

**Missouri Conservation Heritage Foundation**

**Stream Stewardship Trust Fund**

**Old and New Programs**

**Annual Report  
January 1 through December 31, 2018**

**Dedicated to  
Improving Missouri Stream Conservation**

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## 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 under the Old and New Programs during January 1 through December 31, 2018. The Old SSTF program began in 2000 under an MOU with the Corps of Engineers; the New SSTF program was established under the new 2008 regulations governing in-lieu fee mitigation programs and began after Corps of Engineers approval of the Instrument on June 6, 2013.

### Old Program

Work continued on two projects (82, 92), one of which (92) was completed. In addition, \$1,506.52 was spent on maintenance at two projects (60, 92) using Old Program funds. With Corps approval, \$11,576.00 in New Program assurances funds was also spent on maintenance at one project (21). Total project expenditures for these projects during 2018 amounted to \$6,016.52 in Old Program funds and \$11,576.00 in New Program funds. As of December 31, 2018, 2 projects (78 [easement pending], 82 [livestock watering system in the final stages of construction]) are still underway and will be completed as quickly as possible.

### New Program

By action of the Board of Directors of the MCHF, responsibilities for compensatory mitigation associated with four separate Clean Water Act Section 404 authorizations were assumed by the Trust Fund. Total mitigation credits assumed in 2018 were 35,939.0 credits. Total fees collected for these four projects during the same time frame were \$898,475.00.

During 2018, three projects were approved by the MCHF Board and were submitted to the Corps and the IRT for approval. As of December 31, 2018, none of these projects had received Corps/IRT approval. A total of \$175,077.51 was spent on five mitigation projects (1001, 1002, 1005, 1009, 1010). In addition, \$36,871.60 was spent on project repairs using long term assurance funds (\$1,366 for 1001 and \$35,505.60 for 1002).

A total of 20,657.2 credits were released from new mitigation projects in 2018; No new projects were approved and brought into the new program. Three projects (1001, 1002 and 1005) met additional benchmarks triggering the release of partial credits, and two projects (1004 and 1008) met all benchmarks, triggering a full release of credits.

## **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), named the Old Program in this annual report. 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 operation of the MCHF's Stream Stewardship Trust Fund (named the New Program in this annual report) 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 new instrument can be found in Appendix F.

This annual report summarizes the fees collected from developing organizations during 2018, and the uses into which those fees have been put to improve the stream values of Missouri stream resources during the same period.

# U.S. Army Corps of Engineers Districts

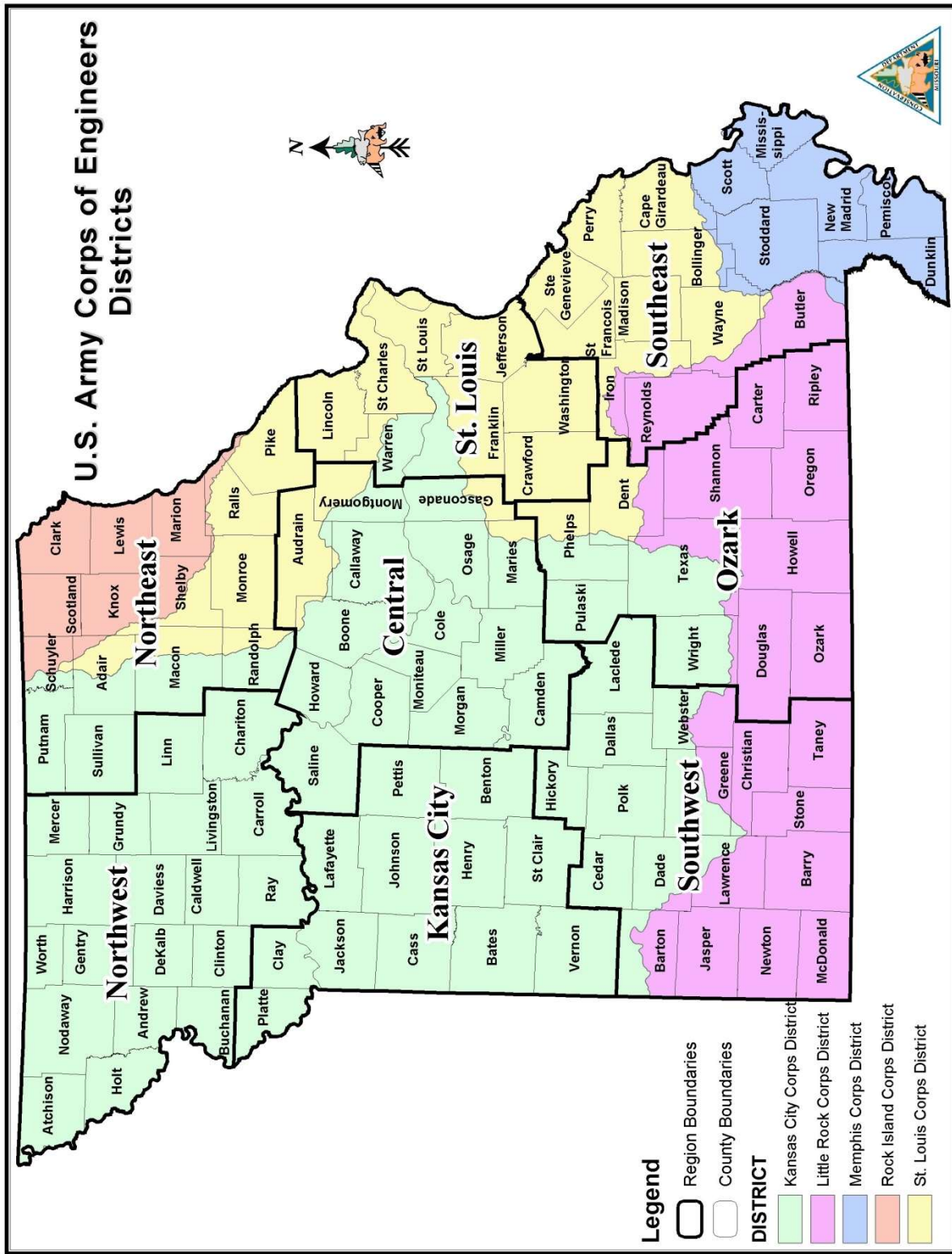
**Legend**

- County Boundaries

**DISTRICT**

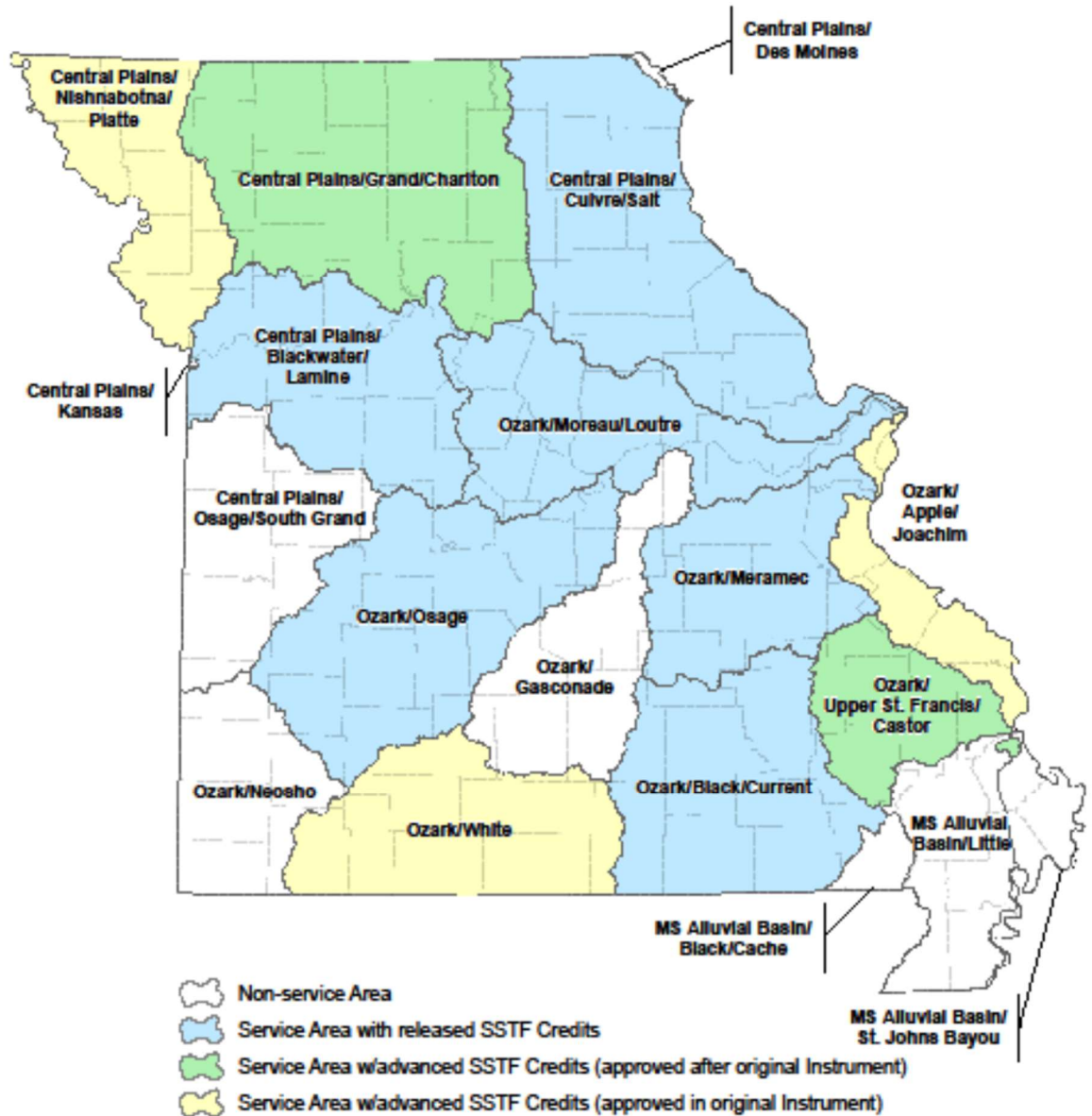
- Kansas City Corps District
- Little Rock Corps District
- Memphis Corps District
- Rock Island Corps District
- St. Louis Corps District







## Stream Stewardship Trust Fund Selected Service Areas





## 2018 Old Program Accomplishments

### Fees Collected and Impacted Resources

MCHF did not collect fees from projects governed by the 1999 MOU during 2018. However, during 2018, work continued on two mitigation projects (82, 92); the latter project was completed. In addition, \$1,506.52 was spent on maintenance at two project (60, 92) using old program funds. With Corps approval, \$11,576.00 in new program assurances funds was also spent on maintenance at one project (21). Total project expenditures for these projects during 2018 amounted to \$6,016.52 in Old Program funds and \$11,576.00 in New Program funds. As of December 31, 2018, two projects (78,82) are still underway, awaiting a final easement document (78) or wrapping up construction (82). Appendix A lists the funds and mitigation credits that have been received by MCHF, and Appendix B tabulates the projects undertaken using those funds.

Under the agreement with the Corps, a minimum of \$5,940,521.00 and 78,981 credits should be allocated to mitigation projects through December 31, 2019. As of December 31, 2018, \$6,154,556.41 and 420,820.1 credits have been allocated to mitigation projects.

**Table 1. Overview of SSTF Old Program Fee Collection and Allocation Timeline**

| Calendar Year | Total Fees         | Total Credits | Allocation Timeline |
|---------------|--------------------|---------------|---------------------|
| 1999          | \$2,063            |               | 2002                |
| 2000          | 228,881            |               | 2003                |
| 2001          | 323,117            |               | 2004                |
| 2002          | 205,472            |               | 2005                |
| 2003          | 344,760            |               | 2006                |
| 2004          | 658,141            |               | 2007                |
| 2005          | 525,718            |               | 2008                |
| 2006          | 561,217            |               | 2009                |
| 2007          | 843,215            | 11,750        | 2010                |
| 2008          | 661,282            | 13,983        | 2011                |
| 2009          | 558,551            | 14,158        | 2012                |
| 2010          | 388,669            | 15,152        | 2013                |
| 2011          | 257,650            | 10,306        | 2014                |
| 2012          | 223,080            | 8,750         | 2015                |
| 2013          | 122,050            | 4,882         | 2016                |
| 2016          | 36,655             | *             | 2019                |
| <b>Total</b>  | <b>\$5,940,521</b> | <b>78,981</b> |                     |

\*Belated project receipt was accepted using jurisdictional acres

## 2018 New 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, responsibilities for compensatory mitigation associated with four separate Clean Water Act Section 404 authorizations were assumed by the trust fund. All were assumed under the Missouri Mitigation Method that was implemented with the approval of the new Instrument for the SSTF on June 6, 2013. Total mitigation credits assumed in 2018 were 35,939.0 credits. Total fees collected during the same time frame were \$898,475.00. See Appendix C for complete information about all SSTF New Program receipts

**Table 2. Fees and credits from development projects by Corps district**

| Corps District | 2018                |                   |
|----------------|---------------------|-------------------|
|                | Fees Collected      | Credit Obligation |
| Kansas City    | 0                   | 0                 |
| Little Rock    | \$673,225.00        | 26,929.0          |
| Memphis        | 0                   | 0                 |
| Rock Island    | 0                   | 0                 |
| St. Louis      | \$225,250.00        | 9,010.0           |
| <b>TOTAL</b>   | <b>\$898,475.00</b> | <b>35,939.0</b>   |

**Table 3. Fees and credits from development projects by EDU**

| EDU                | 2018                |                   |
|--------------------|---------------------|-------------------|
|                    | Fees Collected      | Credit Obligation |
| Apple/Joachim      | \$28,475.00         | 1,139.0           |
| Black/Current      | \$673,225.00        | 26,929.0          |
| Blackwater/Lamine  | \$0                 | 0                 |
| Cuivre/Salt        | \$0                 | 0                 |
| Grand Chariton     | \$0                 | 0                 |
| Meramec            | \$196,775.00        | 7,871.0           |
| Moreau/Loutre      | \$0                 | 0                 |
| Nishnabotna/Platte | \$0                 | 0                 |
| Osage              | \$0                 | 0                 |
| St. Francis/Castor | \$0                 | 0                 |
| White              | \$0                 | 0                 |
| <b>TOTAL</b>       | <b>\$898,475.00</b> | <b>35,939.0</b>   |

## SSTF Mitigation Projects

During 2018, three projects were approved by the MCHF Board and were submitted to the Corps and the IRT for approval. As of December 31, 2018, none of these projects had received Corps/IRT approval. See Appendix D for complete information about all new program mitigation projects.

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

|                | 2018               |                            |
|----------------|--------------------|----------------------------|
| Corps District | Project Allocation | Mitigation Project Credits |
| Kansas City    | \$0                | 0                          |
| Little Rock    | \$0                | 0                          |
| Memphis        | \$0                | 0                          |
| Rock Island    | \$0                | 0                          |
| St. Louis      | \$0                | 0                          |
| <b>TOTAL</b>   | <b>\$0.00</b>      | <b>0</b>                   |

**Table 5. Allocations and Credits From Approved Mitigation Projects by EDU**

|                    | 2018               |                            |
|--------------------|--------------------|----------------------------|
| EDU                | 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              | \$0                | 0                          |
| <b>TOTAL</b>       | <b>\$0.00</b>      | <b>0</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 New Program.

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

| <b>Corps District</b> | <b>Since Inception</b> |                          |
|-----------------------|------------------------|--------------------------|
|                       | <b>Fees Collected</b>  | <b>Credit Obligation</b> |
| Kansas City           | \$815,520.00           | 32,620.8                 |
| Little Rock           | \$865,575.00           | 34,623.0                 |
| Memphis               | 0                      | 0                        |
| Rock Island           | 0                      | 0                        |
| St. Louis             | \$1,374,994.00         | 54,999.8                 |
| <b>TOTAL</b>          | <b>\$3,056,089.00</b>  | <b>122,243.6</b>         |

**Table 7. Fees Collected and Impacted Resources since Inception by EDU**

| <b>EDU</b>         | <b>Since Inception</b> |                          |
|--------------------|------------------------|--------------------------|
|                    | <b>Fees Collected</b>  | <b>Credit Obligation</b> |
| Apple/Joachim      | \$43,900.00            | 1,756                    |
| Black/Current      | \$713,150.00           | 28,526                   |
| Blackwater/Lamine  | \$474,225.00           | 18,969                   |
| Cuivre/Salt        | \$383,400.00           | 15,336                   |
| Grand/Chariton     | \$20,300.00            | 812                      |
| Meramec            | \$392,525.00           | 15,701                   |
| Moreau/Loutre      | \$633,675.00           | 25,347                   |
| Nishnabotna/Platte | \$108,050.00           | 4,322                    |
| Osage              | \$44,175.00            | 1,767                    |
| St. Francis/Castor | \$134,439.00           | 5,377.60                 |
| White              | \$108,250.00           | 4,330                    |
| <b>TOTAL</b>       | <b>\$3,056,089.00</b>  | <b>122,243.6</b>         |

## SSTF Allocation Timeline

The in lieu fee instrument under which the SSTF operates recommends that credits sold from EDUs using advanced credits be allocated to mitigation projects in those EDUs within a three year period. Five EDUs use advance credits; Table 8 summarizes the timeline for allocating projects in those EDUs.

The mitigation responsibility from one development project in an EDU using advance credits was assumed in 2018: 1,139 credits in the Apple Joachim EDU. By the 2018 allocation year, two projects have been allocated in the Upper St. Francis/Castor EDU totaling 17,680 credits and two projects have been allocated in the Ozark/White EDU totaling 18,395 credits; to date, a good project in the Apple Joachim EDU has yet to be identified.

**Table 8. Overview of SSTF Fee Collection and Allocation Timeline**

| <b>Calendar Year</b> | <b>Total Fees Collected</b> | <b>Total Credits</b> | <b>Allocation Year</b> |
|----------------------|-----------------------------|----------------------|------------------------|
| 2013                 | \$0                         | 0                    | 2016                   |
| 2014                 | \$38,050.00                 | 1522                 | 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                 | 1,139.00             | 2021                   |
| <b>TOTAL</b>         | <b>\$414,939.00</b>         | <b>16,597.6</b>      |                        |

## SSTF Credit Balances

The mitigation obligation of four development projects was assumed in 2018; eleven mitigation projects have been approved since 2013. Table 9 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 20,657.2 credits were released from new mitigation projects in 2018. No projects obtained COE approval in 2018, which is the first benchmark in the Instrument for releasing credits. Three projects (1001, 1002 and 1005) attained intermediate benchmarks, creating a partial release of 4,638.2 credits; and two projects (1004, 1008) reached their final benchmark, releasing their final 16,019 credits.

**Table 9. Annual Credit\* Balance Status**

| EDU                | 2017Credit Balance* | 2018 New Credits Assumed | Total Credits Assumed | Total 2018 Mitigation Project Credits** | 2018 Approved Released Credits | Total Approved Released Credits To Date | Credits Yet To Be Released | Advance Credits Offset | New Credits | End of 2018 Credit Balance*** |
|--------------------|---------------------|--------------------------|-----------------------|---|--------------------------------|---|----------------------------|------------------------|-------------|-------------------------------|
| Apple/Joachim      | 4,383.0             | 1139.0                   | 1,756.0               | -                                       | -                              |   | -                          | 0                      | 0           | 3,244.0                       |
| Black/Current      | 26,929.0            | 26,929.0                 | 28,526.0              | -                                       | -                              |   | -                          | 0                      | 0           | 0                             |
| Blackwater/Lamine  | 21162.8             | 0                        | 18,969.0              | -                                       | 1,225.8                        | 2451.6                                  | 3727.4                     | 0                      | 2451.6      | 22,388.6                      |
| Cuivre/Salt        | -                   | 0                        | 15,336.0              | -                                       | -                              |   | -                          | 0                      | 0           | -                             |
| Grand/Chariton     | 9,188.0             | 0                        | 812.0                 | -                                       | -                              |   | -                          | 0                      | 0           | 9,188.0                       |
| Meramec            | 17,204              | 7871.0                   | 15,701.0              | -                                       | -                              |   | -                          | 0                      | 0           | 9333.0                        |
| Moreau/Loutre      | 6058                | 0                        | 25,347.0              | -                                       | 0                              | 6,058.0                                 | -                          | 0                      | 6058        | 6,058.0                       |
| Nishnabotna/Platte | 678.0               | 0                        | 4,322.0               | -                                       | -                              |   | -                          | 0                      | 0           | 678.0                         |
| Osage              | 172,521.1           | 0                        | 1,767.0               | -                                       | 17,611.4                       | 50,981.5                                | 15,837.5                   | 0                      | 50,981.5    | 190,132.5                     |
| St. Francis/Castor | 8158.4              | 0                        | 5,377.6               | -                                       | 1,820.0                        | 5356.0                                  | 12,324                     | 5356.0                 | 0           | 9978.4                        |
| White              | 5121.2              | 0                        | 4,330.0               | -                                       | 0                              | 4625.5                                  | 13,769.5                   | 4625.5                 | 0           | 5,121.20                      |
| <b>TOTAL</b>       |                     | <b>35,939</b>            | <b>122,243.6</b>      | <b>0</b>                                | <b>20,657.2</b>                | <b>69,472.6</b>                         | <b>45,658.4</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. Frequency of monitoring is normally detailed in a project's mitigation plan, is reportable annually in the annual report, and includes compliance reporting as well as whether the project is meeting performance objectives. Exceptions include acquisition projects (which are deemed complete upon fee title transfer or the development of an area plan if the project is a new MDC conservation area) and low water bridge replacement projects (which are deemed complete if functioning without impairment through two bank full floods.)

Eleven mitigation projects have been approved by the Corps under the new Instrument and are in varying stages of completion. Two completed meeting project benchmarks last year and two (1004, 1008) have done so this year. Monitoring was completed throughout the year upon completion of project construction and at each milestone. Monitoring reports with photos were provided to the Corps with a request for credit release. Table 10 summarizes project monitoring for 2018.

**Table 10. 2018 Mitigation Project Monitoring**

| Project Benchmarks Met          |                 |                    |                  |                                  |             |             |                 |                             |                                |   |
|---------------------------------|-----------------|--------------------|------------------|----------------------------------|-------------|-------------|-----------------|-----------------------------|--------------------------------|---|
| Project Number/ Type            | Project Credits | 2018 Monitor Dates | Project Approval | Project Construction/Acquisition | Benchmark 1 | Benchmark 2 | Final Benchmark | Meeting Project Objectives? | Total Released Credits to Date | Comments  |
| 0093/Bridge replacement         | 2,167.8         |                    | X                | X                                | X           |             | X               | Y                           | 2,167.8                        | "Old" project, per 1/12/16 e-mail between Vitello and Berka                               |
| 1001/Stream stabilization       | 9,100.0         | 4/18               | X                | X                                |             |             |                 | Y                           | 3,640                          | Flood damage (winter 2015) repaired with modified design; working well to date            |
| 1002/Stream stabilization       | 7,962.0         | 3/18               | X                | X                                |             |             |                 | N                           | 3,184.8                        | Flood damage 5/17 repaired 3/12-14/18. Inspection at time of repair.                      |
| 1003/Bridge replacement         | 3,861.0         | 2/18               | X                | X                                |             |             |                 | Y                           | 1,544.4                        |   |
| 1004/Bridge replacement         | 11,500.0        | 3/18               | X                | X                                | X           |             | X               | Y                           | 11,500                         | Project withstood two bank full flows by 3/18   |
| 1005/Stream stabilization       | 6,179.0         | 12/17              | X                | X                                |             |             |                 | Y                           | 2,451.6                        |   |
| 1006/Bridge replacement         | 6,058.0         |                    | X                | X                                | X           |             | X               | Y                           | 6,058                          | Project withstood two bank full floods in first year                                      |
| 1007/Land purchase/preservation | 4,508.0         |                    | X                | X                                |             |             | X               | Y                           | 4,508                          | Fee title transferred   |
| 1008/Bridge replacement         | 15,198.4        | 3/18               | X                | X                                | X           |             | X               | Y                           | 15,198.4                       | Project withstood two bank full floods by 3/18  |
| 1009/Stream stabilization       | 8,580.0         | 4/18               | X                | X                                |             |             |                 | Y                           | 1,716                          | Project complete; awaiting easement   |
| 1010/Stream stabilization       | 14,534.0        | 4/18               | X                |                                  |             |             |                 | Y                           | 3,081.1                        | Project complete; awaiting easement   |
| 1011/Land purchase/preservation | 27,650.6        |                    | X                | X                                |             |             |                 | Y                           | 16,590.3                       | Fee title transferred; remaining 40% credit release will occur after area designated a CA |





## SSTF Financial Reporting

### SSTF Income and Disbursements

The final instrument requires an accounting of income and disbursements for the SSTF New Program as a whole and by service area. During 2018, receipts from four projects provided a total of \$898,475.00. A total of \$175,077.51 was spent on five mitigation projects (1001, 1002, 1005, 1009, and 1010) during 2018. In addition, \$36,871.60 was spent on project repairs using long term assurance funds (\$1,366 for 1001 and \$35,505.60 for 1002).

**Table 11. 2018 SSTF New Program Income and Disbursements by EDU**

| EDU                | Income              | Disbursements       |
|--------------------|---------------------|---------------------|
| Apple/Joachim      | \$28,475.00         | \$0                 |
| Black/Current      | \$673,225.00        | \$0                 |
| Blackwater/Lamine  | \$0                 | \$22,539.80         |
| Cuivre/Salt        | \$0                 | \$0                 |
| Grand/Chariton     | \$0                 | \$0                 |
| Meramec            | \$196,775.00        | \$0                 |
| Moreau/Loutre      | \$0                 | \$0                 |
| Nishnabotna/Platte | \$0                 | \$0                 |
| Osage              | \$0                 | \$15,917.00         |
| St. Francis/Castor | \$0                 | \$20,306.10         |
| White              | \$0                 | \$116,314.61        |
| <b>TOTAL</b>       | <b>\$898,475.00</b> | <b>\$175,077.51</b> |

### 2018 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 E). All checking and money market accounts are held in FDIC-insured accounts at Hawthorne Bank, Jefferson City, MO. The balance for Old Program funds as of December 31, 2018 was \$67,977.04 in checking and money market accounts. Balances as of December 31, 2018, for New Program funds were \$400,487.83 (checking account), \$1,147,458.71 (money market account for program funds), and \$248,984.87 (money market account for long term financial assurances). Per the approved Instrument, New 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 New Program 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 Old Program Receipts as of  
December 31, 2018**



**Appendix B—  
Status of Approved Old Program Mitigation Projects as of  
December 31, 2018**



**Appendix C— Status of SSTF New Program Receipts as of  
December 31, 2018**





**Appendix D—Status of Approved New Program Mitigation Projects  
as of December 31, 2018**



## **Appendix E—SSTF Investment Instruments**



**Missouri Conservation Heritage Foundation  
Stream Stewardship Trust Fund Investment  
December 31, 2018**

| <b>Old Program</b>         |  |                     |
|----------------------------|--|---------------------|
|                            |  | <b>Amount</b>       |
| <b>Cash Accounts</b>       |  |                     |
| Hawthorn Bank Checking     |  | \$ 13,650.74        |
| Hawthorn Bank Money Market |  | \$ 54,326.30        |
| <b>Total Cash Accounts</b> |  | <b>\$ 67,977.04</b> |

| <b>New Program</b>  |  |                        |
|---|--|------------------------|
|   |  | <b>Amount</b>          |
| <b>Cash Accounts</b>  |  |                        |
| Hawthorn Bank New Instrument Checking                         |  | \$ 400,487.83          |
| Hawthorn Bank New Instrument Money Market Balance Account     |  | \$ 1,147,458.71        |
| Hawthorn Bank New Instrument Money Market Financial Assurance |  | \$ 248,984.87          |
| <b>Total Cash Accounts</b>                                    |  | <b>\$ 1,796,931.41</b> |



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





## HOW THE OLD PROGRAM WORKS

A Memorandum of Understanding between the Foundation and U.S. Army Corps of Engineers in 1999 authorized and established operating conditions for the Trust Fund. With the Corps' authorization, the MCHF—as the SSTF 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 (i.e., Means Building Construction Data).

|                           |  |
|---------------------------|--|
| <b>GOAL</b>               | Provide an accountable stream mitigation option that offers benefits to aquatic resources, regulators, and Section 404 applicants.   |
| <b>OBJECTIVE</b>          | Implement an in-lieu-fee mitigation alternative that works to ensure stream impacts are given increased attention during the Clean Water Act's Section 404 regulatory process.   |
| <b>FOCUS</b>              | To address authorized impacts to headwater stream systems (i.e., 1 <sup>st</sup> through 3 <sup>rd</sup> order).   |
| <b>PROGRAM FACTS</b>      | The Trust Fund has: (1) remained voluntary, never mandatory, (2) not changed the Clean Water Act's permit process, (3) been used to address small acreage impacts, and (4) served to increase the regulated public's knowledge of headwater streams.   |
| <b>TRUST FUND DOLLARS</b> | <p>Resources are earmarked for restoration, enhancement, and/or protection of stream systems and associated riparian habitats.</p> <p>Trust Fund Dollars are handled in accordance with: (1) MOU and (2) grant program guidelines.</p> <ul style="list-style-type: none"><li>• Request through process ensuring only priority stream projects are funded.</li><li>• Support grant projects located within MDC management region where stream impacts occurred.</li><li>• Utilize project sites that are covered by a 30-year agreement, permanent easement, or purchased by the Foundation.</li><li>• Require allocation to a specific project within three years following the calendar year collected.</li></ul> |
| <b>Annual Reporting</b>   | The Foundation must provide the Corps with an annual report which states the Trust Fund's: (1) balance, (2) investment instruments, and (3) list of supported stream projects and associated costs. Each report will cover one calendar year cycle (i.e., January through December).   |

### **How the Stream Stewardship Trust Fund Works: Jurisdictional Acres**

The Stream Stewardship Trust Fund (SSTF), a creative in-lieu-fee mitigation tool, was established late in 1999 resulting from an agreement between the Missouri Conservation Heritage Foundation (MCHF) and the U.S. Army Corps of Engineers (COE), Kansas City and St. Louis Districts. In the past, permit applicants and agency regulators (COE) complying with Section 404 of the Clean Water Act had limited viable alternatives for lessening or mitigating adverse impacts to stream systems. Today, funds collected from adverse impacts authorized to be mitigated through this in-lieu-fee option are earmarked for stream restoration, enhancement, and/or preservation projects – ensuring appropriate compensation.

The purpose of the SSTF is to serve as an innovative stream mitigation tool and focus on stream impacts not currently being addressed in the regulatory process. In addition, the SSTF shall provide a funding source to restore, enhance, and protect Missouri's stream resources consistent with the Foundation's mission to promote awareness and public support of Conservation Department programs and services.

The SSTF Grant Program is administered by the MCHF with MDC providing technical review. Use of SSTF projects is limited to projects that restore, enhance, and/or protect Missouri's stream resources and associated riparian habitats. SSTF resources are used to support projects on non-MDC lands, sponsored by MDC. Similar to other grant programs, SSTF resources are not MDC funds and the use of the funds is limited to specific uses and reporting requirements. Proposed projects are funded by MCHF based on regional stream needs, maximum return on expended monies, level of threat to the stream system, and overall anticipated benefits to stream resources.

The MCHF depends on MDC to provide liaison positions for coordination of Department staff and activities for implementation of the SSTF grant program.

### **An Individual Example of Participation and Fee Collection Under Jurisdictional Acres Method**

When MCHF staff is contacted about a cost estimate, the following information is requested by mail or fax:

1. Verification in writing from either the U.S. Army Corps of Engineers or the Missouri Department of Natural Resources (DNR) that the SSTF has been offered as a mitigation option. MCHF will prepare a cost estimate with no obligation, but cannot accept payment until the requested verification is received.
2. The number of linear feet impacted.
3. The average width of the stream being impacted.
4. The average depth (at the high water mark) of the stream being impacted.
5. The number of feet of buffer required on each side of the impacted stream (typically 50' on each side). A buffer will require plantings of seedlings.

Cost estimates are mailed or faxed to individuals and copies are retained of all estimate inquiries and responses. Individuals who receive an estimate and choose to participate in the program will

send the payment directly to MCHF. Upon receipt of payment, staff will prepare an acknowledgment letter to the appropriate COE (or DNR) official stating that mitigation requirements have been met in accordance with the memorandum of understanding. Copies of the acknowledgement letter are provided to the participants.

### **How the Stream Stewardship Trust Fund Works: Missouri Mitigation Method (Credits)**

On March 1, 2007 the U.S. Army Corps of Engineers posted a public notice of pending changes to the mitigation method that would go into place on April 1, 2007. These changes would move the mitigation process away from jurisdictional acres to the assigning of credits based on the impact to the stream resource. In return, mitigation projects completed were also assigned a credit value. So, for every credit MCHF assumed the liability for they are required to mitigate a credit. To meet this obligation, MCHF had to determine their cost per credit to assign a fair value to each mitigation credit. They began reviewing existing projects, assigning a credit value using worksheets provided by the U.S. Army Corps of Engineers. Once credits were assigned the total costs of the projects were divided by the number of credits. These dollar amounts were then averaged and it was determined that the MCHF could mitigate a credit for approximately \$35.00 per credit.

Beginning April 1, 2007 the MCHF began accepting fees under the Missouri Mitigation Method at a cost of \$35.00 per mitigation credit. In 2009 the cost per credit was reevaluated and the Foundation reduced their cost per credit to \$25.00.

In April, 2013, the Missouri Mitigation credit calculation method was updated and revised by the Corps of Engineers, with input from several other federal and state agencies. This revision has been used on mitigation projects since its adoption.

### **An Individual Example of Participation and Fee Collection Under Missouri Mitigation Method**

When MCHF staff is contacted about a cost estimate, the following information is requested by mail or fax:

1. Verification in writing from either the U.S. Army Corps of Engineers or the Missouri Department of Natural Resources (DNR) that the SSTF has been offered as a mitigation option.
2. A copy of the permit issued documenting the number of credits to be mitigated for.

The cost of \$25.00 per credit is provided to the individual along with the total cost based on the permit. This is then mailed or faxed to individuals and copies are retained of all inquiries and responses. Individuals who choose to participate in the program will send the payment directly to MCHF. Upon receipt of payment, staff will prepare an acknowledgment letter to the appropriate COE (or DNR) official stating that mitigation requirements have been met in accordance with the memorandum of understanding. Copies of the acknowledgement letter are provided to the participants.

### **Under Both Jurisdictional Acres and Credits**

After the fee is collected, careful documentation is created which identifies MDC Region/County, jurisdictional impacted acres, and Corps District. Fees are pooled and projects are considered based on priority and timeline allocation considerations.

## **HOW THE NEW 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).

**How the New Stream Stewardship Trust Fund Works: 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.