

2024 Bond Flood Protection & Storm Drainage Subcommittee

Recommended Projects (Version 2) & Funding Scenarios

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> Dallas Water Utilities August 15, 2023

Overview



- Project/Location Requests
- Recommended Projects (Version 2) \$200M
- Recommended Projects Additional Funding Scenarios
- Next Steps
- Questions and Discussion





Project/Location Requests





Project/Location Inquiries



- Military Parkway @ Urbandale added to Needs Inventory (total score 56)
- Bar ditches (7000-7500 Lovett and Toland; N/S connectors) Public Works maintenance
- Turtle Creek @ Stonebridge Bridge FY27/28 Capital Plan
- White Rock Dredge & Shore Erosion Parks Needs Inventory
- Trammel Drive unimproved street, Public Works Needs Inventory
- Kiest Valley Parkway/Five Mile
 - 3742 Kiest Valley Parkway Erosion in Needs Inventory and \$200M Scenario
 - Kiest Valley @ Kiest Knoll Erosion (just added to Needs Inventory considered for final)
 - 3968 Kiest Valley Drainage (just added to Needs Inventory considered for final)
 - 3975 Kiest Valley Drainage (to be evaluated for Needs Inventory)
- 6226 Pemberton Needs Inventory as 6231 Pemberton; being re-evaluated for technical score
- 10732 Haven Creek Court part of 2017 Bond using reallocated funds by CD 10
- 7107 Elmridge evaluation being completed by staff



Project/Location Inquiries (cont.)



- 7340 Skillman (erosion)
 - Oaks on Bend and Huntington Lakes addressed erosion threatening Bldg. 12 (2019)
 - Service requests in 2023 for Oaks on Bend units 800, 1001, and 1012 didn't qualify for Needs Inventory due to large distance from creek bank
 - Jackson Branch Channel Improvements from Huntington Lake Apt. Bridge to Church on Needs Inventory for Flood Management scores too low for \$200M scenario
- Buna Drive unimproved street, Public Works Needs Inventory
- 2712 Dorrington recent repair to pipe and headwall; being evaluated for stabilization of headwall only since structure is far from bank
- Should Trinity River Channel be changed to Citywide? Yes, updated
- Gateridge & Cliffbrook FY 26/27 Capital
- 7900 Northaven Drainage Relief total score of 54 & too low for \$200M scenario; FY 32/33 Capital
- Additional request from Bond Office waiting on report from Bond Office





Recommended Projects (Version 2) - \$200M





Recap of Selection Criteria - \$200M



- 20% Erosion Control; 80% Flood Management & Storm Drainage
- Base on highest project score
- No projects in 10-year capital plan unless slated for FY 28 or later
- Projects over \$12M must benefit multiple districts or Citywide projects
- \$35M cap on Citywide and multiple districts projects; include planning/design costs for large Citywide projects



Updates to Selected Projects - \$200M



- Additional projects added to the needs inventory since version 1
- Updated equity scores revised scores received from Bond Office
- Summary of resulting changes:
 - 6 erosion projects removed; 6 erosion projects added

• 5105 Royalcrest (removed) 5828 Caracas (added)

7767 Great Trinity Forest Way (removed)
 3503 Hillbrook (added)

• 6718 Brooklawn (removed) 902/906 Stevens Wood Ct (added)

• 17811 Davenport (removed) 2415/2421 Driftway (added)

2620/2702/2712/2716 Ripplewood (removed)
 8567 Mediterranean Circle (added)

Woody Branch Group 4 (removed)
 Woody Branch Gp. 5 (added)

No changes to flood management & storm drainage projects



Selected Projects (Version 2) - \$200M



Erosion Control - \$37.7M

Projects will prevent current and future erosion at 54 locations throughout the City.

Storm Drainage Relief - \$91.1M

Projects will include upgrading & replacing existing storm drainage lines and installing new lines at 7 locations throughout the City.

Flood Management - \$71.2M

Projects to prevent flooding and relieve properties that suffer repetitive flood loss at 11 locations throughout the City.







Summary Tables – Selected Projects (Ver. 2)



Table 1: Selected Projects Council District Breakdown

Council District	Total Needs (\$)		% of All Needs by \$	Т	otal Selected (\$)	% of All Selected by \$	
1	\$	164,723,125.00	6%	\$	4,516,625.00	2%	
2	\$	280,158,975.00	10%	\$	25,675,433.33	13%	
3	\$	53,503,750.00	2%	\$	8,017,800.00	4%	
4	\$	129,016,200.00	5%	\$	7,027,650.00	4%	
5	\$	37,038,625.00	1%	\$	11,686,875.00	6%	
6	\$	470,134,375.00	16%	\$	17,826,683.33	9%	
7	\$	111,627,050.00	4%	\$	13,615,425.00	7%	
8	\$	153,751,550.00	5%	\$	12,161,250.00	6%	
9	\$	186,693,300.00	7%	\$	3,427,000.00	2%	
10	\$	30,315,150.00	1%	\$	3,884,125.00	2%	
11	\$	27,984,100.00	1%	\$	4,975,475.00	2%	
12	\$	5,425,125.00	0.2%	\$	704,375.00	0%	
13	\$	161,028,750.00	6%	\$	17,826,683.33	9%	
14	\$	78,280,500.00	3%	\$	10,695,000.00	5%	
Subtotal	\$	1,889,680,575.00	66%	\$	142,040,400.00	71%	

^{*}Council Districts with shading represent outliers with selected amounts 5% more or less than % of total needs



Summary Tables – Selected Projects (Ver. 2) Citywide Projects



Table 2: Citywide Selected Projects Council District Distribution

Council District	Total Needs (\$)	% of All Needs by \$	Total Selected (\$)	% of All Selected by \$
1			\$ 5,750,000.00	
2			\$ 11,121,458.33	
3	[No Title]		\$ -	
4			\$ 5,750,000.00	
5			\$ 129,375.00	
6	6 072 191 750 00		\$ 5,750,000.00	
7		31,750.00 34%	\$ 167,708.33	29%
8	\$ 973,181,750.00		\$ -	29%
9			\$ 129,375.00	
10			\$ 129,375.00	
11			\$ 129,375.00	
12			\$ 129,375.00	
13			\$ 129,375.00	
14			\$ 28,644,583.33	
Subtotal	\$ 973,181,750.00	34%	\$ 57,960,000.00	29%
TOTAL	\$ 2,862,862,325.00	100%	\$ 200,000,400.00	100%



Project Statistics by Council District



CD 1

- 12 projects \$10,266,625
- 10 erosion, 2 flood

CD 2**

- 9 projects *\$36,796,891.66
- 1 erosion, 4 flood, 4 drainage

<u>CD 3</u>

- 10 projects \$8,017,800
- All erosion control

<u>CD 4</u>

- 10 projects \$12,777,650
- 9 erosion, 1 flood

<u>CD 5</u>

- 3 projects \$11,816,250
- 1 erosion, 2 flood

CD₆

- 4 projects *\$23,576,683.33
- 2 flood, 2 drainage

CD 7

- 8 projects \$13,783,133.33
- 5 erosion, 2 flood, 1 drainage

CD8

- 4 projects \$12,161,250
- 2 erosion, 2 flood

CD 9

- 5 projects \$3,556,375
- 3 erosion, 1 flood, 1 drainage

CD 10

- 6 projects \$4,013,500
- 5 erosion, 1 flood

CD₁

- 9 projects \$5,104,850
- 6 erosion, 2 flood, 1 drainage

CD 12

- 4 projects \$833,750
- 2 erosion, 1 flood, 1 drainage

CD 13

- 4 projects *\$17,956,058.33
- 2 flood, 2 drainage

CD 14**

- 3 projects \$39,339,583.33
- 1 flood, 2 drainage

<u>Citywide</u>

- 4 projects \$57,960,000
- 2 flood, 2 drainage

^{**}Significantly benefited by Mill Creek/Peaks Branch Citywide Project

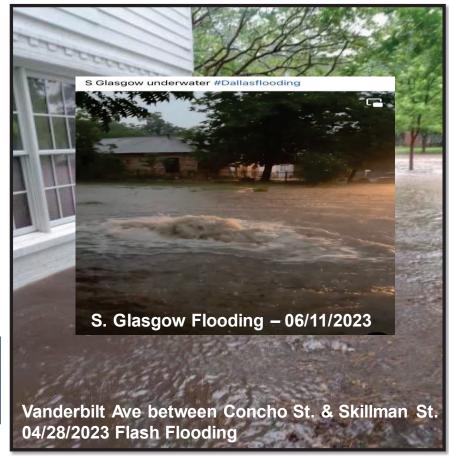


^{*}Includes multiple district projects

Mill Creek/Peaks/East Peaks (Next Steps)



- Improvements needed above tunnel up to Mockingbird within Mill Creek and Peaks Branch watersheds
- Costs estimated at ~ \$339M in 2026 dollars
- Planning and engineering in 2024 Bond to get a head start and fund construction in future bond and capital program - \$33.9M
- Highest rated projects in the Needs Inventory
- Citywide project to capitalize on current investments
- Properties protected ~ 1,710
- Property values > \$585M (based on 2009-2015 values);
 likely in excess of \$878M forecasting to 2023 values

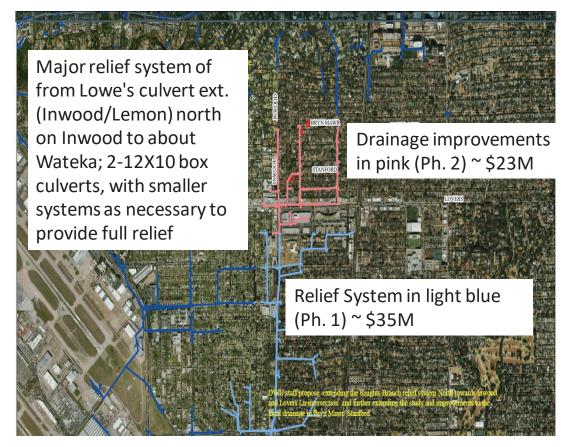




Knights Branch Upper Relief System



- Major relief system from Inwood/Lemmon to south of Lovers and neighborhood improvements to Preston Park (Bryn Mawr)
- Costs estimated at ~ \$58M in 2026 dollars (2 phases)
- \$35M in 2024 Bond to complete planning/engineering and first phase (relief system); \$17.1M to Ph. 2
- Highly rated project in the Needs Inventory; benefits districts 2,6,13





Trinity River Channel & White Rock Creek



Trinity River Channel

- Flood Management Project \$23M
- Located in Districts 1, 2, 4, and 6
- Includes channel dredging, bank stabilization, tree removal, and other activities
- Necessary to meet regulatory requirements
- Protects levees
- Ensures river channel can carry low and maximum flows (300 cfs & 13,000 cfs)

White Rock Creek Floodplain Study

- Flood Management Project \$1M
- Citywide Project; tied for 3rd highest score in selected projects
- Study flood management options within watershed
- Update of 1989 study extended into entire White Rock Creek watershed









Recommended Projects – Additional Funding Scenarios





Additional Funding Scenario - \$150M



- Same proportion 20% erosion control, 80% flood/storm
 - ~ \$30M for erosion control
 - ~ \$120M for flood/storm
- Remove lowest priority projects first (by score)
- Results in ~\$10M reduction for erosion control
 - 45 projects (54 in \$200M option)
- Results in \$40M reduction for flood/storm
 - 11 projects selected (18 in \$200M option)
 - Reduce funding in Knights Branch by \$7.1M to balance (phase 2)
- No Citywide or multiple district projects removed



Additional Funding Scenario - \$150M



Erosion Control - \$30.1M

Projects will prevent current and future erosion at 45 locations throughout the City.

Storm Drainage Relief - \$83.3M

Projects will include upgrading & replacing existing storm drainage lines and installing new lines at 6 locations throughout the City.

Flood Management - \$36.6M

Projects to prevent flooding and relieve properties that suffer repetitive flood loss at 5 locations throughout the City.







Additional Funding Scenario - \$150M (cont.)



 All Erosion Control projects below 902, 906 Stevens Wood Court on \$200M list removed ~ total scores below 60

				LF of erosion protection							-
TWM000063	Stevens Wood Court 902, 906	New	Erosion Control	Unnamed Trib to Coombs - Private - Type I, 2 homes slightly threatened, 175' of gabion wall 7' tall	1	49.1	44	10	6	60	
P8175078	Guadalupe 3033	New	Erosion Control	Five Mile Creek - Private - Type I, slight threat to townhouse, erosion over gas pipeline, possibly short gabion wall - nearest home 30' from erosion, requires 50 LF of 16' gabion wall on creek bank, or combination flowable fill and lower wall near pipe	3	53.3	47	10	2	59	!
PB1603	Coppertowne 8439	New	Erosion Control	Jackson Branch - Private - 2 condos, erosion 35 feet from structure, type I - gabion mattress 100'X15'X2', repair headwall	10	53.12	47	8	•	59	
FP22E02	Havencreek Ct 10732	New	Erosion Control	Dixon Branch - Private - Type 1 home threatened, 31' from bank 27' deep. Approx. 90 LF of erosion protection.	10	54.03	48	8	2	58	
FP19E5	Driftway Drive 2415 & 2421	New	Erosion Control	Stream 585 - Private - Type 1, 2 homes threatened, "17-20" from structure, "16-17" deep, approximately 252 LF of erosion protection	7	51.28	46	8	4	58	
P8175065	Mediterranean Circle 8567	New	Erosion Control	Dixon Branch - Private - Type I, house threatened, 40' from creek bank, 110 LF of 20' gabion wall	10	53.18	47	8	2	57	Ī
FP20E07	Forston Ave 18503	New	Erosion Control	McKamy Branch - Private - Type 1, one home threatened, approx. 6' from bank and 9' deep. Approx. 45 LF of gabion wall	12	59	53	4	0	57	
PB16589	Poplar Springs Lane	New	Erosion Control	Estes Branch - Private - Design and construction of "700 LF gabion mattress at 3:1 slope w/conc. toe wall to protect 12 homes adjacent to filled in channel - 3300 and 3400 block	7	49.82	44	8	4	56	4
TWM000109	Creekspan Drive 12209	New	Erosion Control	Audelia Branch - Private - Type 1 - 1 home, approx. 30' from bank 20' deep. Approx. 100 LF of gabion wall	10	49.33	44	8	4	56	
FP20E14	Woody Branch Erosion Control - Glen Oaks Blvd & Hunters View Group 5	New	Erosion Control	Woody Branch - Private, Type 1/IL Design of erosion control measures to protect the homes of Gien Oaks Blvd and Hunter View Ln.	4	49.05	44	8	4	56	4
TWM000021	Lullwater Drive 8223, 8235	New	Erosion Control	Park Branch - Private - Type I, duplex properties threatened, 25' from bank, creek is 16' deep, 75 LF of gabion - design and construction	9	57.96	52	2	2	56	



Alternative Approach - \$150M



- Same proportion 20% erosion control, 80% flood/storm
 - ~ \$30M for erosion control
 - ~ \$120M for flood/storm
- Results in ~\$10M reduction for erosion control
 - 45 projects (54 in \$200M option)
- Remove Knights Branch Ph. 2 \$18M (in 10-year CIP)
- Remove Trinity River Channel \$23M (prioritize in CIP)
- Keep rest of projects



Additional Funding Scenario - \$100M



- Same proportion 20% erosion control, 80% flood/storm
 - ~ \$20M for erosion control
 - ~ \$80M for flood/storm
- Remove lowest priority projects first (by score)
- Results in ~\$21M reduction for erosion control
 - 27 projects (54 in \$200M option)
- Results in \$80M reduction for flood/storm
 - 7 projects selected (18 in \$200M option)
- 1 Citywide project removed; 1 multiple district project removed
 - Knights Branch Ph. 2 \$17.1M; Trinity River Channel \$23M
 - Reduce Knights Branch Ph. 1 or Mill Creek or EC \$2M to balance



Additional Funding Scenario - \$100M



Erosion Control - \$18.8M

Projects will prevent current and future erosion at 27 locations throughout the City.

Storm Drainage Relief - \$70.2M

Projects will include upgrading & replacing existing storm drainage lines and installing new lines at 4 locations throughout the City.

Flood Management - \$13.1M

Projects to prevent flooding and relieve properties that suffer repetitive flood loss at 3 locations throughout the City.







Additional Funding Scenario - \$100M (cont.)



All Erosion Control projects below 2227 Elmwood on \$200M list removed ~ total scores below 63

				25 from creex bank, would require 150 cr of							
				15' gabion wall							+
FP23E03	Caracas Dr 5828	New	Erosion Control	Red Bird Branch - Private - detached garage threaten, 30' from bank 19' deep. Approx. 40 LF of erosion protection	3	57.95	52	8	4	64	\$
PB175139	Elmwood 2227	New		Elmwood Branch - Private - Type I, house threatened, 20' from bank, 75 LF of 8' gabion wall	1	52.68	47	10	6	63	\$
FP20E11	Woody Branch Erosion Control - Glen Oaks Blvd & Hunters View Group 2	New	Erosion Control	Woody Branch - Private, Type 1/IL Design of erosion control measures to protect the homes of Gien Oaks Blvd and Hunter View Ln.	4	54.24	48	10	4	62	\$
PB172773	Glencairn 460	New	Erosion Control	Herring Branch - Private - 70 LF gabion wall, 15' height, Type I, house threatened, difficult access	8	53.88	48	10	4	62	\$
FP22E08	Richardson Branch Trail 8505	New	Erosion Control	Richardson Branch - Public - Type I, roadway threatened, 15' from bank 14' deep, approx. 285if of erosion protection	10	62.8	56	4	2	62	\$
TWM000003	Cedarhurst 3411, 3421	New	Erosion Control	Five Mile Creek - Private - Type I, two homes threatened, 39 from bank, creek is 22 deep, approx. 190 LF of gabion - design and construction	3	53.41	48	10	4	62	\$
PB175132	Ravinia S. 326 and 406	New	Erosion Control	Coombs Creek - Private - Type I, two houses threatened, 35' from bank, 120 LF 18' gabion wall	1	53.23	47	8	6	61	\$
PB175136	Cripple Creek 3744, 3750, 3758	New	Erosion Control	Red Bud Branch - Private - Type I, three houses threatened, 30' from bank, 300 LF of 15' gabion wall	4	53.18	47	8	6	61	\$
PB175133	Edgemont 1631	New	Erosion Control	Little Cedar Creek - Private - Type I, house threatened, 30' from bank, 75LF of 15' gabion wall	4	53.18	47	8	6	61	\$
PB175134	Lockridge Circle 3216, 3222, 3226	New	Erosion Control	Five Mile Creek - Private - Type I, three houses threatened, 20' from bank, 250 LF of 10' gabion wall	3	53.18	47	10	4	61	\$
P8174648	Stevens Wood Court 914	New	Erosion Control	Coombs Creek - Private - Slight threat to home; 80 LF gabion wall, 10' height	1	50.7	45	10	6	61	\$
FP23E06	W Red Bird Lane 1117 & 1207, Boca Chica 1104, Matagorda 1409	New	Erosion Control	Red Bird Branch - Public/Private - Roadway and 3 homes threatened. 5-24' from bank, 14- 17' deep. Approx. 435 LF of erosion protection	3	55.14	49	8	4	61	\$



Alternative Approach - \$100M



- Same proportion 20% erosion control, 80% flood/storm
 - ~ \$20M for erosion control
 - ~ \$80M for flood/storm
- Results in ~\$21M reduction for erosion control
 - 27 projects (54 in \$200M option)
- Remove Knights Branch construction Ph. 1 & 2, Trinity River Channel, and reduce Mill Creek or remove lowest remaining scored projects by \$5.2M
- Keeps more projects, cuts CW and multiple district project



Priorities for Funding Scenarios Below \$200M



- Reduce lowest scored projects to meet funded amount?
- Retain <u>Citywide and multiple district projects</u>?
- Reduce spending for erosion control?
- Match by <u>ratio of needs in districts</u> as close as possible?
- Reduce/remove <u>larger cost projects</u>?
- Remove projects in <u>10-year capital plan</u> first (earliest planned projects first)?





Next Steps





Selected Projects



- Follow-up on new projects being evaluated for needs inventory
- Revise recommended projects based on tonight's feedback
- Present revised project list scenarios in committee packet for next meeting
 - \$200M high
 - \$150M medium
 - \$100M low



Equity Goal



Equity



- Goal: 30% of overall bond investment in Equity Areas:
 - Goal is based on feedback received during a recent CBTF subcommittee meeting.
 - Staff is evaluating equity funding scenarios, not just by project points but overall bond funding levels.
 - Office of Equity and Inclusion (OEI) is leading the effort to identify the projects for the equity investments.
 - BCM will work with CBTF and subcommittees to adjust proposed programs based on equity investment recommendations.
 - 1st Draft of the Proposed Bond Program will be provided by the subcommittees on August 29th.



Community Bond Task Force Schedule



August

CBTF meetings resume with the subcommittees presenting their proposed program on August 29th

Community Poll on Allocations closes on August 25th

September

CBTF and Chairs will meet to finalize the Proposed Bond Program before taking it to the community as part of the Fall Townhalls

Townhalls start on September 26th

October

Townhalls end on October 13th

CBTF and Chairs will review the community feed back from the Townhalls to refine the Proposed Draft 2024 Bond Program



Community Bond Task Force Schedule



November

CBTF, Chairs and Dallas City Manager to finalize the Proposed Bond Program

December

December 6th CBTF Chair and
Dallas City
Manager briefs
Council on
Proposed 2024
Draft Bond Program

January

Public Hearings on the Proposed Bond Program

City Council review program and makes edits

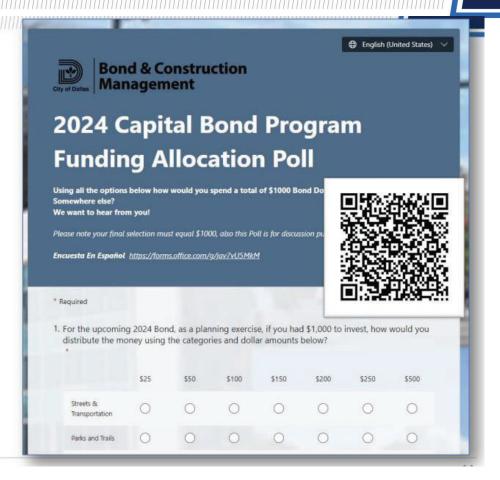
City Council to call for an election January 24th, for an election in May



Community Feedback



- Based upon recommendation from the CBTF, BCM is conducting additional community input.
- A similar poll for Bond allocations is open to the community.
- Allocation Poll to the public through August 25th.
- Will provide results to CBTF and council for they use in developing their program.





Future Meetings



August 22, 2023

- Present final version of projects each scenario
- Final changes incorporated as needed

August 29, 2023

- Chair and DWU to provide recommendations to Bond Task Force
- Invites sent to all committee members

October (TBD)

Reconvene after townhalls to adjust recommendations





Questions?







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Recommended Projects (Version 2) & Funding Scenarios

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