



# Missouri Department of Natural Resources

## AGENDA

### Missouri Soil and Water Districts Commission

#### Salon B

#### TAN-TAR-A RESORT

494 Tan Tar A Est.

Osage Beach, Missouri

December 16, 2013

1:00 p.m.

#### A. CALL TO ORDER

#### B. MINUTES OF THE PREVIOUS MEETING

1. October 30, 2013

#### C. MISSOURI DEPARTMENT OF NATURAL RESOURCES

1. Department Update
2. Nutrient Loss Reduction Strategy

#### D. SOIL AND WATER CONSERVATION PROGRAM DIRECTOR'S COMMENTS

1. University of Missouri Extension Grazing Wedge Software
2. Nutrient Tracking Tool
3. Chariton SWCD Pilot Cover Crop Report
4. FY14 Cost-Share/AgNPS SALT Fund Status
5. FY14 Supplemental Cost-Share Allocations
6. Plan for the Future

#### E. REQUESTS/REVIEW

1. FY15 Cost-Share Allocations
2. Supervisor Appointments  
(If a supervisor request is received in advance of meeting, it may be presented to the commission at that meeting.)

#### F. REPORTS

1. University of Missouri
2. Department of Conservation
3. Department of Agriculture
4. Natural Resources Conservation Service
5. Missouri Association of Soil and Water Conservation Districts

#### G. PUBLIC COMMENTS

#### H. SUGGESTED DATE(S) OF NEXT MEETING(S)

Tentative meeting date: February 19, 2014, Jefferson City

## I. ADJOURNMENT

*Members of the Commission may attend the Missouri Association of Soil and Water Conservation Districts Training Conference for educational and informational purposes. No official business will be conducted by the Commission after they adjourn their meeting.*

Those wishing to address the commission on any of the above issues need to contact a program staff member, Christa Moody or sign up on the comment card at the commission meeting.

If you have any questions regarding this meeting, special accommodation needs, or would like a copy of any material provided at the commission meeting, please contact Christa Moody at 573-751-1172.

Soil & Water Districts Commission may go into closed session at this meeting if such action is approved by a majority vote of the commission members who constitute a quorum to discuss legal, confidential, or privileged matters under § 610.021(1), RSMo 2000; personnel actions under §610.021(3); personnel records or applications under §610.021(13), records under § 610.021(14), or audit issues under § 610.021(17), which are otherwise protected from disclosure by law.



# Missouri Department of Natural Resources

**MINUTES**  
**MISSOURI SOIL AND WATER DISTRICTS COMMISSION**  
**Lincoln University**  
**South Campus Conference Center**  
**Lorenzo Greene Hall**  
**Jefferson City, Missouri**  
**October 30, 2013**

**COMMISSION MEMBERS PRESENT:** Charles Ausfahl, Thomas Bradley, H. Ralph Gaw, Sam Schaumann, and Richard Fordyce

**EX-OFFICIO MEMBERS:** HARRY BOZOIAN, DEPT. OF AGRICULTURE: Judy Grundler; BOB ZIEHMER, DEPT. OF CONSERVATION: Clint Dalbom; SARA PARKER PAULEY, DEPT. OF NATURAL RESOURCES: Joe Engeln

**ADVISORY MEMBERS PRESENT:** SOIL & WATER CONSERVATION PROGRAM: Colleen Meredith; ATTORNEY GENERAL'S OFFICE: Tim Duggan; NATURAL RESOURCES CONSERVATION SERVICE (NRCS): J.R. Flores; MISSOURI ASSOCIATION OF SOIL AND WATER CONSERVATION DISTRICTS (MASWCD): Kenny Lovelace

**STAFF MEMBERS PRESENT:** Christa Moody, James Plassmeyer, Ken Struempf, Bill Wilson, Colette Weckenborg, Theresa Mueller, Alan Freeman, April Brandt, Jim Boschert

**OTHERS PRESENT:** DISTRICTS: Cole: Peggy Lemons; Jefferson: George Engelbach; MISSOURI DEPARTMENT OF NATURAL RESOURCES: Kurt Boeckmann, Van Beydler; Larry Archer; MISSOURI FARM BUREAU: Kelly Smith; MISSOURI SOIL AND WATER CONSERVATION DISTRICTS EMPLOYEES ASSOCIATION (MSWCDEA): Sandy Stratman; MASWCD: Beverly Dometrorch; MISSOURI LAND IMPROVEMENT CONTRACTORS ASSOCIATION (MLICA): Jeff Lance, Tom Lawlor; OTHER: Darrick Steen

## **A. CALL TO ORDER**

Chairman Richard Fordyce called the meeting to order in Jefferson City, Missouri, at the Lorenzo Greene Hall at 9:10 a.m. Charles Ausfahl, Thomas Bradley, H. Ralph Gaw, Sam Schaumann and Richard Fordyce were present, which made a quorum.

Kathy Pabst, Director of Continuing Education and Extended Studies, welcomed the Commission to the Lincoln University, Lorenzo Greene Hall meeting facility and commented on several partnerships that Lincoln has with the Soil and Water Conservation Program.

Richard Fordyce introduced and welcomed Mr. Sam Schaumann, the recently appointed Commissioner to the Soil and Water Districts Commission.

## **B. MINUTES OF THE PREVIOUS MEETING**

### **1. August 14, 2013 Closed session**

H. Ralph Gaw made a motion to approve the closed minutes of the August 14, 2013 Commission meeting. Thomas Bradley seconded the motion. When asked by the chair Charles Ausfahl, Thomas Bradley, H. Ralph Gaw, Sam Schaumann and Richard Fordyce voted in favor of the motion and the motion carried unanimously.

### **2. August 14, 2013 Open Session**

H. Ralph Gaw made a motion to approve the open minutes of the August 14, 2013 Commission meeting. Thomas Bradley seconded the motion. When asked by the chair, Charles Ausfahl, Thomas Bradley, H. Ralph Gaw, Sam Schaumann and Richard Fordyce voted in favor of the motion and the motion carried unanimously.

## **C. MISSOURI DEPARTMENT OF NATURAL RESOURCES**

### **1. Department Update**

Joe Engeln presented the department updates. Mr. Engeln stated that the three summits for the Our Missouri Waters Initiative have been successfully completed. A review will be done over the next month to improve the process of meeting with all the groups in the watershed. It is expected by the end of the year to announce the strategies and schedule for the rest of the basins in Missouri. There currently 66 eight-digit watersheds in Missouri and three have had pilot projects.

Mr. Engeln also stated a few other efforts that have been started in the department. There is an effort to provide assistance to small communities to meet drinking water and wastewater regulations by meeting with the communities and working with partners such as the Rural Water Association, Public Utilities Alliance and regional planning commissions to assist with technical support.

### **2. Nutrient Loss Reduction Strategy**

Joe Engeln presented information on Nutrient Loss Reduction Strategy. Work has begun to create a Nutrient Reduction Plan for the State of Missouri. Mr. Engeln stated he is the representative on the Gulf Hypoxia Task Force for the department. Mr. Engeln stated that the Nutrient Reduction Strategy will be developed in the next six to nine months and it should fit very well with the Soil and Water Conservation Program to enable Missouri farmers to have access to resources or technical information to implement practices on their land.

## **D. SOIL AND WATER CONSERVATION PROGRAM DIRECTOR'S COMMENTS**

### **1. FY14 Cost-Share/AgNPS SALT Fund Status**

April Brandt presented the FY14 cost-share and AgNPS SALT fund status as of October 29, 2013. There is approximately \$28.5 million allocated and of that amount, \$13.3 million has been obligated. Of the \$13.3 million, Sheet and Rill/Gully Erosion resource concern has the highest percent obligated at 53 percent. The Sensitive Areas resource concern has the lowest amount obligated at 23 percent. At this time, \$4.6 million has been paid out.

The AgNPS SALT funds have \$1 million allocated to 20 projects with 38 percent obligated and 18 percent paid out. The AgNPS SALT program will be completed in 2015.

### **2. Supplemental Cost-Share Allocation**

Alan Freeman presented the supplemental cost-share allocations update. The first allocation to districts was based on reaching 70 percent obligated plus pending cost-share contracts within any of six resource concern areas at the close-of-business on October 15, 2013. The Nutrient and Pest Management resource concern was not included since funding in this area had to be obligated by April 15th. The second allocation planned is based on 80 percent district obligated cost-share contracts in any resource concern area at the close-of-business on December 13, 2013. Districts meeting the 70 percent threshold in a resource concern received at least the supplemental resource minimum of \$10,000. A supplemental resource maximum allocation was established to allow more districts an opportunity to receive funds. The maximums range from \$20,000 to \$50,000 based upon resource concern category. In some instances districts received 100 percent of their FY14 Needs Assessment for that resource concern.

There were 74 districts that qualified for a supplemental allocation on October 15, 2013 which totaled \$3,587,114. This included 144 allocations provided within six resource concern areas. Allocations were loaded on October 17, 2013 and letters were sent on October 22, 2013 to each district with their supplemental allocation or an explanation as to why they did not received additional funds. Districts were informed to continue to work towards meeting the 70 percent threshold in preparation for the October 30, 2013 Soil and Water Districts Commission meeting.

As of October 29, 2013, 13 districts would receive an allocation in a resource concern area(s) based on the parameters and funding formula utilized on October 15, 2013.

After discussion, Charles Ausfahl made a motion to extend the October 15, 2013 deadline for the Supplemental Cost-Share Allocation to November 8, 2013 with a threshold of 70 percent obligated plus pending. Thomas Bradley seconded the motion. When asked by the chair, Charles Ausfahl, Thomas Bradley, H. Ralph Gaw, Sam Schaumann and Richard Fordyce voted in favor of the motion and the motion carried unanimously.

**3. FY15 Cost-Share Needs Assessment**

Alan Freeman presented the FY15 cost-share Needs Assessment update. A memo was sent to provide information about the FY15 Needs Assessment process. The original deadline was November 1, 2013, however due to the federal government shut-down the deadline was extended to November 25, 2013.

The FY15 Needs Assessment narrative form was changed to standardize information collected, provide boards with past funding utilization and current year initial allocation information, and improve planning. This revised form will better assist the boards and district staff with completing the Needs Assessment form.

**4. Health Insurance Update**

Jim Boschert presented the health insurance update. For the calendar year 2014 the soil and water district employees were able to choose between two plans the PPO 600 and PPO 1000. The monthly cost of the PPO 600 remains the same at \$601.08 for this plan with the state paying \$560.08. The PPO 1000 plan has a cost of \$533.63 with the state paying \$492.63. Both plans require a \$41.00 per month premium copayment by the employee.

Open enrollment ends November 8, 2013. Both plans meet the requirements for the Affordable Care Act.

**5. Area Meeting Conservation Practices Summary**

Jim Plassmeyer presented a summary of the Area Meeting conservation practices presentation. Mr. Plassmeyer presented an overview of the PowerPoint presentation that he presented at all eight Area Meetings held from July 29, 2013 – August 8, 2013. Feedback on the presentation from each individual area meeting has been posted on the SWCD intranet.

A few of the topics where input from district board members, staff, and partners was received were: the demographics of the participants, practices that are not used statewide, out-of-production incentives, acres coming out of CRP and related impacts to requests for cost-share, grouping components, cost-share assistance level needed for landowner participation, cover crops and other district requests.

All the information will be provided to the Conservation Practices subcommittee for the Plan for the Future. The full summary of this presentation and those from the Area Meetings will be posted to the SWCD intranet.

**6. Pike SWCD Pilot Forestry Practice Update**

Ken Struempf presented the Pike SWCD Pilot Forestry Practice Update. At the August 14th meeting, in response to a request by the district for additional forestry practices, the Commission asked the Pike SWCD board and program staff to develop policies for a potential pilot forestry practice for consideration. Since that time, program office staff met with Pike SWCD twice to begin the process of developing a pilot practice. The intent

of the pilot practice is for the landowner to acquire and implement a Forest Stewardship Plan. An example of a stewardship plan was provided to the Commission for their review. The district is currently working on how they would incorporate a stewardship plan along with documenting water quality efforts of the pilot forestry practice.

Judy Grundler requested coordination with the Department of Agriculture due to their regulatory role with forest diseases and invasive species and also with the Department of Conservation as this pilot practice progresses

Beverly Dometorch stated that there are other agencies covering forestry and stated a concern that an additional practice could create greater demand on cost-share funding. Chairman Fordyce agreed with that concern and stated that at this point, the pilot is just in a development phase. Commissioner Ausfahl asked for comments from the Department of Conservation. Clint Dalbom stated that forestry is the third largest economic engine for the state behind agriculture and tourism. He stated that the department provides a lot of assistance to forest landowners but there is always more that needs to be done. J.R. Flores stated that 10 percent of EQIP funds are directed to forestry and almost 100 percent of the applications have been funded. Kelly Smith stated that the Missouri Department of Conservation also has cost-share funding for forestry practices. After additional discussion regarding assistance to forest landowners and issues on forestland such as invasive species, staff will continue to work with the Pike SWCD to ensure they are aware of the types of financial assistance discussed and to have more information on a pilot at the February 2014 meeting.

**7. Plan for the Future Subcommittees Updates**

Colleen Meredith presented an update on the Plan for the Future. Chairman Fordyce stated the Soil and Water Districts Commission directed Colleen Meredith upon her appointment as director, to update the Plan for the Future. Since that time subcommittees have been established and several are underway to develop the Plan for the Future draft document.

Colleen Meredith stated this process has been a good experience for the program staff, districts and other partners. It has created an environment of discussion and cooperation to direct this process.

The Outreach committee and the Info/Ed committees have been combined to ensure coordination. This Outreach committee has met three times and currently has another meeting scheduled for November 13, 2013.

The Program Delivery and Operations committee received information from a workshop at the Training Conference last November at Tan-Tar-A. The workshop collected feedback on district staffing by using voting software. The next meeting was held on October 2, 2013 with board members, technicians, program specialists and other partners involved.

The Conservation Practices committee will soon be convened. This committee will use the information gathered and compiled from the Area Meetings this past summer to start their process.

The last group is the Emerging Issues committee. This committee will possibly discuss newer issues facing soil and water conservation such as biofuels, cover crops, soil health and other issues as recommended by the committee.

During the training conference, the committees that have been meeting will be providing updates along with time for discussion and the use of voting software to gather additional input for their respective areas. Each committee has a Commissioner represented.

**8. Our Missouri Waters Update**

Colleen Meredith stated that Joe Engeln reviewed this topic earlier but would add that two summits were held, September 10, 2013 in Brunswick for the Lower Grand watershed and October 9, 2013 at the Mineral Area College for the Big River watershed.

George Engelbach addressed the Commission at this time and discussed some of his concerns with watershed effort such as the Sandy Creek Watershed and the Big River Watershed. He also brought up that their district still does not have an extension representative assigned and that there are not enough agricultural extension agents to serve each board. He attended the Big River Summit and had concerns that agricultural landowners were not well represented and other entities will be making decisions for them if they are not present. He also expressed similar concerns regarding the Sandy Creek Watershed plan which was developed with funds from the Environmental Protection Agency (EPA). He expressed concerns that EPA will be regulating landowners because of water quality concerns. Colleen Meredith stated that coordinators for the Our Missouri Waters are working with local soil and water districts in the three pilot watersheds to increase awareness and participation.

**9. Missouri Association Soil and Water Conservation Districts 2012 Resolution**

Bill Wilson presented the Missouri Association Soil and Water Conservation Districts 2012 Resolution update. Mr. Wilson presented Resolution 2012-1 "Whereas, tilling the soil and leaving it without a ground cover is one of the worst things that can be done on fields that are highly erodible. Planting with no-till planters and drills is the most effective method to use to prevent erosion on these fields, and Whereas, the equipment is so expensive that many farmers do not have enough acres to justify buying newer planting equipment but they would rent no-till equipment if they were available, and Whereas, many districts cannot afford to buy or replace existing no-till equipment without a matching grant program; Therefore, be it resolved: that the Missouri Association of Soil and Water Conservation Districts urge the Missouri Soil and Water Commission to reinstate the matching grant program to districts for no-till equipment." This resolution passed 51 to 0.

At the January 2013 Soil and Water Districts Commission meeting, the Commission directed the program to conduct regional meetings to gather input from the districts using

the Turning Point voting software. Five regional meetings were held during February and March of 2013. The summary report of the five regional meetings was presented to the Commission at the April 2013 Commission meeting. At that time the conclusion was to present the information to the Plan for the Future Program Delivery Operations committee for further review and proposed solutions.

Mr. Wilson also presented a motion that was approved at the 2012 MASWCD Annual Business meeting. The motion states, "David Morris, supervisor from Livingston County stated his district did not feel the funds for outsourcing the payroll should be provided to a district in addition to their other funding. He read from the job description of the Program Specialist which states that payroll is part of that position's duties. He stated Livingston County would like to make a motion that the cost of the outsourcing of the payroll come from a district's \$5500 administrative fund with no additional reimbursement from the Program Office. DeKalb County seconded the motion. One comment in support of outsourcing, no other comments." This motion passed with 39 votes.

The option to outsource is in its second year and is strictly a voluntary program for the district boards. Currently there are 42 districts utilizing the outsourcing for payroll.

Chairman Fordyce directed the program staff to draft a letter to be sent to Kenny Lovelace and MASWCD stating that the request for the reinstatement of the Matching Grants Program for purchase of no-till equipment is in process and information is being gathered for the Plan for the Future subcommittee. This will allow the committee to determine exactly what the districts are requesting.

## **E. REQUESTS/REVIEW**

### **1. Supervisor Appointments**

#### **A. Washington Soil and Water Conservation District**

Jim Plassmeyer presented the Washington Soil and Water Conservation district (SWCD) supervisor appointment. The Washington SWCD board requested to appoint Mr. George Richards to complete the unexpired term of Mr. Frank Meyers, who has resigned. Mr. George Richards and the board chairman signed the Verification of Supervisor Eligibility form, verifying the candidate meets the qualifications to serve on the board.

Thomas Bradley made a motion to approve the appointment of Mr. George Richards to complete the unexpired term of Mr. Frank Meyers to the Washington County SWCD Board of Supervisors. Charles Ausfahl seconded the motion. When asked by the chair, Charles Ausfahl, Thomas Bradley, H. Ralph Gaw, Sam Schaumann and Richard Fordyce voted in favor of the motion and the motion carried unanimously.

## **F. REPORTS**

1. **University of Missouri**  
No report
2. **Department of Conservation**  
Clint Dalbom presented information on cover crop study for wildlife benefits, Chronic Wasting Disease sampling, feral hog eradications, elk, quail population, and efforts with bears and mountain lions.
3. **Department of Agriculture**  
Judy Grundler presented information on the new Acting Director of Agriculture, Harry Bozoian, who sent his regrets for missing the meeting. Ms. Grundler also spoke about the Emerald Ash Borer quarantine expansion, Gypsy Moth survey, Thousand Cankers Disease of Black Walnut, Fire Ants, Boll Weevil, and Spotted Winged Drosophila.
4. **Natural Resources Conservation Service**  
J.R. Flores presented information on the Conservation Stewardship Program payments, local workgroups discussing the Farm Bill, cut-off dates for EQIP signups, and the soil health cover crops workshop on November 7<sup>th</sup>, 2013 at the Elsberry Plant Material Center.
5. **Missouri Association of Soil and Water Conservation Districts**  
Kenny Lovelace commented that he thought the Plan for the Future subcommittee that he is involved in is going well. He said that he attended five of the Area Meetings and hoped that the format used this year can be continued in the future. Beverly Dometrorch presented information for Peggy Lemons in reference to the Training conference registration at Tan-Tar-A.

## **G. PUBLIC COMMENTS**

Sandy Stratman, Employees Association President, extended an invitation to the Commission to the Employees Association meeting Tuesday December 17, 2013 at the Training conference at Tan-Tar-A.

George Engelbach clarified that there was a representative from the Army Corps of Engineers at the Big River Summit and that he would supply the Commission with information.

## **H. SUGGESTED DATE(S) OF NEXT MEETING(S)**

The suggested Soil and Water Districts Commission meeting December 16, 2013, in Osage Beach, Tan-Tar-A.

## **I. LINCOLN UNIVERSITY SOUTH CAMPUS TOUR**

Prior to adjournment, Brian McMillan, a Civil Engineer with the Central Missouri Professional Services presented information on the replacement of Lincoln University's Dickinson Research Center parking lot project. The project included replacing and enlarging the existing parking lot and incorporating some "Green" features that would help to qualify for additional sources of funding, as well as opening up the Community Garden area to make it more accessible to the

community. The option that was selected was permeable paving that maximized the parking lot and the community garden area. This paving method improves water quality by increasing infiltration and storage capacity and slows runoff prior to emptying into a stream which adjoins the property. Mr. McMillian invited the Commission to tour the new parking lot.

Maggie Hopper from Lincoln University invited anyone from the group to hear a briefing on their certified kitchen which is available for public use and often used by members of their Farmers Market, and also for a tour of the kitchen.

**J. ADJOURNMENT**

Sam Schaumann made a motion to adjourn open session at 12:24 pm. Thomas Bradley seconded the motion. When asked by the chair. Charles Ausfahl, Thomas Bradley, H. Ralph Gaw, Sam Schaumann and Richard Fordyce voted in favor of the motion and the motion carried unanimously.

Respectfully submitted,

Colleen Meredith, Director  
Soil and Water Conservation Program

Approved by:

Richard Fordyce, Chairman  
Missouri Soil and Water Districts Commission

/clm

## Expanding the Reach of MU Extension's Grazing Wedge Software

Robert Kallenbach, Kent Shannon, Gene Schmitz, Wesley Tucker, Valerie Tate  
Stacey Hamilton, Justin Sexten, Will McClain, and John Lory

### Background:

In 2007, MU Extension developed the initial "Grazing Wedge" software. Starting as an Excel Worksheet, we established a web application and database for the software in 2008. The current versions of the software (<http://plantsci.missouri.edu/grazingwedge/>) and (<http://www.grazingbeef.missouri.edu/>) have been tailored to meet the needs of dairy and beef producers, respectively. The software allows producers to input and track pasture biomass and growth rates on a weekly basis. The data generated from this program allows them to make management decisions about the length of the grazing rotation, concentrate feeding, and fertilizer application. Currently, one-hundred fifty separate accounts have been established on this website, with about 80 unique farms inputting pasture data. Unique web views average approximately 600 per month.

Besides the grazing wedge software, MU Extension Specialists have also developed a low cost (approximate retail value~\$1,500), ruggedized, ultra-sonic pasture meter. About the size of a Kleenex box, this device can be mounted on the front bumper of an ATV (4-wheeler). Producers checking their livestock with an ATV can simultaneously collect the data necessary to measure dry matter availability. We have tested this device more than 20 times in the field against ground truth data. The resultant  $R^2$  values from this testing typically exceed 0.85.

Based on input from current and prospective grazing wedge users we have developed the following proposal.

### What we want to do:

1. Add GPS capability to the website. At present there is no way for producers to geo-reference pasture readings. Producers would like to be able to download a map of their farm and outline paddocks from the map. These outlined paddocks would be stored in their user account and then when geo-referenced data is uploaded, the software would build a color-coded map showing ideal use patterns. This may seem futuristic, but the GPS capability of even small farmers has exploded in the past 5 years.
2. Develop secure upload capability to the Grazing Wedge websites. Currently, producers have to hand enter data from paddocks into a web-form. We need to modernize the web-site to allow properly formatted data to be upload from spreadsheets or other delimited file types. This will make the data from automated sensors (see below) simple to handle.
3. Add algorithms that would process the data from geo-referenced, ultra-sonic pasture meters. The MU Extension developed sensors typically collect 200,000 data point on each farm each week! The coordination of the automatic pasture mass sensors and GPS data will be used to make the maps outlined in #1 above. This map would be the weekly output that a livestock producer could use to make better management decisions as addressed earlier.

4. Hold workshops showing producers how to use the technology. We intend to conduct three one-day, hands-on workshops that out-line 1) the benefits of pasture monitoring, 2) pasture monitoring methods and devices, 3) how to use MU's grazing wedge software, and 4) evaluation of grazing wedge data. The "professional curriculum editing & revision" section of the budget will be used to develop the education materials for this objective.

**Sustainability:** Our goal is to turn this project into a "fee for service" proposition. The number of current users demonstrates the producer interest in this project. By developing the capabilities outlined in this proposal, we intend to make future use of the both the hardware and software a fee-for-service program. During the workshops, we intend to evaluate the "price point" that producers are willing to accept for this service.

**Contact:** Robert Kallenbach, Professor and Forage Specialist. [kallenbachr@missouri.edu](mailto:kallenbachr@missouri.edu)



# The NUTRIENT TRACKING TOOL (NTT)

## Overview

The Nutrient Tracking Tool (NTT)<sup>1</sup> (<http://nn.tarleton.edu/nttwebars/>) is an enhanced version of Nitrogen Trading Tool, a user-friendly web-based computer program originally developed by the United States Department of Agriculture (USDA). NTT was developed by TIAER staff in collaboration with USDA-NRCS. The tool estimates nutrient (nitrogen and phosphorus) and sediment losses from fields managed under a variety of cropping patterns and management practices through its user-friendly linkage to the Agricultural Policy Environmental eXtender (APEX) (Williams et al, 2008). NTT provides farmers, government officials, and other users with a fast and efficient method of estimating nitrogen and phosphorus credits for water quality trading, as well as other water quality, water quantity, and farm production impacts associated with conservation practices. The information obtained from the tool can help farmers to determine the most cost-effective conservation practice alternatives for their individual operations and provide them with more advantageous options in a water quality credit trading program. NTT can also be used in evaluating conservation practice effectiveness outside of a water quality trading environment.

## How does NTT work?

NTT uses a widely recognized farm-scale environmental model, APEX, to determine nutrient

and sediment losses and runoff from agricultural fields. APEX is an environmental model that uses mathematical processes to simulate the transport of water, sediment and nutrients through land. NTT is a web-based program which requires no software installation. The required data for this program for major portions of US are provided through GIS data layers and pre-existing databases.

## Who can use NTT?

APEX is a very sophisticated model. However, NTT uses a very user-friendly web-based interface program to make the benefits of APEX directly accessible to farmers, crop consultants, government officials and the general public. Anyone with internet access can use NTT, but the tool was designed with specific attention to the needs of the typical farmer.

## Scope of NTT

NTT is used to estimate the impacts of alternative conservation practices on nutrient and sediment losses and flow from agricultural fields, as well as crop yields on those fields. NTT output on the impacts of alternative conservation practices can be used in integration with other watershed models to calculate the nutrient credits that would be associated with these practices in a water quality trading program.

## Farm-scale simulation:

NTT is a farm-scale simulator. The tool is designed to provide reliable estimates of nutrient and

<sup>1</sup> Formerly referred to as the Nutrient Trading Tool (NTT).



# Master Fund Status Summary

District	Allocated	Obligated	%Obligated	# Contracts	Contract Payment	% Contract Payment	# Contract Payments	Pending
FY: 2014 Fund Code:R Project:AWM - ANIMAL WASTE MANAGEMENT	\$920,000.00	\$311,173.55	33.82%	15	\$125,782.00	13.67%	4	\$71,845.00
FY: 2014 Fund Code:R Project:CC - COVER CROP	\$55,000.00	\$50,197.50	91.27%	23	\$0.00	0.00%	0	\$0.00
FY: 2014 Fund Code:R Project:GM - GRAZING MANAGEMENT	\$4,089,250.00	\$2,011,344.84	49.19%	721	\$579,662.16	14.18%	190	\$472,723.47
FY: 2014 Fund Code:R Project:IM - IRRIGATION MANAGEMENT	\$1,162,122.00	\$659,667.66	56.76%	149	\$238,749.07	20.54%	55	\$80,006.55
FY: 2014 Fund Code:R Project:NP - NUTRIENT & PEST MANAGEMENT	\$905,371.00	\$417,942.61	46.16%	454	\$221,092.96	24.42%	252	-\$5,502.00
FY: 2014 Fund Code:R Project:PM - PEST MANAGEMENT	\$0.00	\$0.00	0.00%	0	\$0.00	0.00%	0	\$0.00
FY: 2014 Fund Code:R Project:SA - SENSITIVE AREAS	\$2,227,788.00	\$742,820.74	33.34%	262	\$152,371.19	6.84%	87	\$171,888.21
FY: 2014 Fund Code:R Project:SGE - SHEET AND RILL / GULLY EROSION	\$19,005,664.80	\$12,479,819.39	65.66%	2478	\$6,071,703.71	31.95%	1096	\$1,512,420.79
FY: 2014 Fund Code:R Project:WE - WOODLAND EROSION	\$1,392,363.00	\$559,757.99	40.20%	186	\$125,296.34	9.00%	40	\$69,274.26
<b>Subtotal for R</b>	<b>\$29,757,558.80</b>	<b>\$17,232,724.28</b>	<b>57.91%</b>	<b>4288</b>	<b>\$7,514,657.43</b>	<b>25.25%</b>	<b>1724</b>	<b>\$2,372,656.28</b>
FY: 2014 Fund Code:SN Project:BDSP-31 - BUFFER SINKHOLE IMP	\$15,600.00	\$1,500.00	9.62%	5	\$0.00	0.00%	0	\$0.00
FY: 2014 Fund Code:SN Project:SN083 - LOWER COLE CAMP								

# Master Fund Status Summary

District	Allocated	Obligated	%Obligated	# Contracts	Contract Payment	% Contract Payment	# Contract Payments	Pending
	\$35,000.00	\$9,118.70	26.05%	8	\$6,822.70	19.49%	7	\$0.00
<b>FY: 2014 Fund Code:SN Project:SN085 - GRAYS CREEK</b>								
	\$44,770.00	\$40,714.25	90.94%	11	\$26,889.15	60.06%	4	\$0.00
<b>FY: 2014 Fund Code:SN Project:SN086 - MIDDLE FORK SALT RIVER</b>								
	\$49,000.00	\$45,325.92	92.50%	5	\$29,096.53	59.38%	3	\$0.00
<b>FY: 2014 Fund Code:SN Project:SN087 - LOWER LOUTRE</b>								
	\$33,500.00	\$9,530.57	28.45%	9	\$2,762.95	8.25%	1	\$14,719.04
<b>FY: 2014 Fund Code:SN Project:SN088 - LITTLE MARIES CREEK</b>								
	\$36,225.00	\$18,023.25	49.75%	7	\$11,851.25	32.72%	3	\$1,692.50
<b>FY: 2014 Fund Code:SN Project:SN089 - PEMISCOT CLAY ROOT</b>								
	\$68,700.00	\$20,804.83	30.28%	12	\$0.00	0.00%	0	\$0.00
<b>FY: 2014 Fund Code:SN Project:SN090 - SALT FORK CREEK</b>								
	\$57,000.00	\$52,175.76	91.54%	8	\$19,237.16	33.75%	2	\$0.00
<b>FY: 2014 Fund Code:SN Project:SN091 - ST. JOHN'S BAYOU</b>								
	\$54,000.00	\$7,855.78	14.55%	1	\$7,855.78	14.55%	1	\$0.00
<b>FY: 2014 Fund Code:SN Project:SN093 - HURRICANE CREEK AND LITTLE WHITEWATER</b>								
	\$74,000.00	\$26,078.13	35.24%	4	\$17,717.26	23.94%	3	\$0.00
<b>FY: 2014 Fund Code:SN Project:SN094 - BYRD CREEK</b>								
	\$21,700.00	\$12,322.55	56.79%	5	\$5,492.31	25.31%	3	\$0.00
<b>FY: 2014 Fund Code:SN Project:SN095 - UPPER BIG CREEK</b>								
	\$75,000.00	\$28,439.14	37.92%	22	\$13,033.75	17.38%	1	\$279.83
<b>FY: 2014 Fund Code:SN Project:SN096 - CROWLEY'S RIDGE</b>								

# Master Fund Status Summary

<u>District</u>	<u>Allocated</u>	<u>Obligated</u>	<u>%Obligated</u>	<u># Contracts</u>	<u>Contract Payment</u>	<u>% Contract Payment</u>	<u># Contract Payments</u>	<u>Pending</u>	
	\$44,655.00	\$15,429.65	34.55%	8	\$2,747.06	6.15%	1	\$5,630.49	
<b>FY: 2014</b>	<b>Fund Code:SN</b>	<b>Project:SN097 - PEARSON CREEK</b>							
	\$62,000.00	\$11,106.92	17.91%	8	\$0.00	0.00%	0	-\$100.00	
<b>FY: 2014</b>	<b>Fund Code:SN</b>	<b>Project:SN098 - WARM FORK OF SPRING RIVER</b>							
	\$51,450.00	\$4,454.00	8.66%	17	\$3,336.00	6.48%	12	\$0.00	
<b>FY: 2014</b>	<b>Fund Code:SN</b>	<b>Project:SN099 - HEATHS CREEK</b>							
	\$66,505.00	\$16,859.15	25.35%	6	\$9,980.96	15.01%	2	\$7,827.73	
<b>FY: 2014</b>	<b>Fund Code:SN</b>	<b>Project:SN100 - ELK FORK SALT RIVER &amp; COON CREEK</b>							
	\$37,300.00	\$0.00	0.00%	0	\$0.00	0.00%	0	\$0.00	
<b>FY: 2014</b>	<b>Fund Code:SN</b>	<b>Project:SN101 - CROOKED RIVER</b>							
	\$70,000.00	\$54,259.88	77.51%	5	\$40,000.00	57.14%	2	\$15,740.12	
<b>FY: 2014</b>	<b>Fund Code:SN</b>	<b>Project:SN102 - SOUTH WYACONDA</b>							
	\$55,432.00	\$45,394.43	81.89%	6	\$13,718.47	24.75%	2	\$0.00	
<b>FY: 2014</b>	<b>Fund Code:SN</b>	<b>Project:SN103 - LOWER HEADWATERS OF JAMES RIVER</b>							
	\$73,740.00	\$24,993.38	33.89%	11	\$0.00	0.00%	0	\$0.00	
<b>FY: 2014</b>	<b>Fund Code:SN</b>	<b>Project:SN104 - CLARK / WOLF CREEK</b>							
	\$64,980.00	\$57,591.67	88.63%	4	\$52,981.79	81.54%	2	\$0.00	
<b>Subtotal for SN</b>		<b>\$1,090,557.00</b>	<b>\$501,977.96</b>	<b>46.03%</b>	<b>162</b>	<b>\$263,523.12</b>	<b>24.16%</b>	<b>49</b>	<b>\$45,789.71</b>

# Master Fund Status Summary

## Master Fund Status Summary (2014)

<b>Subtotal for R</b>	\$29,757,558.80	\$17,232,724.28	57.91%	4288	\$7,514,657.43	25.25%	1724	\$2,372,656.28
<b>Subtotal for SN</b>	\$1,090,557.00	\$501,977.96	46.03%	162	\$263,523.12	24.16%	49	\$45,789.71
<b>Report Totals</b>	\$30,848,115.80	\$17,734,702.24	57.49%	4450	\$7,778,180.55	25.21%	1773	\$2,418,445.99

District	FY14 Total Initial Allocation	FY14 First Supplemental Allocation (1) 10/15/2013 Obligated plus Pending >=70%	FY14 Second Supplemental Allocation (2) 11/8/2013 Obligated plus Pending >=70%	FY14 Total Allocation	FY14 Proposed Second Supplemental as of 12/2/2013 Obligated >=80%
State Totals	\$ 24,916,947.80	3,587,114.00	\$ 1,198,497	\$ 29,702,559	\$ 1,096,575.00
Number of Districts		74	38		29
Adair	\$ 121,502.00	45,000.00	\$ -	\$ 166,502	
Andrew	\$ 346,013.00	-	\$ 35,000	\$ 381,013	X
Atchison	\$ 631,000.00	-	\$ -	\$ 631,000	
Audrain	\$ 369,137.00	35,000.00	\$ -	\$ 404,137	
Barry	\$ 191,250.00	25,000.00	\$ -	\$ 216,250	
Barton	\$ 275,687.00	70,000.00	\$ -	\$ 345,687	X
Bates	\$ 198,886.00	-	\$ -	\$ 198,886	
Benton	\$ 101,533.00	25,000.00	\$ 35,000	\$ 161,533	
Bollinger	\$ 195,924.00	45,000.00	\$ -	\$ 240,924	
Boone	\$ 187,300.00	-	\$ 25,000	\$ 212,300	
Buchanan	\$ 258,300.00	35,000.00	\$ -	\$ 293,300	X
Butler	\$ 238,779.00	20,000.00	\$ 35,000	\$ 293,779	
Caldwell	\$ 428,097.00	55,000.00	\$ -	\$ 483,097	
Callaway	\$ 169,266.00	-	\$ 35,000	\$ 204,266	
Camden	\$ 80,568.00	80,000.00	\$ -	\$ 160,568	
Cape Girardeau	\$ 271,171.00	35,000.00	\$ -	\$ 306,171	
Carroll	\$ 350,462.00	-	\$ -	\$ 350,462	
Carter	\$ 121,121.00	80,000.00	\$ -	\$ 201,121	X
Cass	\$ 184,427.00	25,000.00	\$ -	\$ 209,427	
Cedar	\$ 92,744.00	70,000.00	\$ -	\$ 162,744	
Chariton	\$ 429,969.00	20,000.00	\$ -	\$ 449,969	
Christian	\$ 83,425.00	35,000.00	\$ 25,000	\$ 143,425	
Clark	\$ 199,004.00	-	\$ -	\$ 199,004	
Clay	\$ 64,936.00	-	\$ -	\$ 64,936	
Clinton	\$ 356,936.00	-	\$ 35,000	\$ 391,936	X
Cole	\$ 191,447.00	80,000.00	\$ 20,000	\$ 291,447	
Cooper	\$ 204,204.00	-	\$ 35,000	\$ 239,204	
Crawford	\$ 108,075.00	69,750.00	\$ -	\$ 177,825	
Dade	\$ 147,595.00	56,628.00	\$ 10,000	\$ 214,223	
Dallas	\$ 151,674.00	65,000.00	\$ -	\$ 216,674	
Daviess	\$ 331,944.00	-	\$ 35,000	\$ 366,944	
Dekalb	\$ 357,166.00	-	\$ 35,000	\$ 392,166	
Dent	\$ 265,959.00	100,000.00	\$ -	\$ 365,959	X
Douglas	\$ 120,437.00	75,000.00	\$ -	\$ 195,437	
Dunklin	\$ 309,538.00	20,000.00	\$ -	\$ 329,538	X
Franklin	\$ 159,228.00	-	\$ 23,497	\$ 182,725	
Gasconade	\$ 91,408.00	43,000.00	\$ -	\$ 134,408	X
Gentry	\$ 317,360.00	-	\$ 35,000	\$ 352,360	
Greene	\$ 108,771.00	35,000.00	\$ -	\$ 143,771	
Grundy	\$ 219,491.00	35,000.00	\$ -	\$ 254,491	
Harrison	\$ 482,587.00	60,000.00	\$ -	\$ 542,587	X
Henry	\$ 120,159.00	45,000.00	\$ 35,000	\$ 200,159	
Hickory	\$ 232,136.00	-	\$ -	\$ 232,136	
Holt	\$ 395,347.00	-	\$ 35,000	\$ 430,347	
Howard	\$ 188,606.00	35,000.00	\$ -	\$ 223,606	
Howell	\$ 223,583.00	91,575.00	\$ -	\$ 315,158	X
Iron	\$ 78,731.00	60,000.00	\$ -	\$ 138,731	

District	FY14 Total Initial Allocation	FY14 First Supplemental Allocation (1) 10/15/2013 Obligated plus Pending >=70%	FY14 Second Supplemental Allocation (2) 11/8/2013 Obligated plus Pending >=70%	FY14 Total Allocation	FY14 Proposed Second Supplemental as of 12/2/2013 Obligated >=80%
Jackson	\$ 117,502.00	-	\$ 35,000	\$ 152,502	
Jasper	\$ 140,466.00	20,000.00	\$ 25,000	\$ 185,466	
Jefferson	\$ 90,009.00	40,000.00	\$ -	\$ 130,009	
Johnson	\$ 332,894.00	-	\$ -	\$ 332,894	
Knox	\$ 312,326.00	35,000.00	\$ -	\$ 347,326	X
Laclede	\$ 105,979.00	35,000.00	\$ -	\$ 140,979	
Lafayette	\$ 384,123.00	-	\$ 35,000	\$ 419,123	
Lawrence	\$ 141,352.00	78,000.00	\$ -	\$ 219,352	
Lewis	\$ 212,551.00	35,000.00	\$ -	\$ 247,551	X
Lincoln	\$ 79,501.00	-	\$ -	\$ 79,501	
Linn	\$ 286,429.00	-	\$ -	\$ 286,429	
Livingston	\$ 329,668.00	-	\$ 55,000	\$ 384,668	
Macon	\$ 219,752.00	35,000.00	\$ -	\$ 254,752	X
Madison	\$ 134,452.00	-	\$ -	\$ 134,452	
Maries	\$ 200,817.00	80,000.00	\$ -	\$ 280,817	X
Marion	\$ 152,864.00	35,000.00	\$ -	\$ 187,864	X
McDonald	\$ 109,000.00	85,000.00	\$ -	\$ 194,000	X
Mercer	\$ 154,867.00	45,000.00	\$ -	\$ 199,867	
Miller	\$ 224,248.00	50,000.00	\$ 20,000	\$ 294,248	
Mississippi	\$ 103,011.80	35,000.00	\$ -	\$ 138,012	X
Moniteau	\$ 205,443.00	35,000.00	\$ 35,000	\$ 275,443	
Monroe	\$ 340,003.00	35,000.00	\$ -	\$ 375,003	X
Montgomery	\$ 309,292.00	60,000.00	\$ -	\$ 369,292	
Morgan	\$ 167,720.00	55,000.00	\$ -	\$ 222,720	
New Madrid	\$ 238,297.00	35,000.00	\$ 20,000	\$ 293,297	X
Newton	\$ 107,990.00	120,000.00	\$ -	\$ 227,990	
Nodaway	\$ 665,338.00	-	\$ 35,000	\$ 700,338	
Oregon	\$ 247,942.00	20,000.00	\$ 25,000	\$ 292,942	
Osage	\$ 191,351.00	75,000.00	\$ 25,000	\$ 291,351	
Ozark	\$ 280,557.00	40,000.00	\$ -	\$ 320,557	X
Pemiscot	\$ 262,007.00	20,000.00	\$ -	\$ 282,007	
Perry	\$ 239,456.00	-	\$ -	\$ 239,456	
Pettis	\$ 386,893.00	35,000.00	\$ -	\$ 421,893	X
Phelps	\$ 136,245.00	94,750.00	\$ -	\$ 230,995	
Pike	\$ 245,400.00	-	\$ -	\$ 245,400	
Platte	\$ 144,754.00	-	\$ -	\$ 144,754	
Polk	\$ 152,878.00	45,000.00	\$ -	\$ 197,878	X
Pulaski	\$ 86,810.00	35,000.00	\$ -	\$ 121,810	
Putnam	\$ 255,750.00	-	\$ 35,000	\$ 290,750	
Ralls	\$ 86,061.00	-	\$ 35,000	\$ 121,061	
Randolph	\$ 198,745.00	60,000.00	\$ -	\$ 258,745	
Ray	\$ 326,994.00	45,000.00	\$ 10,000	\$ 381,994	X
Reynolds	\$ 61,200.00	20,000.00	\$ -	\$ 81,200	
Ripley	\$ 139,434.00	20,000.00	\$ 35,000	\$ 194,434	X
Saline	\$ 695,145.00	35,000.00	\$ -	\$ 730,145	X
Schuyler	\$ 223,996.00	-	\$ 35,000	\$ 258,996	

District	FY14 Total Initial Allocation	FY14 First Supplemental Allocation (1) 10/15/2013 Obligated plus Pending >=70%	FY14 Second Supplemental Allocation (2) 11/8/2013 Obligated plus Pending >=70%	FY14 Total Allocation	FY14 Proposed Second Supplemental as of 12/2/2013 Obligated >=80%
Scotland	\$ 407,415.00	35,000.00	\$ -	\$ 442,415	X
Scott	\$ 201,960.00	35,000.00	\$ 20,000	\$ 256,960	X
Shannon	\$ 89,005.00	-	\$ -	\$ 89,005	
Shelby	\$ 209,139.00	35,000.00	\$ -	\$ 244,139	X
St Charles	\$ 22,400.00	-	\$ 25,000	\$ 47,400	
St Clair	\$ 219,250.00	-	\$ -	\$ 219,250	
St Francois	\$ 120,846.00	-	\$ -	\$ 120,846	
St Louis	\$ 58,200.00	-	\$ -	\$ 58,200	
Ste Genevieve	\$ 162,428.00	45,000.00	\$ 20,000	\$ 227,428	
Stoddard	\$ 361,968.00	30,000.00	\$ 35,000	\$ 426,968	
Stone	\$ 88,352.00	59,543.00	\$ -	\$ 147,895	
Sullivan	\$ 232,518.00	35,000.00	\$ -	\$ 267,518	
Taney	\$ 142,319.00	35,000.00	\$ 45,000	\$ 222,319	
Texas	\$ 341,631.00	100,000.00	\$ -	\$ 441,631	X
Vernon	\$ 242,312.00	-	\$ 80,000	\$ 322,312	
Warren	\$ 93,582.00	58,868.00	\$ -	\$ 152,450	
Washington	\$ 88,569.00	-	\$ -	\$ 88,569	
Wayne	\$ 179,127.00	-	\$ 25,000	\$ 204,127	
Webster	\$ 119,527.00	-	\$ -	\$ 119,527	
Worth	\$ 148,267.00	-	\$ -	\$ 148,267	
Wright	\$ 407,737.00	55,000.00	\$ -	\$ 462,737	

### FY15 Total Needs Assessment Request

	FY15 Total Needs Assessment Request	Animal Waste	Grazing Management	Irrigation Management	Nutrient & Pest Management	Sensitive Areas	Sheet, Rill & Gully	Woodland Erosion
State Totals	\$ 69,077,997.75	\$ 1,645,000.00	\$ 10,382,932.00	\$ 4,770,133.50	\$ 1,788,550.00	\$ 4,988,946.00	\$ 43,671,135.25	\$ 1,831,301.00
Adair	\$ 282,206.00	\$ -	\$ 6,000.00	\$ -	\$ -	\$ 5,400.00	\$ 270,806.00	\$ -
Andrew	\$ 782,000.00	\$ -	\$ 25,000.00	\$ -	\$ 10,000.00	\$ 20,000.00	\$ 727,000.00	\$ -
Atchison	\$ 1,870,666.00	\$ -	\$ -	\$ -	\$ 225,000.00	\$ -	\$ 1,645,666.00	\$ -
Audrain	\$ 1,025,418.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,025,418.00	\$ -
Barry	\$ 265,000.00	\$ 100,000.00	\$ 55,000.00	\$ -	\$ 30,000.00	\$ 20,000.00	\$ 45,000.00	\$ 15,000.00
Barton	\$ 658,000.00	\$ -	\$ 40,000.00	\$ 10,000.00	\$ 40,000.00	\$ 30,000.00	\$ 535,000.00	\$ 3,000.00
Bates	\$ 250,500.00	\$ -	\$ 20,000.00	\$ -	\$ 22,500.00	\$ 21,000.00	\$ 180,000.00	\$ 7,000.00
Benton	\$ 411,770.00	\$ -	\$ 211,824.00	\$ -	\$ 16,800.00	\$ 48,300.00	\$ 132,600.00	\$ 2,246.00
Bollinger	\$ 616,850.00	\$ -	\$ 60,000.00	\$ 215,000.00	\$ 7,000.00	\$ 43,600.00	\$ 235,000.00	\$ 56,250.00
Boone	\$ 433,250.00	\$ -	\$ 36,250.00	\$ -	\$ -	\$ 19,300.00	\$ 367,700.00	\$ 10,000.00
Buchanan	\$ 495,000.00	\$ -	\$ 25,000.00	\$ -	\$ -	\$ 20,000.00	\$ 450,000.00	\$ -
Butler	\$ 1,128,000.00	\$ -	\$ 8,000.00	\$ 800,000.00	\$ -	\$ 15,000.00	\$ 300,000.00	\$ 5,000.00
Caldwell	\$ 2,796,660.00	\$ -	\$ 185,600.00	\$ -	\$ -	\$ 106,760.00	\$ 2,504,300.00	\$ -
Callaway	\$ 505,000.00	\$ -	\$ 180,000.00	\$ -	\$ -	\$ 15,000.00	\$ 285,000.00	\$ 25,000.00
Camden	\$ 192,000.00	\$ -	\$ 50,000.00	\$ -	\$ 15,000.00	\$ 32,000.00	\$ 60,000.00	\$ 35,000.00
Cape Girardeau	\$ 1,378,000.00	\$ -	\$ 17,000.00	\$ 265,000.00	\$ 15,000.00	\$ 68,000.00	\$ 1,000,000.00	\$ 13,000.00
Carroll	\$ 838,450.00	\$ -	\$ 9,250.00	\$ 10,500.00	\$ -	\$ 23,700.00	\$ 795,000.00	\$ -
Carter	\$ 750,909.25	\$ 100,000.00	\$ 510,500.00	\$ -	\$ -	\$ 35,889.00	\$ 65,992.25	\$ 38,528.00
Cass	\$ 812,823.00	\$ 50,000.00	\$ 137,500.00	\$ 25,000.00	\$ 25,000.00	\$ 83,768.00	\$ 477,555.00	\$ 14,000.00
Cedar	\$ 220,000.00	\$ -	\$ 125,000.00	\$ -	\$ 25,000.00	\$ 15,000.00	\$ 50,000.00	\$ 5,000.00
Chariton	\$ 679,450.00	\$ 25,000.00	\$ 17,000.00	\$ -	\$ 9,750.00	\$ 10,400.00	\$ 597,300.00	\$ 20,000.00
Christian	\$ 270,600.00	\$ -	\$ 70,800.00	\$ -	\$ 20,000.00	\$ 96,700.00	\$ 73,100.00	\$ 10,000.00
Clark	\$ 476,600.00	\$ -	\$ -	\$ -	\$ -	\$ 1,600.00	\$ 475,000.00	\$ -
Clay	\$ 173,500.00	\$ -	\$ 11,500.00	\$ -	\$ -	\$ 7,000.00	\$ 155,000.00	\$ -
Clinton	\$ 700,000.00	\$ -	\$ -	\$ -	\$ 90,000.00	\$ 10,000.00	\$ 600,000.00	\$ -
Cole	\$ 317,500.00	\$ 25,000.00	\$ 25,000.00	\$ -	\$ 7,500.00	\$ 25,000.00	\$ 215,000.00	\$ 20,000.00
Cooper	\$ 446,150.00	\$ -	\$ 30,000.00	\$ -	\$ -	\$ 15,000.00	\$ 400,000.00	\$ 1,150.00
Crawford	\$ 260,000.00	\$ -	\$ 100,000.00	\$ -	\$ 30,000.00	\$ 30,000.00	\$ 50,000.00	\$ 50,000.00

	FY15 Total Needs Assessment Request	Animal Waste	Grazing Management	Irrigation Management	Nutrient & Pest Management	Sensitive Areas	Sheet, Rill & Gully	Woodland Erosion
Dade	\$ 183,500.00	\$ -	\$ 80,000.00	\$ -	\$ -	\$ 20,000.00	\$ 82,000.00	\$ 1,500.00
Dallas	\$ 704,000.00	\$ -	\$ 400,000.00	\$ -	\$ 54,000.00	\$ 200,000.00	\$ 35,000.00	\$ 15,000.00
Daviess	\$ 986,651.00	\$ -	\$ 6,500.00	\$ -	\$ -	\$ 1,200.00	\$ 978,951.00	\$ -
Dekalb	\$ 1,430,926.00	\$ -	\$ 56,926.00	\$ -	\$ -	\$ 24,000.00	\$ 1,350,000.00	\$ -
Dent	\$ 822,800.00	\$ -	\$ 425,000.00	\$ -	\$ 70,000.00	\$ 163,800.00	\$ 101,000.00	\$ 63,000.00
Douglas	\$ 385,000.00	\$ 25,000.00	\$ 200,000.00	\$ -	\$ 50,000.00	\$ 50,000.00	\$ 20,000.00	\$ 40,000.00
Dunklin	\$ 892,000.00	\$ -	\$ 25,000.00	\$ 542,000.00	\$ -	\$ 15,000.00	\$ 300,000.00	\$ 10,000.00
Franklin	\$ 208,750.00	\$ 25,000.00	\$ 40,500.00	\$ -	\$ 6,250.00	\$ 25,000.00	\$ 97,000.00	\$ 15,000.00
Gasconade	\$ 429,100.00	\$ -	\$ 244,500.00	\$ -	\$ -	\$ 46,600.00	\$ 105,000.00	\$ 33,000.00
Gentry	\$ 920,700.00	\$ -	\$ 31,500.00	\$ -	\$ -	\$ 26,600.00	\$ 862,600.00	\$ -
Greene	\$ 325,000.00	\$ 50,000.00	\$ 138,200.00	\$ -	\$ 20,000.00	\$ 90,000.00	\$ 6,800.00	\$ 20,000.00
Grundy	\$ 342,500.00	\$ -	\$ 30,000.00	\$ 15,500.00	\$ -	\$ 2,000.00	\$ 295,000.00	\$ -
Harrison	\$ 2,200,175.00	\$ -	\$ 96,250.00	\$ -	\$ -	\$ 50,000.00	\$ 2,050,800.00	\$ 3,125.00
Henry	\$ 716,500.00	\$ -	\$ 212,000.00	\$ -	\$ 60,000.00	\$ 59,500.00	\$ 385,000.00	\$ -
Hickory	\$ 508,486.00	\$ -	\$ 163,305.00	\$ -	\$ 1,000.00	\$ 209,485.00	\$ 125,716.00	\$ 8,980.00
Holt	\$ 676,400.00	\$ -	\$ -	\$ 20,000.00	\$ 6,400.00	\$ -	\$ 650,000.00	\$ -
Howard	\$ 417,200.00	\$ -	\$ 35,000.00	\$ -	\$ -	\$ 5,800.00	\$ 375,000.00	\$ 1,400.00
Howell	\$ 500,000.00	\$ -	\$ 325,000.00	\$ -	\$ 50,000.00	\$ 40,000.00	\$ 45,000.00	\$ 40,000.00
Iron	\$ 295,550.00	\$ -	\$ 95,000.00	\$ -	\$ -	\$ 80,000.00	\$ 92,050.00	\$ 28,500.00
Jackson	\$ 315,300.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 315,300.00	\$ -
Jasper	\$ 357,100.00	\$ -	\$ 200,000.00	\$ -	\$ -	\$ 19,600.00	\$ 130,000.00	\$ 7,500.00
Jefferson	\$ 446,527.00	\$ 50,000.00	\$ 178,000.00	\$ -	\$ -	\$ 83,959.00	\$ 75,568.00	\$ 59,000.00
Johnson	\$ 897,000.00	\$ 50,000.00	\$ 130,000.00	\$ -	\$ -	\$ 50,000.00	\$ 650,000.00	\$ 17,000.00
Knox	\$ 895,008.00	\$ -	\$ 45,379.00	\$ 95,901.00	\$ 13,500.00	\$ 40,021.00	\$ 685,468.00	\$ 14,739.00
Laclede	\$ 128,200.00	\$ -	\$ 63,200.00	\$ -	\$ 10,000.00	\$ 15,000.00	\$ 30,000.00	\$ 10,000.00
Lafayette	\$ 415,000.00	\$ -	\$ 15,000.00	\$ -	\$ -	\$ -	\$ 400,000.00	\$ -
Lawrence	\$ 774,750.00	\$ -	\$ 405,000.00	\$ -	\$ 50,000.00	\$ 33,000.00	\$ 286,750.00	\$ -
Lewis	\$ 465,000.00	\$ -	\$ 15,000.00	\$ -	\$ -	\$ -	\$ 450,000.00	\$ -
Lincoln	\$ 164,700.00	\$ -	\$ 15,500.00	\$ -	\$ -	\$ 3,700.00	\$ 144,000.00	\$ 1,500.00
Linn	\$ 1,436,700.00	\$ -	\$ 10,000.00	\$ -	\$ 11,300.00	\$ 400.00	\$ 1,415,000.00	\$ -
Livingston	\$ 447,000.00	\$ -	\$ -	\$ 35,000.00	\$ 10,000.00	\$ 2,000.00	\$ 400,000.00	\$ -

	FY15 Total Needs Assessment Request	Animal Waste	Grazing Management	Irrigation Management	Nutrient & Pest Management	Sensitive Areas	Sheet, Rill & Gully	Woodland Erosion
Macon	\$ 1,220,700.00	\$ -	\$ 50,450.00	\$ -	\$ -	\$ 4,000.00	\$ 1,166,250.00	\$ -
Madison	\$ 295,200.00	\$ -	\$ 36,000.00	\$ -	\$ 3,000.00	\$ 77,200.00	\$ 148,000.00	\$ 31,000.00
Maries	\$ 626,175.00	\$ 20,000.00	\$ 198,125.00	\$ -	\$ 18,000.00	\$ 82,800.00	\$ 255,250.00	\$ 52,000.00
Marion	\$ 245,807.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 245,807.00	\$ -
McDonald	\$ 213,000.00	\$ 25,000.00	\$ 100,000.00	\$ -	\$ 8,000.00	\$ 35,000.00	\$ 10,000.00	\$ 35,000.00
Mercer	\$ 190,000.00	\$ -	\$ 4,200.00	\$ -	\$ -	\$ 1,600.00	\$ 180,000.00	\$ 4,200.00
Miller	\$ 491,000.00	\$ 150,000.00	\$ 150,000.00	\$ -	\$ 60,000.00	\$ 60,000.00	\$ 36,000.00	\$ 35,000.00
Mississippi	\$ 363,235.00	\$ -	\$ -	\$ 174,115.00	\$ -	\$ -	\$ 189,120.00	\$ -
Moniteau	\$ 522,150.00	\$ 25,000.00	\$ 87,400.00	\$ -	\$ 15,000.00	\$ 34,500.00	\$ 340,250.00	\$ 20,000.00
Monroe	\$ 710,129.00	\$ -	\$ 15,728.00	\$ -	\$ -	\$ 800.00	\$ 693,377.00	\$ 224.00
Montgomery	\$ 825,750.00	\$ -	\$ 52,500.00	\$ -	\$ 15,750.00	\$ 21,000.00	\$ 735,000.00	\$ 1,500.00
Morgan	\$ 724,000.00	\$ 100,000.00	\$ 200,000.00	\$ 20,000.00	\$ 54,000.00	\$ 150,000.00	\$ 150,000.00	\$ 50,000.00
New Madrid	\$ 855,000.00	\$ -	\$ -	\$ 555,000.00	\$ -	\$ -	\$ 300,000.00	\$ -
Newton	\$ 200,000.00	\$ 25,000.00	\$ 90,000.00	\$ -	\$ -	\$ 45,000.00	\$ 30,000.00	\$ 10,000.00
Nodaway	\$ 2,445,127.00	\$ -	\$ -	\$ -	\$ -	\$ 25,000.00	\$ 2,420,127.00	\$ -
Oregon	\$ 390,000.00	\$ -	\$ 165,000.00	\$ -	\$ 30,000.00	\$ 75,000.00	\$ 80,000.00	\$ 40,000.00
Osage	\$ 255,000.00	\$ 25,000.00	\$ 45,000.00	\$ -	\$ 25,000.00	\$ 20,000.00	\$ 115,000.00	\$ 25,000.00
Ozark	\$ 465,000.00	\$ -	\$ 175,000.00	\$ -	\$ 30,000.00	\$ 35,000.00	\$ 175,000.00	\$ 50,000.00
Pemiscot	\$ 518,956.00	\$ -	\$ -	\$ 227,000.00	\$ -	\$ -	\$ 291,956.00	\$ -
Perry	\$ 1,590,500.00	\$ 100,000.00	\$ -	\$ 64,500.00	\$ -	\$ 421,000.00	\$ 1,000,000.00	\$ 5,000.00
Pettis	\$ 440,250.00	\$ -	\$ 15,000.00	\$ -	\$ 15,000.00	\$ 10,250.00	\$ 400,000.00	\$ -
Phelps	\$ 290,000.00	\$ -	\$ 120,000.00	\$ -	\$ 30,000.00	\$ 40,000.00	\$ 50,000.00	\$ 50,000.00
Pike	\$ 450,000.00	\$ -	\$ 40,000.00	\$ -	\$ 25,000.00	\$ 15,000.00	\$ 350,000.00	\$ 20,000.00
Platte	\$ 139,384.00	\$ -	\$ 6,158.00	\$ -	\$ -	\$ 10,000.00	\$ 123,226.00	\$ -
Polk	\$ 295,000.00	\$ -	\$ 155,000.00	\$ -	\$ 45,000.00	\$ 75,000.00	\$ 15,000.00	\$ 5,000.00
Pulaski	\$ 299,100.00	\$ -	\$ 78,800.00	\$ -	\$ 2,000.00	\$ 46,100.00	\$ 157,400.00	\$ 14,800.00
Putnam	\$ 306,000.00	\$ -	\$ 20,000.00	\$ -	\$ 15,000.00	\$ 15,000.00	\$ 250,000.00	\$ 6,000.00
Ralls	\$ 211,000.00	\$ -	\$ 30,000.00	\$ -	\$ -	\$ 15,000.00	\$ 160,000.00	\$ 6,000.00
Randolph	\$ 239,000.00	\$ -	\$ 35,000.00	\$ -	\$ 25,000.00	\$ 4,000.00	\$ 170,000.00	\$ 5,000.00
Ray	\$ 684,500.00	\$ -	\$ 5,000.00	\$ 8,000.00	\$ 8,000.00	\$ 15,000.00	\$ 640,000.00	\$ 8,500.00
Reynolds	\$ 193,468.00	\$ -	\$ 72,000.00	\$ -	\$ 1,200.00	\$ 34,336.00	\$ 46,987.00	\$ 38,945.00
Ripley	\$ 681,000.00	\$ -	\$ 100,000.00	\$ 300,000.00	\$ 4,000.00	\$ 55,000.00	\$ 170,000.00	\$ 52,000.00

	FY15 Total Needs Assessment Request	Animal Waste	Grazing Management	Irrigation Management	Nutrient & Pest Management	Sensitive Areas	Sheet, Rill & Gully	Woodland Erosion
Saline	\$ 1,248,000.00	\$ -	\$ 10,000.00	\$ -	\$ -	\$ -	\$ 1,238,000.00	\$ -
Schuyler	\$ 333,000.00	\$ -	\$ 10,000.00	\$ -	\$ 15,000.00	\$ 25,000.00	\$ 271,000.00	\$ 12,000.00
Scotland	\$ 947,600.00	\$ -	\$ 3,700.00	\$ -	\$ 11,900.00	\$ 47,100.00	\$ 864,900.00	\$ 20,000.00
Scott	\$ 937,158.00	\$ -	\$ 13,900.00	\$ 485,805.00	\$ 6,000.00	\$ 41,695.00	\$ 387,658.00	\$ 2,100.00
Shannon	\$ 257,000.00	\$ 25,000.00	\$ 137,000.00	\$ -	\$ 3,000.00	\$ 35,000.00	\$ 40,000.00	\$ 17,000.00
Shelby	\$ 282,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 282,000.00	\$ -
St Charles	\$ 54,000.00	\$ -	\$ 5,000.00	\$ -	\$ -	\$ 2,000.00	\$ 45,000.00	\$ 2,000.00
St Clair	\$ 427,000.00	\$ -	\$ 200,000.00	\$ 15,000.00	\$ 40,000.00	\$ 80,000.00	\$ 90,000.00	\$ 2,000.00
St Francois	\$ 341,465.00	\$ -	\$ 100,365.00	\$ -	\$ -	\$ 140,000.00	\$ 93,600.00	\$ 7,500.00
St Louis	\$ 67,550.00	\$ -	\$ 18,900.00	\$ 25,000.00	\$ 1,200.00	\$ 5,950.00	\$ 14,000.00	\$ 2,500.00
Ste Genevieve	\$ 506,700.00	\$ -	\$ 79,000.00	\$ 200,000.00	\$ 10,000.00	\$ 61,500.00	\$ 125,200.00	\$ 31,000.00
Stoddard	\$ 1,027,700.00	\$ -	\$ 50,000.00	\$ 600,000.00	\$ -	\$ 5,200.00	\$ 357,500.00	\$ 15,000.00
Stone	\$ 177,661.00	\$ -	\$ 79,939.00	\$ -	\$ 15,000.00	\$ 12,622.00	\$ 58,200.00	\$ 11,900.00
Sullivan	\$ 300,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 275,000.00	\$ 25,000.00
Taney	\$ 397,020.00	\$ -	\$ 84,970.00	\$ -	\$ 15,000.00	\$ 95,350.00	\$ 123,700.00	\$ 78,000.00
Texas	\$ 1,494,900.00	\$ 150,000.00	\$ 508,000.00	\$ -	\$ 74,000.00	\$ 405,600.00	\$ 249,300.00	\$ 108,000.00
Vernon	\$ 771,756.50	\$ -	\$ 112,715.00	\$ 11,812.50	\$ 40,000.00	\$ 122,459.00	\$ 471,770.00	\$ 13,000.00
Warren	\$ 245,000.00	\$ -	\$ 50,000.00	\$ -	\$ 15,000.00	\$ 20,000.00	\$ 150,000.00	\$ 10,000.00
Washington	\$ 317,981.00	\$ -	\$ 173,098.00	\$ -	\$ 7,500.00	\$ 26,802.00	\$ 70,117.00	\$ 40,464.00
Wayne	\$ 550,000.00	\$ 100,000.00	\$ 200,000.00	\$ 50,000.00	\$ 20,000.00	\$ 60,000.00	\$ 90,000.00	\$ 30,000.00
Webster	\$ 262,000.00	\$ -	\$ 180,000.00	\$ -	\$ 10,000.00	\$ 40,000.00	\$ 12,000.00	\$ 20,000.00
Worth	\$ 450,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 450,000.00	\$ -
Wright	\$ 1,583,250.00	\$ 400,000.00	\$ 682,000.00	\$ -	\$ 75,000.00	\$ 165,000.00	\$ 162,000.00	\$ 99,250.00