General Drainage System Repairs - North	\$158,729,715
12 K500-05-00-X007 Cypress Creek	Precinct: 4
13 P121-01-00-X009 Halls Bayou	Precinct: 1
14 G103-33-00-X006 San Jacinto River	Precinct: 4
15 G103-53-00-X002 San Jacinto River	Precinct: 4
16 K500-10-00-X002 Cypress Creek	Precinct: 4
Z100-00-00-X281 General Drainage System Repairs - South	\$16,569,166
17 C100-00-00-X060 Sims Bayou	Precinct: 3
18 C128-00-00-X002 Sims Bayou	Precinct: 3
Z100-00-00-X309 Barker Reservoir	\$5,089,571 Precinct: 3
19 T101-00-00-X008 Barker Reservoir	Precinct: 3
20 T103-00-00-X002 Barker Reservoir	Precinct: 3
21 U120-01-00-X024 Barker Reservoir	Precinct: 3
Z100-00-00-X312 Drainage Sediment Removal & Disposal - North	\$300,000
22 P133-02-00-X003 Greens Bayou	Precinct: 1
23 P133-03-00-X004 White Oak Bayou	Precinct: 1
24 E121-00-00-X023 White Oak Bayou	Precinct: 4
Z100-00-00-X313 Drainage Sediment Removal and Disposal - South	\$320,000
25 A120-04-00-X009 Clear Creek	Precinct: 1

Project	Budget
Z100-00-00-X314 On-Call Sediment Removal County Wide	\$300,000
26 C122-00-00-X003 Sims Bayou	Precinct: 1
27 C156-00-00-X006 Sims Bayou	Precinct: 1
28 P118-31-00-X008 Halls Bayou	Precinct: 1, 4
Z100-00-00-X319 Drainage Sediment Removal and Disposal - South	\$300,000
29 C118-00-00-X012 Sims Bayou	Precinct: 1
30 M516-01-00-X001 Willow Creek	Precinct: 4
Z100-00-00-X320 On-call Storm Sewer Outfall Repairs - Countywide	\$200,000
31 K111-07-00-X013 Cypress Creek	Precinct: 1



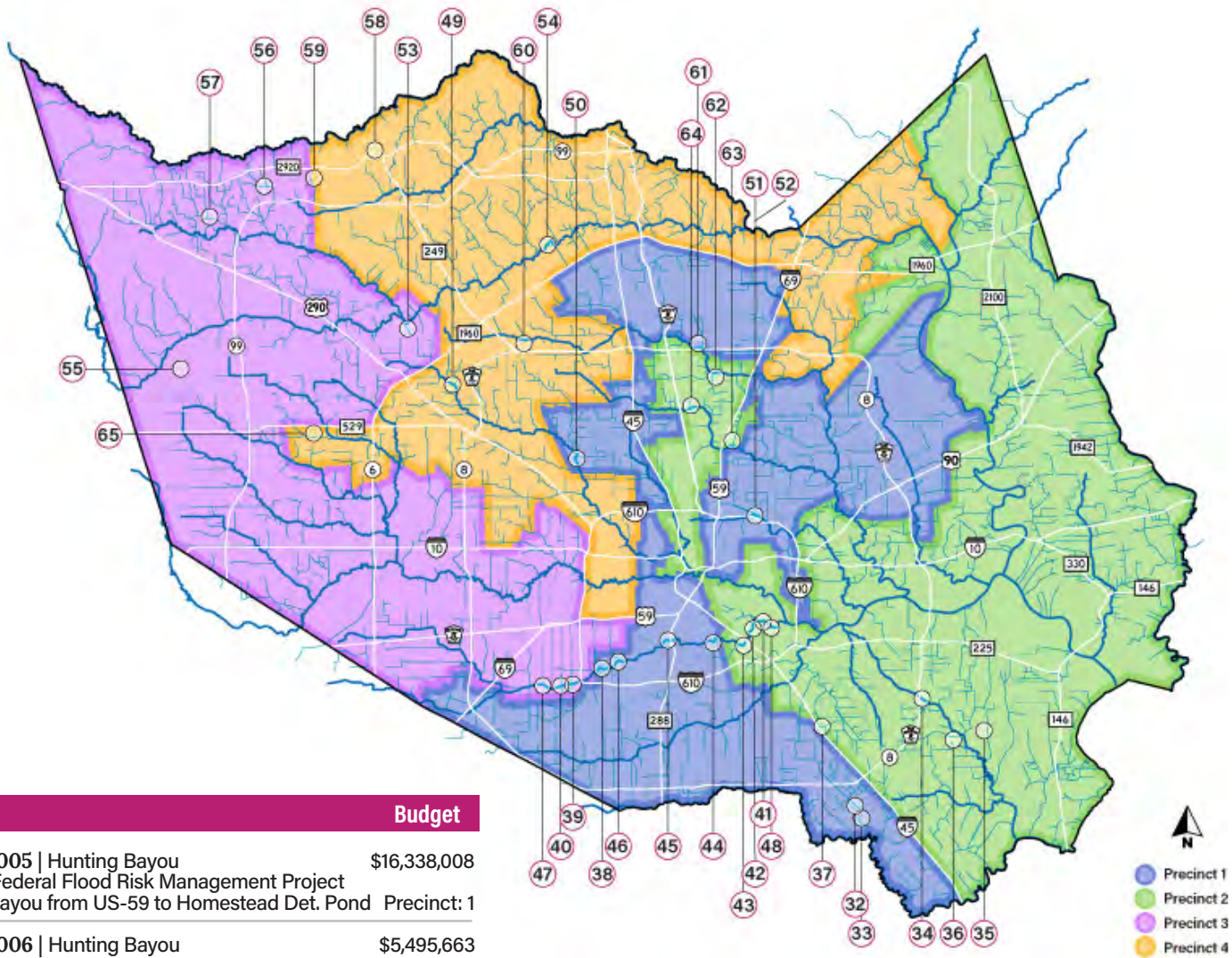


Capital Projects

Total Budget: \$229,571,885
Active Construction Projects - August 2021

Project	Budget
32 A120-00-00-C003 Clear Creek Mud Gully Channel Conveyance Improvements From Basin A520-03-00 to Sagerock Dr.	\$5,755,382 Precinct: 1
33 A520-00-00-E003 Clear Creek Phase 3 Construction of South Belt Stormwater Detention Basin	\$16,988,090 Precinct: 1
34 B100-00-00-E002 Armand Bayou Channel Widening & Deepening Sam Houston Tollway to Spencer Highway	\$4,985,763 Precinct: 2
35 B509-03-00-E002 Armand Bayou Widening and Deepening of Armand Bayou at Beltway 8 East to Spencer Hwy	\$2,111,794 Precinct: 2
36 B513-02-00-E002 Armand Bayou E&R Agreement: Baywood Stormwater Detention Basin Confluence of Units B100-00-00 and B113-00-00	\$5,000 Precinct: 2
37 C106-03-00-C007 Sims Bayou Phase 4 Channel Conveyance Improvement East of I-45 at Shawnee to S. of Edgebrook	\$6,482,958 Precinct: 2
D100-00-00-B030 Brays Bayou Federal Flood Control Project Multi-Site Project	\$20,093,841 Precinct: 1, 3
38 D100-00-00-B027 Brays Bayou Stella Link Bridge	Precinct: 1
39 D100-00-00-B030 Brays Bayou South Rice Blvd. Bridge	Precinct: 3
40 D100-00-00-B031 Brays Bayou Chimney Rock Bridge	Precinct: 3
D100-00-00-B047 Brays Bayou Federal Flood Control Project Multi-Site Project	\$49,164,004 Precinct: 1, 2, 3
41 D100-00-00-B006 Brays Bayou S. 75th Bridge	Precinct: 2
42 D100-00-00-B008 Brays Bayou Lawndale Bridge	Precinct: 2
43 D100-00-00-B009 Brays Bayou Telephone Bridge	Precinct: 2
44 D100-00-00-B0011 Brays Bayou Calhoun Bridge	Precinct: 1
45 D100-00-00-B0015 Brays Bayou Alameda Bridge	Precinct: 1
46 D100-00-00-B026 Brays Bayou Buffalo Speedway Bridge	Precinct: 1
47 D100-00-00-B033 Brays Bayou Hillcroft Bridge	Precinct: 3
48 D100-00-00-B038 Brays Bayou UPRR Galveston Sub	Precinct: 2
49 E100-00-00-E005 White Oak Bayou Phase 4 Channel Conveyance Improvements E. of IH-45 at Shawnee to S. of Edgebrook	\$20,574,645 Precinct: 4
50 E100-00-00-E006 White Oak Bayou White Oak Bayou Federal Flood Risk Reduction Project Channel Modifications - Discrete Segment 106 Cole Creek to Hollister Rd.	\$12,922,567 Precinct: 1, 4

Project	Budget
51 H100-00-00-E005 Hunting Bayou Hunting Bayou Federal Flood Risk Management Project Along Hunting Bayou from US-59 to Homestead Det. Pond	\$16,338,008 Precinct: 1
52 H100-00-00-E006 Hunting Bayou Channel Conveyance Improvements UPRR Yard Upstream to Pickfair St.	\$5,495,663 Precinct: 1
53 K163-00-00-E002 Cypress Creek Channel Conveyance Improvements Cypress Creek Confluence to Cypress N. Houston	\$7,958,998 Precinct: 3
54 K500-23-00-E001 Cypress Creek E&R Agreement: TC Jester Detention Basin East of T.C. Jester Blvd. & South of Cypresswood Dr.	\$1,225 Precinct: 4
55 K700-01-00-Y002 Addicks Reservoir Katy Hockley Mitigation Bank Intersection of Katy-Hockley Road and House-Hahl Road	\$3,495,867 Precinct: 3
56 L512-01-00-E004 Little Cypress Creek Kleb-Mueschke Stormwater Det. Basin Improvements Mueschke Rd., one-mile North of Grand Pkwy	\$2,821,976 Precinct: 3
57 L514-01-00-E002 Little Cypress Creek E&R Agreement: Bauer-Hockley Stormwater Det. Basin Bauer-Hockley Rd. East of Becker Rd.	\$22,000 Precinct: 3
58 M124-00-00-E001 Willow Creek Channel Excavation - Stormwater Detention Basin - Phase I Willow Creek SH 249 to FM 2920	\$3,548,377 Precinct: 4
59 M528-01-00-E001 Willow Creek E&R Agreement: Cypress Rosehill Stormwater Detention Basin Cypress Rosehill Rd. South of Seidel Cemetary Rd.	\$1,000 Precinct: 4



Project	Budget
60 P500-02-00-E013 Greens Bayou Cullen Stormwater Detention Basin Improvements North of Beltway 8 and East of SH-249	\$14,213,282 Precinct: 4
61 P500-04-00-E005 Greens Bayou Aldine Westfield Stormwater Detention Basin - Phase 1 Lauder Road and JFK Boulevard	\$11,420,726 Precinct: 2
62 P500-06-00-E005 Greens Bayou Lauder Stormwater Detention Basin - Phase 1 Lauder Rd. & JFK Boulevard	\$15,744,721 Precinct: 2
63 P518-10-00-E002 Halls Bayou Excavation of Little York Basin & Hopper Basin North to Langely Rd., West to Hirsch Rd., East to US-59 and South to Hartwick Rd.	\$3,511,284 Precinct: 2
64 P518-11-00-E001 Halls Bayou Excavation of P518-11-00 Detention Basin Along Halls Bayou, West of Aldine-Westfield Rd., East of US -59 South of Aldine Mail Rd.	\$5,913,580 Precinct: 2
65 U520-01-00-E002 Addicks Reservoir E&R Agreement: Dinner Creek Stormwater Det. Basin FM-527 and Greenhouse Rd.	\$1,000 Precinct: 4