

**Missouri Conservation Heritage Foundation**

**Stream Stewardship Trust Fund**

**Annual Report  
January 1 through December 31, 2021**

**Dedicated to  
Improving Missouri Stream Conservation**

## Table of Contents

Executive Summary .....	3
Missouri Conservation Heritage Foundation’s Stream Stewardship Trust Fund .....	4
U.S. Army Corps of Engineers District Map .....	5
MDC Unit Map .....	6
MDC Regions Map .....	7
SSTF Service Area Map .....	8
2021 Old Program Accomplishments .....	9
2021 Program Accomplishments .....	9
SSTF Program Receipts .....	9
Table 1. Fees and credits from development projects by Corps District .....	9
Table 2. Fees and credits from development projects by EDU .....	9
SSTF Mitigation Projects .....	10
Table 3. Allocations and credits from mitigation projects by Corps District .....	10
Table 4. Allocations and credits from mitigation projects by EDU .....	10
SSTF Program Receipts History .....	11
Table 5. Fees collected and impacted resources since inception by Corps District .....	11
Table 6. Fees collected and impacted resources since inception by EDU .....	11
SSTF Allocation Timeline .....	11
Table 7. Overview of SSTF fee collection and allocation timeline .....	12
SSTF Credit Balances .....	12
Table 8. Annual credit balance status by EDU .....	12
Mitigation Project Performance Tracking .....	13
Table 9. 2021 Mitigation project monitoring .....	13
SSTF Financial Reporting .....	14
SSTF Income and Disbursements .....	14
Table 10. 2021 SSTF income and disbursements by EDU .....	14
2021 SSTF Financial Instruments .....	14
Appendix A—Status of SSTF Program Receipts as of December 31, 2021 .....	15
Appendix B—Status of SSTF Program Mitigation Projects as of December 31, 2021 .....	17
Appendix C—SSTF Investment Instruments .....	19
Appendix D—How the Stream Stewardship Trust Fund Works .....	23

## EXECUTIVE SUMMARY

The purpose of this annual report is to inform Corps Districts of all activities related to the Missouri Conservation Heritage Foundation's (MCHF) Stream Stewardship Trust Fund (SSTF) undertaken during January 1 through December 31, 2021.

Responsibility for compensatory mitigation associated with three Clean Water Act Section 404 authorizations was assumed (11,790.0 credits). Total fees collected were \$294,750.00.

During 2021, two projects were approved by the MCHF Board, but they did not receive Corps/IRT approval during the year. One project submitted in 2019 (1016) was approved by the Corps/IRT. A total of \$478,539.20 was spent on four mitigation projects (1013, 1014, 1015 and 1016) during 2021. In addition, \$12,810.78 of assurances funds was spent on maintenance and repair of two projects (1010 and 1013).

A total of 15,777 credits were released from mitigation projects in 2021. Six projects (1002, 1005, 1010, 1014, 1015 and 1016) reached interim benchmarks resulting in the credit release. Monitoring reports with photos were provided to the Corps as they were completed.

**MISSOURI CONSERVATION HERITAGE FOUNDATION'S  
STREAM STEWARDSHIP TRUST FUND**

A Memorandum of Understanding between the Missouri Conservation Heritage Foundation (MCHF) and the U.S. Army Corps of Engineers (COE) in 1999 authorized and established operating conditions for the Stream Stewardship Trust Fund (SSTF). With COE authorization, the MCHF—as the SSTF sponsor—can assume an applicant’s Clean Water Act Section 404 stream mitigation responsibilities (as measured by acres impacted or mitigation credits). Costs associated with participating in the Trust Fund were based on specific permit requirements and market forces. In 2008, the Corps and EPA jointly issued new rules that changed the operation of compensatory mitigation programs in the United States, and on June 6, 2013, an Instrument was approved that governed the renewed operation of the MCHF’s Stream Stewardship Trust Fund under the new rules.

In general, a development project that impacts stream environmental values that cannot be mitigated on-site or in any other way, may pay into the Stream Stewardship Trust Fund (an amount based on the environmental impacts of the development project, as measured in mitigation credits) and have those values transferred to the MCHF. MCHF, in cooperation with the Missouri Department of Conservation (MDC) uses those funds to construct restoration, enhancement, and/or protection projects within the same watershed (Ecological Drainage Unit, or EDU) to generate additional mitigation credits that offset those involved in the development project.

Additional information regarding the SSTF before and after approval of the 2013 instrument can be found in Appendix D.

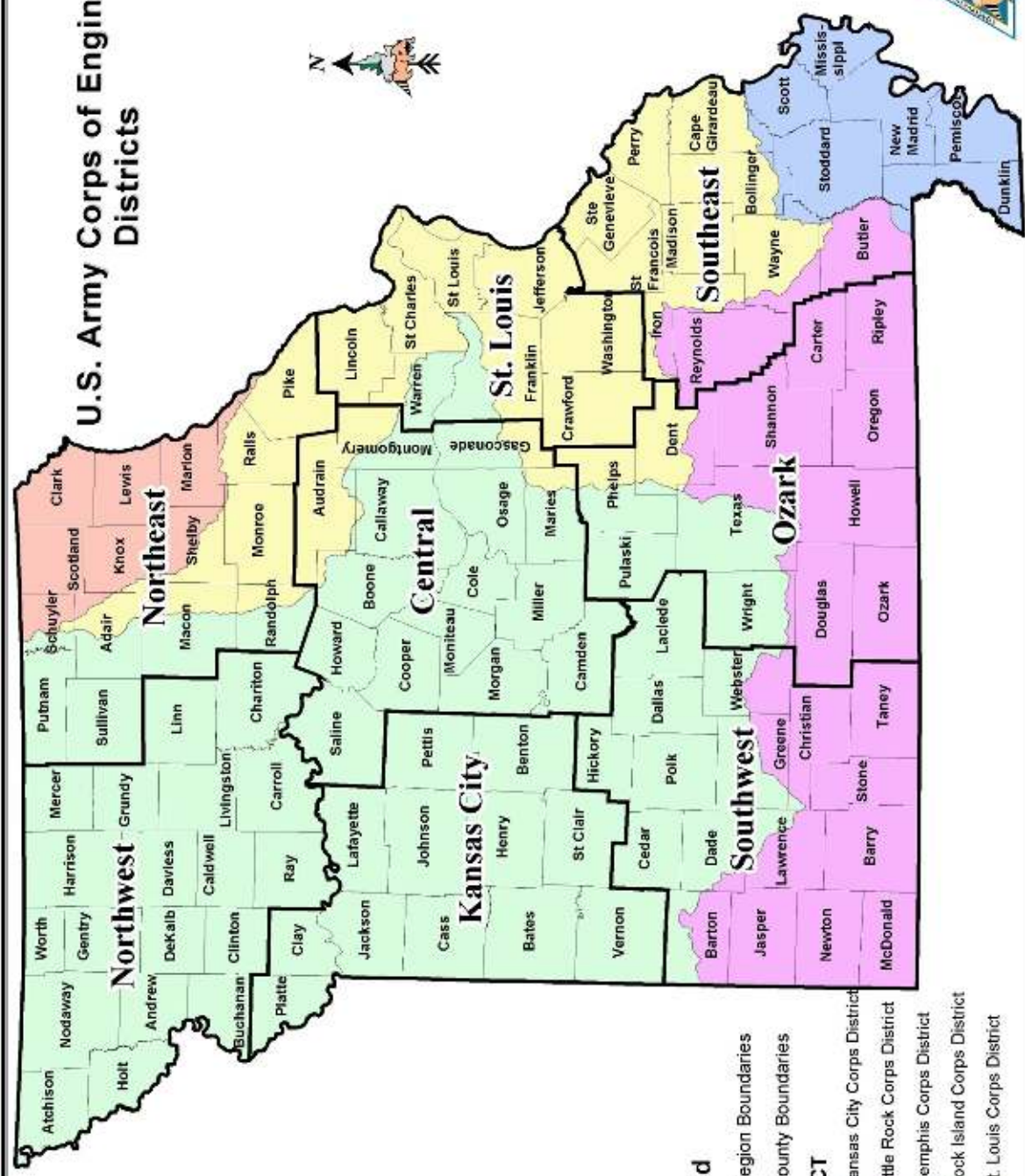
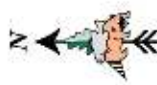
This annual report summarizes the fees collected from developing organizations during 2021, and the uses into which those fees have been invested to improve Missouri stream resources during the same period.







# U.S. Army Corps of Engineers Districts



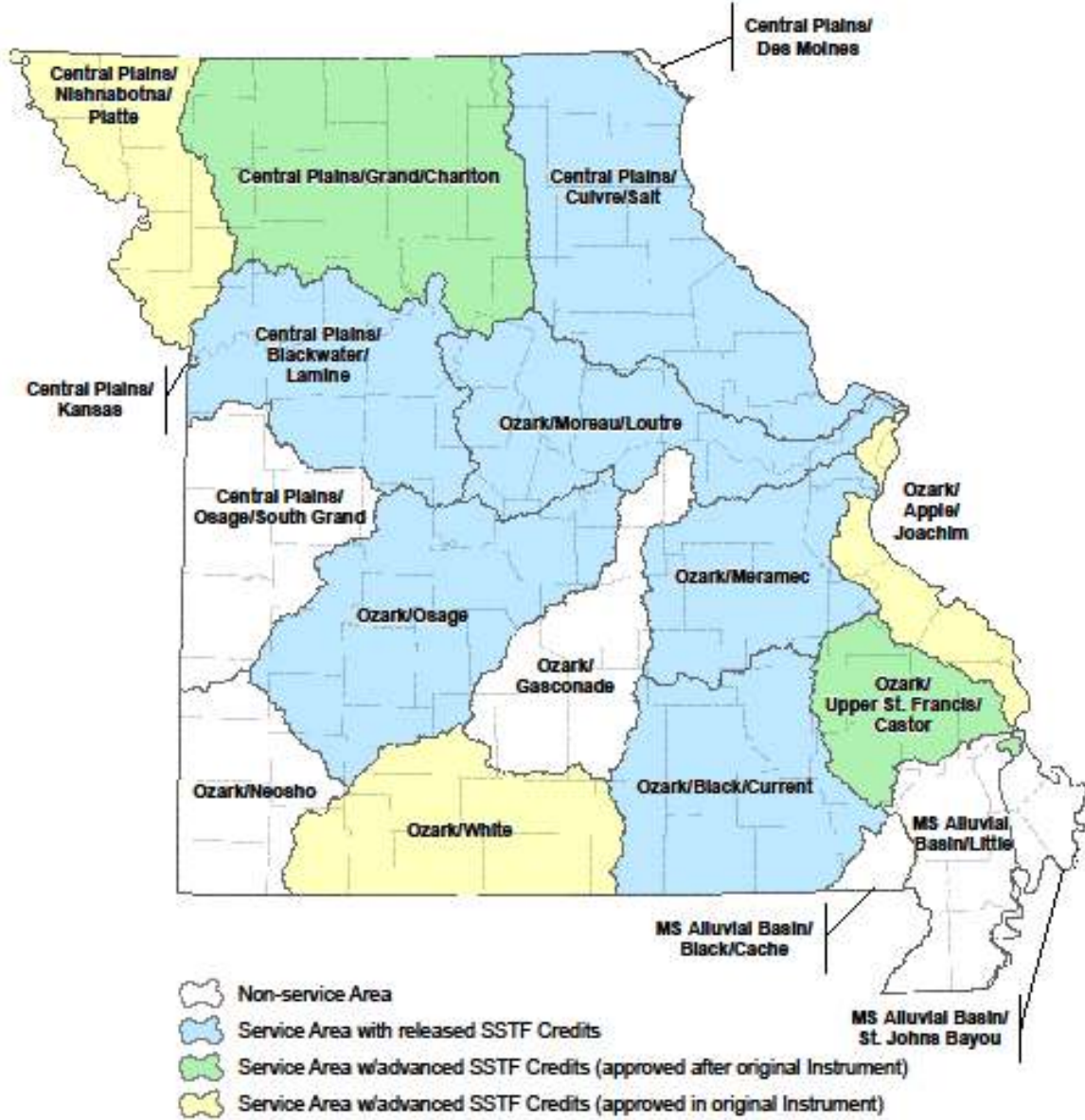
**Legend**

- Region Boundaries
- County Boundaries

**DISTRICT**

- Kansas City Corps District
- Little Rock Corps District
- Memphis Corps District
- Rock Island Corps District
- St. Louis Corps District

## Stream Stewardship Trust Fund Selected Service Areas





## 2021 Old Program Accomplishments

MCHF did not collect fees from projects governed by the 1999 MOU during 2021, and no expenditures were made on Old Program mitigation projects, including assurances expenditures. As of December 31, 2020, all Old Program projects were installed and the Old Program was considered complete. Old Program summaries appeared in the 2020 annual report, but were not to be included in future annual reports. Thus, no further reference to the Old Program is included in this or future annual reports. No maintenance and repair of Old Program projects occurred in 2021, but any expenditures of a maintenance or repair nature using assurances funds will be noted in future annual reports. A list of Old Program projects can be found in the 2020 SSTF Annual Report, and is available on request

## 2021 Program Accomplishments

### SSTF Program Receipts

Upon referral by the Corps of Engineers and by action of the Board of Directors of the Missouri Conservation Heritage Foundation, responsibility for compensatory mitigation associated with three Clean Water Act Section 404 authorizations was assumed by the trust fund. They were assumed under the Missouri Mitigation Method that was implemented with the approval of the SSTF Instrument approved on June 6, 2013. Total mitigation credits assumed in 2021 were 11,790.0 credits. Total fees collected during the same time frame were \$294,750.00. See Appendix A for complete information about SSTF Program receipts

**Table 1. Fees and credits from development projects by Corps district**

Corps District	2021	
	Fees Collected	Credit Obligation
Kansas City	\$229,700.00	9,188.0
Little Rock	\$0	0
Memphis	\$0	0
Rock Island	\$0	0
St. Louis	\$65,050.00	2,602.0
<b>TOTAL</b>	<b>\$294,750.00</b>	<b>11,790.0</b>

**Table 2. Fees and credits from development projects by EDU**

EDU	2021	
	Fees Collected	Credit Obligation
Apple/Joachim	\$49,100.00	1,964.0
Black/Current	\$0	0
Blackwater/Lamine	\$0	0
Cuivre/Salt	\$0	0
Grand Chariton	\$229,700.00	9,188.0
Meramec	\$0.00	0.0
Moreau/Loutre	\$0	0
Nishnabotna/Platte	\$0	0
Osage	\$0	0
St. Francis/Castor	\$15,950.00	638.0
White	\$0	0
<b>TOTAL</b>	<b>\$294,750.00</b>	<b>11,790.0</b>

## SSTF Mitigation Projects

During 2021, two projects were approved by the MCHF Board. One project submitted in 2019 (1016) was approved by the Corps/IRT. Only projects approved by the Corps/IRT are included in tables 3 and 4 below. See Appendix B for complete information about all new program mitigation projects.

**Table 3. Allocations and Credits From Approved Mitigation Projects by Corps District**

Corps District	2021	
	Project Allocation	Mitigation Project Credits
Kansas City	\$0	0.0
Little Rock	\$99,000.00	4,634.4
Memphis	\$0	0
Rock Island	\$0	0
St. Louis	\$0	0
<b>TOTAL</b>	<b>\$99,000.00</b>	<b>4,634.4</b>

**Table 4. Allocations and Credits From Approved Mitigation Projects by EDU**

EDU	2021	
	Project Allocation	Mitigation Project Credits
Apple/Joachim	\$0	0
Black/Current	\$0	0
Blackwater/Lamine	\$0	0
Cuivre/Salt	\$0	0
Meramec	\$0	0
Moreau/Loutre	\$0	0
Nishnabotna/Platte	\$0	0
Osage	\$0	0
St. Francis/Castor	\$0	0
White	\$99,000.00	4,634.4
<b>TOTAL</b>	<b>\$99,000.00</b>	<b>4,634.4</b>

## SSTF Program Receipt History

The following tables represent the total fees collected and credit obligation assumed since June 6, 2013, the beginning of the current SSTF Program.

**Table 5. Fees Collected and Impacted Resources since Inception by Corps District**

Corps District	Since Inception	
	Fees Collected	Credit Obligation
Kansas City	\$1,225,085.00	50,247.4
Little Rock	\$865,575.00	34,623.0
Memphis	\$0	0
Rock Island	\$0	0
St. Louis	\$1,529,819.00	59,948.8
<b>TOTAL</b>	<b>\$3,620,479.00</b>	<b>144,819.2</b>

**Table 6. Fees Collected and Impacted Resources since Inception by EDU**

EDU	Since Inception	
	Fees Collected	Credit Obligation
Apple/Joachim	\$125,000.00	5,000.0
Black/Current	\$713,150.00	28,526.0
Blackwater/Lamine	\$599,640.00	23,985.6
Cuivre/Salt	\$383,400.00	15,336.0
Grand/Chariton	\$250,000.00	10,000.0
Meramec	\$450,300.00	18,012.0
Moreau/Loutre	\$633,675.00	25,347.0
Nishnabotna/Platte	\$125,000.00	5,000.0
Osage	\$81,675.00	3,267.0
St. Francis/Castor	\$150,389.00	6,015.6
White	\$108,250.00	4,330.0
<b>TOTAL</b>	<b>\$3,620,479.00</b>	<b>144,819.2</b>

## SSTF Allocation Timeline

The in lieu fee instrument under which the SSTF operates recommends that, if possible, credits sold from EDUs using advanced credits be allocated to mitigation projects in those EDUs within a three year period. Five EDUs use advanced credits; Table 7 summarizes the timeline for allocating projects in those EDUs. Three development projects in EDUs using advanced credits were assumed in 2021, totaling \$274,750.00 and 11,790.0 credits. By the 2021 allocation year, three projects have been allocated in the Upper St. Francis/Castor EDU totaling 25,417 credits and four projects have been allocated in the Ozark/White EDU totaling 33,760.55 credits (one additional project in an EDU using advanced credits awaits Corps/IRT approval); to date, good projects in the Apple Joachim, Grand/Chariton and Nishnabotna/Platte EDUs have yet to be identified.

**Table 7. Overview of SSTF Fee Collection and Allocation Timeline**

Calendar Year	Total Fees Collected	Total Credits	Allocation Year
2013	\$0	0	2016
2014	\$38,050.00	1,522.0	2017
2015	\$142,350.00	5,694.0	2018
2016	\$108,375.00	4,335.0	2019
2017	\$97,689.00	3,907.6	2020
2018	\$28,475.00	1,139.0	2021
2019	\$48,950.00	1,958.0	2022
2020	\$0	0	2023
2021	\$274,750.00	11,790.0	2024
<b>TOTAL</b>	<b>\$738,639.00</b>	<b>30,345.6</b>	

### SSTF Credit Balances

The mitigation obligation of three additional development projects was assumed in 2021; sixteen mitigation projects have been approved since 2013. Table 8 accounts for the credits assumed to date. The Instrument specifies releases in credits as projects are improved, installed, and meet project benchmarks. A total of 15,777 credits were released from new mitigation projects in 2021.

**Table 8. Annual Credit\* Balance Status**

EDU	2020 Credit Balance*	2021 New Credits Assumed	Total Credits Assumed	Total 2021 Mitigation Project Credits**	2021 Approved Released Credits	Total Approved Released Credits To Date	Credits Yet To Be Released	Advance Credits Offset	New Credits	End of 2021 Credit Balance***
Apple/Joachim	1,964.0	1,964.0	5,000.0	-	-	-	-	0	0	0.0
Black/Current	0	0	28,526.0	-	-	-	-	0	0	0
Blackwater/Lamine	18,597.8	0	23,985.6	-	1,225.8	4,903.2	1,275.8	0	4,903.2	19,823.6
Cuivre/Salt	-	0	15,336.0	-	-	-	-	0	0	-
Grand/Chariton	9,188.0	9,188.0	10,000.0	-	-	-	-	0	0	0.0
Meramec	7,022.0	0.0	18,012.0	-	-	-	-	0	0	7,022.0
Moreau/Loutre	6,057	0	25,347.0	-	0	6,058.0	-	0	6,058.0	6,058.0
Nishnabotna/Platte	0	0	5,000.0	-	-	-	-	0	0	0
Osage	218,897.8	0	3,267.0	0.0	5,571.4	86,818.2	15,121.8	0	86,818.2	224,469.2
St. Francis/Castor	13,241.8	638.0	6,015.6	0.0	5,083.4	13,702.8	11,714.2	10,000.0	3,702.8	17,687.2
White	12,616.2	0	4,330.0	4,634.4	3,896.4	15,842.6	17,758.9	5,000	10,842.6	16,512.6
<b>TOTAL</b>		<b>11,790.0</b>	<b>144,819.2</b>	<b>4,634.4</b>	<b>15,777.0</b>	<b>127,324.2</b>	<b>45,870.7</b>			

\*Includes initial released and advanced credits

\*\*MCHF-approved projects that have COE/IRT approval at the time of this report

\*\*\*Prior year balance minus new credits assumed plus released credits for the year

## Mitigation Project Performance Tracking

Monitoring is required of all compensatory mitigation projects to determine if each project is meeting its performance standards and if additional measures are necessary to ensure that the compensatory mitigation project is accomplishing its objectives.

Sixteen mitigation projects have been approved and are in varying stages of completion. A total of 15,777 credits were released from mitigation projects in 2021. Six projects (1002, 1005, 1010, 1014, 1015 and 1016) reached interim benchmarks resulting in the credit release. Monitoring reports with photos were provided to the Corps as they were completed.

**Table 9. 2021 Mitigation Project Monitoring**

Project Number/Type	Project Credits	Recent Monitor Dates	Project Approval	Project Construction/Acquisition	Benchmark 1	Benchmark 2	Final Benchmark	Meeting Project Objectives?	Total Released Credits to Date
1001/Stream stabilization	9,100.0	3/2021	X	X	X	X		Y	5,460.0
1002/Stream stabilization	7,962.0	4/2021	X	X	X			Y	4,777.2
1003/Bridge replacement	3,861.0	3/2019	X	X	X		X	Y	3,861.0
1004/Bridge replacement	11,500.0	3/2018	X	X	X		X	Y	11,500.0
1005/Stream stabilization	6,179.0	12/2021	X	X	X			Y	4,903.2
1006/Bridge replacement	6,058.0	11/2017	X	X	X		X	Y	6,058.0
1007/Land purchase/preservation	4,508.0		X	X			X	Y	4,508.0
1008/Bridge replacement	15,198.4	3/2018	X	X	X		X	Y	15,198.4
1009/Stream stabilization	8,580.0	4/2021	X	X	X	X		Y	5,148.0
1010/Stream stabilization	14,847.5	4/2021	X	X	X			Y	8,908.5
1011/Land purchase/preservation	27,650.6	4/2019	X	X			X	Y	27,650.5
1012/Bridge replacement	15,226.0	2/2021	X	X	X		X	Y	15,226.0
1013/Stream stabilization	10,731.0	10/2020	X					Y	2,146.2
1014/Stream stabilization	7,737.0	12/2021	X	X				Y	3,094.8
1015/Bridge replacement	19,895.0	4/2021	X	X	X		X	Y	19,895.0
1016/Stream stabilization	4,162.00	3/2021	X					Y	926.9





## SSTF Financial Reporting

### SSTF Income and Disbursements

The final instrument requires an accounting of income and disbursements for the SSTF Program as a whole and by service area. During 2021, receipts from three projects totaled \$294,750.00. A total of \$478,539.20 was spent on four mitigation projects ( 1013, 1014, 1015 and 1016) during 2020. In addition, \$12,810.78 of assurances funds were spent on maintenance and repair of two projects (1010 and 1013).

**Table 10. 2021 SSTF New Program Income and Disbursements by EDU**

<b>EDU</b>	<b>Income</b>	<b>Disbursements</b>
Apple/Joachim	\$49,100.00	\$0
Black/Current	\$0	\$0
Blackwater/Lamine	\$0	\$0
Cuivre/Salt	\$0	\$0
Grand/Chariton	\$229,700.00	\$0
Meramec	\$0	\$0
Moreau/Loutre	\$0	\$0
Nishnabotna/Platte	\$0	\$0
Osage	\$0	\$381,375.00
St. Francis/Castor	\$15,950.00	\$40,649.72
White	\$0	\$56,514.48
<b>TOTAL</b>	<b>\$294,750.00</b>	<b>\$478,539.20</b>

### 2021 SSTF Financial Instruments

The instruments in which Stream Stewardship Trust Fund monies are invested are limited to checking and money market accounts for program funds and a money market account containing funds earmarked for long term financial assurances (Appendix C). All checking and money market accounts are held in FDIC-insured accounts at Simmons Bank. Balances as of December 31, 2021, for SSTF funds were \$56,625.73 (checking account), \$1,071,073.44 (money market account for program funds), and \$279,038.97 (money market account for long term financial assurances). Per the approved Instrument, program funds will continue to be deposited into the long term financial assurances account until it reaches \$250,000; the account will then be maintained at or above that amount. In 2017, the Corps and MCHF Board approved using the long term financial assurances account to fund damages to both New and Old program mitigation projects to insure the long term ecological and physical integrity of all projects.

**Appendix A— Status of SSTF Program Receipts as of  
December 31, 2021**

APPENDIX A--Status of SSTF Program Receipts as of December 31, 2021

Corp Dist.	Region	County	Year	Date Received into SSTF	EDU	Mit. Crdts	Permit #	Fee Collected	Corps Applicant	Notes
KC	M-CE	Boone	2013	08/14/13	Ozark/Moreau/Loutre	533.00	NWK-2011-01568	\$13,325.00	JQB Construction	Allow access within a proposed residential subdivision located in an unnamed tributary to Mill Creek
KC	M-CE	Boone	2013	08/26/13	Ozark/Moreau/Loutre	790.40	NWK-2003-01414	\$19,760.00	MoDot	Permit No. 2003-01414 modified; Hinkson Creek
<b>2013 Total subsequent to New Instrument</b>						<b>1,323.40</b>		<b>\$33,085.00</b>		
KC	M-CE	Cole	2014	01/09/14	Ozark/Moreau/Loutre	3,370.50	NWK-2013-791	\$84,262.50	Land Investments, LLC	Placement of appx 1,000 feet of culvert pipe within unnamed tributary of Wears Creek
STL	O-STL	St. Charles	2014	03/17/14	Central Plains/Cuivre/Salt	5,266.00	MVS-2013-399	\$131,650.00	Lombardo Homes, LLC	Estates of Timberleaf Phase II
KC	M-KC	Johnson	2014	03/17/14	Central Plains/Blackwater/Lamine	7,902.00	NWK-2013-00247	\$197,550.00	Radmacher Bros. Excavating	Development of a limestone quarry operation which will excavate and process rock for commercial sale
STL	O-STL	St. Louis Ste.	2014	04/24/14	Ozark/Moreau/Loutre	6,995.00	MVS-2012-131	\$174,875.00	THF Florissant Development, LLC	Construction of a Wal-Mart Supercenter retail facility
STL	O-SE	Genevieve	2014	05/12/14	Upper St. Francis/Castor River	1,470.00	MVS-2013-11	\$36,750.00	Summit Proppants, Inc	Redwing Ecological Services, Inc; Summit Proppants, Inc - Colony Church #1
STL	O-STL	Jefferson	2014	07/11/14	Ozark/Meramec	1,454.00	MSV-2013-169	\$36,350.00	County of Jefferson	Jefferson County Dept of Public Works; Butcher Branch Road & Bridge MODOT #26700211
STL	O-STL	St. Charles	2014	07/25/14	Central Plains/Cuivre/Salt	1,720.00	MVS-2013-707	\$43,000.00	Pulte Homes of St. Louis	SCI Engineering, applicant on behalf of Pulte Homes of St. Louis; Chestnut Creek residential development
STL	O-STL	St. Charles	2014	09/26/14	Ozark/Moreau/Loutre	7,384.20	MVS-2013-702	\$184,605.00	Missouri Department of Conservation	August A. Busch Memorial CA Shooting Range Complex Renovation Project
LR	O-SE	Butler	2014	10/22/14	Ozark/Black/Current	1,597.00	2014-00244	\$39,925.00	Poplar Bluff School District R1	Renovation and construction of new High School over Pike Creek
STL	O-STL	Phelps	2014	11/04/14	Apple/Joachim	52.00	MVS-2004-2380	\$1,300.00	Centex/Pulte Home / SCI Engineering	Fox Ridge Residential Subdivision
STL	O-OZ	Phelps	2014	11/18/14	Ozark/Meramec	3,953.00	MVS-2014-295	\$98,825.00	MoDot	Route 8 Bridge Replacement Job Number J92221
<b>2014 Total</b>						<b>41,163.70</b>		<b>\$1,029,092.50</b>		
LR	O-SW	Jasper	2015	02/24/15	Ozark/Osage	1,767.00	SWL-2014-00409	\$44,175.00	Olsson Associates / City of Joplin	NWP No. 43 for Stormwater Management Facilities
STL	O-STL	St. Charles	2015	03/11/15	Cuivre/Salt	1,115.00	MVS-2013-733	\$27,875.00	SSM Healthcare/SCI Engineering	Wentzville Healthplex
KC	M - KC	Platte	2015	04/17/15	Central Plains/Mishnabotna/Platte	432.00	NWK-2014-00654	\$10,800.00	MD Management/Flick Seed	Green Hill Road and NW Old Tiffany Springs Road
STL	O-STL	St. Louis	2015	06/04/15	Ozark/Meramec	424.00	MVS-2013-732	\$10,600.00	The Metropolitan St. Louis Sewer District	Laven-Dei Lane Storm Water Improvements
STL	O-STL	St. Louis	2015	06/09/15	Ozark/Meramec	450.00	MVS-2014-732	\$11,250.00	Midwest Testing - ELCO Chevrolet & Cadillac	Used car lot
STL	O-STL	Jefferson	2015	06/12/15	Apple/Joachim	565.00	MVS-2015-121	\$14,125.00	Mercy Hospital - Jefferson / Heideman Associates, Inc.	Mercy-Jefferson Hospital Expansion
LR	O-SW	Greene	2015	07/06/15	Ozark/White	807.00	2015-00069	\$20,175.00	Olsson Associates / City of Springfield	Ravenwood Subdivision Stormwater Improvements
STL	O-STL	St. Louis	2015	08/03/15	Ozark/Moreau/Loutre	1,273.00	MVS-2014-448	\$31,825.00	City of Chesterfield / Intuition and Logic	Chesterfield Creek Riparian Trail - Channel Erosion Project

Corp Dist.	Region	County	Year	Date Received into SSTF	EDU	Mit. Crdts	Permit #	Fee Collected	Corps Applicant	Notes
STL	O-STL	St. Louis	2015	08/26/15	Ozark/Meramec	693.00	MVS-2014-837	\$17,325.00	SCI Engineering - Pulte Group	River Des Peres Road Subdivision
KC	M-NW	Andrew	2015	08/27/15	Central Plains/Nishnabotna/Platte	1,596.00	NWK-2015-00648	\$39,900.00	Snyder and Associates/Andrew County	Reconstruction of bridge #02700281
KC	M-KC	Platte	2015	10/30/15	Central Plains/Nishnabotna/Platte	831.00	NWK-2015-01572	\$20,775.00	A.G. Spanos Corporation/Terra Technologies	North Klamm Road Improvements
STL	O-STL	St. Charles	2015	11/09/15	Ozark/Moreau/Loutre	1,177.00	MVS-2015-255	\$29,425.00	SCI Engineering/Knapheide Equipment Co.	Westgate Business Park Lot 2
KC	M-KC	Platte	2015	11/17/15	Central Plains/Nishnabotna/Platte	1,463.00	NWK-2014-00961	\$36,575.00	A.G. Spanos Corporation/Terra Technologies	The Preserve Apartment Complex Construction
			<b>2015 Total</b>			<b>12,593.00</b>		<b>\$314,825.00</b>		
STL	O-STL	St. Charles	2016	01/25/16	Central Plains/Cuivre/Salt	1,786.00	MVS-2015-457	\$44,650.00	SCI Engineering/McKelvey Homes	South Outer Road 364 (Villages at Montrachet)
KC	M-NW	Daviness	2016	2/29/2016	Grand/Chariton	812.00	NWK-2015-01456	20,300.00	Howe Company, LLC/Davies County Commission	Davies County Bridge No. 05300011
KC	M-CE	Boone	2016	3/28/2016	Moreau/Loutre	2,811.00	2008-01675	70,275.00	A. Civil Group/St. Charles Road Development, LLC	Somerset Village Residential Subdivision
STL	O-STL	St. Charles	2016	5/5/2016	Cuivre/Salt	1,008.00	MVS-2013-649	25,200.00	SCI Engineering, Inc./Wentzville Industrial, Inc.	Crossroads Commercial Center
LR	O-SW	Greene	2016	12/31/2016	Ozark/White	3,523.00	2000-16752-1	88,075.00	Greene County Highway Department	West Republic Road Improvements
STL	O-STL	St. Charles	2016	12/31/2016	Cuivre/Salt	4,441.00	MVS-2015-903	111,025.00	McBride & Son Homes/SCI Engineering, Inc.	Wynstone Residential Development
			<b>2016 Total</b>			<b>14,381.00</b>		<b>\$359,525.00</b>		
KC	M-CE	Boone	2017	5/18/2017	Ozark/Moreau/Loutre	1,012.90	NWK-2009-01175	\$ 25,322.50	Engineering Surveys & Services/Conley Road Transportation District	Conley Road Transportation Development District
KC	M-KC	Jackson	2017	8/1/2017	Central Plains/Blackwater/Lamine	11,067.00	NWK-2006-02214	\$ 276,675.00	B&G Land Development, LLC	Multi-phased residential development
STL	O-STL	Jefferson	2017	11/28/2017	Ozark/Meramec	856.00	MVS-2016-930	\$ 21,400.00	Payne Family Homes/SCI Engineering, Inc.	OTT Property
STL	O-STL	Iron	2017	12/14/2017	Upper St. Francis/Castor River	3,907.56	MVS-2008-826 (P-2)	\$ 97,689.00	Specialty Granules LLC	Expansion of SGI's active quarry
			<b>2017 Total</b>			<b>16,843.46</b>		<b>\$421,086.50</b>		
STL	O-STL	St. Louis	2018	1/25/2018	Apple/Joachim	1,139.00	MVS-2017-00359	\$ 28,475.00	Grasso Fields Development	Grasso Fields
LR	O-SW	Reynolds	2018	5/9/2018	Ozark/Black/Current	26,929.00	SWL-2013-00260	\$ 673,225.00	Doe Run Company	Brushy Creek Tailings Storage
STL	O-STL	Crawford	2018	5/31/2018	Ozark/Meramec	6,642.00	MVS-2016-2221	\$ 166,050.00	SCI Engineering, Inc	Eilermann Lake
STL	O-STL	St. Louis	2018	12/5/2018	Ozark/Meramec	1,229.00	MVS-2018-457	\$ 30,725.00	5th Street Properties	Brent Milner - ???
			<b>2018 Total</b>			<b>35,939.00</b>		<b>\$ 898,475.00</b>		
STL	O-STL	St. Louis	2019	3/12/2019	Ozark/Apple/Joachim	1,280.00	MVS-2009-259	\$ 32,000.00	Metropolitan St. Louis Sewer District	Chalet Court Sewer
KC	M-KC	Clay	2019	3/25/2019	Plains/Nishnabotna/Platte	678.00	NWK-2016-01948	\$ 16,950.00	City of Kansas City MO	East Fork Line Creek
KC	M-KC	Clay	2019	3/25/2019	Central Plains/Blackwater/Lamine	3,157.60	NWK-2016-01948	\$ 78,940.00	City of Kansas City MO	East Fork Line Creek
KC	M-KC	Clay	2019	4/3/2019	Central Plains/Blackwater/Lamine	1,469.00	NWK-2018-00618	\$ 36,725.00	City of Liberty MO	Camelot Estates
KC	O-SW	Webster	2019	5/15/2019	Ozark/Osage	1,500.00	NWK-2018-01739	\$ 37,500.00	MO Department of Transportation	Holmes Creek and Fishing River
KC	M-KC	Clay	2019	6/19/2019	Central Plains/Blackwater/Lamine	390.00	NWK-2018-00256	\$9,750.00	Meridian Properties, LLC	Holmes Creek and Fishing River
				7/30/2019	Ozark/Meramec	1,244.00	MVS-2019-221	\$31,100.00	MO Department of Transportation	MO-30 Bridge over Saline
						<b>9,718.60</b>		<b>\$ 242,965.00</b>		
STL	O-STL	Franklin, Jefferson, St. Louis	2020	9/29/2020	Ozark/Meramec	1,067.00	MVS-2019-374	\$ 26,675.00	Phillips 66 Pipeline, LLC	Blue Line 02 Pipeline Replacement
						<b>1,067.00</b>		<b>\$ 26,675.00</b>		

Corp Dist.	Region	County	Year	Date Received into SSTF	EDU	Mit. Crdts	Permit #	Fee Collected	Corps Applicant	Notes
KC	M - KC	Caldwell	2021	3/25/2021	Central Plains\Grand\Chariton	9,188.00	NWK-2009-00526	\$ 229,700.00	Caldwell County Commission	Little Otter Creek
STL	O-STL	Bollinger	2021	4/22/2021	Ozark\Upper Francis\Castor	638.00	MVS-2021-052	\$ 15,950.00	Missouri Department of Transportation	Rt. A Culvert Construction - St. Francois River
STL	O-STL	Jefferson	2021	11/1/2021	Ozark\Apple\Joachim	1,964.00	MVS-2018-00443	\$ 49,100.00	G'Sell Homes, LLC	Wolf Hollow II Phase II
						11,790.00		\$ 294,750.00		
<b>GRAND TOTAL</b>						144,819.16		\$3,620,479.00		



**Appendix B —Status of Approved Program Mitigation Projects as of  
December 31, 2021**

APPENDIX B --Status of Approved Mitigation Projects as of 12/31/2021

Proj. #	COE Dist.	Region	Year	County	Project Description	COE/IRT Approval Date	Credits'	EDU	Stream	Allocated Funds	Expended Funds	Released Credits to date	Status
#1001	STL	O-SE	2013	Bollinger	Richard Slinkard Bank Stabilization. Bank stabilization with weirs, restoration and enhancement of ~one mile of stream footage; also reduce cattle access to localized points. Project to be used as a demonstration site to increase public appreciation/awareness. <b>Perpetual Easement. MCHF Board Approved: 08/08/2013. COE &amp; IRT Approved: 07/30/2014</b>	7/30/2014	9,100.0	Upper St. Francis/Castor River	Little Whitewater Creek	\$54,702.00	60,101.25	7,284.00	COMPLETE
<b>2013 Total subsequent to New Instrument</b>													
#1002	KC	M-CE	2014	Miller	Alan Miller/Taylor Markway Bank Stabilization. Improve channel stability near erosion site and protect integrity of channel morphology; reduce sediment loads from entering watershed and restore ~500 feet of riparian corridor. Project will increase public appreciation for stream resources. <b>Perpetual easement. MCHF Board Approved: 02/20/2014. COE &amp; IRT Approved: 07/06/2016.</b>	7/6/2016	9,100.0	Ozark/Osage	Big Tavern Creek	\$54,702.00 \$65,574.50	\$60,101.25 \$95,055.18	3,184.80	COMPLETE
#1003	LR	O-SW	2014	Stone	<b>Roadhouse Road Bridge Replacement.</b> Improve aquatic organism passage in the upper portions of Crane Creek. SSTF support of this project will enable a passage-friendly structure instead of a barrier structure planned for installation by the county. Partner funds: \$25,000 (Stone County) <b>Special Management Agreement. MCHF Board Approved: 09/09/2014. COE &amp; IRT Approved: 04/15/2016</b>	4/15/2016	3,861.0	Ozark/White	Crane Creek	\$111,500.00	\$111,500.00	3,861.00	COMPLETE
#1004	KC	O-SW	2014	Dallas	<b>Hayes Road Low Water Crossing Replacement.</b> Replace a low water crossing with a clear-span bridge to facilitate fish passage in this Niangua darter habitat. Partner funds: \$62,000 (US F&W); \$25,000 (Dallas County); MDC in-kind (\$10,000) <b>Special Management Agreement. MCHF Board Approved: 09/09/2014. COE &amp; IRT Approved: 04/19/16</b>	4/19/2016	11,500.0	Ozark/Osage	Greasy Creek	\$100,000.00	\$58,445.00	11,500.00	COMPLETE

Proj. #	COE Dist.	Region	Year	County	Project Description	COE/IRT Approval Date	Credits'	EDU	Stream	Allocated Funds	Expended Funds	Released Credits to date	Status
#1005	KC	M-CE	2014	Morgan	Richland Creek Streambank Stabilization. <b>Wayne &amp; Rita S. Kanenbley</b> . Provide rock-based stabilization on ~550 feet of stream bank to reduce sediment inputs, improving aquatic habitats and water quality. This project will also provide ~nine acres of stream bank to be placed into a perpetual conservation easement. Partner funds: \$5,000 (Morgan County S&WD) <b>Perpetual Easement. MCHF Board Approved: 12/02/2014. COE &amp; IRT Approved: 07/08/2016</b>	7/8/2016	6,179.0	Blackwater/Lamli	Richland	\$39,250.00	\$68,867.26	3,677.40	COMPLETE
#1006	KC	M-CE	2014	Cooper	<b>Round Hill Road</b> Low Water Crossing. Cooper County. Replacement of an existing low water crossing at Round Hill Road with a newly designed, clear-span crossing to facilitate fish and other aquatic organism passage and allow for improved water conveyance and sediment transport. Partner funds: \$200,00 (Cooper County Commission); \$100,000 (US Fish & Wildlife Service); \$2,500 in-kind (MDC) <b>Special Management Agreement. MCHF Board Approved: 12/02/2014. COE &amp; IRT Approved: 12/22/2015</b>	12/22/2015	6,058.0	Moreau/Loutre	Moniteau and Cullley Creek	\$100,000.00	\$77,730.10	6,058.00	COMPLETE
							<b>35,560.0</b>			<b>\$416,324.50</b>	<b>\$411,597.54</b>		
#1007	KC	O-SW	2015	Hickory	<b>Wolfe Tract Acquisition</b> . Hickory County. Acquisition of riparian acreage of Wolfe Tract, addition to Mule Shoe Conservation Area. MDC purchase of the remaining portion of the tract. Partner funds: \$73,350 (MDC) <b>Acquisition. MCHF Board Approved: 05/19/2015. COE &amp; IRT Approved: 05/09/2016</b>	5/9/2016	4,508.0	Ozark/Osage	Little Niangua River	\$34,650.00	\$33,045.71	4,508.00	COMPLETE
#1008	KC	O-SW	2015	Dallas	<b>Engle Road</b> Low Water Crossing Replacement Project, Greasy Creek. Dallas County. Replacement of low water crossing with a clear span bridge in Niangua darter habitat. Partner funds: \$100,000 (USFWS) and \$25,000 (Dallas County Commission) <b>Special Management Agreement. MCHF Board Approved: 08/18/2015. COE &amp; IRT Approved: 02/18/2016</b>	2/18/2016	15,198.4	Ozark/Osage	Greasy Creek	\$100,000.00	\$120,191.75	15,198.40	COMPLETE

Proj. #	COE Dist.	Region	Year	County	Project Description	COE/IRT Approval Date	Credits'	EDU	Stream	Allocated Funds	Expended Funds	Released Credits to date	Status
#1009	STL	O-SE	2015	Bollinger	<b>Mike Kasten</b> Bank Stabilization. Bollinger County. Stabilize eroding streambank with rock weirs, plant trees in the riparian corridor and protect with a perpetual easement. Partner Funds: N/A. <b>Perpetual Easement. MCHF Board Approved: 12/01/2015. COE &amp; IRT Approved: 08/31/2016</b>	8/31/2016	8,580.0	Upper St. Francis/Castor River	Little Whitewater Creek	\$66,241.85	\$100,587.74	6,864.00	COMPLETE
	2015						28,286.4			\$200,891.85	\$253,825.20		COMPLETE
#1010	LR	O-SW	2016	Christian	<b>Kipfer</b> Bank Stabilization and Riparian Project. Christian County. Rock stabilization to heal 300' of eroding bank. Tree planting to re-establish riparian corridor. Three reinforced light equipment crossings. Partner Funds: N/A. <b>Perpetual Easement. MCHF Board Approved: 8/16/16. COE &amp; IRT Approved: 09/29/2017</b>	9/29/2017	14,847.5	Ozark/White	Bull Creek	\$95,700.00	\$171,171.60	5,939.00	COMPLETE
	2016						14,847.5			\$95,700.00	\$171,171.60		COMPLETE
#1011	KC	O-SW	2017	Dallas	<b>Dietrich Tract</b> Acquisition; New Conservation Area. Dallas County. Acquisition of 10,032 linear feet of Niangua River stream frontage. Partner funds: \$641,535.35 (MDC) <b>Acquisition. MCHF Board Approved: 05/16/17. COE &amp; IRT Approved: 10/18/2017</b>	10/18/2017	27,650.6	Ozark/Osage	Niangua River	\$258,464.65	\$258,464.65	27,650.60	COMPLETE
	2017						27,650.6			\$258,464.65	\$258,464.65		COMPLETE
1012	KC	M-CE	2018	Miller	<b>Clark School Road</b> , Tavern Creek Bridge replacement project - replace slab crossing with a span structure to provide aquatic organism passage <b>MCHF Board Approved 5-22-18, COE and IRT Approved</b>	3/14/2019	15,226.0	Ozark/Osage	Tavern Creek	\$ 150,000.00	\$415,425.00	15,226.00	COMPLETE
1013	LR	O-SW	2018	Christian	<b>John Waters</b> Property on Bull Creek. Project will stabilize 300 ft of streambank, establish a riparian corridor, and place over 20 acres in perpetual easement. <b>MCHF Board Approved 8/28/18,COE and IRT Approved</b>	2/19/2020	10,731.2	Ozark/White	Bull Creek	\$ 119,726.00	\$99,584.20	2,146.20	COMPLETE
1014	STL	O-SE	2018	Bollinger	<b>Charles Collier</b> Bank Stabilization. Streambank stabilization with tree planting and 15.4 acres of perpetual easement. <b>MCHF Board Approved 12/4/18,COE and IRT Approved</b>	8/13/2019	7,737.0	Upper St Francis/ Castor	Crooked Creek	\$ 134,985.00	\$56,577.59	1,547.40	COMPLETE
	2018						33,694.2			\$404,711.00	\$571,586.79		COMPLETE

Proj. #	COE Dist.	Region	Year	County	Project Description	COE/IRT Approval Date	Credits <sup>1</sup>	EDU	Stream	Allocated Funds	Expended Funds	Released Credits to date	Status
1015	KC	M-CE	2019	Miller	Bridge replacement on <b>Old St. Thomas Road</b> in Miller County. Niangua Darter habitat. Joint effort between USFWS, Miller County, SSTF. Estimated cost is \$160,000 (SSTF) with 19,895 credits generated. <b>MCHF Board Approved 2/21/19, COE and IRT Approved</b>	1/13/2020	19,895.0	Ozark/Osage	Tavern Ck	\$160,000.00	\$2,100.00	3,979.00	COMPLETE
1016	LR	O-SW	2019	Christian	Bank stabilization on <b>Koeller</b> property on Bull Creek. 11 acre perpetual easement. Reinforced stream crossing and riparian corridor enhancement. <b>MCHF Board Approved 8/27/19, COE and IRT Approved</b>	3/13/2021	4,634.35	Ozark/White	Bull Creek	\$99,000.00	\$0.00		
1018	KC	M-CE	2019	Miller	Bridge replacement on <b>Brushy Creek Road</b> in Niangua Darter habitat. with an estimated 26,845.6 credits generated. <b>MCHF Board Approved 12/5/19</b>		26,845.6	Ozark/Osage	Tavern Creek	\$375,000.00	\$0.00		
	2019						<b>51,375.0</b>			<b>\$634,000.00</b>	<b>\$2,100.00</b>		
	2020						0			0	0		
1019	LR	O-SW	2021	Christian	Bridge replacement on <b>Woods Fork Road</b> . Partner funds of \$32,955.5 from Christian County. <b>MCHF Board Approved 5/13/2021.</b>		6,423.3	Ozark/White	Bull Creek	\$ 160,582.50			
1020	KC	O-SW	2021	Polk	Bridge replacement on <b>560th Road</b> in Polk County. Partner funds of \$69,760 from Polk County. <b>MCHF Board Approved 5/13/2021</b>			Ozark/Osage	Asher Creek	\$125,375.00			
	2021						<b>6,423.3</b>			<b>\$285,957.50</b>			
		<b>GRAND TOTAL</b>					<b>200,513.7</b>			<b>\$2,064,794.00</b>	<b>\$1,728,847.03</b>	<b>118,623.80</b>	
					<b>2021 Expenditures</b>						<b>\$478,539.20</b>		

<sup>1</sup> Estimated credits (i.e., credit totals that have not been confirmed by COE/IRT) appear in italics



## **Appendix C—SSTF Investment Instruments**

**Missouri Conservation Heritage Foundation  
Stream Stewardship Trust Fund Investment  
December 31, 2021**

**Cash Accounts**

Simmons Bank New Instrument Checking	\$56,625.73
Simmons Bank New Instrument Money Market	1,071,073.44
Simmons Bank New Instrument Assurances Money Market	279,038.97
<b>Total Cash Accounts</b>	<b>\$1,406,738.14</b>

## **APPENDIX D—How the Stream Stewardship Trust Fund Works**

## HOW THE SSTF PROGRAM WORKS

A 2000 Memorandum of Understanding between the Foundation and U.S. Army Corps of Engineers authorized and established operating conditions for the Trust Fund, and on June 6, 2013, an Instrument was approved that governed the operation of the Stream Stewardship Trust Fund under the 2008 compensatory mitigation rules.

With the Corps' authorization, the Foundation—as the Trust Fund sponsor—can assume an applicant's Clean Water Act Section 404 stream mitigation responsibilities. Costs associated with participating in the Trust Fund are based on specific permit requirements and market forces.

### GOAL

Provide an accountable stream mitigation option that offers benefits to aquatic resources, regulators, and Section 404 applicants.

### OBJECTIVES

To provide an alternative to permittee-responsible compensatory mitigation that replaces functions and values lost through permitted impacts; enhance the stream resources of Missouri by addressing ecological needs on a watershed basis, provide additional funding for stream improvement projects in Missouri's watersheds, direct mitigation resources to ecologically impaired watersheds, and assist in implementing the improvement objectives of MDC's stream programs; minimize the temporal loss of stream functions and services by gaining approval of mitigation sites in advance of or concurrent to mitigation needs; provide projects to meet current and expected demand for credits in areas without mitigation banks; achieve ecological success on a watershed basis by improvements that are appropriate to the stream or watershed and by integrating ILF projects with other conservation activities; provide a funding complement to statewide stream management efforts of MDC; utilize scale efficiencies by combining the impacts from individual smaller projects into larger mitigation projects with greater ecological value; procedurally unhook the mitigation of development projects from those with little training and experience in replacing natural values; and promote a complement to stream reach-based mitigation banking that is of larger scope.

### FOCUS

To address authorized impacts to streams, especially headwater systems (i.e., 1<sup>st</sup> through 3<sup>rd</sup> order), in select EDUs.

### PROGRAM FACTS

The Trust Fund has: (1) remained voluntary, never mandatory, (2) not changed the Clean Water Act's permit process, (3) been used to address impacts to small acreages and stream reaches, and (4) served to increase the regulated

public's knowledge of headwater streams.

## **TRUST FUND DOLLARS**

Resources are earmarked for restoration, enhancement, and/or protection of stream systems and associated riparian habitats.

Trust Fund Dollars are handled in accordance with: (1) the Instrument, and (2) grant program guidelines:

- Request through process ensuring only priority stream projects are funded.
- Support projects located within the EDUs where stream impacts occurred.
- Utilize project sites that are covered by permanent easements or other long term protection instruments arranged by the Foundation.
- Require allocation to a specific project within three years following the calendar year collected.

## **Annual Reporting**

The Foundation must provide the Corps with an annual report which states the Trust Fund's: (1) balance, (2) investment instruments, (3) list of supported stream projects and associated costs; and 4) a summary of released credit balances in each approved EDU. Each report will cover one calendar year cycle (i.e., January through December).

**Credits** The MCHF established itself as a qualified in-lieu-fee mitigation sponsor for COE authorizations in Missouri in 2000, and upon formal approval of the final instrument by the COE on June 6, 2013, the SSTF was reestablished under the new rules.

The proposed geographic service area for the SSTF is defined as the Ecological Drainage Unit (EDU), and MCHF provides compensatory mitigation in eleven EDUs (Apple/Joachim, Blackwater/Lamine, Cuivre/Salt, Grand /Chariton, Nishnabotna/Platte, Black/Current, Meramec, Moreau/Loutre, Osage, Upper St. Francis/Castor and White basins). Additional EDUs may be added in the future as proposed amendments to the instrument for COE and IRT approval. MCHF provides compensatory mitigation for permitted impacts within the same geographic service area in which impacts occur unless the district engineer, in consultation with the IRT, has agreed to an exemption.

Through the SSTF, MCHF has agreed to take on the mitigation responsibilities of approved development projects and replace those with approved on-the-ground mitigation projects. The COE's Missouri Stream Mitigation Method (MSMM) is used to determine the number of stream credits used for impacts and for projects. Developers complete the MSMM and, upon COE approval, communicate a project description and

number of credits to the MCHF for a written estimate. The MSMM is also used to determine the number of credits involved in an on-the-ground restoration, enhancement or preservation project. Stream impact credits are offset with stream project credits; the Stream Stewardship Trust Fund handles only stream impact credits and is not involved in mitigating small wetland impacts.

For each proposed mitigation project, MCHF submits a project application/mitigation plan to the appropriate COE district and the IRT describing the project, its location and other project-specific information. Each mitigation project is reviewed and approved by the MCHF, MDC, the IRT and the COE. MCHF manages the project for consistency with the approved project criteria following IRT review and COE approval. MCHF and MDC work together on the implementation, performance, and long term management of compensatory mitigation projects.

MCHF covers its own mitigation needs under the new program by selling advance and released credits as specified in the Instrument. As milestones in each project's schedule are reached (i.e., restoration, creation, enhancement, and/or preservation is implemented and interim and final performance measures are met), credits released from new projects begin to accrue in each EDU. MCHF strives to allocate money to complete land acquisition and initial physical and biological improvements on an approved mitigation project site by the third full growing season after a debit occurs in that service area. Credits for projects installed under this Instrument normally are not released until MCHF has obtained IRT approval of the mitigation plan for a site, has achieved the applicable milestones in the credit release schedule as specified in the project mitigation plan, and the credit releases have been approved by the District Engineer.

When mitigation projects have been installed, they are monitored for project success and attainment of performance standards, and any normal and long-term maintenance needs are completed. Any non-attainment issues beyond the scope of routine maintenance are addressed through remedial action plans in conjunction with the COE and the IRT.