

# FLOOD PROTECTION AND STORM DRAINAGE CAPITAL IMPROVEMENTS

## MISSION

This program provides for the preparation of plans, specifications, and construction to improve storm drainage and reduce the loss of property due to flooding and erosion. These projects include construction and replacement of inadequate bridges and culverts, and the implementation of flood plain management plans to improve the flood protection system.

## ACCOMPLISHMENTS FOR FY2002-03

1. Completed construction of drainage improvements for Long Branch Phase II at Weather Vane Lane.
2. Completed construction of drainage improvements for Estes Branch at St. Augustine Road.
3. Completed design and construction of the overbank excavation along White Rock Creek from Greenville Avenue.
4. Completed construction of the 8<sup>th</sup> Street bridge replacement, street paving, storm drainage, water and wastewater mains improvements on 8th Street from the DART right-of-way to 11<sup>th</sup> Street.
5. Completed construction of erosion control improvements on Joe's Creek from Merrell Road to 300 feet north for the protection of properties along the creek bank from further erosion

## OBJECTIVES FOR FY2003-04

1. Complete channel and drainage improvements on Alice Creek.
2. Begin construction of storm drainage improvements on Swiss Avenue from Oak Street to Apple Street (Mill Creek Phase I.)
3. Complete construction of storm drainage improvements at the Rush Creek crossings of Highgate Lane, Rockaway Drive and Santa Barbara Drive, providing for additional box culverts at each of the three crossings and repair a retaining wall at Highgate Lane.
4. Begin implementation of the 2003 Bond Program.

## OPERATING & MAINTENANCE COST

Upon completion, certain capital improvement projects will have on-going costs associated with operating and maintaining the new facility, improvement or expansion. At this time, no additional operating and maintenance costs have been identified for the Flood Protection and Storm Drainage Capital Improvement Program.

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## **PROJECT CATEGORY DESCRIPTIONS**

**Erosion Control** Erosion control projects are recommended for structures threatened by creek or channel bank erosion. Typical structures include streets, culverts, bridges, alleys and homes. Erosion occurring in areas not associated with creek banks or man-made channels is not included in this category. This category would provide armoring of natural creek banks to protect soil against further erosion loss.

**Flood Management** This category is primarily comprised of projects recommended in Flood Plain Management studies of creeks and tributaries. The emphasis is on reduction of severe flood impact on bridges and neighborhoods bordering flood plain areas. Typical projects in this category are bridge and culvert replacement, creek channelization, detention basins and construction of flood protection levees.

**Professional Services and Debt Issuance** Provides funding for certain costs associated with capital improvement projects. These costs include studies and long-range plans, debt issuance costs, and reimbursements to the General Fund for professional staff services such as design, survey, land acquisition fees and engineering. Debt issuance and CIP engineering costs are paid from the interest earned on bond proceeds. These costs also include transfers to General Fund.

**Public Art** Includes the public art initiatives throughout the City of Dallas. Funds generated by Public Art appropriations are used for the design services of artists, for the selection, acquisition, commissioning and display of artworks and for administration of the public art projects.

**Storm Drainage Relief System** Provides funds for the construction of storm drainage improvements. Many areas within the City of Dallas are served by storm drainage systems, which have become inadequate after years of continued development. In many cases, because of the high cost of retrofitting improvements in fully developed areas, these projects are proposed for design and construction by phases.

## FLOOD PROTECTION AND STORM DRAINAGE CAPITAL IMPROVEMENTS

<u>Source of Funds</u>	<u>Budget as of 06-30-03</u>	<u>Spent or Committed 06-30-03</u>	<u>Remaining as of 06-30-03</u>	<u>FY2003-04 Adopted</u>	<u>FY2004-05 Estimated</u>	<u>FY2005-06 Estimated</u>	<u>FY2006-07 Estimated</u>	<u>Total Estimated Cost</u>
1985 General Obligation Bonds	1,741,815	1,705,515	36,300	112,192	0	0	0	1,854,007
1989 General Obligation Bonds	9,672,234	8,926,044	746,190	239,367	0	0	0	9,911,601
1995 General Obligation Bonds	23,857,379	21,529,412	2,327,967	218,935	0	0	0	24,076,314
1998 General Obligation Bonds	12,701,411	9,449,743	3,251,668	653,032	0	0	0	13,354,443
2000 Certificates of Obligation	5,488,475	4,972,264	516,211	800,000	0	0	0	6,288,475
2003 General Obligation Bonds	0	0	0	4,374,759	3,028,685	2,120,455	6,960,203	16,484,102
<b>Total Sources of Funds</b>	<b>53,461,314</b>	<b>46,582,978</b>	<b>6,878,336</b>	<b>6,398,285</b>	<b>3,028,685</b>	<b>2,120,455</b>	<b>6,960,203</b>	<b>71,968,942</b>

## FLOOD PROTECTION AND STORM DRAINAGE CAPITAL IMPROVEMENTS

<u>Use of Funds</u>	<u>Budget as of 06-30-03</u>	<u>Spent or Committed 06-30-03</u>	<u>Remaining as of 06-30-03</u>	<u>FY2003-04 Adopted</u>	<u>FY2004-05 Estimated</u>	<u>FY2005-06 Estimated</u>	<u>FY2006-07 Estimated</u>	<u>Total Estimated Cost</u>
Erosion Control	4,109,871	3,082,315	1,027,556	954,104	670,624	284,138	291,556	6,310,293
Flood Management	20,314,636	19,272,018	1,042,618	1,396,042	2,339,569	1,758,458	5,988,846	31,797,551
Professional Services and Debt Issuance	1,247,596	908,136	339,460	1,937,566	0	0	0	3,185,162
Public Art	287,702	133,495	154,207	21,111	18,492	12,220	15,991	355,516
Storm Drainage Relief System	27,501,509	23,187,014	4,314,495	2,089,462	0	65,639	663,810	30,320,420
<b>Total Uses of Funds</b>	<b>53,461,314</b>	<b>46,582,978</b>	<b>6,878,336</b>	<b>6,398,285</b>	<b>3,028,685</b>	<b>2,120,455</b>	<b>6,960,203</b>	<b>71,968,942</b>

## FLOOD PROTECTION AND STORM DRAINAGE CAPITAL IMPROVEMENTS

Project	Project Category	Council District	Funding Source	Budget as of 06/30/03	Spent or Committed 06/30/03	Remaining as of 06/30/03	FY2003-04 Adopted	FY2004-05 Estimated	FY2005-06 Estimated	FY2006-07 Estimated	Total Estimated Cost	In Service Date
7008 Alexander	Erosion Control	09	98 Bond Program	36,568	36,568	0	0	0	0	0	36,568	4th/02
7008 Alexander	Erosion Control	09	95 Bond Program	48,921	48,921	0	0	0	0	0	48,921	4th/02
8th St. and Cedar/11th St and Little Cedar Creek	Flood Management	07	95 Bond Program	1,116,839	1,108,751	8,088	0	0	0	0	1,116,839	2nd/01
Alice Creek	Erosion Control	04	95 Bond Program	1,030,575	132,223	898,352	0	0	0	0	1,030,575	3rd/04
Altadena at Alley	Erosion Control	05	03 Bond Program	0	0	0	55,853	0	0	0	55,853	1st/05
Ash Creek Barbaree Levee	Flood Management	07	95 Bond Program	191,808	191,808	0	0	0	0	0	191,808	2nd/01
Ash Creek Voluntary Purchase - Arturo Area	Flood Management	07	03 Bond Program	0	0	0	562,754	562,754	562,754	562,754	2,251,016	N/A
Audelia Branch at Audelia Bridge	Erosion Control	10	98 Bond Program	41,957	0	41,957	0	0	0	0	41,957	4th/03
Bachman Lake Dredging	Storm Drainage Relief	02,06,14	Certif Oblig	5,298,475	4,972,264	326,211	0	0	0	0	5,298,475	4th/03
Baymar Lane	Storm Drainage Relief	12	95 Bond Program	22,111	22,111	0	0	0	0	0	22,111	1st/01
Bond Sale Expense - Flood and Storm Drainage	Professional Services and Debt Issuance	Citywide	03 Bond Program	0	0	0	9,468	0	0	0	9,468	N/A
Bryn Mawr 5513	Storm Drainage Relief	14	03 Bond Program	0	0	0	0	0	15,248	102,045	117,293	TBD
Budd Street	Storm Drainage Relief	07	95 Bond Program	816,430	816,375	55	0	0	0	0	816,430	2nd/02
Carissa	Storm Drainage Relief	09	95 Bond Program	920,411	920,411	0	0	0	0	0	920,411	3rd/00
Cedar Creek Bridge at Eighth	Flood Management	06	98 Bond Program	1,671,213	1,671,213	0	0	0	0	0	1,671,213	1st/03

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Cedarhurst	Erosion Control	03	95 Bond Program	0	0	0	135,062	0	0	0	135,062	4th/05
CIP Engineering - Flood and Storm Drainage	Professional Services and Debt Issuance	Citywide	03 Bond Program	0	0	0	39,634	0	0	0	39,634	N/A
CIP Engineering - Flood Protection and Storm Drainage	Professional Services and Debt Issuance	Citywide	95 Bond Program	679,185	678,037	1,148	83,873	0	0	0	763,058	N/A
CIP Engineering - Flood Protection and Storm Drainage	Professional Services and Debt Issuance	Citywide	98 Bond Program	366,815	220,440	146,375	311,740	0	0	0	678,555	N/A
CIP Engineering - Flood Protection and Storm Drainage	Professional Services and Debt Issuance	Citywide	85 Bond Program	0	0	0	112,192	0	0	0	112,192	N/A
CIP Engineering - Flood Protection and Storm Drainage	Professional Services and Debt Issuance	Citywide	89 Bond Program	0	0	0	239,367	0	0	0	239,367	N/A
Coombs Creek Culvert at Clarendon	Flood Management	01	03 Bond Program	0	0	0	20,331	136,060	0	0	156,391	3rd/05
Coombs Creek Culvert at Irwindell	Flood Management	01	03 Bond Program	0	0	0	0	43,566	291,556	0	335,122	3rd/05
Coombs Creek over Five Mile Creek	Erosion Control	03	03 Bond Program	0	0	0	0	18,589	124,397	0	142,986	TBD
Debt Transfer - Bachman Dredging	Professional Services and Debt Issuance	Citywide	Certif Oblig	190,000	0	190,000	800,000	0	0	0	990,000	N/A
Debt Transfer - Bachman Dredging	Professional Services and Debt Issuance	Citywide	98 Bond Program	11,596	9,659	1,937	0	0	0	0	11,596	N/A
Debt Transfer - Flood and Storm Drainage	Professional Services and Debt Issuance	Citywide	98 Bond Program	0	0	0	341,292	0	0	0	341,292	N/A
Elam Creek Channel - Lake June to Seco (Phase I)	Flood Management	04,05	03 Bond Program	0	0	0	0	638,966	0	4,308,468	4,947,434	TBD
Elam Creek Detention Basin	Flood Management	04	98 Bond Program	1,144,266	1,141,613	2,654	0	0	0	0	1,144,266	1st/02
Elam Creek- Umphress Area Engineering	Flood Management	04	95 Bond Program	437,000	436,531	469	0	0	0	0	437,000	N/A

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Elmwood Bridge at Lansford Ave	Flood Management	01	03 Bond Program	0	0	0	0	22,341	0	0	22,341	TBD
Fernwood 1827 and 1835	Erosion Control	04	03 Bond Program	0	0	0	0	0	116,175	0	116,175	TBD
Five Mile Creek	Flood Management	04,05,08	89 Bond Program	9,672,234	8,926,044	746,190	0	0	0	0	9,672,234	Various
Five Mile Creek	Flood Management	04,05,08	85 Bond Program	238,646	238,646	0	0	0	0	0	238,646	Various
Five Mile Pkwy (W) 1612	Erosion Control	03	03 Bond Program	0	0	0	34,853	233,245	0	0	268,098	3rd/05
Flood Alert Expansion	Flood Management	Citywide	95 Bond Program	135,222	135,222	0	0	0	0	0	135,222	3rd/00
Gilford - Roanoke Area Relief System - Phase I	Storm Drainage Relief	02	03 Bond Program	0	0	0	1,899,012	0	0	0	1,899,012	4th/04
Gilford Roanoke (Engineering)	Storm Drainage Relief	02	95 Bond Program	300,000	295,856	4,144	0	0	0	0	300,000	N/A
Griffith Ave 630	Erosion Control	01	03 Bond Program	0	0	0	135,061	0	0	0	135,061	N/A
Hampton (S) 1304	Storm Drainage Relief	03	03 Bond Program	0	0	0	30,161	0	0	0	30,161	4th/04
Harvest Glen 6804	Erosion Control	11	98 Bond Program	35,631	0	35,631	0	0	0	0	35,631	2nd/04
Hawthorne - Bowser Area	Storm Drainage Relief	14	03 Bond Program	0	0	0	0	0	22,364	149,665	172,029	TBD
Hickory Creek	Storm Drainage Relief	08	85 Bond Program	961,187	961,187	0	0	0	0	0	961,187	2nd/04
Hunters View 5925 and 5929	Erosion Control	04	03 Bond Program	0	0	0	39,209	262,399	0	0	301,608	3rd/05
Joe's Creek at Forest Lane	Erosion Control	13	98 Bond Program	34,737	0	34,737	0	0	0	0	34,737	2nd/03

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Joe's Creek North of Merrell	Erosion Control	13	98 Bond Program	158,469	148,666	9,803	0	0	0	0	158,469	4th/02
Kellog at Kiest	Storm Drainage Relief	04,07	95 Bond Program	377,759	377,759	0	0	0	0	0	377,759	4th/03
Kiest Valley Parkway Erosion Control	Erosion Control	03	03 Bond Program	0	0	0	0	0	43,566	291,556	335,122	TBD
Longbranch Area	Storm Drainage Relief	09	98 Bond Program	454,862	449,878	4,984	0	0	0	0	454,862	3rd/02
Manus (N) 300	Erosion Control	03	03 Bond Program	0	0	0	134,049	0	0	0	134,049	2nd/05
Marianne 17506	Storm Drainage Relief	12	98 Bond Program	105,460	105,241	219	0	0	0	0	105,460	1st/01
Matilda 4318	Storm Drainage Relief	14	03 Bond Program	0	0	0	0	0	0	20,107	20,107	TBD
McCree Branch - Fieldcrest Drive Bridge	Flood Management	10	03 Bond Program	0	0	0	0	50,827	340,147	0	390,974	TBD
McKamy Branch ( Upper)- Mapleshade to 1200' d	Flood Management	12	98 Bond Program	20,000	0	20,000	0	0	0	0	20,000	3rd/02
McKamy Branch (Upper) - Purchase and Swale	Flood Management	12	03 Bond Program	0	0	0	812,957	806,860	397,000	0	2,016,817	3rd/06
McKinney Avenue Drainage - Blackburn to Hall	Storm Drainage Relief	14	98 Bond Program	465,810	465,300	510	0	0	0	0	465,810	3rd/03
Meadowcreek 5840	Storm Drainage Relief	11	98 Bond Program	67,625	67,578	47	0	0	0	0	67,625	1st/01
Midpark 8545	Erosion Control	11	03 Bond Program	0	0	0	107,239	0	0	0	107,239	2nd/05
Mill Creek - Phase 1	Storm Drainage Relief	13	98 Bond Program	3,045,500	1,048,357	1,997,143	0	0	0	0	3,045,500	4th/05
Miscellaneous Storm Drainage Improvements	Storm Drainage Relief	Citywide	85 Bond Program	541,982	505,681	36,301	0	0	0	0	541,982	Various

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Miscellaneous Storm Drainage Improvements	Storm Drainage Relief	Citywide	95 Bond Program	1,249,145	0	1,249,145	0	0	0	0	1,249,145	Various
Munger 3900 at Johnson	Storm Drainage Relief	14	03 Bond Program	0	0	0	0	0	7,261	48,593	55,854	TBD
Park Vista Drive, 2400 Block	Erosion Control	07	03 Bond Program	0	0	0	0	89,366	0	0	89,366	TBD
Pemberton Hill - Phase 2	Storm Drainage Relief	05	98 Bond Program	607,410	203	607,207	0	0	0	0	607,410	3rd/04
Pentagon Drainage: Marsalis/Yewpon (Phase I Engineering)	Storm Drainage Relief	04	98 Bond Program	173,687	168,292	5,395	0	0	0	0	173,687	4th/00
Public Art Administration - Flood Protection and Storm Drainage	Public Art	Citywide	98 Bond Program	20,041	0	20,041	0	0	0	0	20,041	Various
Public Art Administration - Flood Protection and Storm Drainage	Public Art	Citywide	03 Bond Program	0	0	0	4,222	3,698	2,878	3,459	14,257	Various
Public Art Administration - Flood Protection and Storm Drainage	Public Art	Citywide	95 Bond Program	37,500	13,660	23,840	0	0	0	0	37,500	Various
Public Art Projects - Flood Protection and Storm Drainage	Public Art	Citywide	03 Bond Program	0	0	0	16,889	14,794	9,342	12,532	53,557	Various
Public Art Projects - Flood Protection and Storm Drainage	Public Art	Citywide	98 Bond Program	80,161	0	80,161	0	0	0	0	80,161	Various
Public Art Projects - Flood Protection and Storm Drainage	Public Art	Citywide	95 Bond Program	150,000	119,835	30,165	0	0	0	0	150,000	Various
Rex Drive 6247	Storm Drainage Relief	11	03 Bond Program	0	0	0	160,289	0	0	0	160,289	2nd/05
Ridgedale 5535	Storm Drainage Relief	14	03 Bond Program	0	0	0	0	0	0	204,424	204,424	TBD
Rugged Branch - Culvert Improvement at Elmwood	Flood Management	01	03 Bond Program	0	0	0	0	78,195	0	0	78,195	TBD
Rush Creek - Culvert at Dalgreen	Flood Management	09	03 Bond Program	0	0	0	0	0	47,341	316,822	364,163	TBD

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Rush Creek - Culvert at Fisher	Flood Management	09	03 Bond Program	0	0	0	0	0	45,018	301,273	346,291	TBD
Rush Creek - Culvert at Patrick	Flood Management	09	03 Bond Program	0	0	0	0	0	34,852	233,243	268,095	TBD
Rush Creek - Culvert at Trammel	Flood Management	09	03 Bond Program	0	0	0	0	0	39,790	266,286	306,076	TBD
Rush Creek - Engineering	Storm Drainage Relief	09	98 Bond Program	1,014,409	1,008,530	5,879	0	0	0	0	1,014,409	N/A
Samcar Trail	Storm Drainage Relief	05	95 Bond Program	32,750	32,750	0	0	0	0	0	32,750	4th/98
Shorecrest 3852	Storm Drainage Relief	14	03 Bond Program	0	0	0	0	0	7,261	48,593	55,854	TBD
Southpoint - McKamy Branch	Erosion Control	12	95 Bond Program	163,845	159,893	3,952	0	0	0	0	163,845	1st/99
Spruce Valley over Five Mile Creek	Erosion Control	03	03 Bond Program	0	0	0	0	67,025	0	0	67,025	TBD
State-Thomas - Clyde Alley	Storm Drainage Relief	14	98 Bond Program	1,644,625	1,644,006	619	0	0	0	0	1,644,625	3rd/02
State-Thomas - Clyde Alley	Storm Drainage Relief	14	95 Bond Program	763,815	763,351	464	0	0	0	0	763,815	3rd/02
State-Thomas - Maple-Routh Connection	Storm Drainage Relief	14	98 Bond Program	608,942	608,730	212	0	0	0	0	608,942	3rd/02
Trinity River Improvements	Flood Management	Citywide	95 Bond Program	4,795,781	4,766,720	29,061	0	0	0	0	4,795,781	3rd/00
Valley View Park	Erosion Control	11	03 Bond Program	0	0	0	312,778	0	0	0	312,778	4th/06
Voluntary Purchase - 7125 Winding Creek	Flood Management	12	98 Bond Program	237,793	237,793	0	0	0	0	0	237,793	N/A
Voluntary Purchase - 7133 Winding Creek	Flood Management	12	98 Bond Program	227,500	425	227,075	0	0	0	0	227,500	N/A

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White Rock Creek at Greenville	Flood Management	09,10,13	98 Bond Program	426,334	417,253	9,081	0	0	0	0	426,334	4th/02
White Rock Lake - Silt Management	Storm Drainage Relief	Citywide	95 Bond Program	8,029,114	7,953,155	75,959	0	0	0	0	8,029,114	4th/99
White Rock Lake INS Study	Erosion Control	Citywide	95 Bond Program	125,000	125,000	0	0	0	0	0	125,000	N/A
Winnetka (N) - 1100 Block	Storm Drainage Relief	03	03 Bond Program	0	0	0	0	0	13,505	90,383	103,888	TBD
Woody Branch	Erosion Control	04,05	95 Bond Program	2,434,168	2,431,043	3,125	0	0	0	0	2,434,168	3rd/00
<b>Total</b>				<b>53,461,314</b>	<b>46,582,978</b>	<b>6,878,336</b>	<b>6,398,285</b>	<b>3,028,685</b>	<b>2,120,455</b>	<b>6,960,203</b>	<b>71,968,942</b>	