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TEXAS STATE SOIL AND WATER CONSERVATION BOARD

Protecting and Enhancing Natural Resources for Tomorrow

TSSWCB FLOOD CONTROL PROGRAM TEN-YEAR DAM REPAIR, REHABILITATION, AND MAINTENANCE PLAN Prepared May 2020

Introduction

Over the past 70 years 2,041 floodwater-retarding structures, or dams, have been built by the United States Department of Agriculture - Natural Resources Conservation Service (USDA-NRCS) through federal programs in Texas. These dams' primary purpose is to protect lives and property by reducing the velocity of floodwaters, and thereby reducing flows to a safer rate. These are earthen dams that exist on private property, and they were designed and constructed by the USDA-NRCS, with the understanding that the private property owner would provide the land, the federal government would provide the technical design expertise and the funding to construct them, and then local sponsors would be responsible for maintaining them into the future. Local sponsors include Soil and Water Conservation Districts (SWCDs), cities, counties, water control improvement districts, river authorities, and other special purpose districts. These dams provide \$151 million of average annual benefits to the people of Texas.

The TEN-YEAR DAM REPAIR, REHABILITATION, AND MAINTENANCE PLAN (the "Plan") was prepared to address the needs of these dams, as required by Senate Bill 8 enacted by the Texas Legislature during the 86th Legislative Session. According to this bill, the "state board" (TSSWCB) "shall prepare and adopt a plan describing the repair and maintenance needs of flood control dams described by Subsection (c) and prepare and adopt a new plan before the end of the 10th year following the adoption of a plan." SB 8 also required that "Each year, the state board shall deliver to the water development board a report regarding progress made on items listed in the plan. If an update to the report or plan is necessary before the yearly report or before the end of the 10-year cycle, the state board must deliver to the water development board an amended report or plan."

With aging dams, and rapid urbanization in many parts of Texas, the need for operation, maintenance, repair, and rehabilitation/upgrade continues to grow each year. Currently, 639 dams are classified as high hazard, meaning there is a potential loss of life if the dam fails; however, only 123 of these meet high hazard criteria. That means that 516 need rehabilitation/upgrade to meet safety criteria that will adequately protect lives downstream. With continuing urbanization, the number of high hazard dams is growing by about 20 dams per year. In recognition that these dams will continue to serve as a critical protection for our state's infrastructure, private property, and lives, the Legislature appropriated funds to the Texas State Soil and Water Conservation Board (TSSWCB) for grants to local Soil and Water Conservation Districts beginning in 2010 for operation, maintenance, structural repair and rehabilitation/upgrade. Since 2010, the average annual general revenue appropriation has been about \$6.8 million. In 2019 a supplemental appropriation from the Economic Stabilization Fund in the amount of \$150 million was provided to TSSWCB. In 2020 and 2021, the annual general revenue appropriation is \$8,832,484. In 2022 and beyond the expected annual appropriation is \$9 million.

Current Flood Control Program needs are \$14 million for maintenance of 2,041 dams, \$136 million for repair of 188 dams, and \$2 billion construction cost for rehabilitation and upgrade of 516 high hazard dams.

Objectives of the Plan

To adequately address current and future needs, the 10-year *Plan* was proposed. The Plan assumes general revenue state funding of about \$9 million per year, an additional \$1.9 billion state funds over the next 10 years, and federal funding of about \$71 million during the 10-year period. If additional federal funding becomes available, less state funding will be required since federal projects are funded 65% (dam rehabilitation program) and 75% (emergency watershed program dam repair). For federal projects, state funds will be provided only for a portion of the local sponsor's share. If less federal funding is available, more state funds will be directed to a smaller number of dams on a priority basis. The goal of the Plan is to complete all currently known dam maintenance and dam repairs. In addition, the Plan would complete rehabilitation/upgrade of 200 dams (10-year projected increase in high hazard dams) plus 25% (131 dams) of currently known dam rehabilitation/upgrade needs. It is assumed that local sponsors will have adequate funding for their share of project cost and are ready and willing to proceed with the work.

Activities and Services to be Delivered

Dam Operation and Maintenance (O&M).

Estimated annual O&M needs are \$1,000 to \$2,000 per dam for 2,041 dams. Because of inadequate funding over the past 20 to 30 years, sponsors have fallen behind, and current known needs are about \$14 million just to get caught up. Annual dam O&M is critical to prevent small problems from becoming larger and more expensive problems. Lack of proper O&M may eventually lead to a need for an expensive dam repair. O&M is cost-shared 90% state and 10% local sponsors. Maintenance activities are not eligible for federal funding.

The Plan assumes funding of \$5 million per year for O&M for the first five years and \$3 million per year after that. This level of funding should help sponsors catch up with unmet needs that have accumulated over the years. After 10 years, annual O&M needs will likely be between \$2 million and \$4 million.

Dam Repair.

Since 2010 repairs have been completed on 143 dams, which was funded by a combination of federal and state funds. Currently, there are 188 dams needing repair at an estimated cost of \$136 million. Applications for dam repair have been received from local sponsors for 49 dams and a total cost of \$27.5 million. Cost share rates for state funded dam repair are 95% state and 5% local sponsors.

The Plan assumes funding would be provided for all current applications for dam repair during the first three years (2020 through 2022). For years 2023 through 2029, the remaining currently known dam repair needs will be funded. It is assumed that all dam repairs will be accomplished with state funds only, as federal dam repair funds are usually only available during major flood disasters.

Dam Rehabilitation and Upgrade to High Hazard Criteria.

Since 2003, applications for federal dam rehabilitation have been received on 82 dams, and rehabilitation has been completed on 24 dams. TSSWCB provided matching state funds (beginning in 2010) on 10 of these dams. Planning and design activities, funded by USDA-NRCS, are underway on 19 dams, and two are currently in construction. Cost share rates for federal rehabilitation projects are 65% federal, 33.25% state, and 1.75% local sponsor.

TSSWCB has received 32 applications for state funded dam upgrade. Twenty of these dams are currently being designed to upgrade them to meet high hazard criteria. Design and construction costs on these dams will be funded with state funds only. However, the state funded upgrade is very similar to the federal rehabilitation program. In both cases, high hazard dams are upgraded to meet current high hazard safety criteria. Cost share rates for state funded dam upgrade are 98.25% state and 1.75% local sponsor.

The Plan assumes state matching funds would be provided for all current federally funded rehabilitation projects (21 dams). If additional federal funds are provided during this period, those projects will receive top priority for state matching funds. The Plan also assumes funds (state funds only) would be provided for upgrade of 310 high hazard dams. Through both the federal and state programs, 331 dams would be upgraded to meet high hazard criteria during this period.

Quality Standards and Quality Assurance Monitoring

All work on eligible flood control dams will be required to meet USDA-NRCS and/or TCEQ Dam Safety standards and criteria. TSSWCB will contract with USDA-NRCS for some of the design and construction inspection assistance. However, NRCS does not have adequate personnel to meet all engineering needs.

TSSWCB has developed Indefinite Delivery Indefinite Quantity (IDIQ) contracts with five professional engineering firms in Texas to deliver the bulk of the engineering services for this plan. These five firms have extensive experience in planning, design, and construction of the Flood Control Program dams built by NRCS.

Staffing and Resource Needs

It is anticipated that one additional engineer, two additional project managers, and one additional accountant will be needed to implement the Plan. Therefore, beginning in year 2022, salary and overhead costs are increased to reflect the additional resources needed.

TSSWCB has also determined that IDIQ contracts with additional engineering firms will likely be needed if funding increases from current levels.

10-Year Plan Tables

The goal is to complete all currently known needs for maintenance and repair, and 25% of known dam rehabilitation/upgrade within a 10-year period.

All currently active federal rehabilitation projects are assumed to receive federal construction funds from 2020 through 2025. After 2025, federal funding is unknown.

The schedule of individual dam projects (based on applications received) is shown by year in detail for the first 5 years. For years 5 through 10, only the *number* of dam repairs or dam upgrades are shown.

The specific projects that will be addressed will be dependent on sponsor's applications for assistance. In order to avoid influencing future construction bids, costs for individual projects have been redacted, and only the totals by fund source are shown.

The tables for years 2020 -2021 are based on currently available funding. For years 2022 through 2029, an annual appropriation of \$9,000,000 general revenue is assumed, and the additional state funding needed to accomplish the Plan is shown. Inflation of 1.5% per year has been applied to the construction cost for dam repair, rehabilitation, and upgrade beginning in year 2022.

TSSWCB FLOOD CONTROL BUDGET SUMMARY - 10 YEAR PLAN										
FISCAL YEAR	ANNUAL STATE GR	ADDITIONAL STATE FUNDING	TOTAL STATE FUNDING	SPONSOR'S COST	FEDERAL FUNDING					
2020	8,832,484	14,807,506	23,639,990	1,302,746	7,121,363					
2021	8,832,484	147,689,696	156,522,180	3,514,767	26,571,879					
2022	9,000,000	152,912,861	161,912,861	3,208,204	10,392,120					
2023	9,000,000	267,402,823	276,402,823	4,313,241	2,100,000					
2024	9,000,000	155,705,020	164,705,020	3,288,041	19,031,349					
2025	9,000,000	275,718,103	284,718,103	4,502,417	5,519,090					
2026	9,000,000	148,533,279	157,533,279	2,639,007	0					
2027	9,000,000	287,089,462	296,089,462	4,552,365	0					
2028	9,000,000	153,167,776	162,167,776	2,709,176	0					
2029	9,000,000	295,911,814	304,911,814	4,680,366	0					
TOTALS	\$89,664,968	\$1,898,938,339	\$1,988,603,307	\$34,710,331	\$70,735,801					

	Type of Work		Number of Dams	Percent of Need	Remaining Dams*	
Total dam rep	airs funded		188	100%	0	
Total federal h	nigh hazard dam reh	abs funded	21			
				25%	387	
Total state hig	h hazard dam upgra	ides funded	310			

^{*} The number of dams being reclassified from low to high hazard increases by an average of 20 dams per year. This plan accomplishes rehabilitation/upgrade of 20 dams per year plus 25% of 516 dams (current need).

NOTE: 1.5% inflation added for each year from 2022 through 2029

TSSWCI	B FLOOD CON	TROL PROGRAN	BUDGET - 202	20	-
BUDGET ITEM	COUNTY	STATE FUNDING	SPONSOR'S COST	FEDERAL FUNDING	TOTAL PROJECT COST
Salary and Overhead		900,000			
Dam Operation & Maintenance		4,935,000	522,222		5,457,222
Engineering Services		3,213,395			
		Dam Repair			
Elm Creek (Centex) 13R	Bell				
Elm Creek (Centex) 14	Bell				
Elm Creek (Centex) 15	Bell				
Chambers Creek 33	Johnson				
Brady Creek 37	Concho				
Brady Creek 27	Concho				
Brady Creek 28	Concho				
Brady Creek 34	Concho				
Brady Creek 36	Concho				
Brady Creek 38	Concho				
Denton Creek 21	Wise				
Chambers Creek 6	Ellis				
Chambers Creek 107	Ellis				
Chambers Creek 79A	Ellis				
Chambers Creek 23	Ellis				
Chambers Creek 125	Ellis				
Chambers Creek 110	Ellis				
Upper East Fork Lateral 11	Kaufman				
Cow Bayou 10	McLennan				
Cedar Creek 135C	Van Zandt				
Cedar Creek 90	Kaufman				
Clear Fork Trinity River 23	Parker				
Subtotal - Dam Repair		12,359,212	620,486	0	12,979,698
	Federal High	Hazard Dam Rehabi			
East Fork Above Lavon 4	Collin				
Lower Brushy Creek 20	Williamson				
Plum Creek 10	Hays				
Subtotal Federal Rehab	,0	2,232,383	160,038	7,121,363	10,955,941
2000000.1000.00.10000	State High	h Hazard Dam Upgr	· · · · · · · · · · · · · · · · · · ·	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	_5,555,511
None this year	2.2.2.1.18				
Subtotal - State Upgrade		0	0	0	0
TOTAL FUNDING NEEDED		23,639,990	1,302,746	7,121,363	29,392,861
TSSWCB ANNUAL APPROPRIATION		8,832,484	-,,,	-,,555	==,==,==
TSSWCB ADDITIONAL FUNDING NEEDED		14,807,506			

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BUDGET ITEM	COUNTY	STATE FUNDING	SPONSOR'S COST	FEDERAL FUNDING	TOTAL PROJECT COST
Salary and Overhead		900,000			
Dam Operation & Maintenance		4,935,000	522,222		5,457,22
Engineering Services		34,529,819			
		Dam Repair	T		
Auds Creek 5	Lamar				
Auds Creek 6A	Lamar				
Auds Creek 7	Lamar Van Zandt				
Cedar Creek 126 Cedar Creek 129	Van Zandt Van Zandt				
Cedar Creek 135B	Van Zandt				
Cedar Creek 136	Van Zandt				
Chambers Creek 100	Ellis				
Chambers Creek 113	Ellis				
Chambers Creek 115	Ellis				
Chiltipin-San Fernando Creek 2	Duval				
Elm Creek (Centex) 26	Bell				
Elm Creek (Centex) 31	Bell				
Elm Creek (Centex) 32	Milam				
Elm Creek (Centex) 37	Milam				
Elm Creek (Centex) 38	Milam				
Elm Creek (Centex) 43 Lake Creek 2	Milam Anderson				
Lake Creek 2 Lake Creek 3	Anderson				
Lower Brushy Creek 12	Williamson				
Lower Brushy Creek 22	Williamson				
Lower Plum Creek 23	Caldwell				
Mountain Creek 11	Ellis				
Pine Creek 14	Lamar				
Pine Creek 3	Lamar				
Richland Creek 16A	Limestone				
Salt Creek and Laterals 8A	Wise				
San Diego/Rosita Creek 2	Duval				
Upper Lake Fork 12	Hopkins				
Upper Lake Fork 15A	Hopkins				
Upper Lake Fork 2	Hunt				
Upper Lake Fork 23 Subtotal - Dam Repair	Hopkins	15,198,544	762,437	0	15,960,981
Subtotal - Dalli Repail	Federal High I	Hazard Dam Rehabi		U	13,960,961
Chambers Creek 11	Ellis				
Cedar Creek 87A	Kaufman				
Lower Running Water Draw 4	Hale				
Plum Creek 12	Hays				
Plum Creek 21	Caldwell				
Subtotal - Federal Rehab		13,592,538	715,396	26,571,879	40,879,813
	State High	Hazard Dam Upgra	ade	p	
Big Sandy 43	Wise				
Big Sandy 44	Wise				
Chambers Creek 1	Ellis				
	Mariani-			p	
Chambers Creek 129	Navarro				
Chambers Creek 129 Chambers Creek 15	Ellis				
Chambers Creek 129 Chambers Creek 15 Chambers Creek 7	Ellis Ellis				
Chambers Creek 129 Chambers Creek 15 Chambers Creek 7 Chambers Creek 9	Ellis Ellis Ellis				
Chambers Creek 129 Chambers Creek 15 Chambers Creek 7	Ellis Ellis				
Chambers Creek 129 Chambers Creek 15 Chambers Creek 7 Chambers Creek 9 East Fork Above Lavon 15	Ellis Ellis Ellis Collin				
Chambers Creek 129 Chambers Creek 15 Chambers Creek 7 Chambers Creek 9 East Fork Above Lavon 15 East Fork Above Lavon 16	Ellis Ellis Ellis Collin Collin				
Chambers Creek 129 Chambers Creek 15 Chambers Creek 7 Chambers Creek 9 East Fork Above Lavon 15 East Fork Above Lavon 16 Elm Creek (Centex) 23	Ellis Ellis Ellis Collin Collin Bell				
Chambers Creek 129 Chambers Creek 15 Chambers Creek 7 Chambers Creek 9 East Fork Above Lavon 15 East Fork Above Lavon 16 EIm Creek (Centex) 23 EIm Creek (Centex) 39 EIm Creek (Centex) 4 Lower Brushy Creek 18	Ellis Ellis Ellis Collin Collin Bell Falls Bell Williamson				
Chambers Creek 129 Chambers Creek 15 Chambers Creek 7 Chambers Creek 9 East Fork Above Lavon 15 East Fork Above Lavon 16 Elm Creek (Centex) 23 Elm Creek (Centex) 39 Elm Creek (Centex) 4 Lower Brushy Creek 18 Lower East Fork Laterals 3	Ellis Ellis Ellis Collin Collin Bell Falls Bell Williamson Kaufman				
Chambers Creek 129 Chambers Creek 15 Chambers Creek 7 Chambers Creek 9 East Fork Above Lavon 15 East Fork Above Lavon 16 Elm Creek (Centex) 23 Elm Creek (Centex) 39 Elm Creek (Centex) 4 Lower Brushy Creek 18 Lower East Fork Laterals 3 Plum Creek 14	Ellis Ellis Ellis Collin Collin Bell Falls Bell Williamson Kaufman Caldwell				
Chambers Creek 129 Chambers Creek 15 Chambers Creek 7 Chambers Creek 9 East Fork Above Lavon 15 East Fork Above Lavon 16 Elm Creek (Centex) 23 Elm Creek (Centex) 39 Elm Creek (Centex) 4 Lower Brushy Creek 18 Lower East Fork Laterals 3 Plum Creek 14 Plum Creek 2	Ellis Ellis Ellis Collin Collin Bell Falls Bell Williamson Kaufman Caldwell Hays				
Chambers Creek 129 Chambers Creek 15 Chambers Creek 7 Chambers Creek 9 East Fork Above Lavon 15 East Fork Above Lavon 16 Elm Creek (Centex) 23 Elm Creek (Centex) 39 Elm Creek (Centex) 4 Lower Brushy Creek 18 Lower East Fork Laterals 3 Plum Creek 14 Plum Creek 2 Upper Cibolo Creek 4	Ellis Ellis Ellis Collin Collin Bell Falls Bell Williamson Kaufman Caldwell Hays Kendall				
Chambers Creek 129 Chambers Creek 15 Chambers Creek 7 Chambers Creek 9 East Fork Above Lavon 15 East Fork Above Lavon 16 Elm Creek (Centex) 23 Elm Creek (Centex) 39 Elm Creek (Centex) 4 Lower Brushy Creek 18 Lower East Fork Laterals 3 Plum Creek 14 Plum Creek 2 Upper Cibolo Creek 4 Upper East Fork Laterals 5B	Ellis Ellis Ellis Collin Collin Bell Falls Bell Williamson Kaufman Caldwell Hays Kendall Rockwall				
Chambers Creek 129 Chambers Creek 15 Chambers Creek 7 Chambers Creek 7 Chambers Creek 9 East Fork Above Lavon 15 East Fork Above Lavon 16 Elm Creek (Centex) 23 Elm Creek (Centex) 39 Elm Creek (Centex) 4 Lower Brushy Creek 18 Lower East Fork Laterals 3 Plum Creek 14 Plum Creek 2 Upper Cibolo Creek 4 Upper East Fork Laterals 5B Upper East Fork Laterals 5C	Ellis Ellis Ellis Collin Collin Bell Falls Bell Williamson Kaufman Caldwell Hays Kendall Rockwall				
Chambers Creek 129 Chambers Creek 15 Chambers Creek 7 Chambers Creek 9 East Fork Above Lavon 15 East Fork Above Lavon 16 Elm Creek (Centex) 23 Elm Creek (Centex) 39 Elm Creek (Centex) 4 Lower Brushy Creek 18 Lower East Fork Laterals 3 Plum Creek 14 Plum Creek 2 Upper Cibolo Creek 4 Upper East Fork Laterals 5B Upper East Fork Laterals 5C Williams Creek 1	Ellis Ellis Ellis Collin Collin Bell Falls Bell Williamson Kaufman Caldwell Hays Kendall Rockwall	\$7.3CC 270	1514 742		88 990 000
Chambers Creek 129 Chambers Creek 15 Chambers Creek 7 Chambers Creek 9 East Fork Above Lavon 15 East Fork Above Lavon 16 Elm Creek (Centex) 23 Elm Creek (Centex) 39 Elm Creek (Centex) 4 Lower Brushy Creek 18 Lower East Fork Laterals 3 Plum Creek 14 Plum Creek 14 Upper Cibolo Creek 4 Upper East Fork Laterals 5B Upper East Fork Laterals 5C Williams Creek 1	Ellis Ellis Ellis Collin Collin Bell Falls Bell Williamson Kaufman Caldwell Hays Kendall Rockwall	87,366,279 156 522 180		0	
Chambers Creek 129 Chambers Creek 15 Chambers Creek 7 Chambers Creek 9 East Fork Above Lavon 15 East Fork Above Lavon 16 Elm Creek (Centex) 23 Elm Creek (Centex) 39 Elm Creek (Centex) 4 Lower Brushy Creek 18 Lower East Fork Laterals 3 Plum Creek 14 Plum Creek 2 Upper Cibolo Creek 4 Upper East Fork Laterals 5B Upper East Fork Laterals 5C Williams Creek 1	Ellis Ellis Ellis Collin Collin Bell Falls Bell Williamson Kaufman Caldwell Hays Kendall Rockwall	87,366,279 156,522,180 8,832,484	3,514,767	0 26,571,879	88,880,991 151,179,007

TSSWCI	B FLOOD CON	TROL PROGRAN	л BUDGET - 202	22	
BUDGET ITEM	COUNTY	STATE FUNDING	SPONSOR'S COST	FEDERAL FUNDING	TOTAL PROJECT COST
Salary and Overhead		1,200,000			
Dam Operation & Maintenance		4,935,000	522,222		5,457,222
Engineering Services		38,170,817			
		Dam Repair			
Cedar Creek 13	Rockwall				
Cedar Creek 3	Rockwall				
Cedar Creek 70	Kaufman				
Cedar Creek 94B	Kaufman				
Denton Creek 24	Wise				
Denton Creek 24A	Wise				
Dry Devil and Lowery Draw 4	Sutton				
Elm Creek (Centex) 19	Bell				
Elm Creek (Centex) 34	Milam				
Lower East Fork Laterals 2	Kaufman				
Lower East Fork Laterals 6	Kaufman				
Salt Creek and Laterals 6	Wise				
Salt Creek and Laterals 8B	Wise				
Upper East Fork Laterals 4	Rockwall				
Upper East Fork Laterals 4B	Rockwall				
Upper East Fork Laterals 6A	Rockwall				
Upper Pecan Bayou 30	Brown				
Subtotal - Dam Repair		12,567,325	629,944	0	13,197,269
	Federal High	Hazard Dam Rehabi	litation		
Chambers Creek 10	Ellis				
Lower East Fork Laterals 10	Kaufman				
Lower Plum Creek 28	Caldwell				
Subtotal - Federal Rehab		5,315,969	279,788	10,392,120	15,987,877
	State Hig	h Hazard Dam Upgr	ade		
25 dam upgrades		99,723,750	1,776,250		101,500,000
Subtotal - State Upgrade		99,723,750	1,776,250	0	101,500,000
TOTAL FUNDING NEEDED		161,912,861	3,208,204	10,392,120	136,142,368
TSSWCB ANNUAL APPROPRIATION		9,000,000			
TSSWCB ADDITIONAL FUNDING NEEDED		152,912,861			

TSSWCE	3 FLOOD CON	TROL PROGRAN	/I BUDGET - 202	 !3	
BUDGET ITEM	COUNTY	STATE FUNDING	SPONSOR'S COST	FEDERAL FUNDING	TOTAL PROJECT COST
Salary and Overhead		1,200,000			
Dam Operation & Maintenance		4,935,000	522,222		5,457,222
Engineering Services		69,262,426			
		Dam Repair			
15 dam repairs		7,927,581	417,241		8,344,822
Subtotal - Dam Repair		7,927,581	417,241	0	8,344,822
	Federal High	Hazard Dam Rehabi	litation		
Lower East Fork Laterals 9	Kaufman				
Subtotal - Federal Rehab		1,074,231	56,538	2,100,000	3,230,769
	State Hig	h Hazard Dam Upgra	ade		
Brady Creek 1	McCulloch				
Elm Creek (Centex) 21	Bell				
Elm Creek (Centex) 22	Bell				
Elm Creek (Centex) 30	Bell				
Elm Creek (Centex) 8	Bell				
Escondido Creek 1	Karnes				
Escondido Creek 12	Karnes				
Escondido Creek 4	Karnes				
Rowlett Creek 4	Collin				
Upper Brushy Creek 25	Williamson				
Upper East Fork Laterals 5A	Rockwall				
Williams Creek 4	Gillespie				
Sulphur Creek 6	Lampasas				
34 additional dam upgrades					
Subtotal - State Upgrade		192,003,585	3,317,240	0	195,320,825
TOTAL FUNDING NEEDED		276,402,823	4,313,241	2,100,000	212,353,638
TSSWCB ANNUAL APPROPRIATION		9,000,000			
TSSWCB ADDITIONAL FUNDING NEEDED		267,402,823			

TSSWCI	TSSWCB FLOOD CONTROL PROGRAM BUDGET - 2024							
BUDGET ITEM	COUNTY	STATE FUNDING	SPONSOR'S COST	FEDERAL FUNDING	TOTAL PROJECT COST			
Salary and Overhead		1,200,000						
Dam Operation & Maintenance		4,935,000	522,222		5,457,222			
Engineering Services		38,050,355						
		Dam Repair						
15 dam repairs		8,046,495	423,500		8,469,995			
Subtotal - Dam Repair		8,046,495	423,500	0	8,469,995			
	Federal High	Hazard Dam Rehab	ilitation					
Big Sandy Creek 26	Wise							
Chambers Creek 4	Ellis							
Clear Fork Trinity 33	Parker							
Comal River 4	Comal							
Kickapoo Creek 4	Coke							
Upper Cibolo Creek 2	Kendall							
Williams Creek 2	Gillespie							
Subtotal - Federal Rehab		9,735,267	512,382	19,031,349	29,278,998			
	State High	n Hazard Dam Upgr	ade					
25 dam upgrades		102,737,903	1,829,937		104,567,840			
Subtotal - State Upgrade		102,737,903	1,829,937	0	104,567,840			
TOTAL FUNDING NEEDED		164,705,020	3,288,041	19,031,349	147,774,055			
TSSWCB ANNUAL APPROPRIATION		9,000,000						
TSSWCB ADDITIONAL FUNDING NEEDED		155,705,020						

TSSWCB	FLOOD CONT	ROL PROGRAN	N BUDGET - 202	.5	
BUDGET ITEM	COUNTY	STATE FUNDING	SPONSOR'S COST	FEDERAL FUNDING	TOTAL PROJECT COST
Salary and Overhead		1,200,000			
Dam Operation & Maintenance		3,000,000	317,460		3,317,460
Engineering Services		71,305,294			
		Dam Repair			
19 dam repairs		10,345,111	544,480		10,889,591
Subtotal - Dam Repair		10,345,111	544,480	0	10,889,591
	Federal High H	lazard Dam Rehabi	litation		
Chambers Creek 6	Ellis				
Kickapoo Creek 5	Coke				
Subtotal - Federal Rehab		2,823,227	148,591	5,519,090	8,490,908
	State High	Hazard Dam Upgra	ade		
47 dam upgrades		196,044,471	3,491,886		199,536,357
Subtotal - State Upgrade		196,044,471	3,491,886	0	199,536,357
TOTAL FUNDING NEEDED		284,718,103	4,502,417	5,519,090	222,234,316
TSSWCB ANNUAL APPROPRIATION		9,000,000			
TSSWCB ADDITIONAL FUNDING NEEDED	_	275,718,103			

TSSWCB FLOOD CONTROL PROGRAM BUDGET - 2026								
BUDGET ITEM	COUNTY	STATE FUNDING	SPONSOR'S COST	FEDERAL FUNDING	TOTAL PROJECT COST			
Salary and Overhead		1,200,000						
Dam Operation & Maintenance		3,000,000	317,460		3,317,460			
Engineering Services		39,200,426						
		Dam Repair						
15 dam repairs		8,289,700	436,300		8,726,000			
Subtotal - Dam Repair		8,289,700	436,300	0	8,726,000			
	Federal High H	lazard Dam Rehabi	litation					
federal funding unknown								
Subtotal - Federal Rehab		0	0	0	0			
	State High	Hazard Dam Upgra	ade					
25 dam upgrades		105,843,153	1,885,247		107,728,400			
Subtotal - State Upgrade		105,843,153	1,885,247	0	107,728,400			
TOTAL FUNDING NEEDED		157,533,279	2,639,007	0	119,771,860			
TSSWCB ANNUAL APPROPRIATION		9,000,000						
TSSWCB ADDITIONAL FUNDING NEEDED		148,533,279						

TSSWCB FLOOD CONTROL PROGRAM BUDGET - 2027									
BUDGET ITEM	COUNTY	STATE FUNDING	SPONSOR'S COST	FEDERAL FUNDING	TOTAL PROJECT COST				
Salary and Overhead		1,200,000							
Dam Operation & Maintenance		3,000,000	317,460		3,317,460				
Engineering Services		74,964,526							
		Dam Repair							
19 dam repairs		10,657,792	560,936		11,218,728				
Subtotal - Dam Repair		10,657,792	560,936	0	11,218,728				
	Federal High I	Hazard Dam Rehabi	litation						
federal funding unknown									
Subtotal - Federal Rehab		0	0	0	0				
	State High	Hazard Dam Upgr	ade						
48 dam upgrades		206,267,144	3,673,969		209,941,113				
Subtotal - State Upgrade		206,267,144	3,673,969	0	209,941,113				
TOTAL FUNDING NEEDED		296,089,462	4,552,365	0	224,477,301				
TSSWCB ANNUAL APPROPRIATION		9,000,000							
TSSWCB ADDITIONAL FUNDING NEEDED		287,089,462							

TSSWCB FLOOD CONTROL PROGRAM BUDGET - 2028								
BUDGET ITEM	COUNTY	STATE FUNDING	SPONSOR'S COST	FEDERAL FUNDING	TOTAL PROJECT COST			
Salary and Overhead		1,200,000						
Dam Operation & Maintenance		3,000,000	317,460		3,317,460			
Engineering Services		40,385,258						
		Dam Repair						
15 dam repairs		8,540,257	449,487		8,989,744			
Subtotal - Dam Repair		8,540,257	449,487	0	8,989,744			
	Federal High I	lazard Dam Rehabi	ilitation					
federal funding unknown								
Subtotal - Federal Rehab		0	0	0	0			
	State High	Hazard Dam Upgra	ade					
25 dam upgrades		109,042,261	1,942,229		110,984,490			
Subtotal - State Upgrade		109,042,261	1,942,229	0	110,984,490			
TOTAL FUNDING NEEDED		162,167,776	2,709,176	0	123,291,694			
TSSWCB ANNUAL APPROPRIATION		9,000,000						
TSSWCB ADDITIONAL FUNDING NEEDED		153,167,776						

TSSWCB FLOOD CONTROL PROGRAM BUDGET - 2029								
BUDGET ITEM	COUNTY	STATE FUNDING	SPONSOR'S COST	FEDERAL FUNDING	TOTAL PROJECT COST			
Salary and Overhead		1,200,000						
Dam Operation & Maintenance		3,000,000	317,460		3,317,460			
Engineering Services		77,230,327						
		Dam Repair			•			
19 dam repairs		10,979,923	577,891		11,557,814			
Subtotal - Dam Repair		10,979,923	577,891	0	11,557,814			
	Federal High I	lazard Dam Rehabi	ilitation					
federal funding unknown								
Subtotal - Federal Rehab		0	0	0	0			
	State High	Hazard Dam Upgr	ade					
48 dam upgrades		212,501,564	3,785,015		216,286,579			
Subtotal - State Upgrade		212,501,564	3,785,015	0	216,286,579			
TOTAL FUNDING NEEDED	<u> </u>	304,911,814	4,680,366	0	231,161,853			
TSSWCB ANNUAL APPROPRIATION		9,000,000						
TSSWCB ADDITIONAL FUNDING NEEDED		295,911,814						

From: SENATE BILL 8, TEXAS 86TH LEGISLATURE

Sec. 201.0227. TEN-YEAR DAM REPAIR AND MAINTENANCE PLAN; REPORTS. (a) In this section:

- (1) "Plan" means the 10-year dam repair, rehabilitation, and maintenance plan adopted under this section.
- (2) "Water development board" means the Texas Water Development Board.
- (b) The state board shall prepare and adopt a plan describing the repair and maintenance needs of flood control dams described by Subsection (c) and prepare and adopt a new plan before the end of the 10th year following the adoption of a plan.
- (c) The plan must include projects under the jurisdiction of the state board and authorized under:
- (1) Section 13, Flood Control Act of 1944 (Pub. L. No. 78-534);
- (2) the pilot watershed program authorized under the Department of Agriculture Appropriation Act, 1954 (Pub. L. No. 83-156);
- (3) the Watershed Protection and Flood Prevention Act (Pub. L. No. 83-566); and
- (4) Subtitle H, Title XV, Agriculture and Food Act of 1981 (Pub. L. No. 97-98).
- (d) The state board shall deliver the plan adopted under this section to the water development board.
- (d-1) The water development board, in coordination with the state board and the Texas Commission on Environmental Quality, shall prepare a report of the repair and maintenance needs of all dams that:
- (1) are not licensed by the Federal Energy Regulatory Commission;
 - (2) do not have flood storage;
 - (3) are required to pass floodwaters; and
 - (4) have failed.
- (e) Each year, the state board shall deliver to the water development board a report regarding progress made on items listed in the plan. If an update to the report or plan is necessary before the yearly report or before the end of the 10-year cycle, the state board must deliver to the water development board an amended report or plan.



TEXAS STATE SOIL AND WATER CONSERVATION BOARD

FLOOD CONTROL PROGRAM 10-YEAR PLAN

Adopted on May 21, 2020

Barry Mahler
MAY 2 1 2020
Date
TSSWCB Executive Director
Rex Isom
MAY 2 1 2020 Date

TSSWCB Flood Control Program Administrator/Engineer

TSSWCB Chair

Steven Bednarz, P.E.

MAY 2 1 2020

Date