SEIZING A WATERSHED MOMENT

Making EQIP Work for Water Quality in 10 Mississippi River Border States

ENVIRONMENTAL WORKING GROUP

ABOUT EWG

EWG is a nonprofit research organization headquartered in Washington, DC, with offices in Ames, IA and Oakland, CA. EWG uses the power of information to educate the public and decision-makers about a wide range of environmental issues, especially those affecting public health.

The Environmental Working Group prepared this report for the Mississippi River Collaborative, with support from the McKnight Foundation. EWG would like to thank the Environmental Quality Incentives Program (EQIP) staff at the US Department of Agriculture's Natural Resources Conservation Service (NRCS) and the NRCS staff in the 10 states that border the Mississippi River for their assistance with this project. The opinions expressed in this report are those of the Environmental Working Group and do not necessarily reflect the views of the supporters listed above. EWG is responsible for any errors of fact or interpretation contained in this report.

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ABOUT THE MISSISSIPPI RIVER COLLABORATIVE

The Collaborative is comprised of environmental organizations from states bordering the Mississippi River as well as regional and national groups that work on Mississippi River issues. The purpose of the Collaborative is to harness the resources and expertise of diverse organizations to reduce all types of pollution entering the river. Mississippi River Collaborative members who are jointly releasing this report include:

Environmental Law & Policy Center
Chicago, Illinois

Environmental Working Group
Washington, D.C.

Iowa Environmental Council
Des Moines, Iowa

Gulf Restoration Network
New Orleans, Louisiana

Kentucky Waterways Alliance, Inc.
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Public Employees for Environmental Responsibility
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Tennessee Clean Water Network
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EXECUTIVE SUMMARY

The Mississippi River flows more than 2,000 miles from Minnesota to the Gulf of Mexico and is the world's third-largest river basin. Millions of residents get their drinking water from the Mississippi and the River supports a vast array of economic, commercial, and recreational activities.

But runoff from farm fields pollutes lakes and streams in the 10 states[1] that border the Mississippi River.[2] And farm sediment, fertilizer runoff and livestock waste are the source of over 70 percent of the pollution causing the Dead Zone in the Mississippi River-Gulf of Mexico.[3]

The Obama Administration faces many challenges, but also an unparalleled opportunity to save the Mississippi and remedy these problems for future generations.

The Administration's most promising tool is the Environmental Quality Incentives Program (EQIP), a U.S. Department of Agriculture (USDA) program, which offers substantial financial inducements and technical assistance to farmers and ranchers who pledge to reduce their runoff, improve water and air quality and preserve wildlife habitat. The USDA's Natural Resources Conservation Service (NRCS) implements EQIP through its national, state, and local offices.

Congress authorized more than $8 billion in EQIP technical and financial assistance across the United States since the program's inception in 1997.[4] The 10 states that border the Mississippi together received $949 million over the last 5-year Farm Bill from 2003 to 2007 or an average of $190 million a year.[5]

We undertook this study, with funding from the McKnight Foundation, to identify opportunities to improve the effectiveness of EQIP in reducing sediment and nutrient pollution (nitrogen and phosphorus from fertilizers and livestock waste) in the 10 Mississippi River border states.

We found that, up to now, EQIP has not been deployed as effectively as it could be in these 10 states. The methods used to decide how to spend EQIP dollars within a state and which farmers will get those dollars are more likely to result in diffuse and fragmented efforts to reduce pollution from farms rather than the focused and coordinated effort needed to clean up the Mississippi River and its tributaries.

Our analysis reveals that to quickly ramp up the effectiveness of EQIP, NRCS should:

1. Set clear and specific goals for how much pollution needs to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals.

2. Use 60 percent of EQIP dollars by 2012 to fund watershed-based water quality clean-up projects that encourage multiple farmers within selected watersheds to reduce pollution to specific lakes, streams, or tributaries to the Mississippi River.

3. Use 40 percent of EQIP funds by 2012 in state-level funding pools to target the highest priority natural resource and environmental problems in each state.

4. Select farmers to participate in EQIP who can do the most to contribute to watershed-based clean-up projects or solve high priority problems.

Despite its past shortcomings, EQIP is an important program that can and must be a critical part of the solution to agricultural pollution in the Mississippi River and its tributaries.

The opportunities to improve EQIP are compelling and well within our grasp. Indeed, some of the 10 state EQIP programs we reviewed have already taken steps in the right direction.

There is still a long way to go, but with concerted action and attention from NRCS leadership, EQIP could emerge as the single most effective federal program aimed at reducing pollution from farms in the United States.

If Congress funds EQIP at the levels promised in the 2008 Farm Bill and the Obama Administration's NRCS takes quick action to make the program work better for water quality, then we will seize an important opportunity to protect the Mississippi River and its tributaries.

However, if EQIP is not much more effectively targeted and if Congress and the Administration fail to fully fund the program, there is no hope for improving either local water quality or the Dead Zone in the Gulf of Mexico. The track record on targeting is poor and EQIP funding has fallen short of what was promised in the farm bill every year since 2002. President Obama's 2010 budget continues the string of bad news, proposing funding for EQIP that is $250 million lower than was provided in the 2008 farm bill.

Given this history, it is becoming clear that voluntary programs alone will not clean up local streams, rivers, and lakes or heal the Gulf of Mexico. New approaches including strengthening and expanding the Conservation Compliance provisions of the farm bill, and regulatory action at the state or federal level will be needed to make real progress on these long-standing pollution problems.

INTRODUCTION

The efficient and effective use of Environmental Quality Incentive Program (EQIP) funds is critically important to tackling the large-scale water quality problems associated with agricultural production. The Environmental Protection Agency (EPA) has long-identified agriculture as a leading source of sediment, nitrogen and phosphorus pollution in the nation's waterways.[6]

In 2008, the U.S. Geological Survey identified fertilizers and livestock waste from crop fields and pasture and range lands in seven of the 9 states that border the Mississippi River as the source of over 70 percent of the nitrogen and phosphorus pollution causing the 8,000 square mile Dead Zone in the Northern Gulf of Mexico.[7]

EQIP is the single largest federal voluntary program that helps reduce water pollution from agricultural operations by providing money and technical help to farmers. EQIP also is used to conserve water, reduce air pollution, and protect wildlife habitat. The US Department of Agriculture's Natural Resources Conservation Service (NRCS) implements EQIP. Nationally, in 2007 alone, EQIP provided over $1 billion nationwide in technical and financial assistance and about $200 million to the 10 states that border the Mississippi River.[8]

We undertook this study, with funding from the McKnight Foundation, to identify opportunities to improve the effectiveness of EQIP in reducing pollution from farm fields in the 10 Mississippi River border states. We analyzed the way NRCS sets priorities, allocates funds, and selects which farmers will receive help in the 10 border states.

Our goal is to understand how these decisions influence the effectiveness of EQIP and to recommend changes in how these decisions are made that would make EQIP work better for water quality. We reviewed information about EQIP available on the 10 states' EQIP program websites and we followed up our investigation by interviewing state and national EQIP program managers.

We encountered several obstacles in completing our assessment. Some of those obstacles arise from gaps in information and variation among states. The availability and quality of information on public websites and provided by state and national program managers upon request was substantially different making comparison across states very difficult. In addition, many funding and participation decisions in most of the 10 states are made by local jurisdictions limiting both our ability and that of the state program managers to know how well those decisions are addressing sediment and nutrient pollution reduction. Finally, the 10 states vary significantly in the way they allocate funds and in the number and kinds of ranking systems they use to evaluate and select participants. These information gaps and variation among states make state-

to-state comparisons difficult and also increases the uncertainty about how well states are using EQIP to solve pressing nutrient and sediment pollution problems.

The available information indicates that the methods used to set priorities, allocate funds and select participants for EQIP in the 10 states are not fully optimized to focus EQIP technical and financial resources to solve agricultural water quality problems. There are clear and important opportunities to improve the way NRCS allocates funds and selects farmers to participate that would lead to more effective efforts to reduce sediment and nutrient pollution, achieve water quality clean-up in agriculturally-impaired watersheds, and better communicate what NRCS and farmers are accomplishing to the public.

This report outlines the opportunities for improvement we identified based on our review of the EQIP programs in the 10 states that border the Mississippi River. Details about each state program are found in the Appendix.

SET CLEAR AND SPECIFIC CLEAN-UP PRIORITIES

EWG suggests that the 10 Mississippi border states set clear and specific goals for how much pollution from agriculture needs to be reduced to clean-up impaired waterbodies, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals.

EWG encountered a pervasive lack of specificity for what EQIP is intending to accomplish in each state. This lack of specificity in problem definition takes two forms:

1. Lack of clean-up goals for a discrete number of identified impaired waterbodies
2. Lack of timelines or evaluation mechanisms to ensure achievement of those goals

With a few, limited exceptions, the state EQIP programs we reviewed do not establish goals to clean-up specific waterbodies that are suffering from agricultural sources of pollution or degradation of aquatic habitat. In addition, there appear to be no timelines established for improving water quality in a specific waterbody or watershed and no obvious mechanisms to track progress toward such goals.

If statewide priorities for using EQIP funds are established, they are generally defined in terms of very broad categories called "resource concerns" and each state defines resource concerns differently. In some cases, the resource concerns that are considered a priority are simply a land use, such as grazing land. Other times, states define a resource concern as a particular conservation practice, such as a comprehensive

nutrient management plan. This lack of specificity in setting priorities and objectives extends to the criteria and questions used in ranking systems that choose which producers will participate in the program.

In contrast, the national EQIP program identifies 8 major resource concerns that can be addressed by the EQIP program: air quality, domestic animals, fish and wildlife, plant condition, soil condition, soil erosion, water quality, and water quantity. Under each major category, there are several sub-categories including, for example, "water quality: excessive nutrients and organics in surface water" and "water quality: excessive suspended sediment and turbidity in surface water." These sub-categories are better descriptions of specific environmental and natural resource problems that should be used when identifying statewide priorities for EQIP.

All 10 Mississippi River border states are required by NRCS to set and track what they call "performance goals." This includes counting the numbers and kinds of conservation practices and activities EQIP funds every year. These data are essential for understanding what EQIP is accomplishing, but what appears to be missing are explicit quantitative or qualitative goals for improving a specific environmental problem in a lake, stream, river, or habitat complex that is either already impaired or at risk of being impaired by agricultural activities. Absent specific goals, it is very difficult to determine the extent to which the funded practices and activities are solving—or preventing—significant resource and environmental problems.

Because of the more limited scope of our investigation, we do not know if such specific goals do not exist or if they are simply not reported. The preponderance of evidence, however, suggests such specific objectives do not play a leading role in determining how EQIP is implemented in a state. The picture that emerges is one of generally diffuse implementation of EQIP driven largely by decisions at county or other sub-state regions.

Establishing such objectives and the means to monitor progress toward meeting those objectives would be, in and of itself, a major step toward improving the effectiveness of EQIP and increasing the understanding among stakeholders about what EQIP is accomplishing. States should also improve the transparency of their fund allocation and ranking processes. In order to explain to policymakers, taxpayers, and stakeholders what EQIP is accomplishing, the 10 states need to do a better job of communicating what they're doing, where they're doing it, how they're doing it, and what successes they're achieving.

Recommendation:

EWG recommends that the 10 states that border the Mississippi River set clear and specific goals for cleaning up agricultural sources of pollution; identify which lakes, streams or tributaries are priorities for improvement, set a timetable to achieve those goals, and establish means to track progress toward the goals. EWG also recommends

that the 10 states that border the Mississippi River develop systems to track, evaluate, and report on the environmental performance of EQIP.

USE 60 PERCENT OF EQIP FUNDS IN WATERSHED-BASED CLEAN-UP PROJECTS

Professional experience and many studies[9] [10] [11] have shown that the best way to improve water quality is to fund well-designed projects that encourage multiple farmers within a watershed to reduce pollution to a specific lake, stream, or tributary to the Mississippi River. The problem-solving advantages of this approach are well understood. They include focusing resources in specific locations to solve well-defined problems using a strategy that directs funding to those farmers within the watershed who can do the most to reduce or prevent pollution.

Ideally, such water quality improvement projects should include monitoring and evaluation systems to adjust the strategy and resource allocations based on the results that are being realized. Ramping up the emphasis in EQIP on such watershed-based clean-up projects would dramatically increase the effectiveness of the program.

We found that only two states (Iowa and Illinois) have used their EQIP funds to support efforts that approach watershed-based clean-up projects. Unfortunately, these states channeled less than 7 percent of their average annual EQIP funds to these projects. Both projects are considered successes but no similar watershed-based projects with EQIP funds have been initiated.

Iowa EQIP has implemented a ”Supershed Projects” initiative for the last five years that leverages funding from multiple state and federal sources to clean up designated lakes and rivers. Iowa spent between 0.3 percent and 1.8 percent of its annual EQIP funds from 2006 to 2008 on a project to improve water quality in Lake Rathbun. Over the course of three years, Iowa used only 1.1 percent of its EQIP funds on the Lake Rathbun Supershed Project ($762,500 out of $72 million). About 2.3 percent of Iowa’s EQIP’s 2006 funds went to a one-year Whitebreast Creek Supershed Project ($474,200 out of $20.3 million). The Lake Rathbun project is continuing and pursuing additional funds from other Farm Bill conservation programs.

Illinois EQIP conducted a “special project” in FY 2006 and 2007 dedicating an average of 7 percent of it’s financial assistance in these two years. The Spoon River had been identified as one of the highest contributors of sediment in the Illinois River Watershed and streambank erosion was identified as a major resource concern. Therefore, EQIP, in partnership with state and federal agricultural and environmental agencies and non-government organizations, developed a special project to increase adoption of

streambank stabilization practices. In FY 2006, Illinois EQIP spent about 10 percent of its financial assistance funds ($1.4 million out of $14 million) and in FY 2007, Illinois EQIP dedicated about 3.5 percent ($483,000 out of $13.8 million) to this project. The project was considered a success and the state and federal environmental protection agencies are continuing water quality monitoring.

Recommendation:

EWG recommends that the 10 Mississippi border states immediately begin allocating more EQIP funds to implement well-designed projects that encourage multiple farmers within a watershed or other specific locations to solve pressing natural resource and environmental problems. By the time the current farm bill expires in 2012, 60 percent of EQIP funds should be dedicated to implementing such projects and the majority of those projects should focus on improving water quality in specific waterbodies and watersheds in those states. By focusing EQIP funding on implementing such watershed-based clean-up projects, NRCS will dramatically improve the contribution EQIP makes to solve local and downstream water quality problems.

USE STATE-LEVEL FUNDING POOLS TO SOLVE SPECIFIC PROBLEMS

EWG found two shortcomings in the way EQIP funds are spent in the 10 border states that impair its effectiveness in cleaning up agricultural pollution. Instead of reserving their EQIP funds to solve water quality problems in well-designed, watershed-based clean-up projects, most states allocate the majority of their EQIP funds directly to counties or other local entities. In addition, to decide how much EQIP funds each locality receives, the state programs use funding allocation formulas that, in most cases, are only marginally related to the extent and severity of natural resource and environmental problems in each local jurisdiction.

A better approach to allocate those EQIP funds that are not used to implement watershed-based clean-up projects is to allocate funds to address specific natural resource and environmental problems that are the highest priorities for a state. By creating state-level funding pools that address the states' most pressing agricultural natural resource and environmental problems, program managers can then select the best applications from across the state based on how much they can contribute to solving the identified problems. Funds can then be allocated to local jurisdictions based on the extent to which local jurisdictions will contribute to solving the identified problems.

EWG found that some states do hold back a portion of their EQIP funds at the state level to target funding to statewide priorities. These states create EQIP "funding pools" that allocate EQIP funds to address designated statewide priorities. Each designated priority is allocated a specific "pool" of funds that are used to enroll farmers into EQIP based on their ability to take actions that will address the designated priority.

Tennessee, for example, holds back the 50 percent of its EQIP funds for state-level competition in 7 funding pools to address particular priorities. In FY 2008, those priorities were: (1) Animal Feeding Operations and Concentrated Animal Feeding Operations Water and Air Quality, (2) Cropland Erosion / Sedimentation, (3) Aquatic At-Risk Species, (4) Limited Resource Farmer and Small Scale Farmer, (5) Grassland At-Risk Species, (6) Forest Habitat Improvement, and (7) Invasive Species-Kudzu. The remaining 50 percent of EQIP funds is allocated to Tennessee's 95 counties.

Wisconsin held back up to one-third of its EQIP funds in FY 2008 for a Waste Storage/Alternative Waste Solutions funding pool. In FY 2008, Arkansas reserved 30 percent of its EQIP funds for statewide competition in 8 priority resource concerns; five of which are water quality-related concerns. The remaining EQIP funds in both states are allocated to the 72 counties in Wisconsin and the 75 counties in Arkansas for county-level competition.

Illinois is the only border state that allocated all of its EQIP funds into state-level funding pools in FY 2008. The funding pools directed EQIP funding to the following categories: (1) General EQIP, (2) Confined Livestock Operations, (3) Comprehensive Nutrient Management Plans, (4) Forest Management Plans, (5) Forest Management Implementation, and (6) Grazing Land Operations.

The way these states are using funding pools to focus EQIP funding on statewide priorities is a step in the right direction. The effectiveness of funding pools would be much greater if the statewide priorities were defined more specifically to address pressing natural resource or environmental problems, as discussed above.

EWG recommends that after allocating 60 percent of EQIP funds to watershed-based clean-up projects by 2012, states allocate the remaining 40 percent of funds by 2012 to funding pools that target high priority natural resource and environmental problems. State-level funding pools create important opportunities to focus EQIP funding on the most pressing environmental problems and to select the best applications from all the applications proposing to address the same environmental or natural resource problem. Used appropriately, such funding pools will multiply the benefits of dedicating most of EQIP funds to watershed-based clean-up projects.

If states continue to allocate funding directly to local jurisdictions – a less preferred alternative to effective use of funding pools – they must use formulas that ensure EQIP funds go to those counties with the most pressing problems. Currently, eight states (AR, IA, KY, LA, MN, MS, TN, and WI) allocate 50 percent or more of their EQIP funds

to local jurisdictions (e.g. county- or parish-based soil and water conservation districts or, in the case of Kentucky, to 14 regions, each composed of multiple counties). These states use various funding formulas to determine how much each locality receives.

The formulas include generic factors such as number of farms or number of livestock as well as resource impairment or risk factors such as acres of highly erodible land (HEL) or the presence of impaired waters. In most cases, the generic factors are more numerous and/or more important than the resource concern or environmental factors. Using such generic factors will fail to direct EQIP funding to those opportunities to solve the most pressing natural resource and environmental problems.

Iowa is an example of how a state can allocate funds to local jurisdictions based primarily on the extent and magnitude of natural resource and environmental problems. Iowa allocates 90 percent of Its EQIP funds to its 100 county districts based on four factors:

- Percent of agricultural land with impaired waters due to agricultural concerns - factor weight 40%;
- Number of livestock in the county - factor weight 30%;
- Number of acres with a land capability class limitations of IIe or greater[1] - factor weight 20%; and
- Number of acres needing wildlife habitat conservation systems - factor weight 10%.

In contrast, Mississippi allocates 92 percent of its EQIP funds to its 82 county districts using four unweighted factors – only one of which focuses on resource and environmental concerns: (1) county request, (2) previous funding demands and performance, (3) priority resource concerns, and (4) other related factors, e.g. workload.

Recommendation:

EWG recommends that if funds are allocated directly to local jurisdictions, states should use allocation formulas based primarily on natural resource and environmental factors

[1] NRCS defines a Land Capability Class rating of II as "soils (that) have moderate limitations that reduce the choice of plants or require moderate conservation practices while Subclass e "is made up of soils for which the susceptibility to erosion is the dominant problem or hazard affecting their use. Erosion susceptibility and past erosion damage are the major soil factors that affect soils in this subclass." Thus, Class ratings of greater than IIe have greater limitations and greater susceptibility to erosion and other environmental hazards.

to channel more funding to localities with significant yet solvable environmental problems associated with agriculture.

SELECT FARMERS WHO CAN DO THE MOST TO SOLVE THE IDENTIFIED PROBLEMS

Normally, there are many more farmers who apply to participate in EQIP than are selected to participate because of limited funding. The criteria NRCS uses to pick which farmers get to participate, then, has an important effect on the results EQIP ultimately produces.

The 10 Mississippi River border states use a variety of factors and approaches in their ranking systems to select participants in EQIP from among pools of applicants. Despite this variety, there are important elements in each application ranking system that can be used to give priority to applications that do the most to reduce agricultural pollution. In particular, these ranking systems could and should be designed to select participants who can reduce sediment and nutrient pollution, the two most important pollutants in streams, lakes, or reservoirs in the 10 border states and the tributaries to the Mississippi River.

In most cases, the 10 states use ranking systems that suffer from the same lack of specificity we noted earlier in regard to goals and priorities for EQIP. Points are awarded to applications that address generic factors such as water quality from point sources or nonpoint sources. The particular pollutant causing the water quality problem, the source of that pollutant, and the waterbody threatened are frequently not specified. (See Box 1 for more on the challenges due to lack of specificity in the ranking criteria.)

All 10 states include at least one factor related to the location of the operation the farmer is proposing to enroll in EQIP. Examples of the type of geographic factors states use in their ranking systems include: (1) whether the application is located in a watershed of a 303(d) listed stream or other waterbody of concern to the state or (2) whether the application is located in proximity to receiving waters, such as within 300 feet of a stream or 1,000 feet of a lake.

The use of such location factors can be an important way to focus EQIP geographically to more effectively solve problems. Unfortunately, it appears that the emphasis given to such location factors is limited. To get a sense of how much emphasis state EQIP programs placed on geographic priorities, we looked more closely at the "general" ranking criteria documents in 5 states (Illinois, Iowa, Kentucky, Louisiana, and Minnesota).

We selected these states for review because we had information about the points they allocated to factors in their ranking systems. The results of this rough estimate of raw, unweighted points reveals that these 5 states' ranking documents appear to give very little emphasis to applications in geographic priority areas. Iowa and Minnesota's ranking criteria documents appear to give the largest percentage of their total unweighted points (16 percent) to addressing environmental problems in geographically important locations while Illinois' ranking sheet gave the smallest percentage of points (6 percent).

Box 1. The Lack of Specificity in Ranking Criteria

The ranking criteria in all 10 Mississippi River border states lacked sufficient specificity for us to determine with real certainty the emphasis each state was giving in its ranking sheets to the reduction of sediment and nutrient pollution and to areas of geographic importance.

For example, many ranking factors do not specify the particular source of natural resource or environmental problems, such as sediment or nutrient loss from cropland. Instead the ranking factors refer to more generic sources of problems, such as nonpoint source pollution.

In those cases where more specific types of pollutants like sediments or nutrients were cited, they were usually included in a longer list of pollutants, such as pathogens, pesticides, or excess salinity, making determination of the priorities implicit in the ranking criteria difficult. A similar lack of specificity hampered our ability to determine the emphasis placed on location of an application within a priority watershed or other geographic unit.

Despite these difficulties, it is clear that the factors used in ranking criteria and the priority assigned those factors through point allocations and multipliers are critical determinants of the effectiveness of EQIP in reducing sediment and nutrient pollution.

Recommendation:

Despite the variability among states, lack of specificity, and information gaps we encountered during our review of state EQIP ranking documents, our analysis makes it clear that revising the ranking systems could be a powerful tool for focusing EQIP more effectively to reduce sediment and nutrient pollution. EWG recommends that the 10 Mississippi border states immediately revise their ranking systems to increase the priority given to applications that reduce sediment and nutrient pollution in priority locations.

CONCLUSION

We find that EQIP has not been deployed as effectively as it could be in the 10 states that border the Mississippi River. The methods used to decide how to spend EQIP dollars within the state and which farmers will get those dollars are more likely to result in diffuse and fragmented efforts to reduce pollution from farms rather than the focused and coordinated effort needed to solve both local and regional water pollution problems.

Watershed-based water quality clean-up projects are the best use of federal taxpayer resources and offer the greatest hope for cleaning up the unintended environmental damage from agriculture. These projects entail setting goals to clean up specific bodies of water that are deemed the highest priorities, determining how many of the most cost effective practices are needed, and persuading key farmers to participate in the project.

To quickly ramp up the effectiveness of EQIP, NRCS should:

1. Set clear and specific goals for how much pollution needs to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals.

2. Use 60 percent of EQIP dollars by 2012 to fund watershed-based water quality clean-up projects that encourage multiple farmers within selected watersheds to reduce pollution to specific lakes, streams, or tributaries to the Mississippi River.

3. Use 40 percent of EQIP funds by 2012 in state-level funding pools to target the highest priority natural resource and environmental problems in each state.

4. Select farmers to participate in EQIP who can do the most to contribute to watershed-based clean-up projects or solve high priority problems.

[1] The 10 states that border the Mississippi River are: Arkansas, Iowa, Illinois, Kentucky, Tennessee, Minnesota, Mississippi, Missouri, Tennessee, and Wisconsin.
[2] Environmental Protection Agency. The National Water Quality Inventory: Report to Congress for the 2004 Reporting Cycle. http://www.epa.gov/owow/305b/2004report/
[3] US Geological Survey. 2008. Alexander et al. Differences in Phosphorus and Nitrogen Delivery to the Gulf of Mexico from the Mississippi River Basin. http://water.usgs.gov/nawqa/sparrow/gulf_findings/
[4] This figure was calculated by summing the funds authorized by Congress for EQIP in the 1996, 2002, and 2008 farm bills.
[5] EWG estimated these dollar amounts from the following USDA NRCS EQIP tables "Allocation" and "Contract" tables found on the USDA NRCS website: http://www.nrcs.usda.gov/programs/EQIP/.
[6] Environmental Protection Agency. 2004. Ibid.
[7] US Geological Survey. 2008. Alexander et al. Ibid.
[8] EWG estimated these dollar amounts from the following USDA NRCS EQIP tables "Allocation" and "Contract" tables found on the USDA NRCS website: http://www.nrcs.usda.gov/programs/EQIP/.
[9] National Research Council. 2008. Mississippi River Water Quality and the Clean Water Act; Progress, Challenges, and Opportunities. The National Academies Press. Washington, DC.
[10] National Research Council. 2008. Nutrient Control Actions for Improving Water Quality in the Mississippi River Basin and Northern Gulf of Mexico. Committee on the Mississippi River and the Clean Water Act: Scientific, Modeling, and Technical Aspects of Nutrient Pollutant Load Allocation and Implementation.
[11] National Research Council. 1993. Soil And Water Quality; An Agenda for Agriculture. Committee on Long-Range Soil and Water Conservation. Board on Agriculture. National Academy Press. Washington, D.C. 1993

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Making EQIP Work for Water Quality in 10 Mississippi River Border States

Environmental Quality Incentives Program
State Report 1 of 10

ENVIRONMENTAL WORKING GROUP

APPENDIX – STATE REPORTS

ARKANSAS
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM

OVERVIEW

Arkansas received an average of $21 million in EQIP funds per year for technical and financial assistance from 2003 to 2007, ranking it 4th out of the 10 states that border the Mississippi River for EQIP funds. Seventy percent of Arkansas EQIP funds are disbursed to the state's 75 NRCS field offices while 30 percent are retained at the state-level to help achieve the state's 8 funding categories; 5 of which are labeled with the term "water quality."

Applications to participate in EQIP are evaluated using a single ranking sheet called the "Application Ranking Summary" that includes a: (1) national priority section, (2) state issues section, and (3) cost-efficiency score. Applications to participate in EQIP are collected and ranked at the county Natural Resources Conservation Service (NRCS) offices and then sent to the Arkansas NRCS state office for selection. Arkansas EQIP awards contracts to the highest scoring applications in each county first until the funds in each county run out. Then, if there are any funding categories that still have remaining funds, Arkansas EQIP collects the remaining applications and awards contracts to the highest scoring applications.

The State Technical Committee's EQIP Work Group provides input to the State Conservationist regarding Arkansas's EQIP funding categories and generates questions for the state issues section. "Locally-led groups and partners" identify local resource concerns and provide input to the state office on practices needed in their county and appropriate cost-share rates to generate higher participation rates.

ARKANSAS EQIP WEBSITE

http://www.ar.nrcs.usda.gov/programs/eqip/eqip.html

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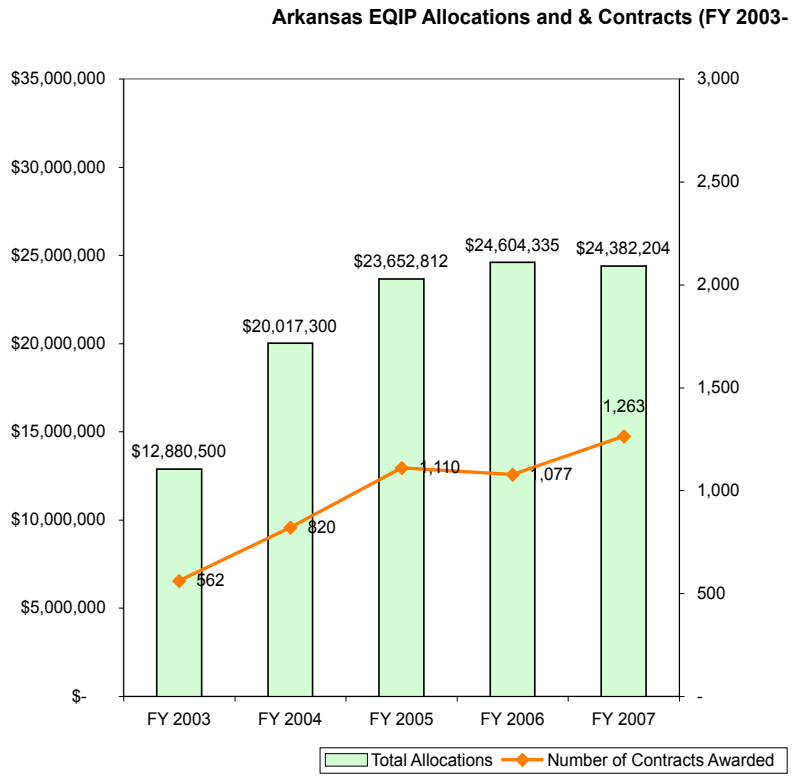
FUNDING AND REACH OF EQIP

EQIP funding is allocated to states using a national formula. The chart below shows the amount of financial and technical assistance Arkansas has received from FY 2003 to 2007 and the number of contracts awarded each fiscal year. A total of 4,832 contracts have been entered into with producers between 2003 and 2007 providing $105.5 million and addressing nearly 749,802 acres in the state.



Source: EWG compiled annual data from EQIP's "Allocation" and "Contract" tables found on the USDA NRCS website: http://www.nrcs.usda.gov/programs/EQIP/.

KEY FACTORS ANALYSIS

We analyzed the following factors for indications of the extent to which EQIP in Arkansas is focused on reducing sediment and nutrient loads to streams, lakes, and rivers: (1) the presence or absence of qualitative or quantitative goals for pollutant reductions, (2) methods used to allocate state-level funds to counties or other sub-state levels or to specific projects or priorities, and (3) the application ranking criteria used to select participants in EQIP. We relied primarily on the information and data presented on the NRCS website to complete this analysis and followed up on our investigation with interviews of the state EQIP program manager.

Goals

Aside from one unsuccessful watershed-based project, EWG did not find evidence to suggest that Arkansas EQIP has a) established explicit quantitative or qualitative goals for EQIP to clean up agricultural sources of pollution, b) identified which lakes, streams, or tributaries are priorities for improvement, c) set a timetable to achieve those goals, or d) established a means to track progress toward the goals. Arkansas's application ranking systems do create an implicit set of priorities for treating water quality, but measurable goals and timelines do not exist.

EWG recommends that Arkansas EQIP set clear and specific goals for how much and what types of agricultural pollution need to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals. EWG also recommends that Arkansas EQIP develop systems to track, evaluate, and report on the environmental performance of EQIP.

Fund Allocation

Arkansas distributes 70 percent of its EQIP funding to its 75 county field offices. This allocation consists of

1. A $75,000 base EQIP allocation amount
2. An additional allocation based on
    a. A geographic information system (GIS) analysis of resource concerns and
    b. The number of unfunded applications from the previous year in each county.

The remaining 30 percent of funds are allocated on a statewide competitive basis to ensure that adequate funding is given to each of the state's priority resource concerns. According to Kenneth Lee, Arkansas's Assistant State Conservationist for Programs, the state's priority resource concerns are commonly referred to as funding categories since they include both actual resource concerns and funding initiatives for small farmers.

EWG recommends that if funds are allocated directly to local jurisdictions, Arkansas EQIP should use allocation formulas based primarily on natural resource and environmental factors to channel more funding to localities with significant environmental problems associated with agriculture.

In its "2008 State EQIP Policy" document,[1] Arkansas provides a breakdown of EQIP spending by the percentage of funds distributed to each of its priority resource concerns. (See table below.) The Policy document states, "EQIP funds allocated to Arkansas will be targeted in the percentages shown for the following resource concerns

[1] Arkansas 2008 State EQIP Policy document. ftp://ftp-fc.sc.egov.usda.gov/AR/eqip/Arkansas_2008_State_EQIP_Policy.pdf

as nearly as possible. Any changes will be based on numbers of applications and amounts requested with a goal of maintaining approximately 60 percent of funding for livestock related applications."

Funding Distribution to Resource Concerns in Arkansas	
Resource Concerns	**Distribution of EQIP Funds**
Grassland Sediment/Erosion, Water Quality	32%
Irrigation, Water Quantity, Regular EQIP Funds	26%
Animal Waste/Nutrient Management, Water Quality	25%
Forestry, Water Quality/Plant Health	10%
Waste System Closures, Water Quality	2%
Cropland Sediment/Erosion, Water Quality	2%
Alternative/Small Cropland Farms (Alternative Crop)	2%
Small Grassland Farms (Small Scale Farm Initiative)	1%

Source: Arkansas State EQIP Policy: ftp://ftp-fc.sc.egov.usda.gov/AR/eqip/Arkansas_2008_State_EQIP_Policy.pdf.

As highlighted in yellow, 5 of the 8 funding categories are related to water quality. Thus, Arkansas intends to spend approximately 70 percent of the state's EQIP funds on water quality-related funding categories.

According to Lee, Arkansas EQIP is very responsive to the desires of the locally led groups and partners. For example, the State Conservationist set up the "Waste Systems Closure" funding category in response to the need to close swine lagoon systems when a major swine company closed their operation. Only the swine farms involved in the lawsuit were eligible to receive funding. Arkansas EQIP may be ending this funding category soon as most of the farms have closed their lagoons.

Another example of the State Conservationists flexibility in determining funding categories is the establishment of the Alternative Crop funding category. This funding category was created because some counties have many small, vegetable farms that could not compete with the big traditional, farmers. Thus, all practices are available to these applicants but their applications only have to compete against other small, vegetable farm applications.

Arkansas EQIP developed and attempted to carry out one "special project" to install sediment reduction practices in the L'Anguille River watershed. This project approached a watershed-based water quality clean up project. Unfortunately, according to Lee, necessary complementary funding from the state's Clean Water Act "319" program fell through and the "L'Anguille Total Maximum Daily Load (TMDL) Project" was unable to be fully implemented.

Despite this setback, EWG recommends that Arkansas EQIP's best opportunity for improving water quality is to fund well-designed, watershed-based clean-up projects. This approach encourages multiple farmers within a watershed to reduce pollution to a specific lake, stream, or tributary to the Mississippi River.

The problem-solving advantages of this approach are well understood. They include focusing resources in specific locations to solve well-defined problems using a strategy that directs funding to those farmers within the watershed who can do the most to reduce pollution. Ideally, such water quality improvement projects include developing monitoring and evaluation systems to adjust the strategy and resource allocations based on the results that are being realized. Ramping up the emphasis in EQIP on such watershed-based clean-up projects would dramatically increase the effectiveness of the program.

EWG recommends that Arkansas EQIP allocate 60 percent of its EQIP funds to watershed-based clean-up projects by 2012. Arkansas EQIP should then allocate the remaining 40 percent of funds by 2012 to funding pools that target high priority natural resource and environmental problems. These state-level funding pools create important opportunities to focus EQIP on the most pressing designated problems. The funding pools allow EQIP managers to select the best applications from all the applications proposing to address the same natural resource or environmental problem.

Application Ranking Criteria

Applications to participate in EQIP are evaluated using a single ranking sheet called the "Application Ranking Summary" that includes only three of the four customary components: (1) a national priority section, (2) a state issues section, and (3) a cost-efficiency score. There are no questions in the Ranking Summary's local issues section but the "locally-led groups and partners" help the state NRCS develop Arkansas's resource concerns.

The ranking sheet is not posted online but Lee provided a copy (see Appendix). Arkansas uses a points-based ranking system for EQIP and applications that receive a greater total point score get a higher priority for participation in EQIP.

When a farmer meets with a county District Conservationist to apply to EQIP, the District Conservationist determines what practices the farmer is interested in and selects one of 8 funding categories in the ProTracts ranking tool. This enables the State Conservationist to track funding requests by each funding category. Applications to participate in EQIP are collected and ranked at the county NRCS offices and then sent to the Arkansas NRCS state office for selection.

Arkansas EQIP awards contracts to the highest scoring applications in each county until the funds in each county run out. Then, if there are any funding categories that still have remaining funds, Arkansas EQIP collects the remaining applications, re-ranks

them, and awards contracts to the highest scoring applications. The State Conservationist has the discretion to move funds between funding categories if there are more applications than funds in certain categories. According to Lee, Arkansas EQIP is often able to fund all applications to each category but the Irrigation funding category consistently has more applications than there is money available.

Arkansas uses three multipliers to weight its ranking criteria. The multiplier for the state section of the ranking sheet is 1.4 and the multiplier for the national section is 1.1. Lee did not know what the multiplier was for the cost-efficiency score as it was embedded in the NRCS ProTracts ranking software. Lee said that Arkansas, like other states, does not provide a certain percentage of the total application ranking score to each national, state, or cost-efficiency section of its ranking criteria document. He did say that most of Arkansas's emphasis is on the state section because most of the points are given to the state section. See Box 1 for background information on the cost-efficiency score.

Box 1. The Cost-Efficiency Score

A cost-efficiency score is generated for each application to determine how effective the cost-shared practices will be at addressing the priority resource concerns (soil, water, air, plant, animal, and human). The cost-efficiency score is calculated by multiplying the practice(s)'

Conservation Practice Physical Effects (CPPE) value(s)
x Service life of the practice(s)
/ Average cost of installing and maintaining the practice(s)

NRCS maintains a national database of each practice's CPPE value. CPPE values range from -5 to + 5 reflecting the practice's ability to worsen or improve each resource concern. The CPPE value can be modified by the state or local jurisdiction to reflect the soil, weather, topographic, and other state or local conditions that may impact the effectiveness of the practice.

All 10 Mississippi River border states are using the NRCS Pro-Tracts Cost-Efficiency software to calculate a Cost-Efficiency score for each application. However, because the Cost-Efficiency score is embedded in the software, this step in the ranking process is not transparent since the state EQIP managers were unable to fulfill our request of reviewing the CPPE values given to practices funded by EQIP.

We attempted to determine how much emphasis Arkansas EQIP places in its Ranking Summary on the reduction of nutrient and sediment pollution and on geographic priority areas. Our investigation was hampered by a lack of specificity in the ranking criteria, which we describe in Box 2. In addition, we were unable to receive a version of the Ranking Summary with points in order for us to conduct a rough analysis of raw, unweighted points.

Box 2. The Lack of Specificity in Ranking Criteria

The ranking criteria in all 10 Mississippi River border states lacked sufficient specificity for us to determine with real certainty the emphasis each state was giving in its ranking sheets to the reduction of sediment and nutrient pollution and to areas of geographic importance. For example, many ranking factors do not specify the particular source of natural resource or environmental problems, such as sediment or nutrient loss from cropland. Instead the ranking factors refer to more generic sources of problems, such as nonpoint source pollution.

In those cases where more specific types of pollutants like sediments or nutrients were cited, they were usually included in a longer list of pollutants, such as pathogens, pesticides, or excess salinity, making determination of the priorities implicit in the ranking criteria difficult. A similar lack of specificity hampered our ability to determine the emphasis placed on location of an application within a priority watershed or other geographic unit.

Despite these difficulties, it is clear that the factors used in ranking criteria and the priority assigned those factors through point allocations and multipliers are critical determinants of effectiveness of EQIP in reducing sediment and nutrient pollution.

Arkansas's Ranking Summary does include factors that appear to give some priority to geographic location and/or sediment and nutrient pollution reduction though it is unclear how much priority is emphasized. Arkansas asks National Priorities Question 1 which includes a reference to impaired watersheds:

> "Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?"

This question does give some priority to an application located in an impaired watershed as part of a larger priority for addressing nonpoint and point source pollution.

Arkansas's Ranking Summary asks one geographically focused question in its State Issues section:

> " Will this application area be within the identified ground water decline area and address reduced use of ground water for irrigation?"

Regarding emphasis on reducing nutrient and sediment pollution, a review of Arkansas's Ranking Summary does not provide clear answers about how much priority Arkansas EQIP places on these two specific water quality impairments. For example, the National Priority Question 1 does mention the words "nutrients" and "sediment" but the question lacks sufficient specificity for us to distinguish whether an application was being selected for treatment of nutrients and sediments versus treatment of excess salinity or pesticides.

Arkansas's Summary includes the National Priorities Question 4 related to sediment pollution:

> "Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?"

There are two questions in the State Issues section regarding "sediment and pollutants" and "sheet and rill erosion."

> "Will all sediment and pollutants from the application area be filtered or otherwise reduced (Other than by animal waste application area set back distance or sheet and rill erosion control measures) before entering adjacent ditches, streams, wetlands, or waterbodies on at least a) 1/3 of the acres, b) 2/3 of the acres, or c) all of the acres in this application?"

> "Is there active sheet and rill erosion above the soil loss tolerance on the application area that will be reduced a) by 1 – 2 tons average, but remains above T, b) by 2 – 3 tons average, but remains above T, or c) to the soil loss tolerance or less?"

Without access to the points assigned to the factors listed above, it is impossible to conclude how much emphasis in raw un-weighted points Arkansas is providing for the reduction of sediment and nutrient pollution or to location within impaired watersheds or other geographic units.

EWG recommends that Arkansas EQIP revise their ranking systems to increase the priority given to applications located in high priority watersheds that will reduce sediment and nutrient pollution. Sediment and nutrient pollution are the two most important pollutants of streams, lakes, and reservoirs in the 10 states bordering the Mississippi River, the main stem of the Mississippi River, and the Dead Zone in the Gulf of Mexico.

Conclusion

We find that EQIP has not been deployed as effectively as it could be in Arkansas or any of the 9 states that border the Mississippi River. The methods used to decide how to spend EQIP dollars within the state and which farmers will get those dollars are more likely to result in diffuse and fragmented efforts to reduce pollution from farms rather than the focused and coordinated effort needed to solve both local and regional water pollution problems.

Watershed-based water quality clean-up projects are the best use of federal taxpayer resources and offer the greatest hope for cleaning up the unintended environmental damage of agriculture. These projects entail setting goals to clean up specific bodies of water that are deemed the highest priorities, determining how many of the most cost effective practices are needed, and persuading key farmers to participate in the project.

To quickly ramp up the effectiveness of EQIP, Arkansas NRCS should:

1. Set clear and specific goals for how much pollution needs to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals.

2. Use 60 percent of EQIP dollars by 2012 to fund watershed-based water quality clean-up projects that encourage multiple farmers within selected watersheds to reduce pollution to specific lakes, streams, or tributaries to the Mississippi River.

3. Use 40 percent of EQIP funds by 2012 in state-level funding pools to target the highest priority natural resource and environmental problems in each state.

4. Select farmers to participate in EQIP who can do the most to contribute to watershed-based clean-up projects or solve high priority problems.

APPENDIX—Arkansas EQIP Ranking Criteria

Natural Resources Conservation Service

Application Ranking Summary

Croplamd Water Quality

Program:	**Ranking Date:**	**Application Number:**
Ranking Tool: Croplamd Water Quality		**Applicant:**
Final Ranking Score:		**Address:**
Planner:		**Telephone:**
Farm Location:		

National Priorities Addressed

Issue Questions	Responses
1. Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?	Yes O or No O
2. Will the treatment you intend to implement using EQIP result in a considerable amount of ground or surface water conservation?	Yes O or No O
3. Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	Yes O or No O
4. Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	Yes O or No O
5. Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	Yes O or No O

State Issues Addressed

Issue Questions	Responses
Sediment & Pollutants Filtered or Reduced - Select only one question.	
1. Will all sediment and pollutants from the application area be filtered or otherwise reduced (Other than by animal waste application area set back distance or sheet and rill erosion control measures) before entering adjacent ditches, streams, wetlands, or waterbodies on at least 1/3 of the acres in this application?	Yes O or No O
2. Will all sediment and pollutants from the application area be filtered or otherwise reduced (Other than by animal waste application area set back distance or erosion control measures) before entering adjacent ditches, streams, wetlands, or waterbodies on at least 2/3 of the acres in this application?	Yes O or No O
3. Will all sediment and pollutants from the application area be filtered or otherwise reduced (Other than by animal waste application area set back distance or erosion control measures) before entering adjacent ditches, streams, wetlands, or waterbodies on all of the acres in this application?	Yes O or No O
Sheet & Rill Erosion- Select only one question.	
4. Is there active sheet and rill erosion above the soil loss tolerance on the application area that will be reduced by 1 - 2 tons average, but remains above T, on application area?	Yes O or No O
5. Is there active sheet and rill erosion above the soil loss tolerance on the application area that will be reduced by 2 - 3 tons average, but remains above T on application area?	Yes O or No O
6. Is there active sheet and rill erosion above the soil loss tolerance on the application area that will be reduced to the soil loss tolerance or less?	Yes O or No O
Improving Livestock Operations- Select only one question.	
7. The livestock operation producing the waste or dead animals to be treated with practices in the contract is an existing operation.	Yes O or No O
8. The livestock operation producing the waste or dead animals to be treated with practices in the contract is an expanding operation (Low Expansion).	Yes O or No O
9. The livestock operation producing the waste or dead animals to be treated with practices in the contract is expanding operation (Medium Expansion).	Yes O or No O

Page 1 of 2

10. The livestock operation producing the waste or dead animals to be treated with practices in the contract is expanding operation (High Expansion).	Yes O or No O
Field Runoff Recovery System- Select only one question.	
11. Will tailwater recovery provide for 10 to 33% of field runoff on the area in this application?	Yes O or No O
12. Will tailwater recovery provide for 33.1% to 66% of field runoff on the area in this application?	Yes O or No O
13. Will tailwater recovery provide for more than 66% of field runoff on the area in this application?	Yes O or No O
Woodland Protection- Select only one question.	
14. At least 1/3 of woodland in tract(s) associated with this application will be protected from wildfire, invasive species where present (See list) and uncontrolled grazing, where present	Yes O or No O
15. At least 2/3 of woodland in tract(s) associated with this application will be protected from wildfire, invasive species where present (See list) and uncontrolled grazing, where present	Yes O or No O
16. All of woodland in tract(s) associated with this application will be protected from wildfire, invasive species where present (See list) and uncontrolled grazing, where present	Yes O or No O
This must be in accordance to policy or other documentation (List).	
17. Will the treatment you intend to implement using EQIP result in the protection, restoration, development or enhancement of federally listed threatened and endangered species (See List for Species and Practices)?	Yes O or No O
18. A valid CP9 (that includes a native grass buffer), CP21(native warm season grasses only), CP22 (Zone 3-native warm season grasses only), CP29, CP30 or CP33 application is pending on the same tract of land represented by this application.	Yes O or No O
19. Will this application area be within the identified ground water decline area and address reduced use of ground water for irrigation?	Yes O or No O

Local Issues Addressed

Issue Questions	Responses

Land Use:

Resource Concerns	Practices

Ranking Score

Efficiency:
Local Issues:
State Issues:
National Issues:
Final Ranking Score:

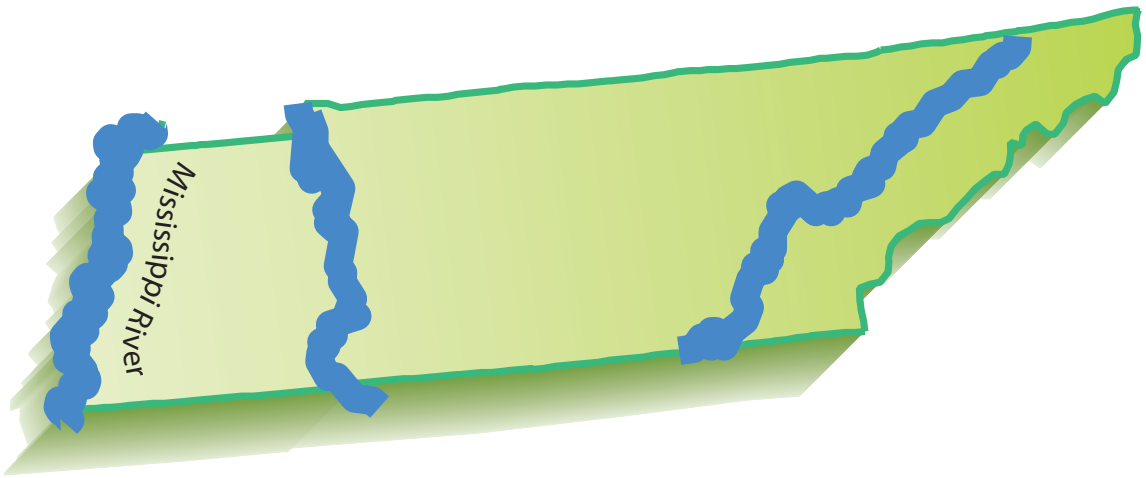
This ranking report is for your information. It does not in any way guarantee funding. When funding becomes available, you will be notified if your application is selected for funding. Some changes to the application may be required before a final contract is awarded.

Notes:

NRCS Representative: **Signature Date:**	**Application Signature Not Required for Contract Development unless required by State policy:** **Signature Date:**

SEIZING A WATERSHED MOMENT

Making EQIP Work for Water Quality in 10 Mississippi River Border States



Tennessee

Environmental Quality Incentives Program
State Report 9 of 10

ENVIRONMENTAL WORKING GROUP

APPENDIX – STATE REPORTS

TENNESSEE
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM

OVERVIEW

Tennessee received an average of $11.8 million in EQIP funds for technical and financial assistance per year from 2003 to 2007, ranking it 10th out of the 10 states that border the Mississippi River for EQIP funds. TN-EQIP distributes approximately half of its funds to its 95 counties and the remaining half is distributed among its 7 resource concerns: (1) AFO/CAFO, Water and Air Quality, (2) Aquatic At-Risk Species Habitat Conservation, (3) Cropland - Erosion/Sedimentation, (4) Forest Habitat Improvement, (5) Grassland At-Risk Species Habitat Conservation, (6) Invasive Species and (7) Limited Resource Farmer/Small-Scale Farmer.

Applicants to EQIP in Tennessee can choose to either apply to the county-based programs or to one or more of the 7 statewide funding categories, which are competitive on a statewide basis. Each of the 95 counties has a county-based ranking criteria document that contains different local issue ranking questions. The 7 state-level resource concern ranking criteria documents include: (1) national priorities, (2) state issues, (3) a cost-efficiency score, and (4) selected resource concerns and practice lists.

Tennessee EQIP's State Technical Committee identifies statewide resource concerns and develops the resource concern ranking criteria documents while the Local Work Groups identify each county's priority practices and develop their county's local ranking criteria document.

TENNESSEE EQIP WEBSITE

http://www.tn.nrcs.usda.gov/programs/eqip2009/index.html

CONTACTS

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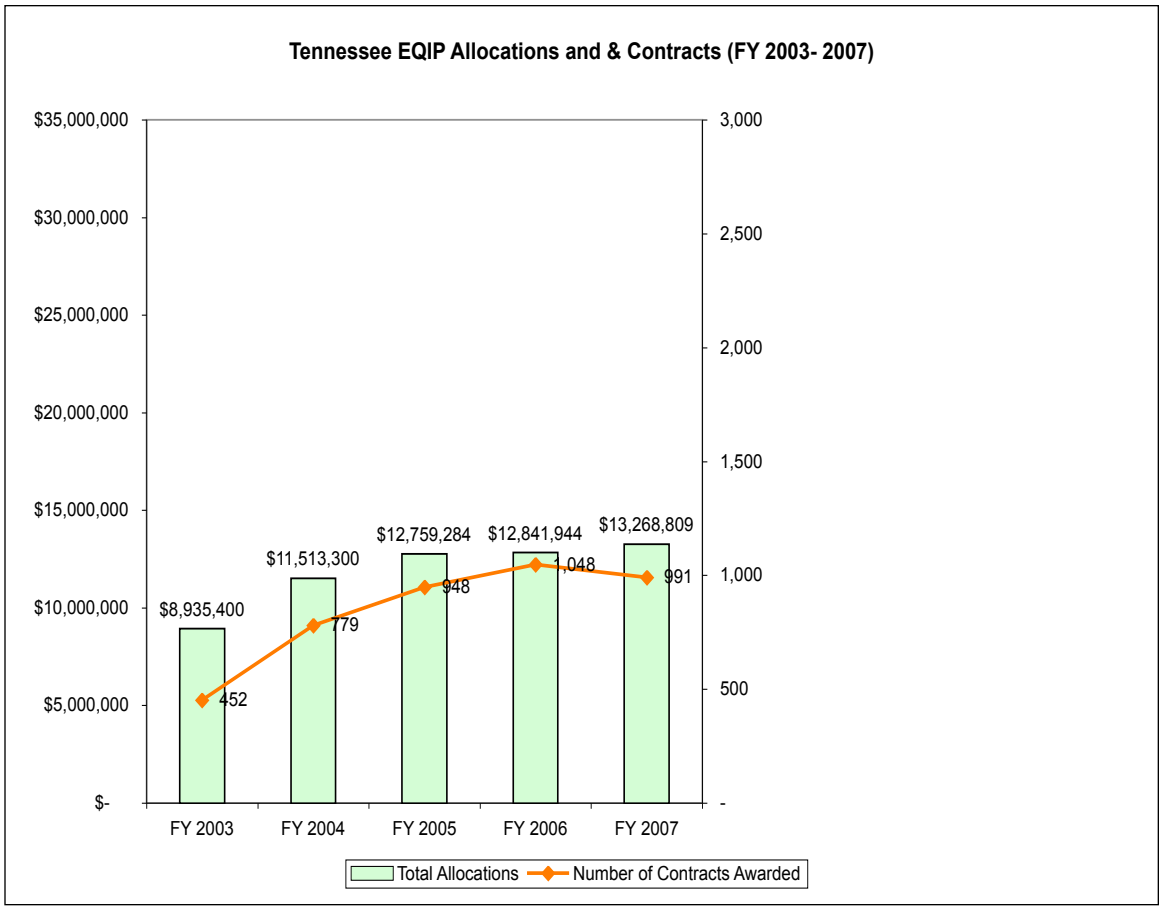
FUNDING AND REACH OF EQIP

EQIP funding is allocated to states using a national formula. The chart below shows the amount of financial and technical assistance Tennessee has received from FY 2003 to 2007 and the number of contracts awarded each fiscal year. A total of 4,218 contracts have been entered into with producers between 2003 and 2007 providing $59.3 million and addressing 361,593 acres in the state.



Source: EWG compiled annual data from EQIP's "Allocation" and "Contract" tables found on the USDA NRCS website: http://www.nrcs.usda.gov/programs/EQIP/.

KEY FACTORS ANALYSIS

We analyzed the following factors for indications of the extent to which EQIP in Tennessee is focused on reducing sediment and nutrient loads to streams, lakes, and rivers: (1) the presence or absence of qualitative or quantitative goals for pollutant reductions, (2) methods used to allocate state-level funds to counties or other sub-state levels or to specific projects or priorities, and (3) the application ranking criteria used to select participants in EQIP. We relied primarily on the information and data presented on the Natural Resources Conservation Service (NRCS) websites to complete this

analysis and followed up on our investigation with interviews of the state EQIP program manager.

Goals

Tennessee EQIP's Aquatic At-Risk Species funding category has a goal of protecting Threatened and Endangered Species and uses 7 percent of EQIP funds to reduce pollution to streams designated as "High," "Medium," and "Low" priorities.

Regarding the balance of Tennessee EQIP funds, EWG did not find evidence to suggest that Tennessee EQIP has a) established explicit quantitative or qualitative goals for EQIP to clean up agricultural sources of pollution, b) identified which lakes, streams, or tributaries are priorities for improvement, c) set a timetable to achieve those goals, or d) established a means to track progress toward the goals. Tennessee's application ranking systems do create an implicit set of priorities for treating water quality, but measurable goals and timelines do not exist.

EWG recommends that Tennessee EQIP set clear and specific goals for how much of what types of agricultural pollution need to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals. EWG also recommends that Tennessee EQIP develop systems to track, evaluate, and report on the environmental performance of EQIP.

Fund Allocation

In FY2008, Tennessee EQIP distributed approximately half of its funds to its 95 counties and held back the remaining half for distribution amongst the 7 resource concern funding categories: (1) AFO/CAFO, Water and Air Quality, (2) Aquatic At-Risk Species Habitat Conservation, (3) Cropland - Erosion/Sedimentation, (4) Forest Habitat Improvement, (5) Grassland At-Risk Species Habitat Conservation, (6) Invasive Species and (7) Limited Resource Farmer/Small-Scale Farmer.

Tennessee EQIP does not have a formula for allocating funding to local jurisdictions like several other states that include various generic and resource concern factors and weights. According to John Rissler, Assistant State Conservationist for Programs, "Initially we equally divide the funds (amongst the 95 counties). Some counties do not have enough applications to utilize their funds. Slippage from those counties is placed in counties with the least percent of applications funded."

EWG recommends that if funds are allocated directly to local jurisdictions, Tennessee EQIP should use allocation formulas based primarily on natural resource and environmental factors rather than generic production factors to channel more funding to localities with significant yet solvable environmental problems associated with agriculture.

The figure below shows a breakdown of TN-EQIP funds.

Funding Distribution to Resource Concerns in Tennessee for 2008	
Resource Concern/Program Area	**Distribution of EQIP Funds**
County Allocation	50%
AFO/CAFO, Water and Air Quality	16%
Cropland Erosion/Sedimentation	13%
Aquatic At-Risk Species	7%
Limited Resource Farmer and Small Scale Farmer	6%
Grassland At-Risk Species	4.5%
Forest Habitat Improvement	2%
Invasive Species- Kudzu	1.5%
Total	100%

Source: John Rissler, Assistant State Conservationist for Tennessee.

Note that 36 percent FY2008 TN-EQIP funds went to 3 funding categories that are likely to result in a reduction of nutrient and sediment pollution: AFO/CAFO Water and Air Quality, Cropland – Erosion / Sedimentation, and Aquatic At-Risk Species. Unfortunately, Tennessee EQIP does not provide a breakdown by resource concern for approximately half of its funds that go to the county-based program so it is difficult to know how much of a priority it is to Tennessee to reduce nutrient and sediment pollution. However, according to Rissler, "a majority of the funds going to counties goes to fencing with a priority on excluding livestock from streams and other sensitive areas." This is an important practice for reducing nutrient and sediment pollution.

EWG found that Tennessee EQIP's "Aquatic At-Risk Species Habitat Conservation" funding category approaches a watershed-based clean-up project because it focuses EQIP funds on reducing water quality pollution in a discrete number of priority watersheds. TN-EQIP uses an Aquatic Priority List to prioritize applications from three sets of watershed categories. Applications in the watersheds that rank "High" receive higher priority over watersheds that are ranked "Medium" or "Low." The state designates 7 percent or about $800,000 per year out of the $11 million annual average of EQIP funds to this funding pool.

Rissler provided the following description of the funding pool for Aquatic At-Risk Species Habitat Conservation in a written response to EWG's inquiries.

> "The Aquatic fund pool is intended to protect Tennessee streams and the threatened and endangered species that live in the streams. It is an attempt at providing protection to the streams that are not already degraded beyond repair. Streams that are already so degraded that they no longer have Threatened and Endangered (T&E) species are not likely to receive funding in this fund pool. Tennessee has more T&E species than any other non-coastal

state in the nation. Priority is given to streams that have known populations of aquatic T&E species. Within that priority you will find that excluding livestock from streams and riparian forest buffers receive the majority of points. I would venture to say that in order to receive funding producers had to exclude livestock and put in a riparian forest buffer to score high enough to receive funding in this very competitive funding pool."

EWG recommends that Tennessee EQIP's best opportunity for improving water quality is to fund well-designed, watershed-based clean-up projects. This approach encourages multiple farmers within a watershed to reduce pollution to a specific lake, stream, or tributary to the Mississippi River.

The problem-solving advantages of this approach are well understood. They include focusing resources in specific locations to solve well-defined problems using a strategy that directs funding to those farmers within the watershed who can do the most to reduce pollution. Ideally, such water quality improvement projects include developing monitoring and evaluation systems to adjust the strategy and resource allocations based on the results that are being realized. Ramping up the emphasis in EQIP on such watershed-based clean-up projects would dramatically increase the effectiveness of the program.

EWG recommends that Tennessee EQIP allocate 60 percent of its EQIP funds to watershed-based clean-up projects by 2012. Tennessee EQIP should then allocate the remaining 40 percent of funds by 2012 to funding pools that target high priority natural resource and environmental problems. These state-level funding pools create important opportunities to focus EQIP on the most pressing designated problems. The funding pools allow EQIP managers to select the best applications from all the applications proposing to address the same natural resource or environmental problem.

Application Ranking Criteria

Tennessee EQIP makes available on their website the 7 state-wide resource concern program ranking criteria sheets and 95 county ranking sheets and each sheet shows the amount of points awarded per question. The 7 Ranking Tool Summaries are (1) AFO/CAFO, Water and Air Quality, (2) Aquatic At-Risk Species Habitat Conservation, (3) Cropland – Erosion / Sedimentation, (4) Forest Habitat Improvement, (5) Grassland At-Risk Species Habitat Conservation, (6) Invasive Species and (7) Limited Resource Farmer/Small-Scale Farmer.

Applicants to EQIP in Tennessee can choose to either apply to the county-based program or to 1 or more of the statewide resource concern funding categories. Applications to the county-based program compete against each other within each

county while applications to the statewide resource concern programs compete within each program on a statewide basis.

All applications are entered, ranked and selected using the NRCS ProTracts software with the highest scores receiving funding first. The county-based program applications are selected at the field level with oversight at the Area Office level and assistance from the State Office Program Staff. Applications to the statewide programs are selected for funding at the state office.

Each of the 95 counties in Tennessee have a local ranking criteria document called "County Based Funding Practices and Ranking Questions developed by Local Work Group for FY 2008." This document lists different local issue ranking questions in a Yes/No format with points for answering Yes. None of the county applications answer national priority questions and there is only one single state issue question included in the county-based applications. That question provides the applicant an opportunity of a "tie-breaker" if they agree to complete a Conservation Security Program self-assessment for their operation.[1]

The 7 state-level resource concern ranking criteria documents are called "Ranking Tool Summary" sheets which include 4 sections: (1) national priorities questions, (2) state issues questions, (3) a cost-efficiency score, and (4) selected resource concerns and practice lists. There are no local issue questions in any of these 7 Ranking Tool Summaries. The list of selected resource concerns and practice lists in each Ranking Summary is tailored to reflect the specific statewide resource concerns of each of the 7 Ranking Summaries. Applications that receive a greater total point score get a higher priority for participation in EQIP. See Box 1 for background information on the cost-efficiency score.

On each of the 7 statewide Ranking Tool Summaries, Tennessee assigns a Scoring Multiplier of 1 to the Efficiency Score, 10 to the National Priorities, and 10 to the State Issues.

To determine how much emphasis Tennessee EQIP places on the reduction of nutrient and sediment pollution and on geographic priority areas, we attempted a rough estimate of the percentage of raw, un-weighted points assigned to questions that appear to address these priorities. We acknowledge that this approach is incomplete and potentially misleading, as it does not account for the effect of the multipliers and the cost-efficiency score in the Ranking Criteria. In addition, the lack of specificity in the ranking criteria made it difficult to identify points for reducing sediment and nutrient pollution and points for applications located in priority areas. Those complications are described in Box 2.

[1] Written comments provided by John Rissler, Assistant State Conservationist (Programs), Tennessee EQIP.

Box 1. The Cost-Efficiency Score

A cost-efficiency score is generated for each application to determine how effective the cost-shared practices will be at addressing the priority resource concerns (soil, water, air, plant, animal, and human). The cost-efficiency score is calculated by multiplying the practice(s)'

Conservation Practice Physical Effects (CPPE) value(s)
x Service life of the practice(s)
/ Average cost of installing and maintaining the practice(s)

NRCS maintains a national database of each practice's CPPE value. CPPE values range from -5 to + 5 reflecting the practice's ability to worsen or improve each resource concern. The CPPE value can be modified by the state or local jurisdiction to reflect the soil, weather, topographic, and other state or local conditions that may impact the effectiveness of the practice.

All 10 Mississippi River border states are using the NRCS Pro-Tracts Cost-Efficiency software to calculate a Cost-Efficiency score for each application. However, because the Cost-Efficiency score is embedded in the software, this step in the ranking process is not transparent since the state EQIP managers were unable to fulfill our request of reviewing the CPPE values given to practices funded by EQIP.

Box 2. The Lack of Specificity in Ranking Criteria

The ranking criteria in all 10 Mississippi River border states lacked sufficient specificity for us to determine with real certainty the emphasis each state was giving in its ranking sheets to the reduction of sediment and nutrient pollution and to areas of geographic importance. For example, many ranking factors do not specify the particular source of natural resource or environmental problems, such as sediment or nutrient loss from cropland. Instead the ranking factors refer to more generic sources of problems, such as nonpoint source pollution.

In those cases where more specific types of pollutants like sediments or nutrients were cited, they were usually included in a longer list of pollutants, such as pathogens, pesticides, or excess salinity, making determination of the priorities implicit in the ranking criteria difficult. A similar lack of specificity hampered our ability to determine the emphasis placed on location of an application within a priority watershed or other geographic unit.

Despite these difficulties, it is clear that the factors used in ranking criteria and the priority assigned those factors through point allocations and multipliers are critical determinants of effectiveness of EQIP in reducing sediment and nutrient pollution.

Since the "AFO/CAFO Water and Air Quality" and "Cropland Erosion/Sedimentation" Ranking Tool Summaries focus implicitly and explicitly on nutrient and sediment pollution and because these 2 funding categories receive nearly a third of the state's funding, we will review these 2 ranking sheets. For a review of local issue ranking factors, we randomly chose Anderson County's ranking criteria document.

Regarding emphasis on geographic priorities, a review of the FY 2008 "AFO/CAFO Water and Air Quality" and "Cropland Erosion / Sedimentation" Ranking Tool Summaries (see Appendix) indicates that Tennessee does not appear to give much emphasis to geographic priorities. The National Priorities Question 1 includes a reference to impaired watersheds:

> "Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations."

This question does give some priority to an application located in an impaired watershed as part of a larger priority for addressing nonpoint and point source pollution.

In the State Issue sections of the two Ranking Summaries, there is a clearer emphasis for applications in geographic priority areas though the emphasis is minor. In the "AFO/CAFO Water and Air Quality" Summary, 1,000 of the 7,535 maximum possible number of points (13 percent) in the State section is given to livestock operation applications located in a watershed of a 303 (d) listed stream. In addition, 200 points are provided (3 percent) if all livestock will be fenced from streams or have limited access to streams according to NRCS Standards.

As for the State Issue section in the "Cropland Erosion / Sedimentation" Summary, 100 of the 735 maximum possible number of points (14 percent) is provided if the practices to be installed reduce sediment load to a 303 (d) stream.

In contrast, the Local Issues section of Anderson County's ranking sheet provides a major emphasis on geographically important locations: a) 100 points are provided if the application results in the exclusion of livestock from all water bodies on the farm and b) 90 points are provided if the application results in the maintenance or the installation of a conservation buffer (including livestock use exclusion) of 35 feet or more in width beside waterbodies. Thus, 190 out of the 335 maximum possible points in the Local section (57 percent) are provided for geographic priorities.

Regarding emphasis on reducing nutrient and sediment pollution, as would be expected of Ranking Tool Summaries labeled AFO/CAFO Water and Air Quality

and Cropland Erosion / Sedimentation, Tennessee appears to place a major emphasis on these two specific impairments to water quality. However, the ranking criteria lack specificity. For example, the National Priority Question 1 does mention the words "nutrients" and "sediment" but the question lacks sufficient specificity for us to distinguish between points awarded for treatment of nutrients and sediments versus points awarded for reducing excess salinity or pesticides.

The National Priorities Question 4 does allocate 5 points (20 percent of the 25 total points available from the National Priorities section of both Ranking Summaries) for applications that specifically address soil erosion and sedimentation.

> "Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?"

In the State Issues section of the AFO/CAFO Water and Air Quality Summary, of the 7,535 points given (the largest set of points found among the 10 states evaluated), 5,000 points (66 percent) are given if the application seeks only to develop a Comprehensive Nutrient Management Plan (CNMP). Indeed, this Summary even announces "Comprehensive Nutrient Management Plan (CNMP) only applications will receive a high priority and be funded first."

In the State Issues section of the Cropland Erosion / Sedimentation Summary, 300 points (41 percent of the 735 maximum possible points) are provided for practices that are likely to reduce soil erosion and may reduce sediment pollution: a) planting of Highly Erodible Land (HEL) cropland to permanent vegetation – 150 points, b) converting cropland to permanent vegetation – 50 points, and c) establishing a buffer on fields adjacent to streams – 100 points. 100 points (14 percent) are provided if the applicant will practice nutrient management according to NRCS specifications, which is likely to result in a reduction of nutrient pollution.

Despite Tennessee EQIP appearing to give a large number of unweighted points in the reviewed Summaries to the most pressing concerns – nutrient and sediment pollution reduction in high priority areas – only about 13 to 14 percent of points from the State Issues sections are given to applications from priority watersheds. Thus, it is unlikely that Tennessee's ranking system can ensure that applications in the priority watersheds will rise to the top of the ranking list and get selected for funding.

EWG recommends that Tennessee EQIP revise their ranking systems to increase the priority given to applications located in high priority watersheds that will reduce sediment and nutrient pollution. Sediment and nutrient pollution are the two most important pollutants of streams, lakes, and reservoirs in the 10 states bordering the Mississippi River, the main stem of the Mississippi River, and the Dead Zone in the Gulf

of Mexico.

Conclusion

We find that EQIP has not been deployed as effectively as it could be in Tennessee or any of the 9 states that border the Mississippi River. The methods used to decide how to spend EQIP dollars within the state and which farmers will get those dollars are more likely to result in diffuse and fragmented efforts to reduce pollution from farms rather than the focused and coordinated effort needed to solve both local and regional water pollution problems.

Watershed-based water quality clean-up projects are the best use of federal taxpayer resources and offer the greatest hope for cleaning up the unintended environmental damage of agriculture. These projects entail setting goals to clean up specific bodies of water that are deemed the highest priorities, determining how many of the most cost effective practices are needed, and persuading key farmers to participate in the project.

To quickly ramp up the effectiveness of EQIP, Tennessee NRCS should:

1. Set clear and specific goals for how much pollution needs to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals.

2. Use 60 percent of EQIP dollars by 2012 to fund watershed-based water quality clean-up projects that encourage multiple farmers within selected watersheds to reduce pollution to specific lakes, streams, or tributaries to the Mississippi River.

3. Use 40 percent of EQIP funds by 2012 in state-level funding pools to target the highest priority natural resource and environmental problems in each state.

4. Select farmers to participate in EQIP who can do the most to contribute to watershed-based clean-up projects or solve high priority problems.

APPENDIX—Tennessee EQIP Ranking Criteria

Ranking Tool Summary for FY2008 – AFO/CAFO Water and Air Quality

Ranking Tool Summary
for FY2008 - AFO/CAFO Water and Air Quality
(Released 10/12/2007)

Description:

This funding pool is used to assist landowners interested in the EQIP 2008 AFO-CAFO - State Resource Concerns. The primary resource concerns are Water and Air Quality resulting from the livestock operations and the storage and use of waste materials produced by concentrated animal feeding operations. Comprehensive Nutrient Management Plans (CNMP) only applications will receive a high priority and be funded first. Applicants can submit more than one application to this funding pool.

Land Uses:

Crop, Hay, Headquarters, Pasture

Efficiency Score:

Scoring Multiplier: 1.00

Optional Notes:

National Priorities:

Scoring Multiplier: 10.00
Questions:

Number	Question	Points
1	Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?	5
2	Will the treatment you intend to implement using EQIP result in a considerable amount of ground or surface water conservation?	5
3	Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	5
4	Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	5
5	Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	5
	Total Points	25

State Issues:

Scoring Multiplier: 10.00
Questions:

Sub-heading Number	Question Number	Question	Points
	1	Is this application only for the development of a Comprehensive Nutriant Management Plan (CNMP) by Technical Service Provider (TSP) ?	5000
	2	Is this a livestock operation that has been in business for more than two	1000

		years and is located in a watershed of a 303(d) listed stream?	
	3	Is this a livestock operation that has been in business for more than two years and is NOT located in a watershed of a 303(d) listed stream?	500
	4	Are you a new operation in business less than two years?	50
	5	Is this a livestock operation where less than 50% of the nutrient requirements of the livestock is provided from grazing?	750
	6	After implementation of this contract, will all livestock be fenced from streams or have limited access to streams according to NRCS Standards?	200
	7	Are you applying to install practices that are identified in your approved CNMP? (to answer yes, your CNMP must meet your planned or current operation and NRCS specifications.)	75
	8	Have you ever terminated or cancelled an EQIP CONTRACT (does not apply to an EQIP application cancellation)?	-50
	9	Has the applicant completed and submitted a Conservation Security Program (CSP) Self Assessment?	10
		Maximum Points: Total Points	7535

Local Issues:

Selected Resource Concerns and Practices:

Air Quality: Ammonia (NH3)
- Animal Mortality Facility (316)
- Closure of Waste Impoundment (360)
- Composting Facility (317)
- Comprehensive Nutrient Management Plan (100)
- Heavy Use Area Protection (561)
- Irrigation System, Sprinkler (442)
- Irrigation Water Conveyance, Pipeline, H (430DD)
- Mulching (484)
- Nutrient Management (590)
- Pipeline (516)
- Roof Runoff Structure (558)
- Solid/Liquid Waste Separation Facility (632)
- Waste Storage Facility (313)
- Waste Utilization (633)

Air Quality: Chemical Drift
- Comprehensive Nutrient Management Plan (100)
- Filter Strip (393)
- Heavy Use Area Protection (561)
- Irrigation System, Sprinkler (442)
- Irrigation Water Conveyance, Pipeline, H (430DD)
- Nutrient Management (590)
- Pest Management (595)
- Pipeline (516)
- Waste Storage Facility (313)

Air Quality: Excessive Greenhouse Gas - CH4 (methane)
- Animal Mortality Facility (316)
- Closure of Waste Impoundment (360)
- Comprehensive Nutrient Management Plan (100)
- Irrigation System, Sprinkler (442)
- Irrigation Water Conveyance, Pipeline, H (430DD)
- Nutrient Management (590)
- Pipeline (516)
- Waste Utilization (633)

Air Quality: Objectionable Odors
- Closure of Waste Impoundment (360)

Ranking Tool Summary for FY2008 – Cropland Soil Erosion/Sedimentation

Ranking Tool Summary

for FY2008 - Cropland - Erosion/Sedimentation

(Released 10/12/2007)

Description:

This funding pool is used in ranking EQIP applications for Cropland - Erosion/Sedimentation for Fiscal Year 2008. The beginning land use must be cropland, but cropland converting to grass is eligible for this funding pool also. Irrigation and Precision Farming (Nutrient Management) are added this year. Irrigation history must be verified (two out of the last five years) according to Conservation Programs Manual (CPM) 440-V-NCPM Amendment TN14, Jan. 2006 (Part 515).

Land Uses:

Crop

Efficiency Score:

Scoring Multiplier: 1.00

Optional Notes:

National Priorities:

Scoring Multiplier: 10.00
Questions:

Number	Question	Points
1	Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?	5
2	Will the treatment you intend to implement using EQIP result in a considerable amount of ground or surface water conservation?	5
3	Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	5
4	Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	5
5	Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	5
	Total Points	25

State Issues:

Scoring Multiplier: 10.00
Questions:

Sub-heading Number	Question Number	Question	Points
	1	Are you or will you produce crops in one or more of the following cropping systems on this tract? a. No till high residue crops annually (corn, small grains) b. No till cotton in no more than 2 consecutive years followed by	200

		high residue crops c. No till corn silage in a rotation with small grains d. Low residue crops with winter cover crops	
	2	Does the applicant plan to plant Highly Erodible Land (HEL) cropland to permanent vegetation?	150
	3	If you convert cropland to permanent vegetation, will you plant native vegetation?	50
	4	Will the practice(s) to be installed reduce sediment load to a 303(d) stream?	100
	5	Do you have or will you establish a buffer on fields adjacent to streams?	100
	6	Do you currently have land enrolled in Conservation Reserve Program (CRP) buffers or field borders on this tract?	25
	7	Are you or will you practice nutrient management according to NRCS specifications?	100
	8	Has the applicant completed and submitted a Conservation Security Program (CSP) Self Assessment?	10
		Maximum Points: Total Points	735

Local Issues:

Selected Resource Concerns and Practices:

Air Quality: Chemical Drift
- Conservation Crop Rotation (328)
- Cover Crop (340)
- Critical Area Planting (342)
- Field Border (386)
- Filter Strip (393)
- Irrigation System, Microirrigation (441)
- Irrigation System, Sprinkler (442)
- Irrigation System, Tailwater Recovery (447)
- Irrigation Water Conveyance, Pipeline, H (430DD)
- Nutrient Management (590)
- Pasture and Hay Planting (512)
- Pest Management (595)
- Riparian Forest Buffer (391)
- Tree/Shrub Establishment (612)

Air Quality: Excessive Greenhouse Gas - CO2 (carbon dioxide)
- Conservation Crop Rotation (328)
- Contour Buffer Strips (332)
- Cover Crop (340)
- Critical Area Planting (342)
- Field Border (386)
- Filter Strip (393)
- Grassed Waterway (412)
- Mulching (484)
- Nutrient Management (590)
- Pasture and Hay Planting (512)
- Pest Management (595)
- Riparian Forest Buffer (391)
- Tree/Shrub Establishment (612)
- Use Exclusion (472)

Domestic Animals: Inadequate Quantities and Quality of Feed and Forage
- Conservation Crop Rotation (328)
- Contour Buffer Strips (332)
- Cover Crop (340)
- Critical Area Planting (342)
- Field Border (386)

Anderson County's ranking criteria document

County Based Funding Practices and Ranking Questions developed by Local Work Group (LWG) For FY2008				
1.	County name			Anderson
	The Beginning Farmer Payment Schedule Rate for this county is			50%
2.	PRAC. CODE	CONSERVATION PRACTICE NAME	UNITS	The Local work Group Recommended Using These Practices (A "yes" has been entered for those practices available in this funding pool to use in your county. Blank practices are not available with this ranking tool but may be available from other funding pools.)
	560	Access Rd (Ft)	FT	YES
	316	Animal Mortality Facility (No)	No	YES
	575	Animal Trails and Walkways (Ft)	FT	YES
	584	Channel Stabilization (Ft)	CY or Ton	YES
	360	Closure of Waste Impoundments (No)	CY	YES
	100	CNMP	No	YES
	317	Composting Facility (No)	SF	YES
	328	Conservation Crop Rotation (Ac)	Ac	YES
	340	Cover Crop (Ac)	Ac	YES
	342	Critical Area Planting (Ac)	Ac	YES
	362	Diversion (Ft)	CY	YES
	382	Fence (Ft)	FT or Strand/ft	YES
	386	Field Border (Ft)	Ac	YES
	393	Filter Strip (Ac)	Ac	YES
	410	Grade Stabilization Structure (No)	CY or DIFT or Ton	YES
	412	Grassed Waterway (Ac)	Ac	YES
	561	Heavy Use Area Protection (Ac)	SF	YES
	422	Hedgerow Planting (Ft)	FT	YES
	464	Irrigation Land Leveling (Ac)	CY	YES
	436	Irrigation Storage Reservoir (No & AcFt)	CY	YES
	441	Irrigation System, Microirrigation (No & Ac)	Ac	YES
	442	Irrigation System, Sprinkler (Ac)	Ac	YES
	447	Irrigation System, Tailwater Recovery (No)	CY	YES
	430DD	Irrigation Water Conveyance, High-Pressure, Underground, Plastic Pipeline (Ft)	DIFT	YES
	449	Irrigation Water Management (Ac)	Ac	YES
	460	Land Clearing (Ac)	Ac	YES

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	468	Lined Waterway or Outlet (Ft)	LF or SF	YES
	634	Manure Transfer (No)	DIFT or Gal or LF	YES
	484	Mulching (Ac)	Ac or Sq Yd	YES
	590	Nutrient Management (Ac)	Ac	YES
	512	Pasture and Hay Planting (Ac)	Ac	YES
	595	Pest Management	Ac	YES
	516	Pipeline (Ft)	DIFT	YES
	378	Pond (No)	CY	YES
	521A	Pond Sealing and Lining, Flexible Membrane (No)	SF	YES
	521D	Pond Sealing or Lining, Compacted Clay Treatment (No)	CY	YES
	338	Prescribed Burning (Ac)	Ac	YES
	409	Prescribed Forestry (Ac)	Ac or Ea	YES
	528	Prescribed Grazing (Ac)	Ac	YES
	533	Pumping Plant (No)	Each or HP	YES
	391	Riparian Forest Buffer (Ac)	Ac	YES
	558	Roof Runoff Structure (No)	LF	YES
	350	Sediment Basin (No)	CY	YES
	632	Solid/Liquid Waste Separation Facility (No)	CF or CY or NO	YES
	574	Spring Development (No)	Each	YES
	578	Stream Crossing (No)	SF	YES
	580	Streambank & Shoreline Protection (Ft)	CY or Ton	YES
	606	Subsurface Drain (Ft)	DIFT	YES
	600	Terrace (Ft)	CY	YES
	612	Tree/Shrub Establishment (Ac)	Ac	YES
	490	Tree/Shrub Site Preparation (Ac) formerly-Forest Site Preparation	Ac	YES
	620	Underground Outlet (Ft)	DIFT	YES
	645	Upland Wildlife Habitat Management (Ac)	Ac	YES
	645	Upland Wildlife Habitat Management (Ac) (Early Successional…)	Ac	YES
	645	Upland Wildlife Habitat Management (Ac) (Early Successional…)	Ac	YES
	472	Use Exclusion (Ac)	strand-ft	YES
	313	Waste Storage Facility (No)	CF or SF	YES
	633	Waste Utilization (Ac)	Ac	YES
	638	Water & Sediment Control Basin (No)	CY	YES
	614	Water Facility (No)	Each	YES
	642	Water Well (Ft)	LF or NO	YES
	351	Well Decommissioning (No)	LF	YES

3. LOCAL ISSUES: Your Local Work Group developed the following yes or no questions to be used in the County Base Ranking Tool. Points will only be awarded with a Yes Answer.

Question #	Question	Points	Responses
1	Will this application result in the exclusion of livestock from all waterbodies on the farm (example: Creeks, Streams, Lakes, and/or Springs)? (If answer is Yes, then questions # 2, # 6, and # 12 are No)	100	Yes No
2	Will this application result in the installation of an alternative watering system in conjunction to exclusion of livestock from all waterbodies on the farm (example: Creeks, Streams, Lakes, and/or Springs)? (If answer is Yes, then questions # 1, # 6, and # 12 are No)	95	Yes No
3	Will this application result in the maintenance or the installation of a conservation buffer, (including livestock use exclusion), of 35 feet or more in width beside waterbodies? (example: Creeks, Streams, Lakes, and/or Springs)	90	Yes No
4	Blank	85	Yes No
5	Will this application result in an installation of a 5 paddock (or more) rotational grazing system and includes payment schedule for practice code 528 and will follow Prescribed Grazing Requirments? (If answer is Yes, then question #14 is No)	80	Yes No
6	Will this application result in the installation of an alternative watering system in conjunction to exclusion of livestock from some of the waterbodies on the farm but not all of the waterbodies on the farm? (example: Creeks, Streams, Lakes, and/or Springs)? (If answer is Yes, then questions # 1, # 2, and # 12 are No)	75	Yes No
7	Blank	70	Yes No
8	Blank	65	Yes No
9	Blank	60	Yes No
10	Blank	55	Yes No
11	Blank	50	Yes No
12	Will this application result in the installation of a watering system for livestock and does not include the installation of a pond? (If answer is Yes, then questions # 1, # 2, and # 6 are No)	45	Yes No
13	Blank	40	Yes No
14	Will this application result in an increase in paddocks for rotating livestock? (If answer is Yes, then question # 5 is No)	35	Yes No
15	Blank	30	Yes No
16	Blank	25	Yes No
17	Blank	20	Yes No
18	Will this application result in the completion of Practice Code (512) Pasture Planting and does landowner agrees to follow the Requirements for Pasture Renovation and Prescribed Grazing? (see requirements sheet)	15	Yes No
19	Will this application result in the completion of Practice Code (342) Critical Area Planting?	10	Yes No
20	If this application is funded, will it be the first time since 1-1-2002 you would have received cost share funds and / or installed structural conservation practices on this or any farm?	5	Yes No

SEIZING A WATERSHED MOMENT

Making EQIP Work for Water Quality in 10 Mississippi River Border States

Missouri

Environmental Quality Incentives Program
State Report 8 of 10

ENVIRONMENTAL WORKING GROUP

APPENDIX – STATE REPORTS

MISSOURI
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM

OVERVIEW

Missouri received an average of $21.8 million in EQIP technical and financial assistance funds per year from 2003 to 2007, ranking it 3rd out of the 10 states that border the Mississippi River for EQIP funds. In FY2008, 60 percent of MO-EQIP funds were reserved for livestock-related conservation practices provided through the Animal Waste application categories while the remaining 40 percent of funds were provided through the General EQIP applications, Flood Impacted applications, and Windbreak/ Shelterbreak applications categories. Only the General EQIP applications compete against each other within each of Missouri's 114 counties while the other 3 types of applications compete on a statewide basis.

Applications to participate in EQIP are evaluated using multiple ranking criteria that include: (1) national priorities, (2) state issues, (3) local issues, (4) cost-efficiency score, and (5) a planned conservation practices checklist. Missouri uses ranking sheets called "Application Data Forms" that contain these 5 criteria. Missouri EQIP uses 114 County Application Data Forms that double as both a General EQIP application-ranking sheet and as an Animal Waste application sheet. Missouri EQIP has separate Application Data Forms for Flood Impacted-Bottom Land and Windbreak/Shelterbreak applicants.

Missouri's State Conservationist determines the questions and point values for the state ranking criteria and evaluates applications competing statewide. District conservationists in each Soil and Water Conservation District determine the ranking criteria and evaluate applications for counties, while four "Area" Conservationists representing the four regional Areas in Missouri review the work of these district conservationists. The Area Conservationists or the State Conservationist can use discretion to determine which projects are funded if certain projects are close in ranking criteria values. Missouri county Local Working Groups provide input to the Area Level Group while the State Technical Committee provides input to the State Conservationist.

MISSOURI EQIP WEBSITE

http://www.mo.nrcs.usda.gov/programs/eqip/eqip.html

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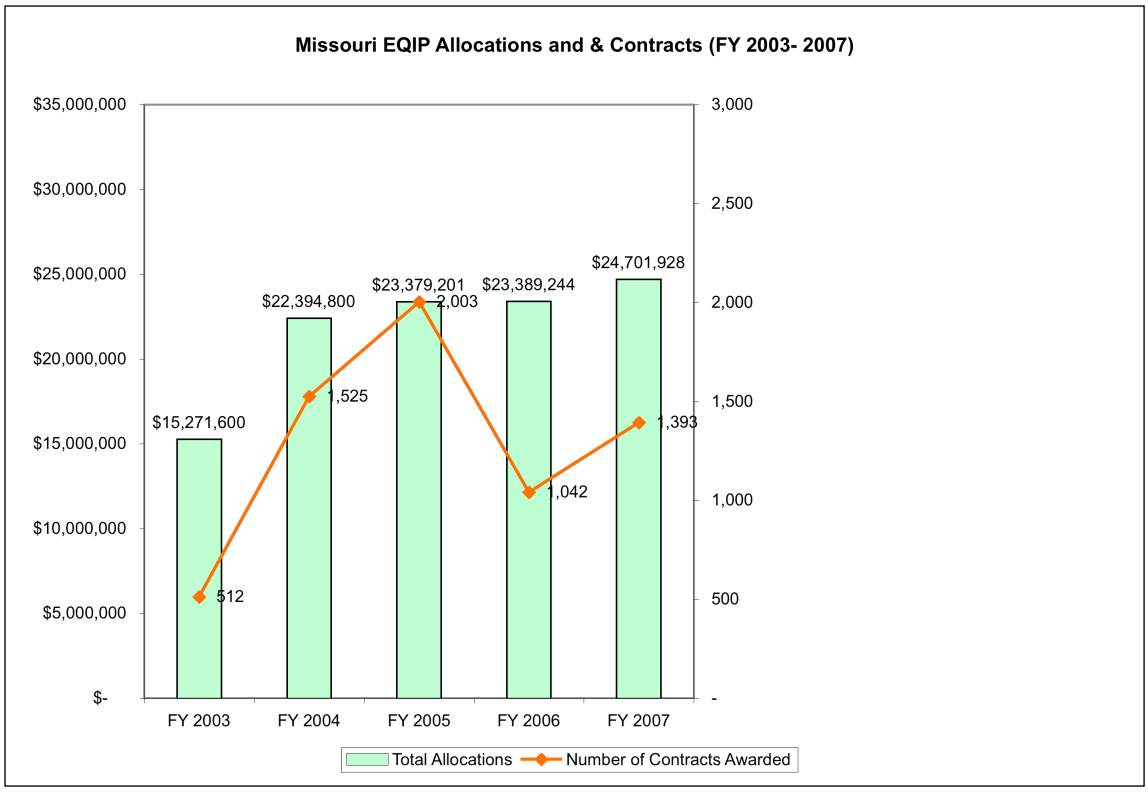
FUNDING AND REACH OF EQIP

EQIP funding is allocated to states using a national formula. The chart below shows the amount of financial and technical assistance Missouri has received from FY2003 to 2007 and the number of contracts awarded each fiscal year. A total of 6,475 contracts have been entered into with producers between 2003 and 2007 providing $109.1 million and addressing 909,946 acres in the state.



Source: EWG compiled annual data from EQIP's "Allocation" and "Contract" tables found on the USDA NRCS website: http://www.nrcs.usda.gov/programs/EQIP/.

KEY FACTORS ANALYSIS

We analyzed the following factors for indications of the extent to which EQIP in Missouri is focused on reducing sediment and nutrient loads to streams, lakes, and rivers: (1) the presence or absence of qualitative or quantitative goals for pollutant reductions, (2) the methods used to allocate state-level funds to counties or other sub-state levels or to specific projects or priorities, and (3) the application ranking criteria used to select participants in EQIP. We relied primarily on the information and data presented on the Natural Resources Conservation Service (NRCS) website to complete this analysis and followed up on our investigation with interviews of the state EQIP program manager.

Goals

EWG did not find evidence to suggest that Missouri EQIP has a) established explicit quantitative or qualitative goals for EQIP to clean up agricultural sources of pollution, b) identified, which lakes, streams, or tributaries are priorities for improvement, c) set a timetable to achieve those goals, or d) established a means to track progress toward the goals. Missouri's application ranking systems do create an implicit set of priorities for treating water quality, but measurable goals and timelines do not exist.

EWG recommends that Missouri EQIP set clear and specific goals for how much and what types of agricultural pollution need to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals. EWG also recommends that Missouri EQIP develop systems to track, evaluate, and report on the environmental performance of EQIP.

Fund Allocation

In FY2008, 60 percent of MO-EQIP funds were reserved for livestock-related conservation practices through the Animal Waste and General application funding categories, while the remaining 40 percent were provided for General EQIP applications, Flood Impacted applications, and Windbreak/Shelterbreak applications categories. Grazing-related livestock practices are usually submitted and funded under the General EQIP funding code available in all counties.[1]

The Animal Waste, Flood Impacted, and Windbreak/Shelterbreak applications compete against the same type of applications on a statewide basis while the General EQIP applications compete against each other within each of Missouri's 114 counties.

Darlene Johnson, Missouri's Resource Conservationist for Programs described, in writing, Missouri EQIP's funding allocation formula for distributing funds to its counties this way:

> "Missouri follows guidance established in the Conservation Program Manual, Section 515, Subpart G Fund Allocation. Once statewide funding pool allocations are made, the State Conservationist allocates the remaining funds to the four administrative areas, based upon a base allocation per county. If a county does not use its entire allocation (due to a lack of eligible applications), the portion remaining is allocated to another county with the highest ranked unfunded application, within the same administrative area."

EWG recommends that if funds are allocated directly to local jurisdictions, Missouri EQIP

[1] Written comments from R. Darlene Johnson, Resource Conservationist (Programs), and Missouri NRCS.

should use allocation formulas based primarily on natural resource and environmental factors, rather than generic production factors, to channel more funding to localities with significant environmental problems associated with agriculture.

In the April 2008 State Technical Committee Meeting, EWG found a discussion of the following funding allocations for FY2007 and FY2008 and placed the data in a table. [2]

FY2007 Obligated		**FY2008 Obligated**	
Total	$20.4 million	**Total**	$18.5 million
Selected categories:		Selected categories:	
Animal Waste	$5.8 million	Animal Waste	$5.9 million
Beginning Farmer	$1.8 million	Forestry	$3.6 million
Limited Resource Farmer	$970,000	Bottomland	$700,000
Windbreak	$407,000		

EWG recommends that Missouri EQIP's best opportunity for improving water quality is to fund well-designed, watershed-based clean-up projects. This approach encourages multiple farmers within a watershed to reduce pollution to a specific lake, stream, or tributary to the Mississippi River.

The problem-solving advantages of this approach are well understood. They include focusing resources in specific locations to solve well-defined problems using a strategy that directs funding to those farmers within the watershed who can do the most to reduce pollution. Ideally, such water quality improvement projects include developing monitoring and evaluation systems to adjust the strategy and resource allocations based on the results that are being realized. Ramping up the emphasis in EQIP on such watershed-based clean-up projects would dramatically increase the effectiveness of the program.

EWG recommends that Missouri EQIP allocate 60 percent of its EQIP funds to watershed-based clean-up projects by 2012. Missouri EQIP should then allocate the remaining 40 percent of funds by 2012 to funding pools that target high priority natural resource and environmental problems. These state-level funding pools create important opportunities to focus EQIP on the most pressing designated problems. The funding pools allow EQIP managers to select the best applications from all the applications proposing to address the same natural resource or environmental problem.

Application Ranking Criteria

Applications to participate in Missouri EQIP are evaluated using multiple ranking criteria that include: (1) national priorities, (2) state issues, (3) local issues, (4) cost-efficiency score, and (5) a planned conservation practices checklist. Missouri uses ranking sheets

[2] State Technical Committee Meeting Minutes, April 2008.
http://www.mo.nrcs.usda.gov/technical/out/stc/April%2010%2008%20STC%20Minutes.doc

called "Application Data Forms" that contain these 5 criteria. Missouri EQIP uses 114 County Application Data Forms that double as both a General EQIP application-ranking sheet and as an Animal Waste application sheet. MO-EQIP has separate Application Data Forms for Flood Impacted-Bottom Land and Windbreak/Shelterbreak applicants.

Thus, Missouri EQIP uses 3 types of application data forms but has 4 funding categories. All three types of Missouri EQIP application data forms ask yes/no questions, and though there are points associated with each of the questions, no points are provided on Missouri EQIP's website. Applications that receive a greater total point score get a higher priority for participation in EQIP, within the selected funding category. See Box 1 for background information on the cost-efficiency score.

Box 1. The Cost-Efficiency Score

A cost-efficiency score is generated for each application to determine how effective the cost-shared practices will be at addressing the priority resource concerns (soil, water, air, plant, animal, and human). The cost-efficiency score is calculated by multiplying the practice(s)'

Conservation Practice Physical Effects (CPPE) value(s)
x Service life of the practice(s)
/ Average cost of installing and maintaining the practice(s)

NRCS maintains a national database of each practice's CPPE value. CPPE values range from -5 to + 5 reflecting the practice's ability to worsen or improve each resource concern. The CPPE value can be modified by the state or local jurisdiction to reflect the soil, weather, topographic, and other state or local conditions that may impact the effectiveness of the practice.

All 10 Mississippi River border states are using the NRCS Pro-Tracts Cost-Efficiency software to calculate a Cost-Efficiency score for each application. However, because the Cost-Efficiency score is embedded in the software, this step in the ranking process is not transparent since the state EQIP managers were unable to fulfill our request of reviewing the CPPE values given to practices funded by EQIP.

For information purposes, we randomly chose Callaway County to review and Resource Conservationist Johnson provided upon request, Callaway County's multipliers for 2008: National – 4, State – 0.18, Local – 1, and Cost-Efficiency – 10. When points are summed in each issue section and multiplied by the multiplier, Missouri EQIP arrives at the following percentages of weighted scores in each of the 4 main sections, which sum to the final score: National – 35 percent, State – 2 percent, Local – 21 percent, and Cost-efficiency – 43 percent.

Since the only section asking whether applications are located in 303(d) impaired watersheds is the State section, giving only 2 percent of an application's ranking score to the State section raises a question about the level of emphasis Missouri EQIP places on geographic priorities.

Our efforts to determine how much priority Missouri EQIP places on nutrient and sediment pollution and on geographic priority areas was hampered because we were unable to receive a copy of a Summary sheet with points. Thus, we will comment only on the number and quality of questions that appear to give priority to these 3 issues.

In addition, the lack of specificity in the ranking criteria made it difficult to conclude whether many ranking questions were aiming to select applicants that reduced sediment and nutrient pollution and applicants located in priority areas. These complications are described in Box 2.

Box 2. The Lack of Specificity in Ranking Criteria

The ranking criteria in all 10 Mississippi River border states lacked sufficient specificity for us to determine with real certainty the emphasis each state was giving in its ranking sheets to the reduction of sediment and nutrient pollution and to areas of geographic importance. For example, many ranking factors do not specify the particular source of natural resource or environmental problems, such as sediment or nutrient loss from cropland. Instead the ranking factors refer to more generic sources of problems, such as nonpoint source pollution.

In those cases where more specific types of pollutants like sediments or nutrients were cited, they were usually included in a longer list of pollutants, such as pathogens, pesticides, or excess salinity, making determination of the priorities implicit in the ranking criteria difficult. A similar lack of specificity hampered our ability to determine the emphasis placed on location of an application within a priority watershed or other geographic unit.

Despite these difficulties, it is clear that the factors used in ranking criteria and the priority assigned those factors through point allocations and multipliers are critical determinants of effectiveness of EQIP in reducing sediment and nutrient pollution.

Regarding emphasis on geographic priorities, a review of the FY2008 Callaway County Application Data Form (see Appendix) does not provide clear answers about how much priority Missouri EQIP may give to geographic priorities. In the National Ranking Factors section, the National Priorities Question 1 includes a reference to impaired watersheds:

> "Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?"

This question does give some priority to an application located in an impaired watershed as part of a larger priority for addressing nonpoint and point source pollution.

In the state issues section of the Callaway County Application Data Form, there are 2 geographically related questions.

> "Offered acres are in the watershed of a public drinking water supply reservoir, or 303d watershed with at least one EQIP planned practice that addresses the water quality concern in the watershed area identified."
>
> "Planned EQIP practice(s) include installing buffers on a) 50 percent or more or b) 75 percent or more of the eligible perennial or intermittent streams, wetlands, sinkholes, or permanent waterbodies, and/or limiting or excluding livestock access to streams."

Regarding emphasis on reducing nutrient and sediment pollution, a review of Callaway County's Form does not provide clear answers about how much priority Missouri EQIP places on these two specific water quality impairments. For example, National Priority Question 1 does mention the words "nutrients" and "sediment" but the question lacks sufficient specificity for us to distinguish between points awarded for treatment of nutrients and sediments versus points awarded for reducing excess salinity or pesticides.

Callaway's Summary includes National Priorities Question 4 related to sediment pollution:

> "Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?"

Three questions in Callaway County's State Issues section are likely to address sediment pollution and nutrient pollution: a) offered acres include a conservation practice(s) that will reduce sheet and/or rill soil erosion, b) planned EQIP practice(s) include nutrient management, and c) planned improvements to an existing animal waste management system and/or development of a CNMP by a TSP.

In Callaway County's Local Issues section, 3 questions are likely to address sediment pollution and nutrient pollution: a) Will more than 50%, 70% or 85% of the cropland acres treated in EQIP have a Land Capability Class 3 or higher?[3], b) Will the planned EQIP practices include the Pest Management (595) conservation practice and the Nutrient Management (590) and/or Waste Utilization (633) conservation practices on 100% of the enrolled cropland?, and c) Will the planned EQIP practice include the Terrace (600) conservation practice?

Without access to the points assigned to the factors listed above, it is impossible to conclude how much emphasis in raw unweighted points Missouri is providing for the

[3] A Land Capability Class rating of II is defined as "soils (that) have moderate limitations that reduce the choice of plants or require moderate conservation practices" while Subclass e "is made up of soils for which the susceptibility to erosion is the dominant problem or hazard affecting their use. Erosion susceptibility and past erosion damage are the major soil factors that affect soils in this subclass." Thus, Class ratings of greater than IIe have greater limitations and greater susceptibility to erosion and other environmental hazards.

reduction of sediment and nutrient pollution or to locations within impaired watersheds or other geographic units.

EWG recommends that Missouri EQIP revise their ranking systems to increase the priority given to applications located in high priority watersheds that will reduce sediment and nutrient pollution. Sediment and nutrient pollution are the two most important pollutants of streams, lakes, and reservoirs in the 10 states bordering the Mississippi River, the main stem of the Mississippi River, and the Dead Zone in the Gulf of Mexico.

Conclusion

We find that EQIP has not been deployed as effectively as it could be in Missouri or any of the 9 states that border the Mississippi River. The methods used to decide how to spend EQIP dollars within the state and which farmers will get those dollars are more likely to result in diffuse and fragmented efforts to reduce pollution from farms rather than the focused and coordinated effort needed to solve both local and regional water pollution problems.

Watershed-based water quality clean-up projects are the best use of federal taxpayer resources and offer the greatest hope for cleaning up the unintended environmental damage of agriculture. These projects entail setting goals to clean up specific bodies of water that are deemed the highest priorities, determining how many of the most cost effective practices are needed, and persuading key farmers to participate in the project.

To quickly ramp up the effectiveness of EQIP, Missouri NRCS should:

1. Set clear and specific goals for how much pollution needs to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals.

2. Use 60 percent of EQIP dollars by 2012 to fund watershed-based water quality clean-up projects that encourage multiple farmers within selected watersheds to reduce pollution to specific lakes, streams, or tributaries to the Mississippi River.

3. Use 40 percent of EQIP funds by 2012 in state-level funding pools to target the highest priority natural resource and environmental problems in each state.

4. Select farmers to participate in EQIP who can do the most to contribute to watershed-based clean-up projects or solve high priority problems.

APPENDIX— Missouri EQIP Ranking Criteria
MISSOURI EQIP FY 2008 Callaway County Application Data Form

Missouri Environmental Quality Incentives Program (EQIP)
2008 Callaway County Application Data Form

Applicant(s):		**Date:**	
Address:			
Farm Number:	**Tract Number:**	**Acres in Application:**	
LRF:	**Beginning Farmer:**	**Livestock Type:**	

Answer each question below, considering conservation practices planned to receive EQIP financial assistance. All applicants must sign a CPA-1200 in addition to this form to be considered for EQIP funding.

	NRCS National Conservation Priorities		
1	Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds consistent with TMDL's where available as well as the reduction of groundwater contamination or point source contamination from confined animal feeding operations?	Yes	No
2	Will the treatment you intend to implement using EQIP result in the conservation of a considerable amount of ground or surface water resources?	Yes	No
3	Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NO_x), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	Yes	No
4	Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	Yes	No
5	Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	Yes	No
	Missouri State Issues		
6	Offered acres are in the watershed of a public drinking water supply reservoir, or in a watershed of a 303d list stream, with at least one EQIP planned practice that addresses the water quality concern in the watershed area dentified.	Yes	No
7	Planned EQIP practice(s) include installing buffers on 50 percent or more of the eligible perennial or intermittent streams, wetlands, sinkholes, or permanent waterbodies, and/or limiting or excluding livestock access to streams.	Yes	No
8	Planned EQIP practice(s) include installing buffers on 75 percent or more of the eligible perennial or intermittent streams, wetlands, sinkholes, or permanent waterbodies, and/or limiting or excluding livestock access to streams.	Yes	No
9	EQIP planned practice(s) address basic habit requirements of bobwhite quail on 50 percent or more of the eligible offered acres.	Yes	No
10	EQIP planned practice(s) address basic habit requirements of bobwhite quail on 75 percent or more of the eligible offered acres.	Yes	No
11	EQIP planned practice(s) benefit a federal threatened or endangered species or a state rare species.	Yes	No
12	EQIP planned practice(s) on offered cropland acres include a conservation practice(s) that will reduce sheet and/or rill soil erosion from the existing condition, or treated to address air quality (for example, residue management, crop rotation, cover crop, and/or buffer practices) on 25 percent or more of the eligible cropland acres.	Yes	No
13	EQIP planned practice(s) on offered cropland acres include a conservation practice(s) that will reduce sheet and/or rill soil erosion from the existing condition, or treated to address air quality (for example, residue management, crop rotation, cover crop, and/or buffer practices) on 50 percent or more of the eligible cropland acres.	Yes	No
14	EQIP planned practice(s) on offered cropland acres include a conservation practice(s) that will reduce sheet and/or rill soil erosion from the existing condition, or treated to address air quality (for example, residue management, crop rotation, cover crop, and/or buffer practices) on 75 percent or more of the eligible cropland acres.	Yes	No
15	Application includes EQIP planned practice(s) on currently irrigated cropland that will improve Irrigation Water Management efficiencies on 50 percent or more of the eligible offered cropland acres.	Yes	No
16	Application includes EQIP planned practice(s) on currently irrigated cropland that will improve Irrigation Water Management efficiencies on 75 percent or more of the eligible offered cropland acres.	Yes	No
17	Planned EQIP cropland practices include Nutrient Management on 50 percent or more of the eligible offered cropland acres.	Yes	No
18	Planned EQIP cropland practices include Nutrient Management on 75 percent or more of the eligible offered cropland acres.	Yes	No

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Missouri Environmental Quality Incentives Program (EQIP) 2008 Callaway County Application Data Form			
Missouri State Issues			
19	Application includes EQIP planned practice(s) that will improve grazing efficiency through a prescribed grazing system on 25 percent or more of the eligible offered acres.	Yes	No
20	Application includes EQIP planned practice(s) that will improve grazing efficiency through a prescribed grazing system on 50 percent or more of the eligible offered acres.	Yes	No
21	Application includes EQIP planned practice(s) that will improve grazing efficiency through a prescribed grazing system on 75 percent or more of the eligible offered acres.	Yes	No
22	Application includes planned forest stand improvement (thinning) on woodland stands needing treatment, development of a conservation plan on forest land, and/or planned treatment of eroding areas on forest land (harvest trails, log landing areas, gullies, etc).	Yes	No
23	Application includes a resource concern(s) subject to Local, County, State, or Federal Regulation.	Yes	No
24	Application is on existing livestock feeding operation and includes planned improvements to an existing animal waste management system, and/or development of a CNMP by a TSP.	Yes	No
25	Application includes an existing animal feeding operation with a current CNMP developed prior to submission of EQIP application.	Yes	No
26	EQIP planned practices on livestock confinement facilities address air quality odor mitigation needs.	Yes	No
27	EQIP planned practices on farmstead headquarters area address energy conservation needs which have a positive impact on mitigating air temperature and air movement.	Yes	No
Local Issues			
28	Will more than 50% of the cropland acres treated in EQIP have a Land Capability Class of 3 or higher?	Yes	No
29	Will more than 70% of the cropland acres treated in EQIP have a Land Capability Class of 3 or higher?	Yes	No
30	Will more than 85% of the cropland acres treated enrolled in EQIP have a Land Capability Class of 3 or higher?	Yes	No
31	Will the planned EQIP practices include the Pest Management (595) conservation practice and the Nutrient Management (590) and/or the Waste Utilization (633) conservation practices on 100% of the enrolled cropland?	Yes	No
32	Will the planned EQIP practices include the Forest Stand Improvement (666) conservation practice?	Yes	No
33	Will the planned EQIP practices include the Prescribed Grazing (528) conservation practice?	Yes	No
34	Will the planned EQIP practices include the Terrace (600) conservation practice?	Yes	No

Missouri Environmental Quality Incentives Program (EQIP)
2008 Callaway County Application Data Form

Planned Conservation Practices

The following list contains every conservation practice eligible for 2008 EQIP. List the field(s) for each conservation practice(s) that is planned for financial assistance through this EQIP application.

____ Agrichemical Mixing Facility
____ Alley Cropping
____ Anaerobic Digester - Ambient Temp.
____ Anaerobic Digester - Controlled Temp.
____ Animal Mortality Facility
____ Brush Management
____ Closure of Waste Impoundments
____ Composting Facility
____ Comprehensive Nutrient Mgmt. Plan
____ Conservation Cover
____ Conservation Crop Rotation
____ Contour Buffer Strips
____ Cover Crop
____ Critical Area Planting
____ Diversion
____ Drainage Water Management
____ Early Successional Habitat Dev/Mgmt
____ Fence
____ Field Border
____ Filter Strip
____ Forest Slash Treatment
____ Forest Stand Improvement
____ Forest Trails and Landings
____ Grade Stabilization Structure
____ Grassed Waterway
____ Heavy Use Area Protection
____ Herbaceous Wind Barriers
____ Irrigation Land Leveling
____ Irrigation Systems - Microirrigation
____ Irrigation System - Sprinkler
____ Irrigation System - Surface and Subsurface
____ Irrigation System - Tailwater Recovery
____ Irrigation Water Conveyance
____ Irrigation Water Management
____ Manure Transfer
____ Nutrient Management
____ Pasture and Hayland Planting
____ Pest Management
____ Pipeline
____ Prescribed Burning
____ Prescribed Forestry
____ Prescribed Grazing
____ Pumping Plant
____ Residue Management, No Till/Strip Till
____ Restoration & Mgmt of Declining Habitats
____ Riparian Forest Buffer
____ Shallow Water Management for Wildlife
____ Silvopasture Establishment
____ Spring Development
____ Stream Crossing
____ Streambank and Shoreline Protection
____ Stripcropping
____ Structure for Water Control
____ Terrace
____ Tree/Shrub Establishment
____ Tree/Shrub Site Preparation
____ Underground Outlet
____ Upland Wildlife Habitat Management
____ Use Exclusion
____ Vegetative Barrier
____ Vertical Drain
____ Waste Facility Cover
____ Waste Storage Facility
____ Waste Treatment Lagoon
____ Waste Utilization
____ Water and Sediment Control Basin
____ Water Well
____ Watering Facility
____ Well Decommissioning
____ Wetland Restoration
____ Wetland Wildlife Habitat Management
____ Wildlife Watering Facility
____ Windbreak/Shelterbelt Establishment

SEIZING A WATERSHED MOMENT

Making EQIP Work for Water Quality in 10 Mississippi River Border States

Environmental Quality Incentives Program
State Report 7 of 10

ENVIRONMENTAL WORKING GROUP

APPENDIX – STATE REPORTS

MISSISSIPPI
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM

OVERVIEW

Mississippi received an average of $18.6 million in EQIP funds for technical and financial assistance per year from 2003 to 2007, ranking it 6th out of the 10 states that border the Mississippi River for EQIP funds. Approximately 90 percent of MS-EQIP funds are allocated to the state's 82 counties while the remaining funds are held at the state level to address statewide issues including Poultry Litter Distribution and Small Scale Farmers.

Applications to participate in EQIP are evaluated using multiple ranking sheets that include: (1) national priorities (2) state issues and (3) a cost- efficiency score. Local Work Groups have the option of adding local issues questions to any of the ranking sheets. MS-EQIP uses 9 ranking criteria sheets to evaluate applications dealing with (1) animal waste, (2) sustainable forestry, (3) grazing land, (4) sedimentation, (5) water quantity, (6) small scale farmer initiatives on cropland, (7) small scale farmer initiatives on grazing land, (8) poultry litter transfer for cropland, and (9) poultry litter transfer for pasture.

Local Work Groups in Mississippi identify resource concerns and recommend practices, payment rates, cost-share levels and funding needs through a "conservation needs assessment" for the State Conservationist. The State Conservationist convenes the State Technical Committee to review the resource concerns and county requests. Eligible resource concerns, practices, payment rates, etc. are set at the state level. Counties may then choose which concerns will be addressed in their respective county and the percentage of county funding allocation to address those resource concerns. The counties may also reduce the number of eligible practices, further restrict practice requirements, and add any local criteria to the ranking sheets.

MISSISSIPPI EQIP WEBSITE

http://www.ms.nrcs.usda.gov/programs/2008StatewideEQIPProgramPriorities1.html

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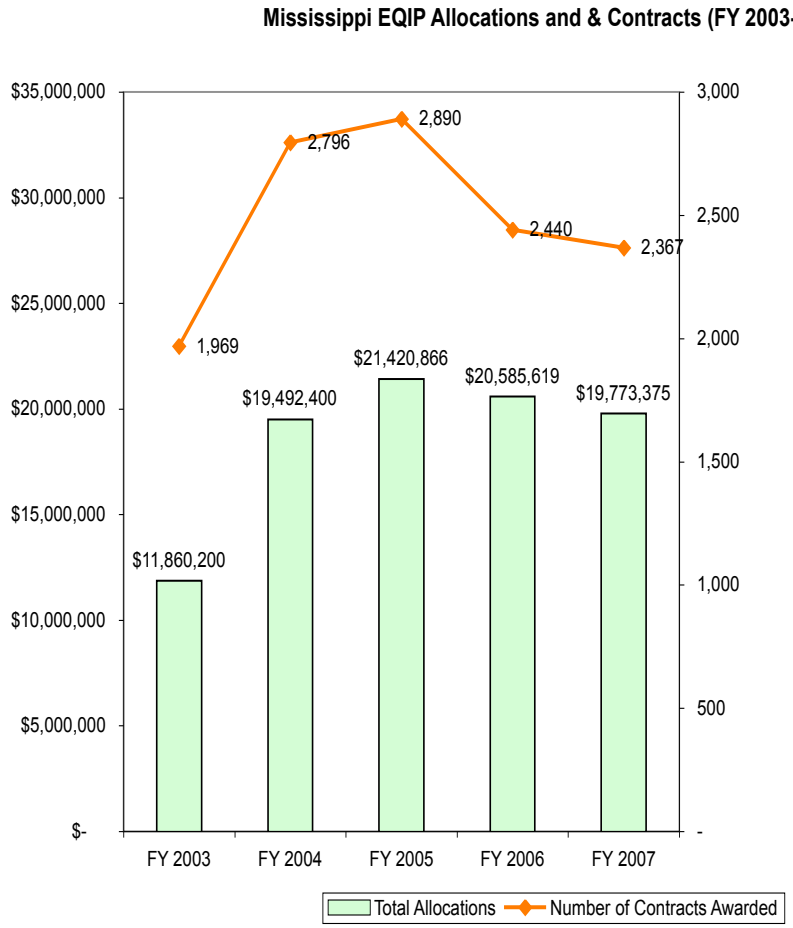
FUNDING AND REACH OF EQIP

EQIP funding is allocated to states using a national formula. The chart below shows the amount of financial and technical assistance Mississippi has received from FY2003 to 2007 and the number of contracts awarded each fiscal year. A total of 12,462 contracts have been entered into with producers between 2003 and 2007, providing $93.1 million and addressing 1,149,835 acres in the state.



Source: EWG compiled annual data from EQIP's "Allocation" and "Contract" tables found on the USDA NRCS website: http://www.nrcs.usda.gov/programs/EQIP/.

KEY FACTORS ANALYSIS

We analyzed the following factors for indications of the extent to which EQIP in Mississippi is focused on reducing sediment and nutrient loads to streams, lakes, and rivers: (1) the presence or absence of qualitative or quantitative goals for pollutant reductions, (2) methods used to allocate state-level funds to counties or other sub-state levels or to specific projects or priorities, and (3) the application ranking criteria used to

select participants in EQIP. We relied primarily on the information and data presented on the Natural Resources Conservation Service (NRCS) website to complete this analysis and followed up on our investigation with interviews of the state EQIP program managers.

Goals

Mississippi EQIP's Poultry Litter Transport Program does set a goal of transporting excess poultry litter from 10 counties with high concentrations of poultry production and high soil phosphorus content to other areas that can safely use the litter.

Other than this program, EWG did not find evidence to suggest that Mississippi EQIP has a) established explicit quantitative or qualitative goals for EQIP to clean up agricultural sources of pollution, b) identified which lakes, streams, or tributaries are priorities for improvement, c) set a timetable to achieve those goals, or d) established a means to track progress toward the goals. Mississippi's application ranking systems do create an implicit set of priorities for treating water quality, but measurable goals and timelines do not exist.

EWG recommends that Mississippi EQIP set clear and specific goals for how much and what types of agricultural pollution need to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals. EWG also recommends that Mississippi EQIP develop systems to track, evaluate, and report on the environmental performance of EQIP.

Fund Allocation

Approximately 92 percent of Mississippi EQIP funds are allocated to the state's 82 counties while the remaining funds are withheld at the state level to address the statewide issues (Poultry Litter Distribution Project and Small Scale Farmers Initiative).

Mississippi uses four factors that are not weighted to allocate funds to the counties:

1. County request
2. Previous funding demands and performance
3. Priority resource concerns
4. Other related factors

According to Al Garner, Mississippi's Assistant State Conservationist, "other related factors," include whether there are ample staff to handle contract administration, that is, the workload. This includes: number of existing contracts a field office has to service, whether practices are being applied on schedule, the type of practices (such as grade stabilization structures, which require significant time, versus some grazing practices like fencing and watering facilities, that do not require as much time), backlog of contracts, and the staff ability to assist participants.

EWG recommends that if funds are allocated directly to local jurisdictions, Mississippi EQIP should use allocation formulas based primarily on natural resource and environmental factors to channel more funding to localities with significant environmental problems associated with agriculture.

There are 5 prioritized resource concerns for Mississippi EQIP and the table below shows a general breakdown of funding for these resource concerns and the statewide issue programs.

Mississippi EQIP funding categories and typical funding levels	
Funding categories	**Funding levels**
Water Quality – Animal Waste	10%
Water Quality - Sedimentation	30%
Water Quantity	20%
Grazing Lands	20%
Forestry	10%
Statewide Issues (Small Scale Farmers Initiatives and Poultry Litter Distribution Project)	10%
Total	100%

Source: Al Garner, MS-EQIP Assistant State Conservationist.

Thus, 40 percent of Mississippi EQIP funds typically goes towards the state's two water quality resource concerns: animal waste and sedimentation.

The state program manager sets the statewide funding categories. In general MS-EQIP allocates about $1 million for Small Scale Farmers and about $400,000 to $500,000 for Poultry Litter Distribution each year. EWG regards the Poultry Litter Transfer Program as a "Special Project" because it targets EQIP funds to specifically identified geographic areas. However, the level of funding is small; at about $450,000 per year, this is 2.4 percent of the $18.6 million Mississippi EQIP spends on average every year in technical and financial assistance.

Mississippi uses EQIP funds to transfer litter from: Newton, Neshoba, Jones, Smith, Wayne, Walthall, Simpson, Leake, Jasper, and Clark counties for use on cropland or pasture land outside these counties. According to Garner, "The counties were selected based upon the concentration of poultry production and their high soil phosphorus content. This program will ease the burden of land applying nutrients while dealing with a concentrated poultry industry and more challenging phosphorus regulations."

According to Garner, "Approximately 87 farmers have participated in the program since 2007, spreading litter on about 15,000 acres outside the high phosphorus prone watersheds. This is a partnership effort involving NRCS, Mississippi Farm Bureau, Mississippi Poultry Association and Mississippi State University. About 2.5% of the state's EQIP funds have been utilized for this effort (in 2007 and 2008 amounting to

$756,640). The effort will continue in 2009 addressing the water quality resource concerns in this poultry production belt."

The five resource concerns (animal waste, sustainable forestry, grazing land, sedimentation, water quantity) are funding categories at the discretion of the county Local Work Group (LWG). The LWG determines, within state guidelines, the percentage of their county allocation that will be distributed to each resource concern. The LWG may also reduce the number of eligible practices, further restrict practice requirements and add any local criteria to the 9 ranking sheets.

To better understand how each of the 82 counties in Mississippi intended to use their 2008 funds, see the Appendix for a table displaying this funding allocation by resource concern.

To show the wide variability in funding priorities in Mississippi counties, Adams County and Leak County's funding intentions by resource concern were chosen and reproduced below.

Percentage of 2008 Funds Addressing the 5 Statewide Resource Concerns in Two Mississippi Counties		
Resource Concerns	**Adams County**	**Leake County**
Water Quality – Animal Waste	0	65%
Water Quality – Sedimentation	25%	5%
Water Quantity	0	0
Grazing Lands	70%	20%
Forestry	5%	10%

EWG recommends that Mississippi EQIP's best opportunity for improving water quality is to fund well-designed, watershed-based clean-up projects. This approach encourages multiple farmers within a watershed to reduce pollution to a specific lake, stream, or tributary to the Mississippi River.

The problem-solving advantages of this approach are well understood. They include focusing resources in specific locations to solve well-defined problems using a strategy that directs funding to those farmers within the watershed who can do the most to reduce pollution. Ideally, such water quality improvement projects include developing monitoring and evaluation systems to adjust the strategy and resource allocations based on the results that are being realized. Ramping up the emphasis in EQIP on such watershed-based clean-up projects would dramatically increase the effectiveness of the program.

EWG recommends that Mississippi EQIP allocate 60 percent of its EQIP funds to

watershed-based clean-up projects by 2012. Mississippi EQIP should then allocate the remaining 40 percent of funds by 2012 to funding pools that target high priority natural resource and environmental problems. These state-level funding pools create important opportunities to focus EQIP on the most pressing designated problems. The funding pools allow EQIP managers to select the best applications from all the applications proposing to address the same natural resource or environmental problem.

Application Ranking Criteria

Applications to participate in EQIP are evaluated using multiple ranking sheets that include: (1) national priorities (2) state issues and (3) a cost- efficiency score. Local Work Groups have the option of adding local issues questions to any of the ranking sheets and about 60 percent of the counties use local issue questions.[1] MS-EQIP uses 9 ranking criteria sheets to evaluate applications dealing with (1) animal waste, (2) sustainable forestry, (3) grazing land, (4) sedimentation, (5) water quantity, (6) small scale farmer initiatives on cropland, (7) small scale farmer initiatives on grazing land, (8) poultry litter transfer for cropland, and (9) poultry litter transfer for pasture. Each sheet is called an "Application Ranking Summary."

Each of the 9 Summaries have the same 5 national priority issue questions while each document has a different set of state issue questions, numbering from 6 to 12, reflecting the resource concern, the initiative, or project of each Summary. Each county can add local issue questions for their specific county resource concern. All the ranking criteria questions are in a Yes/No format and no points are shown online.

Points in each section are multiplied to achieve the following desired distribution of points in the Ranking Summaries: National: 13 to 23 percent, State: 33 to 43 percent, and Local: 24 to 34 percent. Points in each section, including the cost-efficiency section, are then summed to a final score. Applications that have the highest scores receive the highest rank. For information purposes, the multipliers for the national, state, and local issues scores are each 0.10. The multipliers for each resource concern are: Animal waste – 100, Forestry – 100, Sedimentation – 20, Grazing – 10, Water Quantity – 30, and Small Farmers Initiative - Cropland – 10 and Grazing Lands – 10. See Box 1 for background information on the cost-efficiency score.

Upon request, Garner provided us with FY2002 versions of the 9 Application Ranking Summaries that did display the points awarded to each question. (See the Appendix.)

[1] Information provided in writing by Al Garner, MS-EQIP Assistant State Conservationist.

Box 1. The Cost-Efficiency Score

A cost-efficiency score is generated for each application to determine how effective the cost-shared practices will be at addressing the priority resource concerns (soil, water, air, plant, animal, and human). The cost-efficiency score is calculated by multiplying the practice(s)'

Conservation Practice Physical Effects (CPPE) value(s)
x Service life of the practice(s)
/ Average cost of installing and maintaining the practice(s)

NRCS maintains a national database of each practice's CPPE value. CPPE values range from -5 to + 5 reflecting the practice's ability to worsen or improve each resource concern. The CPPE value can be modified by the state or local jurisdiction to reflect the soil, weather, topographic, and other state or local conditions that may impact the effectiveness of the practice.

All 10 Mississippi River border states are using the NRCS Pro-Tracts Cost-Efficiency software to calculate a Cost-Efficiency score for each application. However, because the Cost-Efficiency score is embedded in the software, this step in the ranking process is not transparent since the state EQIP managers were unable to fulfill our request of reviewing the CPPE values given to practices funded by EQIP.

To determine how much emphasis Mississippi EQIP places on the reduction of nutrient and sediment pollution and on geographic priority areas, we attempted a rough estimate of the percentage of raw, unweighted points assigned to questions that appear to address these priorities. We acknowledge that this approach is incomplete and potentially misleading, as it does not account for the effect of the multipliers and the cost-efficiency score in the Ranking Criteria. In addition, the lack of specificity in the ranking criteria made it difficult to identify points for reducing sediment and nutrient pollution and points for applications located in priority areas. These complications are described in Box 2.

Regarding emphasis on geographic priorities, a review of the 9 Application Ranking Summaries indicates that Mississippi appears to give modest emphasis to geographic priorities.

In each of the 9 Summaries, the 5 National Priority Issues questions are identical. National Priorities Question 1 includes a reference to impaired watersheds, and Mississippi instructs applicants to only respond affirmatively to this question if their application occurs within the impaired watersheds identified in one or more of the state's 3 Impaired Waters Area Maps (See Appendix for maps). The maps show waters impaired for all three of the following pollutants - sediments, nutrients, and pesticides – and the pollutants are indistinguishable.

"Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?"

Box 2. The Lack of Specificity in Ranking Criteria

The ranking criteria in all 10 Mississippi River border states lacked sufficient specificity for us to determine with real certainty the emphasis each state was giving in its ranking sheets to the reduction of sediment and nutrient pollution and to areas of geographic importance. For example, many ranking factors do not specify the particular source of natural resource or environmental problems, such as sediment or nutrient loss from cropland. Instead the ranking factors refer to more generic sources of problems, such as nonpoint source pollution.

In those cases where more specific types of pollutants like sediments or nutrients were cited, they were usually included in a longer list of pollutants, such as pathogens, pesticides, or excess salinity, making determination of the priorities implicit in the ranking criteria difficult. A similar lack of specificity hampered our ability to determine the emphasis placed on location of an application within a priority watershed or other geographic unit.

Despite these difficulties, it is clear that the factors used in ranking criteria and the priority assigned those factors through point allocations and multipliers are critical determinants of effectiveness of EQIP in reducing sediment and nutrient pollution.

In State Issues sections of the 9 Summaries (which are not identical), only 2 Summaries award points for applications located in an impaired watershed. The Small Scale Farmer Initiative-Grazing Lands and the Small Scale Farmers Initiative – Cropland Summaries give 20 points each, or only about 7 percent of the 300 maximum possible points, in each of the Summaries' State sections to applications from impaired watersheds.

Two Summaries give points for excluding livestock from streams. The Small Scale Farmers Initiative – Grazing Lands and the Grazing Lands Summaries give 30 and 40 points, respectively, or 7 and 11 percent of the Summaries' maximum possible number of points.

The Animal Waste Summary gives 80 points for applications that include stream setbacks, or about 22 percent of the maximum possible number of points.

The Poultry Litter Distribution Ranking Summary gives the largest percentage of its points in the State Issues section to location-specific issues, including: 70 points for applications that transfer poultry litter out of one of 10 listed counties, 40 points for transferring the litter 100 miles or more from the county of origin, and 20 points if 50 percent or more of the receiving land has a soil test phosphorus rating of low. Thus,

130 out of the 250 maximum possible points (52 percent) in this Summary are provided for geographically specific priorities.

Regarding emphasis on reducing nutrient and sediment pollution, a review of Mississippi's General Application Ranking Summary does not provide clear answers about how much priority Mississippi EQIP places on these two specific water quality impairments. For example, the National Priority Question 1 does mention the words "nutrients" and "sediment" but the question lacks sufficient specificity for us to distinguish between points awarded for treatment of nutrients and sediments versus points awarded for reducing excess salinity or pesticides.

The National Priorities Question 4 does allocate 50 points (25 percent of the 200 total points available from the National Priorities section in each Summary) for applications that specifically address soil erosion and sedimentation.

> "Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?"

The nature of the Sedimentation and the Animal Waste Resource Concern Summaries indicate that they focus solely on soil erosion and sedimentation and on animal waste, respectively. Animal waste is a major source of nutrient pollution. In the state issues section of the Sedimentation Resource Concern Summary, the first 5 questions and the 9th question award 300 out of the 380 maximum potential raw points or 79 percent for addressing soil erosion and generic water quality issues (increasing the Soil Conditioning Index; installing field borders or hedgerow; reducing sheet and rill erosion above "T"; reducing gully erosion; cropland conversion to permanent cover; 4 or more conservation practices planned). The remaining 3 questions are of an administrative nature.

In the state issues section of the Animal Waste Resource Concern Summary, 3 of the 7 state issue questions give 200 of the maximum possible 360 points (56 percent) for practices that are likely to result in a reduction of nutrient pollution (stream setbacks; closure of waste impoundments; field borders or hedgerows) The remaining 4 questions are of an administrative nature.

Despite Mississippi EQIP appearing to give a large number of unweighted points in the reviewed Summaries to the most pressing concerns – nutrient and sediment pollution reduction in high priority areas – only about 7 percent of points are given to applications from priority watersheds and in only 2 of the 9 Summaries. Thus, it is unlikely that Mississippi's ranking system can ensure that applications in the priority watersheds will rise to the top of the ranking list and get selected for funding.

EWG recommends that Mississippi EQIP revise their ranking systems to increase the priority given to applications located in high priority watersheds that will reduce sediment and nutrient pollution. Sediment and nutrient pollution are the two most important pollutants of streams, lakes, and reservoirs in the 10 states bordering the Mississippi River, the main stem of the Mississippi River, and the Dead Zone in the Gulf of Mexico.

Conclusion

We find that EQIP has not been deployed as effectively as it could be in Mississippi or any of the 9 states that border the Mississippi River. The methods used to decide how to spend EQIP dollars within the state and which farmers will get those dollars are more likely to result in diffuse and fragmented efforts to reduce pollution from farms rather than the focused and coordinated effort needed to solve both local and regional water pollution problems.

Watershed-based water quality clean-up projects are the best use of federal taxpayer resources and offer the greatest hope for cleaning up the unintended environmental damage of agriculture. These projects entail setting goals to clean up specific bodies of water that are deemed the highest priorities, determining how many of the most cost effective practices are needed, and persuading key farmers to participate in the project.

To quickly ramp up the effectiveness of EQIP, Mississippi NRCS should:

1. Set clear and specific goals for how much pollution needs to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals.

2. Use 60 percent of EQIP dollars by 2012 to fund watershed-based water quality clean-up projects that encourage multiple farmers within selected watersheds to reduce pollution to specific lakes, streams, or tributaries to the Mississippi River.

3. Use 40 percent of EQIP funds by 2012 in state-level funding pools to target the highest priority natural resource and environmental problems in each state.

4. Select farmers to participate in EQIP who can do the most to contribute to watershed-based clean-up projects or solve high priority problems.

APPENDIX—2008 Mississippi EQIP Ranking Criteria
Percent of MS-EQIP Funds Allocated Towards 2008 Resource Concerns in Each County

2008 Resource Concerns and Percent Funds to Be Addressed by County						
	Forestry	Grazing	Water Quantity	Sedimen-tation	Animal Waste	TOTAL
	%	%	%	%	%	%
Adams	5	70		25		100%
Alcorn	10	55		35		100%
Amite	25	30		15	30	100%
Attala	30	35		20	15	100%
Benton	26	24		50		100%
Bolivar			70	30		100%
Calhoun	18	26		40	16	100%
Carroll	5	35		60		100%
Chickasaw	10	50		30	10	100%
Choctaw	40	45		5	10	100%
Claiborne	4	60		36		100%
Clarke	30	55		10	5	100%
Clay	25	45		30		100%
Coahoma			70	30		100%
Copiah	15	40		25	20	100%
Covington	15	35		5	45	100%
DeSoto		15		85		100%
Forrest	30	40		20	10	100%
Franklin	35	33		22	10	100%
George	40	50		10		100%
Greene	50	25		10	15	100%
Grenada	6	19		75		100%
Hancock	20	50		20	10	100%
Harrison	35	40		15	10	100%
Hinds	15	40		45		100%
Holmes	20	30	10	40		100%
Humphreys			50	50		100%
Issaquena			75	25		100%
Itawamba	31	40		29		100%
Jackson	20	65		15		100%
Jasper	40.5	39.5			20	100%
Jefferson		40		45	15	100%
Jeff Davis	28	40		10	22	100%
Jones	25	25		5	45	100%
Kemper	15	30		50	5	100%
Lafayette	10	40		50		100%
Leflore			50	50		100%
Lamar	10	40		10	40	100%
Lauderdale	41	39		16	4	100%
Lawrence	34	36		10	20	100%

2008 Resource Concerns and Percent Funds to Be Addressed by County						
	Forestry	Grazing	Water Quantity	Sedimen-tation	Animal Waste	TOTAL
	%	%	%	%	%	%
Leake	10	20		5	65	100%
Lee	15	34		51		100%
Lincoln	32	38		16	14	100%
Lowndes	20	40		40		100%
Madison	15	40		45		100%
Marion	15	50		10	25	100%
Marshall	10	10		80		100%
Monroe	5	44	5	46		100%
Montgomery	10	30		60		100%
Neshoba	25	30		5	40	100%
Newton	25	35		4	36	100%
Noxubee		30	30	40		100%
Oktibbeha	25	45	17	13		100%
Panola		40		60		100%
Pearl River	35	55		10		100%
Perry	30	40		20	10	100%
Pike	20	30		20	30	100%
Pontotoc	26	24		50		100%
Prentiss	30	32		38		100%
Quitman			60	40		100%
Rankin	18	50		2	30	100%
Scott	5	25		15	55	100%
Sharkey			70	30		100%
Simpson	15	40		10	35	100%
Smith	10	45		15	30	100%
Stone	20	70		10		100%
Sunflower			65	35		100%
Tallahatchie	10	30	20	40		100%
Tate	5			95		100%
Tippah	10	30		60		100%
Tishomingo	32	33		35		100%
Tunica			50	50		100%
Union	14	42		44		100%
Walthall	25	30		22	23	100%
Warren		20	5	75		100%
Washington			60	40		100%
Wayne	25	15		10	50	100%
Webster	26	24		50		100%
Wilkinson	15	25		60		100%

2008 Resource Concerns and Percent Funds to Be Addressed by County						
	Forestry	Grazing	Water Quantity	Sedimen-tation	Animal Waste	TOTAL
	%	%	%	%	%	%
Winston	25	60		5	10	100%
Yalobusha	20	45		35		100%
Yazoo	10	35	15	40		100%

MS-EQIP FY 2008 Application Ranking Summaries

Natural Resources Conservation Service

Application Ranking Summary
Litter Distribution Project-Cropland

Program: EQIP 2002	Ranking Date:
Ranking Tool: Litter Distribution Project-Cropland	
Final Ranking Score:	
Planner:	
Farm Location:	

National Priorities Addressed

Issue Questions	Responses
1. Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?	50 Point(s)
2. Will the treatment you intend to implement using EQIP result in a considerable amount of ground or surface water conservation?	50 Point(s)
3. Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	10 Point(s)
4. Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	50 Point(s)
5. Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	40 Point(s)

State Issues Addressed

Issue Questions	Responses
1. Will the poultry litter be transferred from one of the following counties: Newton; Neshoba; Jones; Smith; Wayne; Walthall; Simpson; Leake; Jasper; or Clark?	70 Point(s)
2. Will the litter be incorporated?	40 Point(s)
3. Will the litter be transferred 100 miles or greater from the county of origin?	40 Point(s)
4. Will the litter be transferred between 75 to 99 miles from the county of origin?	25 Point(s)
5. Will the litter be transferred between 50 to 74 miles from the county of origin?	15 Point(s)
6. Has applicant had a previous contract and not completed items on schedule?	-20 Point(s)
7. Has applicant self certified as a limited resource farmer (LRF)?	20 Point(s)
8. Will this contract be for two years or less?	60 Point(s)
Questions 9-11: Answer only one.	

9. Does the predominance (greater than 50%) of the land application have a soil test Phosphorus Rating of Low?	20 Point(s)
10. Does the predominance (greater than 50%) of the land application have a soil test Phosphorus Rating of Medium?	10 Point(s)
11. Does the predominance (greater than 50%) of the land application have a soil test Phosphorus Rating of High?	0 Point(s)

Natural Resources Conservation Service

Application Ranking Summary
Small Scale Farmer Initiative-Grazing Lands

Program: EQIP 2002	Ranking Date:
Ranking Tool: Small Scale Farmer Initiative-Grazing Lands	
Final Ranking Score:	
Planner:	
Farm Location:	

National Priorities Addressed

Issue Questions	Responses
1. Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?	59 Point(s)
2. Will the treatment you intend to implement using EQIP result in a considerable amount of ground or surface water conservation?	50 Point(s)
3. Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	1 Point(s)
4. Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	50 Point(s)
5. Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	40 Point(s)

State Issues Addressed

Issue Questions	Responses
1. Will treatment increase the number of grazing cells?	25 Point(s)
2. Will treatment result in adequate watering facilities in each grazing cell?	25 Point(s)
3. Will treatment result in livestock being restricted from streams?	30 Point(s)
4. Will treatment result in a safe new or existing watering facility?	20 Point(s)

5. Will invasive and/or noxious species be treated?	30 Point(s)
6. Will legumes be inter-seeded on a minimum of 30% of offered pasture acres?	20 Point(s)
7. Will treatment result in conversion to native grasses?	35 Point(s)
8. Is applicant located in an impaired watershed?	20 Point(s)
9. Will treatments result in the establishment of silvopasture?	15 Point(s)
10. Is this land pasture / idle land being converted to trees?	20 Point(s)
11. Will conversion treatment require no site preparation or only light site preparation?	20 Point(s)
12. Will conversion treatment require medium site preparation?	10 Point(s)
13. Will treatment of grazing lands include pest management removal of woody vegetation on two acres or less?	20 Point(s)
14. Will treatment of grazing lands include pest management removal of woody vegetation on more than two acres ?	10 Point(s)

Natural Resources Conservation Service

Application Ranking Summary
Small Scale Farmer Initiative-Cropland

Program: EQIP 2002	Ranking Date:
Ranking Tool: Small Scale Farmer Initiative-Cropland	
Final Ranking Score:	
Planner:	
Farm Location:	

National Priorities Addressed

Issue Questions	Responses
1. Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?	59 Point(s)
2. Will the treatment you intend to implement using EQIP result in a considerable amount of ground or surface water conservation?	50 Point(s)
3. Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	1 Point(s)
4. Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	50 Point(s)

5. Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	40 Point(s)

State Issues Addressed

Issue Questions	Responses
1. Will treatment increase SCI on cropland?	30 Point(s)
2. Will treatment include conservation buffers?	20 Point(s)
3. Will sheet and rill erosion above acceptable levels (T) be treated?	30 Point(s)
4. Will all active gullies be treated? (gully erosion)	30 Point(s)
5. Will cropland be converted to permanent cover? (permanent grass or trees)	30 Point(s)
6. Does application include practices with a lifespan greater than one year?	20 Point(s)
7. Is applicant located in an impaired watershed?	20 Point(s)
8. Will treatment include installation of an irrigation system ? (441,442)	60 Point(s)
9. Has applicant grown alternative crops for at least two of the last five years?	30 Point(s)
10. Is applicant's alternative crop production greater than 20% of their cropland acreage?	30 Point(s)

Natural Resources Conservation Service

Application Ranking Summary
Sedimentation Resource Concern

Program: EQIP 2002	Ranking Date:
Ranking Tool: Sedimentation Resource Concern	
Final Ranking Score:	
Planner:	
Farm Location:	

National Priorities Addressed

Issue Questions	Responses
1. Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?	50 Point(s)
2. Will the treatment you intend to implement using EQIP result in a considerable amount of ground or surface water conservation?	50 Point(s)
3. Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	10 Point(s)
4. Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	50 Point(s)

5. Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	40 Point(s)

State Issues Addressed

Issue Questions	Responses
1. Will treatment increase SCI on cropland?	60 Point(s)
2. Will treatment include field borders or hedgerows?	60 Point(s)
3. Will sheet and rill erosion above acceptable levels (T) be treated?	60 Point(s)
4. Will gully erosion be treated?	60 Point(s)
5. Will cropland be converted to permanent cover?	40 Point(s)
6. Has applicant self certified as a limited resource farmer?	20 Point(s)
7. Has applicant had a previous contract and failed to complete items according to schedule?	-20 Point(s)
8. Will this contract be for two years or less?	60 Point(s)
Questions 9-11: If participant is planning to apply multiple conservation practices, answer only one.	
9. Are 4 or more conservation practices planned?	20 Point(s)
10. Are 2 to 3 conservation practices planned?	10 Point(s)
11. Is 1 conservation practice planned?	5 Point(s)

Natural Resources Conservation Service

Application Ranking Summary
Water Quantity Resource Concern

Program: EQIP 2002	Ranking Date:
Ranking Tool: Water Quantity Resource Concern	
Final Ranking Score:	
Planner:	
Farm Location:	

National Priorities Addressed

Issue Questions	Responses
1. Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?	50 Point(s)
2. Will the treatment you intend to implement using EQIP result in a considerable amount of ground or surface water conservation?	50 Point(s)
3. Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	10 Point(s)
4. Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	50 Point(s)

5. Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	40 Point(s)

State Issues Addressed

Issue Questions	Responses
1. Is applicant located in Aquifer Decline Area #1?	50 Point(s)
2. Is applicant located in Aquifer Decline Area #2?	40 Point(s)
3. Is applicant located in Aquifer Decline Area #3?	30 Point(s)
4. Is applicant located in Aquifer Decline Area #4	25 Point(s)
5. Has applicant had a previous contract and not completed items on schedule?	-20 Point(s)
6. Has applicant self certified as a limited resource farmer?	20 Point(s)
7. Will treatment result in negative water savings? (Example: Center Pivot System changed to Surface Application)	-20 Point(s)
8. Will treatment result in savings of 0-2 acre-inch/acre/year?	20 Point(s)
9. Will treatment result in savings of >2-6 acre-inch/acre/year?	30 Point(s)
10. Will treatment result in savings of >6-12 acre-inch/acre/year?	35 Point(s)
11. Will treatment result in savings of >12 acre-inch/acre/year?	50 Point(s)
12. Will this contract be for two years or less?	60 Point(s)

Natural Resources Conservation Service

Application Ranking Summary
Grazing Lands Resource Concern

Program: EQIP 2002	Ranking Date:
Ranking Tool: Grazing Lands Resource Concern	
Final Ranking Score:	
Planner:	
Farm Location:	

National Priorities Addressed

Issue Questions	Responses
1. Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?	50 Point(s)
2. Will the treatment you intend to implement using EQIP result in a considerable amount of ground or surface water conservation?	50 Point(s)
3. Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	10 Point(s)

4. Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	50 Point(s)
5. Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	40 Point(s)

State Issues Addressed

Issue Questions	Responses
1. Will treatment increase the number of grazing cells?	40 Point(s)
2. Will treatment result in adequate watering facilities in each grazing cell?	35 Point(s)
3. Will treatment result in livestock being restricted from streams?	40 Point(s)
4. Will treatment result in a safe new or existing watering facility?	30 Point(s)
5. Will invasive species be treated?	30 Point(s)
6. Will legumes be inter-seeded on a minimum of 30% of offered pasture acres?	30 Point(s)
7. Will treatment result in conversion to native grasses?	35 Point(s)
8. Has applicant self certified as a limited resource farmer?	20 Point(s)
9. Has applicant had a previous contract and not completed contract items according to schedule?	-20 Point(s)
10. Will treatment include establishment of field borders or hedgerows?	40 Point(s)
11. Will this contract be for two years or less?	60 Point(s)
Questions 12-14: If Nutrient Management (590) is being planned, answer only one.	
12. Are fertilizer AND lime needed?	20 Point(s)
13. Is only lime needed?	10 Point(s)
14. Is only fertilizer needed?	5 Point(s)

Natural Resources Conservation Service

Application Ranking Summary
Sustainable Forestry Resource Concern

Program: EQIP 2002	Ranking Date:
Ranking Tool: Sustainable Forestry Resource Concern	
Final Ranking Score:	
Planner:	
Farm Location:	

National Priorities Addressed

Issue Questions	Responses
1. Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?	50 Point(s)

2. Will the treatment you intend to implement using EQIP result in a considerable amount of ground or surface water conservation?	50 Point(s)
3. Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	10 Point(s)
4. Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	50 Point(s)
5. Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	40 Point(s)

State Issues Addressed

Issue Questions	Responses
1. Is this treatment pastureland/idle land conversion?	30 Point(s)
2. Will native vegetation be left along stream corridors (SMZs) in accordance with the MS BMP Handbook for forestry guidelines?	60 Point(s)
3. Will all offered land suited for longleaf pines or hardwoods be planted to these type trees?	60 Point(s)
4. Will treatments address erosion on roads, skid trails, and landings?	50 Point(s)
5. Will treatment result in control of mid-story hardwoods (QVM) in pine stands?	40 Point(s)
6. Will invasive species be treated on offered acres?	40 Point(s)
7. Has applicant self certified as a limited resource farmer?	20 Point(s)
8. Has applicant had a previous contract and not completed items according to schedule?	-20 Point(s)
9. Will this contract be for two years or less?	60 Point(s)

Natural Resources Conservation Service

Application Ranking Summary
Animal Waste Resource Concern

Program: EQIP 2002	Ranking Date:
Ranking Tool: Animal Waste Resource Concern	
Final Ranking Score:	
Planner:	
Farm Location:	

National Priorities Addressed

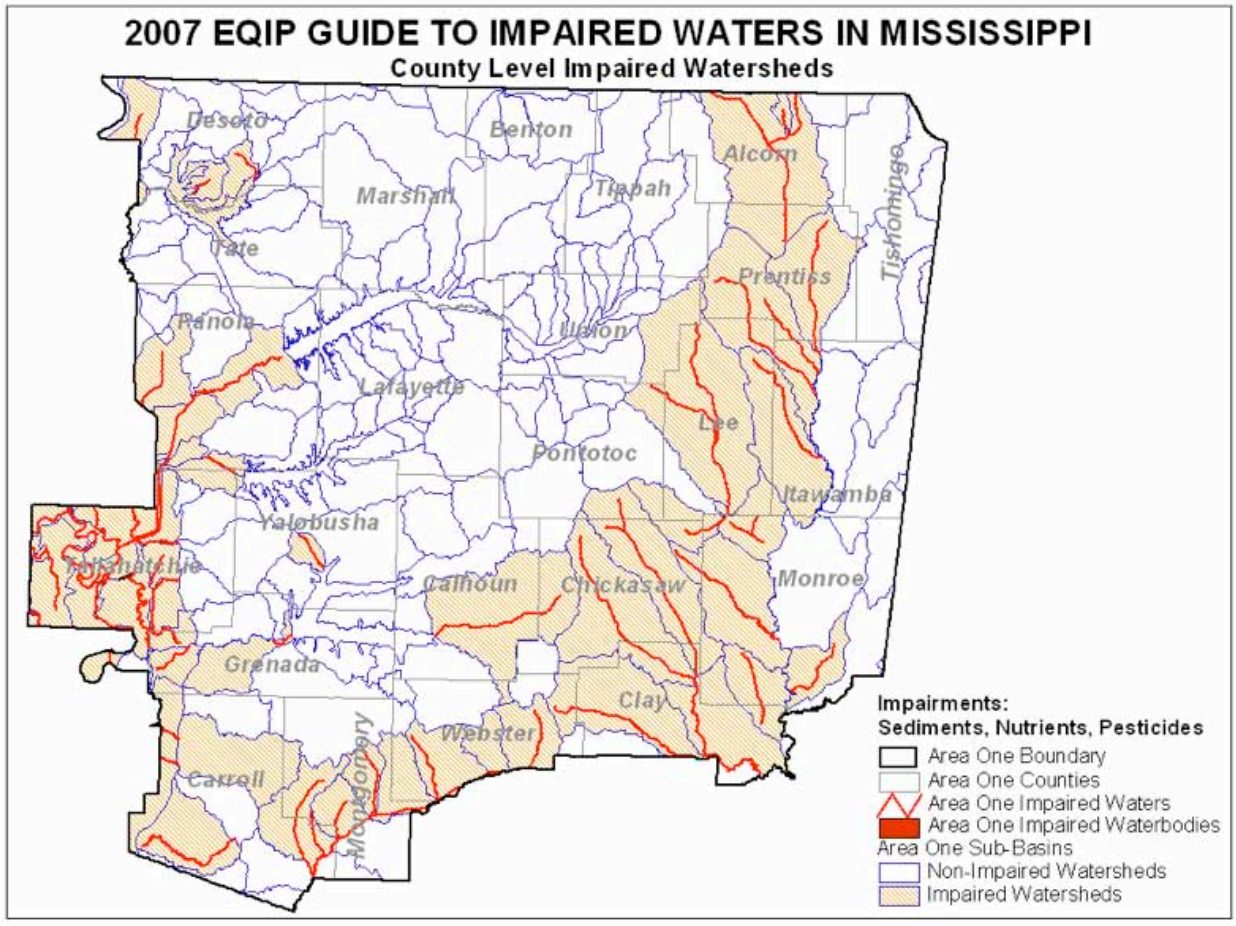
Issue Questions	Responses
1. Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?	50 Point(s)

2. Will the treatment you intend to implement using EQIP result in a considerable amount of ground or surface water conservation?	50 Point(s)
3. Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	10 Point(s)
4. Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	50 Point(s)
5. Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	40 Point(s)

State Issues Addressed

Issue Questions	Responses
1. Is this an existing or expanding operation?	80 Point(s)
2. Will stream set backs be present on this application?	80 Point(s)
3. Will Closure of Waste Impoundments be one of the treatments for this application?	60 Point(s)
4. Has applicant self certified as a limited resource farmer?	20 Point(s)
5. Has applicant on previous program contracts failed to complete contract items on schedule?	-20 Point(s)
6. Will treatment include establishment of field borders or hedgerows?	60 Point(s)
7. Will this contract be for two years or less?	60 Point(s)

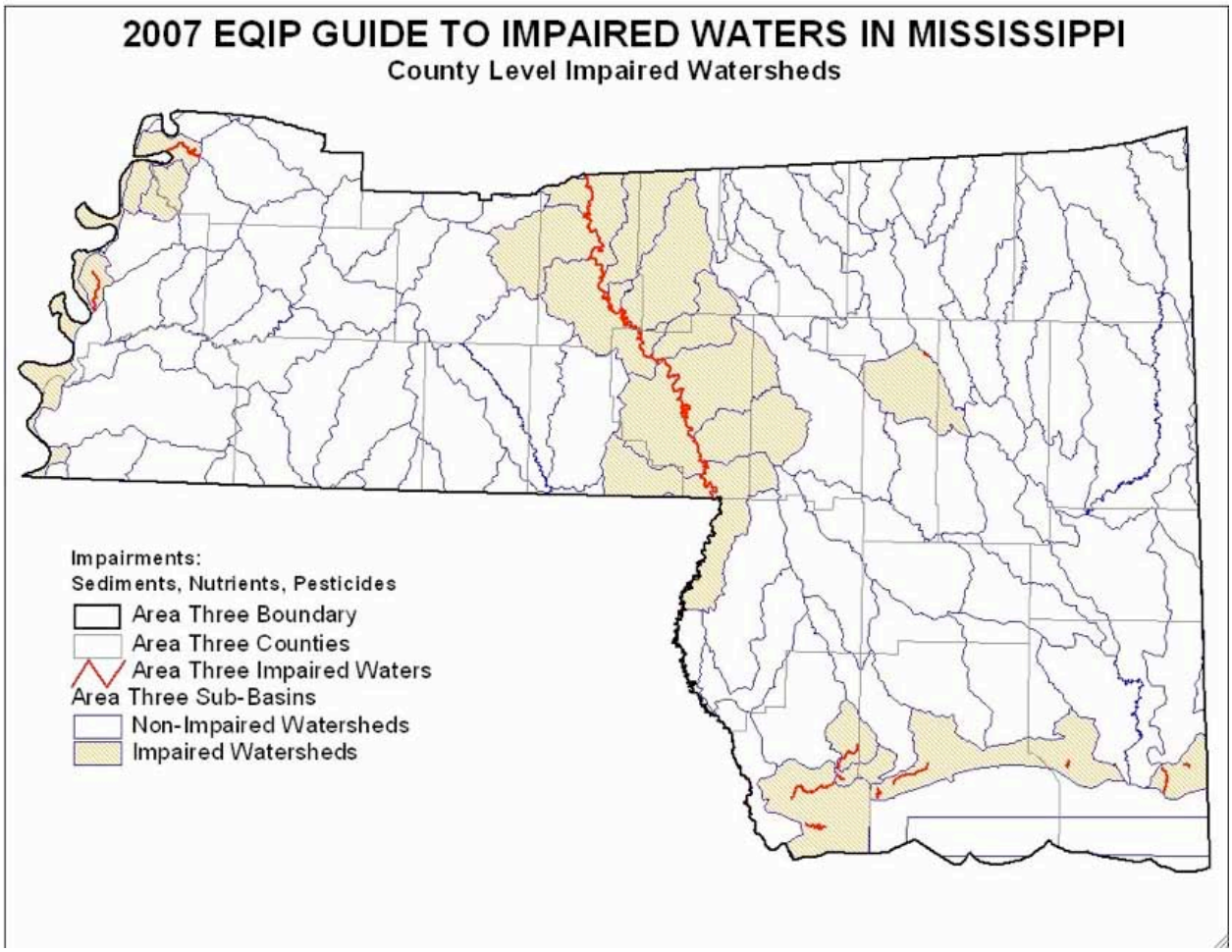
Mississippi Impaired Waters Maps
Area 1



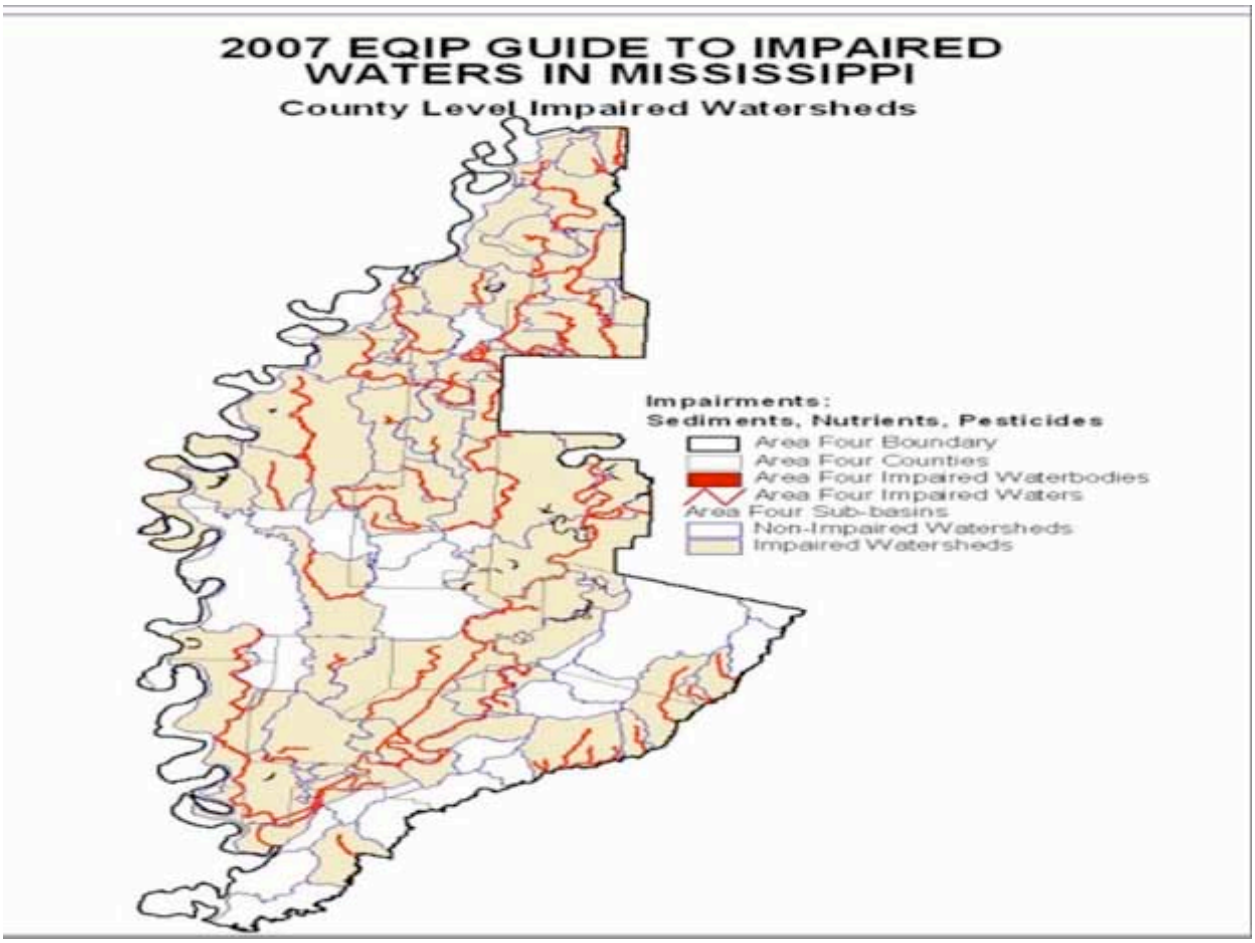
Area 2


2007 EQIP GUIDE TO IMPAIRED WATERS IN MISSISSIPPI
County Level Impaired Watersheds
Impairments:
Sediments, Nutrients, Pesticides
Area Two Boundary
Area Two Counties
Area Two Impaired Waters
Aea Two Sub-Basins
Non-Impaired Watersheds
Impaired Watersheds
Oktibbeha
Lowndes
Choctaw
Attala
Winston
Noxubee
Leake
Neshoba
Kemper
Madison
Scott
Newton
Lauderdale
Hinds
Rankin
Claiborne
Smith
Jasper
Clarke
Copiah
Simpson

Area 3


2007 EQIP GUIDE TO IMPAIRED WATERS IN MISSISSIPPI
County Level Impaired Watersheds
Impairments:
Sediments, Nutrients, Pesticides
Area Three Boundary
Area Three Counties
Area Three Impaired Waters
Area Three Sub-Basins
Non-Impaired Watersheds
Impaired Watersheds

Area 4


2007 EQIP GUIDE TO IMPAIRED WATERS IN MISSISSIPPI
County Level Impaired Watersheds
Impairments:
Sediments, Nutrients, Pesticides
Area Four Boundary
Area Four Counties
Area Four Impaired Waterbodies
Area Four Impaired Waters
Area Four Sub-basins
Non-Impaired Watersheds
Impaired Watersheds

SEIZING A WATERSHED MOMENT

Making EQIP Work for Water Quality in 10 Mississippi River Border States

Minnesota

Environmental Quality Incentives Program
State Report 6 of 10

ENVIRONMENTAL WORKING GROUP

APPENDIX – STATE REPORTS

MINNESOTA
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM

OVERVIEW

Minnesota received an average of $29 million in EQIP funds for technical and financial assistance per year from 2003 to 2007, ranking it 1st out of the 10 states that border the Mississippi River for EQIP funds. Minnesota EQIP funds are allocated through the 91 Soil and Water Conservation District (SWCD) boundaries.

Applications to participate in EQIP are evaluated using multiple ranking sheets that include: (1) national priorities, (2) state issues, (3) local issues, and (4) a cost-efficiency score. There is a single "EQIP Application Ranking Summary" document, which includes a national priorities section and a state issues section. In addition, there are 91 local issues ranking criteria documents called "Local Work Group development of local EQIP."

Each NRCS field office, in conjunction with the SWCD and Local Work Group develops a local EQIP program and a set of local issues questions. Applications are scored, ranked, and selected at the local level (after review and approval by the State Conservationist). The State Technical Committee's EQIP subcommittee provides input to Minnesota's EQIP program by reviewing the prior year's accomplishments, suggesting changes and commenting on recommended changes, practices, and policies, etc.

MINNESOTA EQIP WEBSITE

http://www.mn.nrcs.usda.gov/programs/eqip/eqip2009.html

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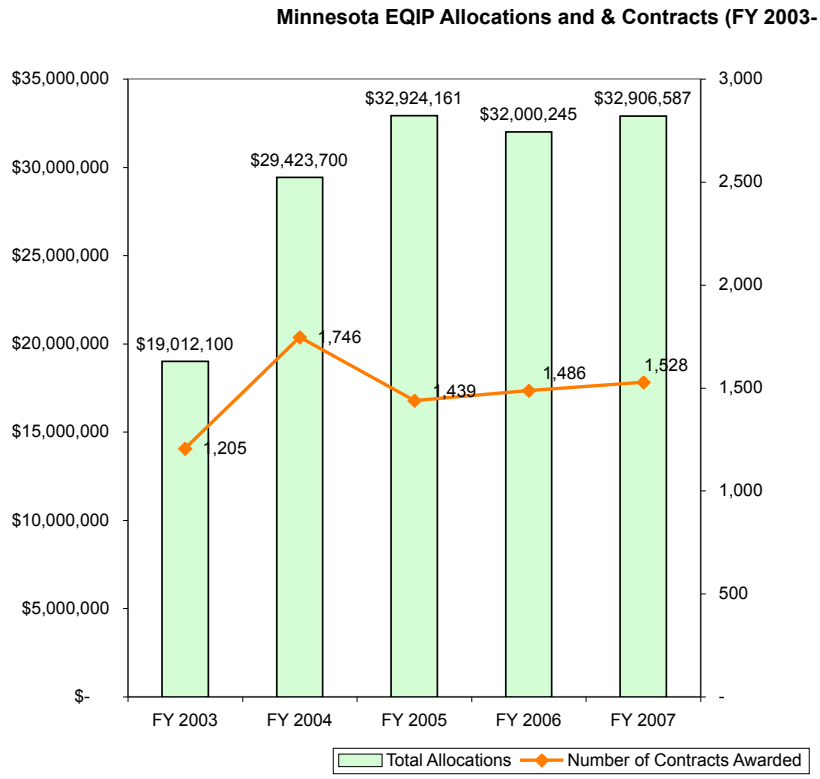
FUNDING AND REACH OF EQIP

EQIP funding is allocated to states using a national formula. The chart below shows the amount of financial and technical assistance Minnesota has received from FY 2003 to 2007 and the number of contracts awarded each fiscal year. A total of 7,404 contracts have been entered into with producers between 2003 and 2007 providing $146.3 million and addressing 1,783,431 acres in the state.



Source: EWG compiled annual data from EQIP's "Allocation" and "Contract" tables found on the USDA NRCS website: http://www.nrcs.usda.gov/programs/EQIP/.

KEY FACTORS ANALYSIS

We analyzed the following factors for indications of the extent to which EQIP in Minnesota is focused on reducing sediment and nutrient loads to streams, lakes, and rivers: (1) the presence or absence of qualitative or quantitative goals for pollutant reductions, (2) methods used to allocate state-level funds to counties or other sub-state levels or to specific projects or priorities, and (3) the application ranking criteria used to select participants in EQIP. We relied primarily on the information and data presented on the Natural Resources Conservation Service (NRCS) website to complete this analysis and followed up on our investigation with interviews of the state EQIP program managers.

Goals

Minnesota EQIP has implemented two watershed-based projects, which had goals of increasing adoption of soil conservation terrace practices. Both projects have been discontinued and Minnesota spent less than 1 percent of its EQIP funds on the projects.

Other than these two projects, EWG did not find evidence to suggest that Minnesota EQIP has a) established explicit quantitative or qualitative goals for EQIP to clean up agricultural sources of pollution, b) identified which lakes, streams, or tributaries are priorities for improvement, c) set a timetable to achieve those goals, or d) established a means to track progress toward the goals. Minnesota's application ranking systems do create an implicit set of priorities for treating water quality, but measurable goals and timelines do not exist.

EWG recommends that Minnesota EQIP set clear and specific goals for how much and what types of agricultural pollution need to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals. EWG also recommends that Minnesota EQIP develop systems to track, evaluate, and report on the environmental performance of EQIP.

Fund Allocation

Minnesota EQIP funds are distributed through each of the 91 Soil and Water Conservation District (SWCD) boundaries. According to Tim Koehler, Assistant State Conservationist, Minnesota EQIP funds are distributed to the SWCDs based largely on the:

1. Historic use of EQIP funding in these counties, but also considering
2. Current needs and
3. Resource concerns such as land use characteristics and erosion potential.

According to Koehler, the allocations to each SWCD are not rigid and funds can be moved to different conservation districts after the initial allocations are made if an unexpected number of applications are received in a particular area.

EWG recommends that if funds are allocated directly to local jurisdictions, Minnesota EQIP should use allocation formulas based primarily on natural resource and environmental factors to channel more funding to localities with significant environmental problems associated with agriculture.

Applications are scored, ranked, and selected at the local level (after review and approval by the State Conservationist) given the local priorities and the local allocation. Each local office may develop specific funding pools to target funds to land uses or

issues, including prescribed grazing systems or Comprehensive Nutrient Management Plans.

Minnesota EQIP identified two watersheds that received state level priority: Whitewater Watershed and the Kanaranzi-Little Rock Watershed (K-LR Watershed). The federal Watershed Protection and Flood Prevention Act program (known as PL-566), which is primarily a flood prevention program, identified these two watersheds as priority areas. Due to limited funding under the PL-566 program, EQIP provided some funding for the two watersheds for the installation of cropland terraces to achieve flood protection and water quality benefits but has since stopped funding the project. In FY2008, Minnesota EQIP obligated $223,000 to the K-LR watershed and $161,000 to the Whitewater watershed or less than 1 percent of the total EQIP funding of almost $34 million.[1]

Minnesota EQIP also sets aside funds for use in a state-initiated program called the Nutrient Management Initiative.[2] The Initiative helps farmers evaluate their own nutrient management practices compared with nutrient rate guidance promoted by the USDA-NRCS. The project is open to only farmers in the southern portion of the state and "results will assist the USDA-NRCS in assessing their nutrient management guidance on a regional scale." This project was initially allocated $100,000 in 2008, but due to low levels of participation by farmers, only $37,000 worth of projects was funded, even though the NRCS funded every application that was submitted.

Minnesota EQIP had four funding pools that are unlikely to continue in FY 2009:

- The American Indian pool emphasized tribal resources (FY 08 obligated $83,000 and there are no unfunded tribal applications left pending)
- The Drought Assistance pool provided funds to drought designated counties in northwestern Minnesota (FY 07 and 08: $1.1 million)
- The Flood Assistance pool provided funds for designated counties in the southeastern corner of the state (FY 08: $471,000)
- Minnesota participated in the national 2008 Midwest Flood fund with a separate pool for those designated counties (FY 08: $380,000)

EWG recommends that Minnesota EQIP's best opportunity for improving water quality is to fund well-designed, watershed-based clean-up projects. This approach encourages multiple farmers within a watershed to reduce pollution to a specific lake, stream, or tributary to the Mississippi River.

The problem-solving advantages of this approach are well understood. They include focusing resources in specific locations to solve well-defined problems using a strategy that directs funding to those farmers within the watershed who can do the most to reduce pollution. Ideally, such water quality improvement projects include developing monitoring and evaluation systems to adjust the strategy and resource allocations based on the results that are being realized. Ramping up the emphasis in EQIP on such

[1] Written comments provided by Koehler and Cornelius, Minnesota NRCS.
[2] Minnesota's Nutrient Management Initiative. http://www.mda.state.mn.us/protecting/soilprotection/nmi.htm

watershed-based clean-up projects would dramatically increase the effectiveness of the program.

EWG recommends that Minnesota EQIP allocate 60 percent of its EQIP funds to watershed-based clean-up projects by 2012. Minnesota EQIP should then allocate the remaining 40 percent of funds by 2012 to funding pools that target high priority natural resource and environmental problems. These state-level funding pools create important opportunities to focus EQIP on the most pressing designated problems. The funding pools allow EQIP managers to select the best applications from all the applications proposing to address the same natural resource or environmental problem.

Application Ranking Criteria

Applications to participate in Minnesota EQIP are evaluated using ranking sheets that include: (1) national priorities, (2) state issues, (3) local issues, and (4) a cost-efficiency score. There is a single "EQIP Application Ranking Summary" document, which includes a national priorities section and a state issues section. In addition, there are local issues questions in 91 local issues ranking criteria documents called "Local Work Group development of local EQIP." Each NRCS field office, in conjunction with its SWCD and Local Work Group develops a local EQIP program and determines local priorities. All the ranking criteria questions are in a Yes/No format. There are no points provided online for the national and state issues questions but there are points provided online for the local issues questions.

Each of the 91 local issue EQIP ranking sheets, are instructed to (1) list local resource concerns, (2) list geographic regions and their respective resource concern within the District to receive priority and (3) develop a list of 3 to 12 yes/no questions to determine if an application is addressing these high priority concerns. Anoka County's ranking sheet was randomly chosen for review. Anoka has 9 questions worth 40 points.

Minnesota EQIP uses the national Application Evaluation Ranking Tool (AERT) that includes multipliers for each section being scored. Minnesota sets the points and multipliers in each of its sections so that each section receives a certain percentage of the final application score: the national issues section receives 20 to 25 percent of the final score, state issues get 20 to 25 percent, local issues receive approximately 40 percent, and the cost-efficiency score gets about 10 to 15 percent of the final score.[3] The multipliers are: 0.79 for the national priorities score, 0.64 for the state score, 1.73 for the local score, and 198.00 for the efficiency score. See Box 1 for background information on the cost-efficiency score.

[3] Written comments from Sid Cornelius, Minnesota EQIP Resource Conservationist.

Box 1. The Cost-Efficiency Score

A cost-efficiency score is generated for each application to determine how effective the cost-shared practices will be at addressing the priority resource concerns (soil, water, air, plant, animal, and human). The cost-efficiency score is calculated by multiplying the practice(s)'

Conservation Practice Physical Effects (CPPE) value(s)
x Service life of the practice(s)
/ Average cost of installing and maintaining the practice(s)

NRCS maintains a national database of each practice's CPPE value. CPPE values range from -5 to + 5 reflecting the practice's ability to worsen or improve each resource concern. The CPPE value can be modified by the state or local jurisdiction to reflect the soil, weather, topographic, and other state or local conditions that may impact the effectiveness of the practice.

All 10 Mississippi River border states are using the NRCS Pro-Tracts Cost-Efficiency software to calculate a Cost-Efficiency score for each application. However, because the Cost-Efficiency score is embedded in the software, this step in the ranking process is not transparent since the state EQIP managers were unable to fulfill our request of reviewing the CPPE values given to practices funded by EQIP.

Upon request, Sid Cornelius, Minnesota Resource Conservationist, provided EWG with a version of the FY2008 Ranking Tool Summary that had points listed. To determine how much emphasis Minnesota EQIP places on the reduction of nutrient and sediment pollution and on geographic priority areas, we attempted a rough estimate of the percentage of raw, un-weighted points assigned to questions that appear to address these priorities. We acknowledge that this approach is incomplete and potentially misleading, as it does not account for the effect of the cost-efficiency score in the ranking criteria. We did include a review of the effect of the multipliers on the points provided in each National, State, and Local Issues section.

Overall, the lack of specificity in the ranking criteria made it difficult to identify points for reducing sediment and nutrient pollution and points for applications located in priority areas. Those complications are described in Box 2.

Regarding emphasis on geographic priorities, a review of the FY 2008 Ranking Tool Summary (see Appendix) indicates that Minnesota places a modest emphasis on geographic priorities. In the National Ranking Factors section, Minnesota asks National Priorities Question 1 which includes a reference to impaired watersheds:

> "Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater

contamination or point source contamination from confined animal feeding operations."

This question does give some priority to an application located in an impaired watershed as part of a larger priority for addressing nonpoint and point source pollution.

Box 2. The Lack of Specificity in Ranking Criteria

The ranking criteria in all 10 Mississippi River border states lacked sufficient specificity for us to determine with real certainty the emphasis each state was giving in its ranking sheets to the reduction of sediment and nutrient pollution and to areas of geographic importance. For example, many ranking factors do not specify the particular source of natural resource or environmental problems, such as sediment or nutrient loss from cropland. Instead the ranking factors refer to more generic sources of problems, such as nonpoint source pollution.

In those cases where more specific types of pollutants like sediments or nutrients were cited, they were usually included in a longer list of pollutants, such as pathogens, pesticides, or excess salinity, making determination of the priorities implicit in the ranking criteria difficult. A similar lack of specificity hampered our ability to determine the emphasis placed on location of an application within a priority watershed or other geographic unit.

Despite these difficulties, it is clear that the factors used in ranking criteria and the priority assigned those factors through point allocations and multipliers are critical determinants of effectiveness of EQIP in reducing sediment and nutrient pollution.

In Minnesota's State Issues section, there are two questions that give points to applications that are located in geographically important areas providing 12 out of 61 maximum possible State section points (20 percent):

"WATER QUALITY - Sensitive Water Bodies - the application is located within – a watershed impaired by turbidity, fecal coliform, or excess nutrients – a Source Water Assessment Area – a Drinking Water Supply Management Area with medium to very high vulnerability - a high to high Sensitivity Aquifer AND the practice will be implemented to address a water quality concern." (8 points)

"WATER QUALITY - Distance to a Receiving Water – the application addresses soil erosion or non-point source pollution and is less than 100 feet from a receiving water." (4 points)

For a review of the local ranking factors, Anoka County's Local Issues section was randomly selected. Anoka County asked three questions about geographic priorities providing 12 out 40 maximum possible Local section points (30 percent):

> "Water Quality: Is the practice located <100 ft of receiving water (surface water)?" (5 points)
>
> "Water Quality: Is the practice located 100 to 500 feet of receiving water (surface water)?" (3 points)
>
> "Water Quality: For questions 1,2,3, 4, 7 and 8 above, is the practice located in the Rum and Sunrise Watershed? (4 points)

The 24 total possible points for these 5 geographic priority factors represent 16 percent of the 151 maximum points in the entire ranking system of National, State, and Local Issues.

Regarding emphasis on reducing nutrient and sediment pollution, a review of Minnesota's Ranking sheet does not provide clear answers about how much priority Minnesota EQIP places on these two specific water quality impairments. For example, the National Priority Question 1 does mention the words "nutrients" and "sediment" but the question lacks sufficient specificity for us to distinguish between points awarded for treatment of nutrients and sediments versus points awarded for reducing excess salinity or pesticides.

The National Priorities Question 4 does allocate 10 points (20 percent of the 50 total points available from the National Priorities section) for applications that specifically address soil erosion and sedimentation.

> "Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?"

The State Issues section awards 14 of the section's 61 maximum possible points (23 percent) to 3 questions related to soil erosion. However, there is no indication that the erosion occurring on the applicant's cropland may be causing a sedimentation problem in a body of water.

> "SOIL EROSION – greater than 4 tons/ac/yr will be saved by the installed practices from sheet and rill and/or wind erosion" (6 points)
>
> "SOIL EROSION – the Soil Conditioning Index changes from negative to at least 0.0 on the field." (2 points)

> "SOIL EROSION – structural practices Diversion (362), Grade Stabilization Structure (410), Grassed Waterway (412), Water and Sediment Control Basin (638), Dam (402) or other structural practices will be installed to control ephemeral or gully erosion." (6 points)

Three more questions in the State Issues section are likely to address nutrient pollution providing 15 of the 61 possible points (25 percent):

> "NON-POINT SOURCE POLLUTION - Nutrient management (590) will be implemented." (8 points)
>
> "NON-POINT SOURCE POLLUTION – Waste storage will be implemented to eliminate a groundwater pollution problem where a feedlot runoff problem does not exist." (6 points)
>
> "NON-POINT SOURCE POLLUTION – Animal Mortality Facility (316), Silage Leachate Abatement system, or Milkhouse Wastewater system will be implemented as part of a complete Wastewater and Feedlot Runoff Control system." (1 point)

In Anoka County's Local Issues section, one question focused on reducing sheet and rill erosion to less than "T" (the soil loss tolerance factor) and awarded 5 out of the 40 points (12.5 percent). Two questions focused on water quality providing 9 of the 40 points (22.5 percent) for reducing "nutrient loading, sediment loading or manure impacts to surface water" and "practices that filter contaminants that may enter open waterbodies."

Thus, when the national, state, and local sections in this illustrative exercise are combined, 77 out of a maximum 151 possible points or 51 percent were provided for applications that are likely to reduce sediment and nutrient pollution and occur in geographically important locations. This evaluation of the raw, un-weighted points is incomplete as it does not include the effect of the multipliers for the national, state, and local sections nor does it include an analysis of the effect of the cost-efficiency score. Due to a lack of information about the cost-efficiency section of the ranking sheet, EWG did not evaluate the likely impact of that score on the final score.

EWG was able to use Minnesota EQIP's multipliers (national: 0.79, state: 0.64, and local: 1.73) to observe the effect these multipliers might have on raw, un-weighted points and percentages awarded for activities that might result in a reduction of sedimentation and nutrient pollution and occur in geographic priority areas. We found that the multipliers did not significantly change the percentages of points awarded to these three priority issues.

After the multipliers were applied, the 51 percent of raw, un-weighted points (77 out of 151) in the Ranking Tool Summary that were awarded for reducing the priority problems and prioritizing locations did not change significantly but was raised to 54 percent (25 out of 46.7 weighted points). The percentage of points awarded in the national section for our priority issues rose from 20 percent (10 out of 50 points) to 40 percent (2.5 out of 12.5 weighted points) when the multiplier for the national section was applied. The percentage of points awarded in the state section, 67 percent (41 out of 61 points) remained the same with when the multiplier was applied: 67 percent (8.2 out of 12.2 points). The percentage of points in the local section, 65 percent (26 out of 40 points), also remained the same when the multiplier was applied: 65 percent (14.3 out of 22 weighted points).

Despite Minnesota EQIP appearing to give about half the unweighted points in the reviewed Summary to the most pressing concerns – nutrient and sediment pollution reduction in high priority areas – only about 8 percent of points are given to applications from priority watersheds. Thus, it is unlikely that Minnesota's ranking system can ensure that applications in the priority watersheds will rise to the top of the ranking list and get selected for funding.

EWG recommends that Minnesota EQIP revise their ranking systems to increase the priority given to applications located in high priority watersheds that will reduce sediment and nutrient pollution. Sediment and nutrient pollution are the two most important pollutants of streams, lakes, and reservoirs in the 10 states bordering the Mississippi River, the main stem of the Mississippi River, and the Dead Zone in the Gulf of Mexico.

Conclusion

We find that EQIP has not been deployed as effectively as it could be in Minnesota or any of the 9 states that border the Mississippi River. The methods used to decide how to spend EQIP dollars within the state and which farmers will get those dollars are more likely to result in diffuse and fragmented efforts to reduce pollution from farms rather than the focused and coordinated effort needed to solve both local and regional water pollution problems.

Watershed-based water quality clean-up projects are the best use of federal taxpayer resources and offer the greatest hope for cleaning up the unintended environmental damage of agriculture. These projects entail setting goals to clean up specific bodies of water that are deemed the highest priorities, determining how many of the most cost effective practices are needed, and persuading key farmers to participate in the project.

To quickly ramp up the effectiveness of EQIP, Minnesota NRCS should:

1. Set clear and specific goals for how much pollution needs to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals.

2. Use 60 percent of EQIP dollars by 2012 to fund watershed-based water quality clean-up projects that encourage multiple farmers within selected watersheds to reduce pollution to specific lakes, streams, or tributaries to the Mississippi River.

3. Use 40 percent of EQIP funds by 2012 in state-level funding pools to target the highest priority natural resource and environmental problems in each state.

4. Select farmers to participate in EQIP who can do the most to contribute to watershed-based clean-up projects or solve high priority problems.

APPENDIX—2008 Minnesota EQIP Ranking Criteria

Ranking Tool Summary
for FY2008 - EQIP General FA
(Draft)

Description:

Statewide template

Land Uses:

Crop, Forest, Grazed Forest, Hay, Headquarters, Pasture, Wildlife

Efficiency Score:

Scoring Multiplier: 198.00

Optional Notes:

National Priorities:

Scoring Multiplier: 0.79

Questions:

Number	Question	Points
1	Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?	10
2	Will the treatment you intend to implement using EQIP result in a considerable amount of ground or surface water conservation?	10
3	Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	10
4	Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	10
5	Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	10
	Total Points	50

State Issues:

Scoring Multiplier: 0.64

Questions:

Sub-heading Number	Question Number	Question	Points
1		Sheet and Rill and /or Wind Erosion - answer only 1 of next 3	
	1	SOIL EROSION - less than 3 tons/ac/yr will be saved by the installed practices from sheet and rill and /or wind erosion	1
	2	SOIL EROSION - 3 to 5 tons/ac/yr soil will be saved by the installed practices from sheet and rill and/or wind erosion	3
	3	SOIL EROSION - greater than 5 tons/ac/yr will be saved by the installed practices from sheet and rill and/or wind erosion	6
2		Soil Conditioning Index	
	4	SOIL EROSION - the Soil Conditioning Index changes from negative to at least 0.0 on the field	2
3		Classic or Ephemeral Gully Erosion	
	5	SOIL EROSION - structural practices Diversion (362), Grade Stabilization Structure (410), Grassed Waterway (412), Water and Sediment Control Basin	6

		(638), Dam (402) or other structural practices will be installled to control ephemeral or gully erosion	
4		Water Resource Protection - answer only 1 of next 3	
	6	NON-POINT SOURCE POLLUTION - Nutrient management (590) will be implemented	8
	7	NON-POINT SOURCE POLLUTION - Conservation Crop Rotation-Organic (328b), Well Decommissioning (351), Riparian Forest Buffer (391), Filter Strip (393), Pest Management on Cropland (595), Sinkhole Treatment (725) or Access Control in a riparian area (472) will be implemented	6
	8	NON-POINT SOURCE POLLUTION - Contour Buffer Strips (332), Field Border (386), Irrigation Water Management (449), Streambank and Shoreline Protection (580), Comprehensive Nutrient Management Plan (100), or, when installed to improve water quality but not part of a complete runoff control system: Diversion (362), Roof Runoff Management (558), and Closure of Waste Impoundment (360) will be implemented	4
5		Livestock Waste - answer only 1 of next 7	
	9	NON-POINT SOURCE POLLUTION - existing MinnFARM rating is 1 to 10	1
	10	NON-POINT SOURCE POLLUTION - existing MinnFARM rating is 11 to 25	2
	11	NON-POINT SOURCE POLLUTION - existing MinnFARM rating is 26 to 49	4
	12	NON-POINT SOURCE POLLUTION - existing MinnFARM rating is greater than 49	6
	13	NON-POINT SOURCE POLLUTION - waste storage will be implemented to eliminate a groundwater pollution problem where a feedlot runoff problem does not exist	6
	14	NON-POINT SOURCE POLLUTION - storage or composting of manure is required ONLY to eliminate a land-spreading problem	3
	15	NON-POINT SOURCE POLLUTION - Animal Mortality Facility (316), Silage Leachate Abatement system, or Milkhouse Wastewater system will be implemented to address a single problem.	4
6		Livestock Waste add on	
	16	NON-POINT SOURCE POLLUTION - Animal Mortality Facility (316), Silage Leachate Abatement system, or Milkhouse Wastewater system will be implemented as part of a complete Wastewater and Feedlot Runoff Control system	1
7		Wildlife Habitat - answer all that apply	
	17	HABITAT CONSERVTION - Prescribed Burning (338), Windbreak/Shelterbelt Establishment (380), Stream Habitat Improvement (395), Restoration and Management of Declining Habitat (643), Upland Wildlife Habitat Management (645), Early Successional Habitat Development (647), Wetland Restoration (657), Pond for wildlife (402) or Invasive Plant Species Pest Management (797) will be implemented	6
	18	HABITAT CONSERVATION - A wildlife practice will be implemented that benefits a threatened and endangered species according to MN eFOTG Section II.D	1
	19	HABITAT CONSERVATION - A practice will be implemented that benefits native pollinators according to Native Habitat Development for Pollinators-Minnesota guidelines	1
8		Air Quality - answer only 1 of next 2	
	20	AIR QUALITY - A practice will be implemented specifically to improve air quality	6
	21	AIR QUALITY - A practice will be implemented to address other resource concerns, but also addresses air quality as a secondary concern	1
9		Sensitive Water Bodies	
	22	WATER QUALITY - Sensitive Water Bodies - the application is located within: -a watershed impaired by turbidity, fecal coliform, or excess nutrients -a Source Water Assessment Area -a Drinking Water Supply Management Area with medium to very high vulnerablity -a very high to high Sensitivity Aquifer AND the practice will be implemented to address a water quality concern	8
10		Distance to a Receiving Water - answer only 1 of next 7	
	23	WATER QUALITY - Distance to a receiving water - the application addresses soil erosion or non-point source pollution and is less than 100 feet from a receiving water	4
	24	WATER QUALITY - Distance to a receiving water - the application addresses soil erosion or non-point source pollution and is 100 to 500 feet from a receiving water	3

	25	WATER QUALITY - Distance to a receiving water - the application addresses soil erosion or non-point source pollution and is 501 to 1000 feet from a receiving water	2
	26	WATER QUALITY - Distance to a receiving water - the application addresses soil erosion or non-point source pollution and is 1001 to 2000 feet from a receiving water	1
	27	WATER QUALITY - Distance to a recieving water - the application addresses only habitat conservation, grazing systems, or forest management and is less than 100 feet from a receiving water	3
	28	WATER QUALITY - Distance to a receiving water - the application addresses only habitat conservation, grazing systems, or forest management and is 100 to 500 feet from a receiving water	2
	29	WATER QUALITY - Distance to a receiving water - the application addresses only habitat conservation, grazing systems, or forest management and is 501 to 1000 feet from a receiving water	1
11		Grazing Practices	
	30	GRAZING SYSTEMS - Prescribed Grazing (528) including Organic systems will be implemented	6
12		Forest Practices	
	31	FOREST MANAGEMENT - Forest Stand Improvement (666), or Tree Planing (612) will be implemented	6
		Maximum Points: 61 Total Points	114

Local Issues:

Scoring Multiplier: 1.73

Selected Resource Concerns and Practices:

Air Quality: Chemical Drift
- Conservation Crop Rotation (328)
- Pest Management (595)
- Riparian Forest Buffer (391)
- Tree/Shrub Establishment (612)
- Windbreak/Shelterbelt Establishment (380)

Air Quality: Excessive Greenhouse Gas - CH4 (methane)
- Anaerobic Digestor, Controlled Temp. (366)
- Animal Mortality Facility (316)
- Closure of Waste Impoundment (360)
- Nutrient Management (590)
- Waste Facility Cover (367)

Air Quality: Objectionable Odors
- Anaerobic Digestor, Controlled Temp. (366)
- Animal Mortality Facility (316)
- Closure of Waste Impoundment (360)
- Composting Facility (317)
- Nutrient Management (590)
- Pest Management (595)
- Riparian Forest Buffer (391)
- Tree/Shrub Establishment (612)
- Waste Facility Cover (367)
- Windbreak/Shelterbelt Establishment (380)

Air Quality: Particulate matter less than 10 micrometers in diameter (PM 10)
- Access Control (472)
- Animal Mortality Facility (316)
- Conservation Crop Rotation (328)
- Contour Buffer Strips (332)
- Cover Crop (340)
- Critical Area Planting (342)
- Early Successional Habitat Development/M (647)
- Field Border (386)
- Filter Strip (393)
- Heavy Use Area Protection (561)
- Irrigation System, Sprinkler (442)

Anoka Soil and Water Conservation District FY08 EQIP – Local Work Group development of local EQIP.

Local Work Group development of local EQIP.

Anoka Soil and Water Conservation District FY08 EQIP

1. **List the local resource concerns that EQIP can address:**

Surface Water:
- Nutrient loading
- Soil runoff
- Bacteria growth

Groundwater:
- Nitrate contamination and
- Bacteria growth
- Infiltration of pesticides

Habitat:
- Improve habitat within identified greenway corridors

Soil Loss:
- Sedimentation of lakes, rivers and wetlands.

2. **If applicable, list any geographic regions (i.e. watersheds, townships, etc.) and their respective resource concerns within the District to receive priority:**

Elk River Watershed: nutrients, sedimentation, manure, riparian habitat, impaired waters (IBI and turbidity), drained wetlands and degraded wetland habitat

Delineated drinking water supply management areas: nitrates, pesticides, irrigation management
Rum River watershed
Sunrise River watershed and
Adjacent Lake Watersheds:
1. George Lake
2. East Twin Lake
3. Martin Lake
4. Coon Lake
5. Linwood Lake

3. **From items 1 & 2 above prioritize the local resource concerns to be addressed with EQIP funding for the district. Describe a minimum of 3 categories of the highest priority applications which you would want to receive funding.**

Prioritize Local Resource Concerns
1. Nutrient loading
2. Soil runoff
3. Nitrate contamination
4. Improve habitat within identified greenway corridors
5. Sedimentation
6. Bacteria growth
7. Infiltration of pesticides

4. **Develop a minimum of 3 and maximum of 12 yes/no questions to determine if an application is addressing the high priority concerns described in item 3.**

	Question:	Points
1.	Soil Erosion: Will the practice reduce sheet and rill erosion < T?	5
2.	Water Quality: Will the practice reduce nutrient loading, sediment loading or manure impacts to surface water?	5
3.	Water Quality: Is the practice located < 100 ft of receiving water (surface water)?	5
4.	Water Quality: Is the practice located 100 to 500 ft of receiving water (surface water)?	3
5.	Habitat: Improve habitat within identified greenway corridor?	5
6.	Habitat: Will the practice improve riparian habitat?	4
7.	Habitat: Will drained or degraded wetlands be addressed?	5
8.	Water Quality: For questions 1, 2, 3, 4, 7 and 8 above, is the practice located in the Rum and Sunrise Watershed?	4
9.	Water Quality: Does practice filter contaminants that may enter adjacent open waterbodies?	4
	Total	**40**

5. **Assign points to the questions in Item #4 as desired to reflect local priorities. The total points assigned to the questions must equal exactly 40 points.**

   Refer to question 4, column 3

6. **Submit this worksheet to your respective ASTC(FO). After approval from the state office, the questions will be entered into the Local Issues section of the ranking tool.**

   Worksheet submitted to Timothy Wilson, ASTC(FO) of Area 4.

7. **List any recommended practices to be deleted from the state Conservation Practice Payment Document.**

   None

The local EQIP program description, cost-share docket changes, and ranking worksheet must be reviewed and approved by the State Conservationist before any EQIP contract is approved and signed.

This document serves as the Local Work Group recommendation for FY 08 EQIP. Below is a roster of participation in the Local Work Group.

Chris Lord — 10-15-07

Chair, Local Work Group — **Date**

Roster:
Kim Kovich
Sean Sullivan
Mary Jo Trushon
Vicki Nass
Chris Lord
Kathy Berkness
George Montgomery

SEIZING A WATERSHED MOMENT

Making EQIP Work for Water Quality in 10 Mississippi River Border States

Louisiana

Environmental Quality Incentives Program
State Report 5 of 10

ENVIRONMENTAL WORKING GROUP

APPENDIX – STATE REPORTS

LOUISIANA
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM

OVERVIEW

Louisiana received an average of $16 million in EQIP technical and financial assistance funds per year from 2003 to 2007, ranking it 8th out of the 10 states that border the Mississippi River for EQIP funds. As of 2008, all of Louisiana's EQIP funds are allocated to the 64 parishes in the state. Starting in 2009, EQIP funds will be allocated to the state's 44 Soil and Water Conservation districts instead.

Applications to participate in EQIP are evaluated using a single ranking criteria document called the "Ranking Summary Tool" that includes: (1) national priorities, (2) state issues, (3) a list of 7 major resource concerns with 28 sub-resource concerns and numerous eligible practices related to each sub-resource concern, and (4) a cost-efficiency score. In 2009, Louisiana EQIP will include a local issues section in their Summary Tool creating 44 Tools with unique local issue sections reflecting the priorities of the 44 Local Work Groups.

The State Technical Committee in Louisiana has an EQIP Subcommittee which provides input into prioritizing resource concerns, identifying practices, establishing the state issue section questions, setting points, and multipliers. There are 44 Local Work Groups in each of the 44 Soil and Water Conservation Districts that help identify resource concerns in Louisiana and in 2009, they will write questions for the local issues section of their District's Summary Tool.

LOUISIANA EQIP WEBSITE

http://www.la.nrcs.usda.gov/programs/EQIP/

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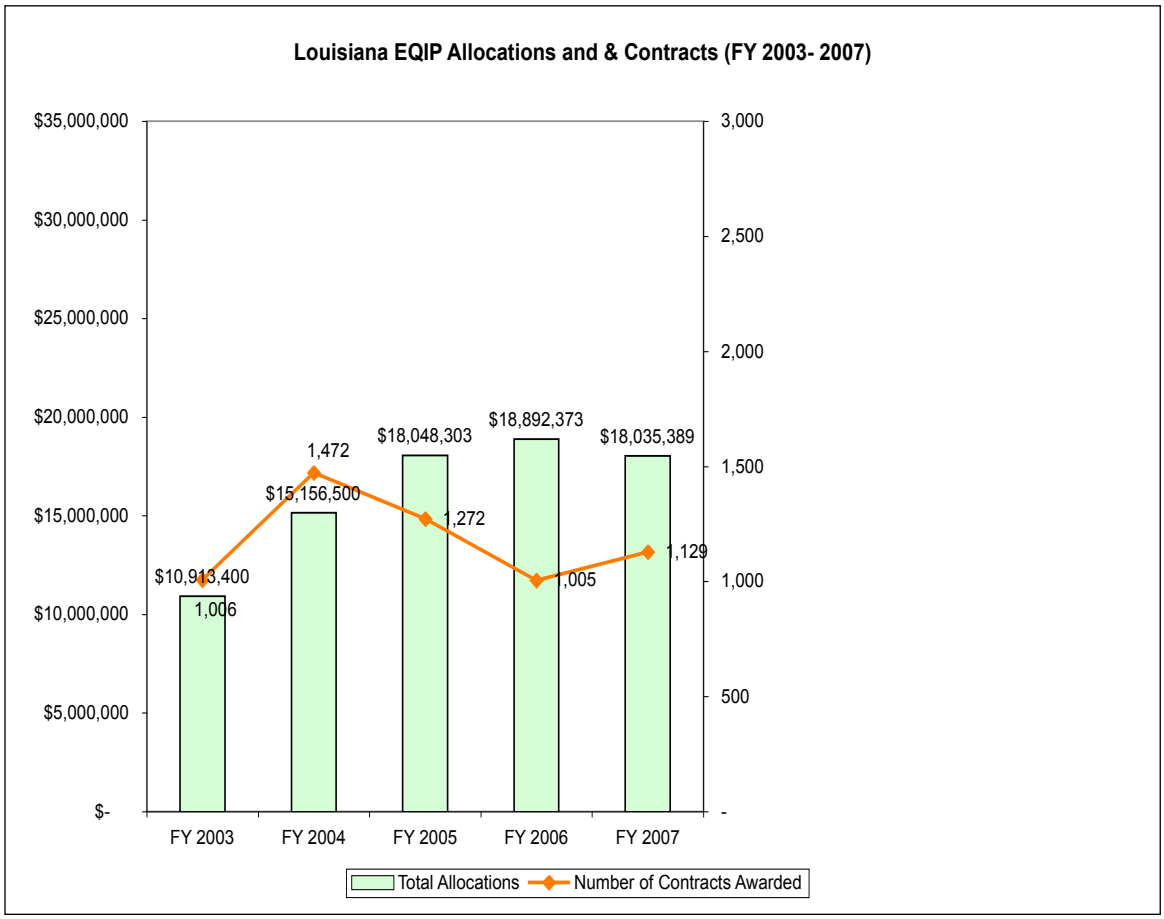
FUNDING AND REACH OF EQIP

EQIP funding is allocated to states using a national formula. The chart below shows the amount of financial and technical assistance Louisiana has received from FY 2003 to 2007 and the number of contracts awarded each fiscal year. A total of 5,884 contracts have been entered into with producers between 2003 and 2007 providing $81 million and addressing nearly 979,722 acres in the state.



Source: EWG compiled annual data from EQIP's "Allocation" and "Contract" tables found on the USDA NRCS website: http://www.nrcs.usda.gov/programs/EQIP/.

KEY FACTORS ANALYSIS

We analyzed the following factors for indications of the extent to which EQIP in Louisiana is focused on reducing sediment and nutrient loads to streams, lakes, and rivers: (1) the presence or absence of qualitative or quantitative goals for pollutant reductions, (2) methods used to allocate state-level funds to counties or other sub-state levels or to specific projects or priorities, and (3) the application ranking criteria used to select participants in EQIP. We relied primarily on the information and data presented on the Natural Resources Conservation Service (NRCS) website to complete this

analysis and followed up on our investigation with interviews of the state EQIP program managers.

Goals

EWG did not find evidence to suggest that Louisiana EQIP has a) established explicit quantitative or qualitative goals for EQIP to clean up agricultural sources of pollution, b) identified which lakes, streams, or tributaries are priorities for improvement, c) set a timetable to achieve those goals, or d) established a means to track progress toward the goals. Louisiana's application ranking systems do create an implicit set of priorities for treating water quality, but measurable goals and timelines do not exist.

Louisiana EQIP managers reported that they meet periodically with the Louisiana Department of Environmental Quality (DEQ) to determine if EQIP is benefiting water quality by observing trends in water quality indicators in selected waterbodies and attempting to correlate those trends with the location of EQIP projects. EWG commends managers at LA-EQIP and LA-DEQ for these collaborative efforts.

EWG recommends that Louisiana EQIP set clear and specific goals for how much and what types of agricultural pollution need to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals. EWG also recommends that Louisiana EQIP develop systems to track, evaluate, and report on the environmental performance of EQIP.

Fund Allocation

EQIP funding allocations and application selection in Louisiana are made on a parish-by-parish basis. Approximately 60 percent of EQIP funds will be directed to livestock concerns and approximately 40 percent will be directed to forestland and/or cropland concerns. However, since Louisiana is not a major animal-production state, Louisiana rarely spends 60 percent of its EQIP funds on livestock concerns because there are an insufficient number of livestock applications. The result is that Louisiana EQIP funds every livestock application it receives.[1]

The funding is allocated to parishes based on a formula that takes into account different factors including:

1. Number of cropland farmers
2. Acres of cropland
3. Number of livestock producers
4. Number of hay producers
5. Acres of hayland

[1] Personal communication with Tim Landreneau, State Program Specialist, and Leslie Michael, Assistant State Conservationist/Programs, Louisiana NRCS.

6. Number of dairy operation
7. Acres of pastureland
8. Total EQIP applications
9. Number of farms
10. Number of poultry producers

Twenty percent of Louisiana's EQIP funding is divided equally into the 64 parishes to form a base allocation for each parish. Then, 45 percent of the state funding is allocated to each parish based on the 10 factors listed above called the "Workload Summation" which reflect the extent of agricultural production. These 10 elements are not weighted. Finally, the remaining 35 percent of EQIP funding is allocated to the parishes based on "Special Resource Concerns" which include highly erodible land, irrigated land, and other indicators of environmental problems.

The funding allocation formula is under revision for FY2009. There will no longer be "workload summation" or "special resource concern" factors. Instead, a certain percentage (to be decided) will form the base allocation to be shared equally by the 44 SWCDs. Then, the remaining percentage will be allocated to the significant resource concerns identified by the newly formed EQIP Local Work Groups (LWG). Each LWG will identify resource concerns; the Soil and Water Conservation District Board supervisors will prioritize those resource concerns for their District and send that list to the state office. The State Technical Committee will prioritize that list of resource concerns and select the top 10 priority concerns to be used in the allocation formula.

EWG recommends that if funds are allocated directly to local jurisdictions, Louisiana EQIP should use allocation formulas based primarily on natural resource and environmental factors (rather than generic production factors) to channel more funding to localities with significant environmental problems associated with agriculture.

EWG recommends that Louisiana EQIP's best opportunity for improving water quality is to fund well-designed, watershed-based clean-up projects. This approach encourages multiple farmers within a watershed to reduce pollution to a specific lake, stream, or tributary to the Mississippi River.

The problem-solving advantages of this approach are well understood. They include focusing resources in specific locations to solve well-defined problems using a strategy that directs funding to those farmers within the watershed who can do the most to reduce pollution. Ideally, such water quality improvement projects include developing monitoring and evaluation systems to adjust the strategy and resource allocations based on the results that are being realized. Ramping up the emphasis in EQIP on such watershed-based clean-up projects would dramatically increase the effectiveness of the program.

EWG recommends that Louisiana EQIP allocate 60 percent of its EQIP funds to watershed-based clean-up projects by 2012. Louisiana EQIP should then allocate the

remaining 40 percent of funds by 2012 to funding pools that target high priority natural resource and environmental problems. These state-level funding pools create important opportunities to focus EQIP on the most pressing designated problems. The funding pools allow EQIP managers to select the best applications from all the applications proposing to address the same natural resource or environmental problem.

Application Ranking Criteria

Louisiana uses the ProTracts Ranking Tool for ranking all EQIP applications. This ranking tool has been developed to achieve a consistent nation-wide ranking process. However, the tool is tailored to prioritize the targeted resource concerns in Louisiana, as identified by the Local Work Groups. According to Louisiana EQIP's program website: "The ranking tool will allow field offices to rank applications based on practices in which the applicant is requesting financial assistance, while evaluating practice benefits / cost effectiveness, and addressing state and national issues. A sum of the point values will be used to prioritize EQIP applications for funding consideration."[2]

Applications to participate in EQIP are evaluated using a single ranking criteria document called the "Ranking Summary Tool" that includes: (1) national priorities, (2) state issues, (3) a list of 7 major resource concerns with 28 sub-resource concerns and numerous eligible practices that treat each sub-resource concern, and (4) a cost-efficiency score. See Box 1 for background information on the cost-efficiency score.

Louisiana EQIP uses the ProTracts ranking system to calculate a cost-efficiency score for each application. The cost-efficiency score is achieved by summing the Conservation Practice Physical Effects scores by practice, multiplying by the service life of each practice, and dividing by the sum of the average cost of each practice. The Ranking Summary Tool has the following Scoring Multipliers that are multiplied to each application's raw score to "weight" each section of the application: 100.00 for the efficiency score, 2.00 for the national priorities section and 3.00 for the state issues section.

In 2009, Louisiana EQIP hopes to refine their Ranking Summary Tool so that it will provide the following percentage of points to each of the Tool's four sections to generate a total ranking score for each application: 1 percent of the total ranking score's points will go to the cost-efficiency section, 10 percent to the national issues section, 20 percent to the state issues section, and 69 percent to the new local issues section.

[2]EQIP General Description – Louisiana. http://www.la.nrcs.usda.gov/programs/EQIP/index.html

Box 1. The Cost-Efficiency Score

A cost-efficiency score is generated for each application to determine how effective the cost-shared practices will be at addressing the priority resource concerns (soil, water, air, plant, animal, and human). The cost-efficiency score is calculated by multiplying the practice(s)'

Conservation Practice Physical Effects (CPPE) value(s)
x Service life of the practice(s)
/ Average cost of installing and maintaining the practice(s)

NRCS maintains a national database of each practice's CPPE value. CPPE values range from -5 to + 5 reflecting the practice's ability to worsen or improve each resource concern. The CPPE value can be modified by the state or local jurisdiction to reflect the soil, weather, topographic, and other state or local conditions that may impact the effectiveness of the practice.

All 10 Mississippi River border states are using the NRCS Pro-Tracts Cost-Efficiency software to calculate a Cost-Efficiency score for each application. However, because the Cost-Efficiency score is embedded in the software, this step in the ranking process is not transparent since the state EQIP managers were unable to fulfill our request of reviewing the CPPE values given to practices funded by EQIP.

To determine how much emphasis Louisiana EQIP places on the reduction of nutrient and sediment pollution and on geographic priority areas, we attempted a rough estimate of the percentage of raw, un-weighted points assigned to questions that appear to address these priorities. We acknowledge that this approach is incomplete and potentially misleading, as it does not account for the effect of the cost-efficiency score in the ranking criteria. We did include a review of the effect of the multipliers on the points provided in each National, State, and Local Issues section.

Overall, the lack of specificity in the ranking criteria made it difficult to identify points for reducing sediment and nutrient pollution and points for applications located in priority areas. Those complications are described in Box 2.

Regarding emphasis on geographic priorities, a review of the FY 2008 Ranking Tool Summary (see Appendix) indicates that Louisiana does not appear to give much emphasis to geographic priorities. In the National Priorities section, Louisiana asks National Priorities Question 1 which includes a reference to impaired watersheds:

> "Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?"

This question does give some priority to an application located in an impaired watershed as part of a larger priority for addressing nonpoint and point source pollution.

Box 2. The Lack of Specificity in Ranking Criteria

The ranking criteria in all 10 Mississippi River border states lacked sufficient specificity for us to determine with real certainty the emphasis each state was giving in its ranking sheets to the reduction of sediment and nutrient pollution and to areas of geographic importance. For example, many ranking factors do not specify the particular source of natural resource or environmental problems, such as sediment or nutrient loss from cropland. Instead the ranking factors refer to more generic sources of problems, such as nonpoint source pollution.

In those cases where more specific types of pollutants like sediments or nutrients were cited, they were usually included in a longer list of pollutants, such as pathogens, pesticides, or excess salinity, making determination of the priorities implicit in the ranking criteria difficult. A similar lack of specificity hampered our ability to determine the emphasis placed on location of an application within a priority watershed or other geographic unit.

Despite these difficulties, it is clear that the factors used in ranking criteria and the priority assigned those factors through point allocations and multipliers are critical determinants of effectiveness of EQIP in reducing sediment and nutrient pollution.

In Louisiana's State Issues section, there are four questions related to geographically important areas but these questions receive only 80 points (10 percent of the State section's 780 maximum possible points):

> "Are the offered acres within the drainage area of a stream segment or waterbody is designated by the State Water Quality Management Plan (305(b) report) as "Not Fully Supporting" its designated use, AND the EQIP contract will include practices targeted at improving the water quality of runoff from the offered acres?" (20 points)
>
> "Are the offered acres within the drainage area of a scenic stream (that portion designated by the State as scenic) and the EQIP contract will include practice(s) that target the reduction of non-point source pollution?" (20 points)
>
> "Are the offered acres within a parish listed as significant Threatened and Endangered (T&E) Species and/or high priority Candidate Species Habitat and the EQIP contract will include practice(s) that will benefit the habitat for the identified T&E species?" (20 points)

"Does the EQIP contract treatment include the establishment of a Wildlife Buffer (at least one chain in width from the waterline) around a pond and the buffer and pond will be fenced to exclude livestock?" (20 points)

Regarding emphasis on reducing nutrient and sediment pollution, a review of Louisiana's Ranking Summary does not provide clear answers about how much priority Louisiana EQIP places on these two specific water quality impairments. For example, the National Priority Question 1 does mention the words "nutrients" and "sediment" but the question lacks sufficient specificity for us to distinguish between points awarded for treatment of nutrients and sediments versus points awarded for reducing excess salinity or pesticides.

The National Priorities Question 4 does allocate 30 points (25 percent of the 120 total points available from the National Priorities section of the ranking system) for applications that specifically address soil erosion and sedimentation.

"Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?"

In the State Issues section of Louisiana's ranking tool, four questions explicitly or implicitly address nutrient pollution:

a) Development and implementation of a Comprehensive Nutrient Management Plan (CNMP) by a CAFO (250 points)
b) Contract includes a Waste Storage Facility, Compositing Facility, Waste Treatment Lagoon, or Conveyance Pipeline that requires the development and implementation of a CNMP (250 points)
c) Implementation of "Precision Agriculture, "with" Yield Monitor, through Nutrient Management (30 points)
d) Implementation of practices that will make up and be operated as a complete Tailwater Recovery System (10 points)

In the State Issues section of Louisiana's ranking tool, three questions implicitly address sediment pollution:

a) Offered cropland acres consist of a predominance of soils with a surface layer K factor equal to or greater than .43 and the EQIP contract will include practice(s) that reduce soil erosion equal to or less than "T" (20 points)
b) Installation of "Buffer" practices such as Field Border, Filter Strip, Grassed Waterway, Riparian Forest Buffer, Riparian Herbaceous Cover, etc. (10 points)
c) Treatment of "Classic Gully(s)" (20 points)
d) Conversion of land use form cropland to pasture or hayland or conversion of cropland hayland or pastureland to forest land (20 points)

Thus, 610 of the State Issues section's 780 maximum possible points (78 percent) may result in a reduction of nutrient and sediment pollution.

This evaluation of the raw, un-weighted points is incomplete as it does not include the effect of the multipliers for the national and state sections of the Ranking Summary Tool nor does it include an analysis of the effect of the cost-efficiency section of the ranking sheet. Due to a lack of information about the cost-efficiency section of the ranking sheet, EWG did not evaluate the likely impact of that score on the final score.

EWG was able to use Louisiana's EQIP multipliers (national: 2.0 and state: 3.0) to observe the effect these multipliers might have on raw, un-weighted points that may reduce sedimentation and nutrient pollution and give priority to important locations. We found that the multipliers did not significantly change the percentages of points awarded to these priority issues.

Despite Louisiana EQIP appearing to giving about 80 percent of its unweighted points in the reviewed Summary to the most pressing concerns – nutrient and sediment pollution reduction in high priority areas – only about 7 percent of points are given to applications from priority watersheds. Thus, it is unlikely that Louisiana's ranking system can ensure that applications in the priority watersheds will rise to the top of the ranking list and get selected for funding.

EWG recommends that Louisiana EQIP revise their ranking systems to increase the priority given to applications located in high priority watersheds that will reduce sediment and nutrient pollution. Sediment and nutrient pollution are the two most important pollutants of streams, lakes, and reservoirs in the 10 states bordering the Mississippi River, the main stem of the Mississippi River, and the Dead Zone in the Gulf of Mexico.

Conclusion

We find that EQIP has not been deployed as effectively as it could be in Louisiana or any of the 9 states that border the Mississippi River. The methods used to decide how to spend EQIP dollars within the state and which farmers will get those dollars are more likely to result in diffuse and fragmented efforts to reduce pollution from farms rather than the focused and coordinated effort needed to solve both local and regional water pollution problems.

Watershed-based water quality clean-up projects are the best use of federal taxpayer resources and offer the greatest hope for cleaning up the unintended environmental damage of agriculture. These projects entail setting goals to clean up specific bodies of water that are deemed the highest priorities, determining how many of the most cost effective practices are needed, and persuading key farmers to participate in the project.

To quickly ramp up the effectiveness of EQIP, Louisiana NRCS should:

1. Set clear and specific goals for how much pollution needs to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals.

2. Use 60 percent of EQIP dollars by 2012 to fund watershed-based water quality clean-up projects that encourage multiple farmers within selected watersheds to reduce pollution to specific lakes, streams, or tributaries to the Mississippi River.

3. Use 40 percent of EQIP funds by 2012 in state-level funding pools to target the highest priority natural resource and environmental problems in each state.

4. Select farmers to participate in EQIP who can do the most to contribute to watershed-based clean-up projects or solve high priority problems.

APPENDIX—Louisiana EQIP Ranking Criteria

Louisiana EQIP – Ranking Tool Summary for FY 2008[3]

Ranking Tool Summary
for FY2008

(Released 10/05/2007)

Land Uses: Crop, Forest, Grazed Forest, Grazed Range, Hay, Headquarters, Pasture, Wildlife

Efficiency Score: Scoring Multiplier: 100.00

National Priorities:

Scoring Multiplier: 2.00
Questions:

Number	Question	Points
1	Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?	30
2	Will the treatment you intend to implement using EQIP result in a considerable amount of ground or surface water conservation?	20
3	Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	10
4	Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	30
5	Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	30
	Total Points	120

[3] 2008 Louisiana EQIP Ranking Criteria Summary.
http://www.la.nrcs.usda.gov/programs/EQIP/2008_Louisiana_EQIP_Ranking_Criteria_Summary.pdf

State Issues:

Scoring Multiplier: 3.00

Questions:

Question Number	Question	Points
1	Are the offered acres within the drainage area of a stream segment or waterbody that is designated by the State Water Quality Management Plan (305(b) report) as "Not Fully Supporting" its designated use, AND the EQIP contract will include practices targeted at improving the water quality of runoff from the offered acres?	20
2	Do the offered cropland acres consist of a predominance of soils with a surface layer K factor equal to or greater than .43 and the EQIP contract will include practice(s) that reduce soil erosion equal to or less than "T"?	20
3	Will the EQIP contract treatment assist the applicant with the development and/or Implementation of a Comprehensive Nutrient Management Plan (CNMP) on a Confined Animal Feeding Operation that has been in operation less than one year?	200
4	Will the EQIP contract treatment assist the applicant with the development and/or Implementation of a Comprehensive Nutrient Management Plan (CNMP) on a Confined Animal Feeding Operation that has been in operation one year or longer?	250
5	Are the offered acres within the drainage area of a scenic stream (that portion designated by the State as scenic) and the EQIP contract will include practice(s) that target the reduction of non-point-source pollution?	20
6	Are the offered acres within a parish listed as significant Threatened and Endangered (T&E) Species and/or high priority Candidate Species Habitat and the EQIP contract will include practice(s) that will benefit the habitat for the identified T&E species?	20
7	Does the EQIP contract treatment include a Waste Storage Facility, Composting Facility, Waste Treatment Lagoon, or Conveyance Pipeline that requires the development and implementation of a Comprehensive Nutrient Management Plan (CNMP)?	250
8	Does the EQIP contract treatment include the establishment of one or more of the following rare or declining habitats: Longleaf Pine and/or "native" herbaceous vegetation?	30

9	Does the EQIP contract treatment include the establishment of a Wildlife Buffer (at least one chain in width from the waterline) around a pond and the buffer and pond will be fenced to exclude livestock?	20
10	Is the applicant currently participating in the Master Farmer Program (Includes Master Farmer, Cattleman, Dairyman, etc.) (Reference the LSU Ag Center Participant List) and/or the American Tree Farmer Program (participant must show their certification card)?	20
11	Does the EQIP contract treatment include the implementation of "Precision Agriculture", "with" Yield Monitor, though Nutrient Management?	30
12	Does the EQIP contract treatment include the implementation of "Precision Agriculture", "without" Yield Monitor, though Nutrient Management?	10
13	Are the offered acres within the Chicot Aquifer and the EQIP contract will include irrigation practice(s) that result in a net savings of ground and surface water resources?	10
14	Does the EQIP contract treatment include the implementation of one or more conservation practices that will make up and be operated as a complete Tailwater Recovery System, as specified in the NRCS Field Office Technical Guide, practice code 447?	10
15	Will the EQIP contract include installation of "Buffer" practices such as Field Border, Filter Strip, Grassed Waterway, Riparian Forest Buffer, or Riparian Herbaceous Cover, and/or practices to establish the buffer such as Conservation Cover or Tree and Shrub Establishment?	10
16	Will the EQIP contract include treatment of "Classic Gully(s)" with one or more of the following erosion control practices: Critical Area Planting; Grade Stabilization Structure?	20
17	Does the EQIP contract include conversion of landuse from cropland to pasture or hayland; or conversion of cropland, hayland or pastureland to forestland?	20
18	Will the EQIP contract treatment assist the applicant in increasing the pasture condition score from a Category 1 to a Category 4?	30
19	Will the EQIP contract treatment assist the applicant in increasing the pasture condition score from a Category 2 to a Category 4?	20
20	Will the EQIP contract treatment assist the applicant in increasing the pasture condition score from a Category 3 to a Category 4?	10
	Maximum Points: Total Points	1020

Selected Resource Concerns and Practices:

Air Quality: Objectionable Odors
- Composting Facility (317)
- Waste Utilization (633)

Domestic Animals: Inadequate Quantities and Quality of Feed and Forage
- Animal Trails and Walkways (575)
- Brush Management (314)
- Conservation Cover (327)
- Fence (382)
- Nutrient Management (590)
- Pasture and Hay Planting (512)
- Pest Management (595)
- Pipeline (516)
- Prescribed Burning (338)
- Prescribed Grazing (528)
- Range Planting (550)
- Tree/Shrub Establishment (612)
- Waste Utilization (633)
- Water Well (642)
- Watering Facility (614)

Domestic Animals: Inadequate Shelter
- Livestock Shade Structure (717)
- Tree/Shrub Establishment (612)

Domestic Animals: Inadequate Stock Water
- Pipeline (516)
- Pond (378)
- Pond Sealing or Lining, Bentonite Sealan (521C)
- Pond Sealing or Lining, Flexible Membran (521A)
- Pumping Plant (533)
- Water Well (642)
- Watering Facility (614)

Fish and Wildlife: Inadequate Cover/Shelter
- Conservation Cover (327)
- Cover Crop (340)
- Fence (382)
- Field Border (386)
- Filter Strip (393)
- Forest Stand Improvement (666)
- Nutrient Management (590)
- Pasture and Hay Planting (512)
- Pond (378)
- Prescribed Burning (338)
- Prescribed Grazing (528)
- Range Planting (550)
- Residue Management, Seasonal (344)
- Residue Mgmt, Mulch Till (345)
- Residue Mgmt, Ridge Till (346)
- Residue Mgmt-No-Till/Strip Till/Direct S (329)
- Shallow Water Management for Wildlife (646)
- Streambank and Shoreline Protection (580)
- Structure for Water Control (587)
- Tree/Shrub Establishment (612)
- Vegetative Barrier (601)

Fish and Wildlife: Inadequate Food
- Conservation Cover (327)
- Fence (382)
- Field Border (386)
- Filter Strip (393)
- Forest Stand Improvement (666)
- Nutrient Management (590)
- Pasture and Hay Planting (512)
- Prescribed Burning (338)
- Range Planting (550)
- Shallow Water Management for Wildlife (646)
- Tree/Shrub Establishment (612)
- Vegetative Barrier (601)

Fish and Wildlife: Inadequate Water
- Conservation Cover (327)
- Dike (356)
- Pond (378)
- Pond Sealing or Lining, Bentonite Sealan (521C)
- Pond Sealing or Lining, Flexible Membran (521A)
- Shallow Water Management for Wildlife (646)
- Structure for Water Control (587)
- Tree/Shrub Establishment (612)

Plant Condition: Noxious and Invasive Plants
- Brush Management (314)
- Forest Site Preparation (490)
- Forest Stand Improvement (666)
- Pest Management (595)
- Prescribed Burning (338)
- Prescribed Grazing (528)
- Range Planting (550)
- Tree/Shrub Establishment (612)

Plant Condition: Plants not adapted or suited
- Brush Management (314)
- Firebreak (394)
- Forest Site Preparation (490)
- Forest Stand Improvement (666)
- Nutrient Management (590)
- Pasture and Hay Planting (512)
- Pest Management (595)
- Prescribed Burning (338)
- Prescribed Grazing (528)
- Range Planting (550)
- Tree/Shrub Establishment (612)
- Vegetative Barrier (601)

Plant Condition: Productivity, Health and Vigor
- Brush Management (314)
- Conservation Cover (327)
- Critical Area Planting (342)
- Fence (382)
- Firebreak (394)
- Forest Site Preparation (490)
- Forest Stand Improvement (666)
- Forest Trails and Landings (655)
- Irrigation System, Sprinkler (442)
- Irrigation Water Conveyance, Pipeline, H (430DD)
- Irrigation Water Conveyance, Pipeline, L (430EE)
- Mulching (484)
- Nutrient Management (590)
- Pasture and Hay Planting (512)
- Pest Management (595)
- Pipeline (516)
- Prescribed Burning (338)

- Prescribed Grazing (528)
- Pumping Plant (533)
- Range Planting (550)
- Streambank and Shoreline Protection (580)
- Tree/Shrub Establishment (612)
- Vegetative Barrier (601)
- Waste Utilization (633)
- Water Well (642)
- Watering Facility (614)

Plant Condition: Wildfire Hazard
- Firebreak (394)

Soil Condition: Contaminants-Animal Waste and Other Organics - P
- Composting Facility (317)
- Comprehensive Nutrient Management Plan (100)
- Cover Crop (340)
- Field Border (386)
- Filter Strip (393)
- Irrigation Water Conveyance, Pipeline, H (430DD)
- Irrigation Water Conveyance, Pipeline, L (430EE)
- Nutrient Management (590)
- Prescribed Grazing (528)
- Pumping Plant (533)
- Range Planting (550)
- Waste Storage Facility (313)
- Waste Treatment Lagoon (359)
- Waste Utilization (633)

Soil Condition: Organic Matter Depletion
- Contour Farming (330)
- Cover Crop (340)
- Field Border (386)
- Filter Strip (393)
- Nutrient Management (590)
- Residue Management, Seasonal (344)
- Residue Mgmt, Mulch Till (345)
- Residue Mgmt, Ridge Till (346)
- Residue Mgmt-No-Till/Strip Till/Direct S (329)
- Waste Utilization (633)

Soil Erosion: Classic Gully
- Conservation Cover (327)
- Contour Farming (330)
- Cover Crop (340)
- Critical Area Planting (342)
- Diversion (362)
- Fence (382)
- Field Border (386)
- Filter Strip (393)
- Forest Trails and Landings (655)
- Grade Stabilization Structure (410)
- Grassed Waterway (412)
- Mulching (484)
- Pasture and Hay Planting (512)
- Pond (378)
- Pond Sealing or Lining, Bentonite Sealan (521C)
- Pond Sealing or Lining, Flexible Membran (521A)
- Prescribed Grazing (528)
- Range Planting (550)
- Residue Management, Seasonal (344)
- Residue Mgmt, Mulch Till (345)
- Residue Mgmt, Ridge Till (346)
- Residue Mgmt-No-Till/Strip Till/Direct S (329)
- Sediment Basin (350)
- Structure for Water Control (587)
- Terrace (600)
- Tree/Shrub Establishment (612)
- Underground Outlet (620)
- Vegetative Barrier (601)
- Water and Sediment Control Basin (638)

Soil Erosion: Ephemeral Gully
- Conservation Cover (327)
- Contour Farming (330)
- Cover Crop (340)
- Critical Area Planting (342)
- Diversion (362)
- Fence (382)
- Field Border (386)
- Filter Strip (393)
- Grassed Waterway (412)
- Heavy Use Area Protection (561)
- Irrigation Land Leveling (464)
- Mulching (484)
- Pasture and Hay Planting (512)
- Precision Land Forming (462)
- Residue Management, Seasonal (344)
- Residue Mgmt, Mulch Till (345)
- Residue Mgmt, Ridge Till (346)
- Residue Mgmt-No-Till/Strip Till/Direct S (329)
- Sediment Basin (350)
- Terrace (600)
- Tree/Shrub Establishment (612)
- Underground Outlet (620)
- Vegetative Barrier (601)
- Water and Sediment Control Basin (638)

Soil Erosion: Irrigation-induced
- Conservation Cover (327)
- Field Border (386)
- Filter Strip (393)
- Grassed Waterway (412)
- Irrigation Land Leveling (464)
- Irrigation System, Microirrigation (441)
- Irrigation System, Sprinkler (442)
- Irrigation Water Management (449)
- Pasture and Hay Planting (512)
- Range Planting (550)
- Residue Management, Seasonal (344)
- Residue Mgmt, Mulch Till (345)
- Residue Mgmt, Ridge Till (346)
- Residue Mgmt-No-Till/Strip Till/Direct S (329)
- Terrace (600)
- Tree/Shrub Establishment (612)

Soil Erosion: Sheet and Rill
- Conservation Cover (327)
- Contour Farming (330)
- Cover Crop (340)
- Critical Area Planting (342)
- Diversion (362)
- Fence (382)
- Field Border (386)

- Filter Strip (393)
- Grassed Waterway (412)
- Heavy Use Area Protection (561)
- Irrigation Land Leveling (464)
- Mulching (484)
- Pasture and Hay Planting (512)
- Pipeline (516)
- Precision Land Forming (462)
- Prescribed Grazing (528)
- Pumping Plant (533)
- Residue Management, Seasonal (344)
- Residue Mgmt, Mulch Till (345)
- Residue Mgmt, Ridge Till (346)
- Residue Mgmt-No-Till/Strip Till/Direct S (329)
- Roof Runoff Structure (558)
- Terrace (600)
- Tree/Shrub Establishment (612)
- Vegetative Barrier (601)
- Water Well (642)
- Watering Facility (614)

Soil Erosion: Shoreline
- Streambank and Shoreline Protection (580)

Soil Erosion: Streambank
- Conservation Cover (327)
- Critical Area Planting (342)
- Diversion (362)
- Fence (382)
- Field Border (386)
- Grade Stabilization Structure (410)
- Grassed Waterway (412)
- Mulching (484)
- Pumping Plant (533)
- Stream Crossing (578)
- Streambank and Shoreline Protection (580)
- Structure for Water Control (587)
- Tree/Shrub Establishment (612)
- Water and Sediment Control Basin (638)

Water Quality: Excessive Nutrients and Organics in Groundwater
- Composting Facility (317)
- Comprehensive Nutrient Management Plan (100)
- Conservation Cover (327)
- Cover Crop (340)
- Fence (382)
- Field Border (386)
- Filter Strip (393)
- Grassed Waterway (412)
- Irrigation Land Leveling (464)
- Irrigation System, Microirrigation (441)
- Irrigation Water Conveyance, Pipeline, H (430DD)
- Irrigation Water Conveyance, Pipeline, L (430EE)
- Nutrient Management (590)
- Pasture and Hay Planting (512)
- Pond Sealing or Lining, Bentonite Sealan (521C)
- Pond Sealing or Lining, Flexible Membran (521A)
- Precision Land Forming (462)
- Prescribed Grazing (528)
- Pumping Plant (533)
- Range Planting (550)
- Roof Runoff Structure (558)
- Tree/Shrub Establishment (612)
- Waste Storage Facility (313)
- Waste Treatment Lagoon (359)
- Waste Utilization (633)
- Well Decommissioning (351)

Water Quality: Excessive Nutrients and Organics in Surface Water
- Composting Facility (317)
- Comprehensive Nutrient Management Plan (100)
- Conservation Cover (327)
- Contour Farming (330)
- Cover Crop (340)
- Fence (382)
- Field Border (386)
- Filter Strip (393)
- Grassed Waterway (412)
- Heavy Use Area Protection (561)
- Irrigation Land Leveling (464)
- Irrigation or Regulating Reservoir (552)
- Irrigation Storage Reservoir (436)
- Irrigation System, Microirrigation (441)
- Irrigation System, Sprinkler (442)
- Irrigation Water Conveyance, Pipeline, H (430DD)
- Irrigation Water Conveyance, Pipeline, L (430EE)
- Irrigation Water Management (449)
- Nutrient Management (590)
- Pasture and Hay Planting (512)
- Pond Sealing or Lining, Bentonite Sealan (521C)
- Pond Sealing or Lining, Flexible Membran (521A)
- Precision Land Forming (462)
- Prescribed Grazing (528)
- Pumping Plant (533)
- Range Planting (550)
- Residue Management, Seasonal (344)
- Residue Mgmt, Mulch Till (345)
- Residue Mgmt, Ridge Till (346)
- Residue Mgmt-No-Till/Strip Till/Direct S (329)
- Roof Runoff Structure (558)
- Sediment Basin (350)
- Structure for Water Control (587)
- Terrace (600)
- Tree/Shrub Establishment (612)
- Vegetative Barrier (601)
- Waste Storage Facility (313)
- Waste Treatment Lagoon (359)
- Waste Utilization (633)
- Water and Sediment Control Basin (638)

Water Quality: Excessive Suspended Sediment and Turbidity in Surface Water
- Animal Trails and Walkways (575)
- Conservation Cover (327)
- Contour Farming (330)
- Cover Crop (340)
- Critical Area Planting (342)
- Diversion (362)
- Fence (382)
- Field Border (386)
- Filter Strip (393)

- Forest Trails and Landings (655)
- Grade Stabilization Structure (410)
- Grassed Waterway (412)
- Heavy Use Area Protection (561)
- Irrigation Land Leveling (464)
- Irrigation or Regulating Reservoir (552)
- Irrigation Storage Reservoir (436)
- Irrigation System, Microirrigation (441)
- Irrigation System, Sprinkler (442)
- Irrigation Water Conveyance, Pipeline, L (430EE)
- Irrigation Water Management (449)
- Mulching (484)
- Pasture and Hay Planting (512)
- Pipeline (516)
- Pond (378)
- Pond Sealing or Lining, Bentonite Sealan (521C)
- Pond Sealing or Lining, Flexible Membran (521A)
- Precision Land Forming (462)
- Prescribed Grazing (528)
- Pumping Plant (533)
- Range Planting (550)
- Residue Management, Seasonal (344)
- Residue Mgmt, Mulch Till (345)
- Residue Mgmt, Ridge Till (346)
- Residue Mgmt-No-Till/Strip Till/Direct S (329)
- Roof Runoff Structure (558)
- Sediment Basin (350)
- Stream Crossing (578)
- Streambank and Shoreline Protection (580)
- Structure for Water Control (587)
- Terrace (600)
- Tree/Shrub Establishment (612)
- Underground Outlet (620)
- Vegetative Barrier (601)
- Water and Sediment Control Basin (638)
- Water Well (642)
- Watering Facility (614)

Water Quality: Harmful Levels of Pathogens in Surface Water
- Composting Facility (317)
- Comprehensive Nutrient Management Plan (100)
- Filter Strip (393)
- Heavy Use Area Protection (561)
- Roof Runoff Structure (558)
- Sediment Basin (350)
- Structure for Water Control (587)
- Waste Storage Facility (313)
- Waste Treatment Lagoon (359)

Water Quality: Harmful Levels of Pesticides in Groundwater
- Conservation Cover (327)
- Cover Crop (340)
- Field Border (386)
- Filter Strip (393)
- Grassed Waterway (412)
- Irrigation Land Leveling (464)
- Irrigation System, Microirrigation (441)
- Pasture and Hay Planting (512)
- Precision Land Forming (462)
- Prescribed Grazing (528)
- Pumping Plant (533)
- Range Planting (550)
- Residue Mgmt, Mulch Till (345)
- Residue Mgmt, Ridge Till (346)
- Residue Mgmt-No-Till/Strip Till/Direct S (329)
- Tree/Shrub Establishment (612)
- Well Decommissioning (351)

Water Quality: Harmful Levels of Pesticides in Surface Water
- Conservation Cover (327)
- Contour Farming (330)
- Cover Crop (340)
- Field Border (386)
- Filter Strip (393)
- Grassed Waterway (412)
- Irrigation Land Leveling (464)
- Irrigation or Regulating Reservoir (552)
- Irrigation Storage Reservoir (436)
- Irrigation System, Microirrigation (441)
- Irrigation System, Sprinkler (442)
- Irrigation Water Conveyance, Pipeline, L (430EE)
- Irrigation Water Management (449)
- Pasture and Hay Planting (512)
- Precision Land Forming (462)
- Prescribed Grazing (528)
- Range Planting (550)
- Residue Management, Seasonal (344)
- Residue Mgmt, Mulch Till (345)
- Residue Mgmt, Ridge Till (346)
- Residue Mgmt-No-Till/Strip Till/Direct S (329)
- Sediment Basin (350)
- Structure for Water Control (587)
- Terrace (600)
- Tree/Shrub Establishment (612)
- Vegetative Barrier (601)
- Water and Sediment Control Basin (638)

Water Quantity: Aquifer Overdraft
- Conservation Cover (327)
- Irrigation Land Leveling (464)
- Irrigation or Regulating Reservoir (552)
- Irrigation Storage Reservoir (436)
- Irrigation System, Microirrigation (441)
- Irrigation System, Sprinkler (442)
- Irrigation Water Conveyance, Pipeline, H (430DD)
- Irrigation Water Conveyance, Pipeline, L (430EE)
- Irrigation Water Management (449)
- Pasture and Hay Planting (512)
- Pumping Plant (533)
- Range Planting (550)
- Structure for Water Control (587)
- Water and Sediment Control Basin (638)

Water Quantity: Excessive Runoff, Flooding, or Ponding
- Irrigation System, Sprinkler (442)

Water Quantity: Inefficient Water Use on Irrigated Land
- Irrigation Land Leveling (464)
- Irrigation or Regulating Reservoir (552)

Irrigation Storage Reservoir (436)
Irrigation System, Microirrigation (441)
Irrigation System, Sprinkler (442)
Irrigation Water Conveyance, Pipeline, H (430DD)
Irrigation Water Conveyance, Pipeline, L (430EE)
Irrigation Water Management (449)
Pumping Plant (533)
Residue Management, Seasonal (344)
Residue Mgmt, Mulch Till (345)
Residue Mgmt, Ridge Till (346)
Residue Mgmt-No-Till/Strip Till/Direct S (329)
Structure for Water Control (587)
Water and Sediment Control Basin (638)
Water Well (642)

SEIZING A WATERSHED MOMENT

Making EQIP Work for Water Quality in 10 Mississippi River Border States

Environmental Quality Incentives Program
State Report 4 of 10

ENVIRONMENTAL WORKING GROUP

APPENDIX – STATE REPORTS

KENTUCKY
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM

OVERVIEW

Kentucky received an average of $12.3 million in EQIP technical and financial assistance funds per year from 2003 to 2007, ranking it 9th out of the 10 states that border the Mississippi River for EQIP funds. Each of the 120 counties in Kentucky is grouped into one of 14 different pooling areas and all of the state's EQIP funds are distributed to these 14 geographic pooling areas.

Applications to participate in EQIP are evaluated using the specific ranking criteria document (called the Kentucky EQIP Application Field Worksheet) for the pooling area where the applicant's operation is located. Each of the 14 Worksheets has: (1) 5 questions, related to national EQIP priorities that are the same for each pooling area (2) 8 questions related to state criteria that are the same for each pooling area, (3) 9 to 10 different local issue questions specific to each of the 14 pooling areas, and (4) a cost-efficiency component.

The Kentucky State Technical Committee provides input on the funding allocation formula to the 14 pooling areas and the statewide priority resource concerns, recommends issues for the state level component of the Worksheet, and determines the weights of each section of the ranking criteria document. Local Work Groups in each of the 14 pooling areas identify and prioritize their resource concerns and create a list of "local issue" questions for use in the ranking tool. All local issue questions are reviewed and approved by the State Conservationist.

KENTUCKY EQIP WEBSITE

http://www.ky.nrcs.usda.gov/programs/EQIP2008/index2008.html

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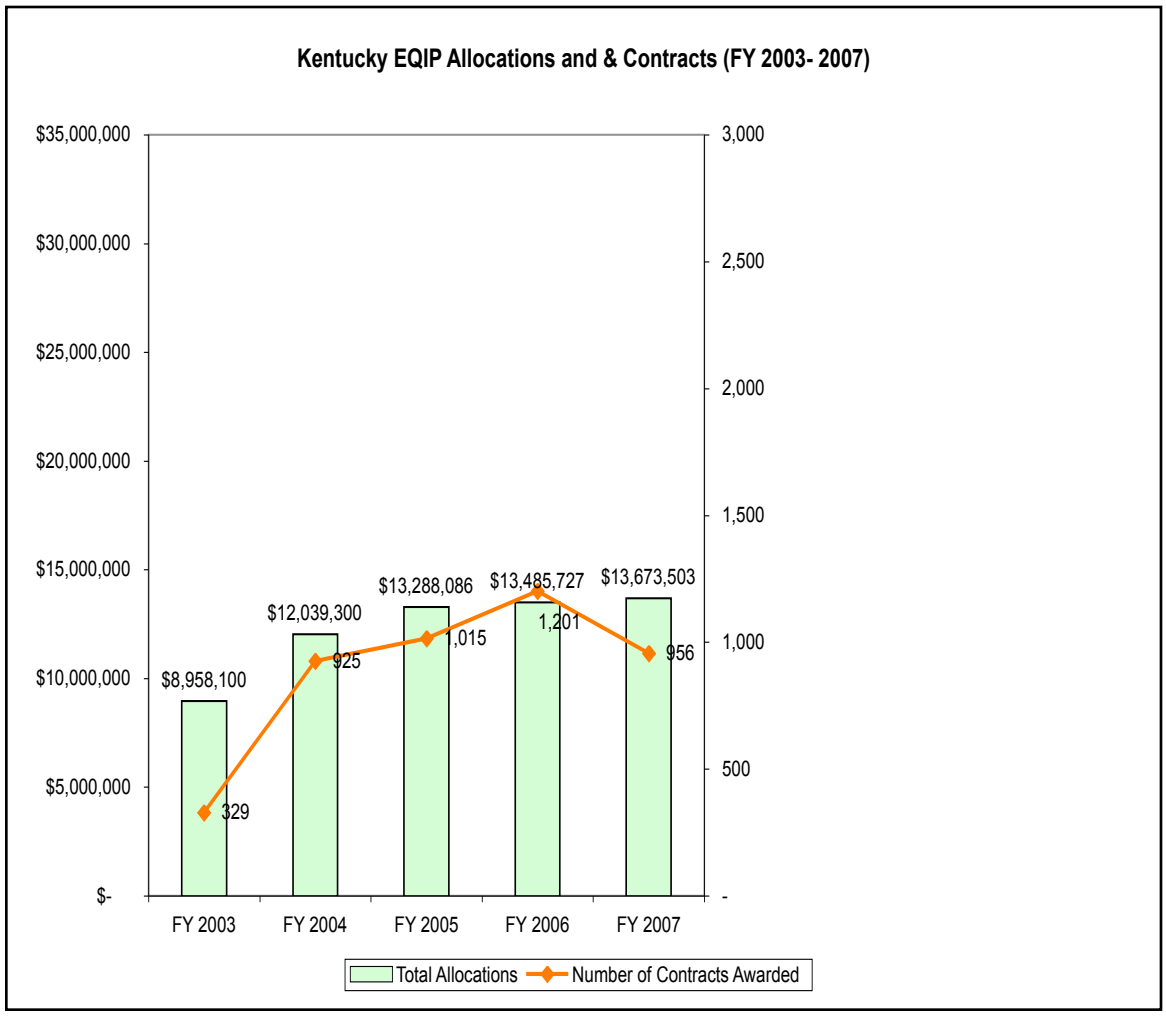
FUNDING AND REACH OF EQIP

EQIP funding is allocated to states using a national formula. The chart below shows the amount of financial and technical assistance Kentucky has received from FY 2003 to 2007 and the number of contracts awarded each fiscal year. A total of 4,426 contracts have been entered into with producers between 2003 and 2007 providing $61.4 million and addressing nearly 330,152 acres in the state.



Source: EWG compiled annual data from EQIP's "Allocation" and "Contract" tables found on the USDA NRCS website: http://www.nrcs.usda.gov/programs/EQIP/.

KEY FACTORS ANALYSIS

We analyzed the following factors for indications of the extent to which EQIP in Kentucky is focused on reducing sediment and nutrient loads to streams, lakes, and rivers: (1) the presence or absence of qualitative or quantitative goals for pollutant reductions, (2) methods used to allocate state-level funds to counties or other sub-state levels or to specific projects or priorities, and (3) the application ranking criteria used to

select participants in EQIP. We relied primarily on the information and data presented on the Natural Resources Conservation Service (NRCS) website to complete this analysis and followed up on our investigation with interviews of the state EQIP program manager.

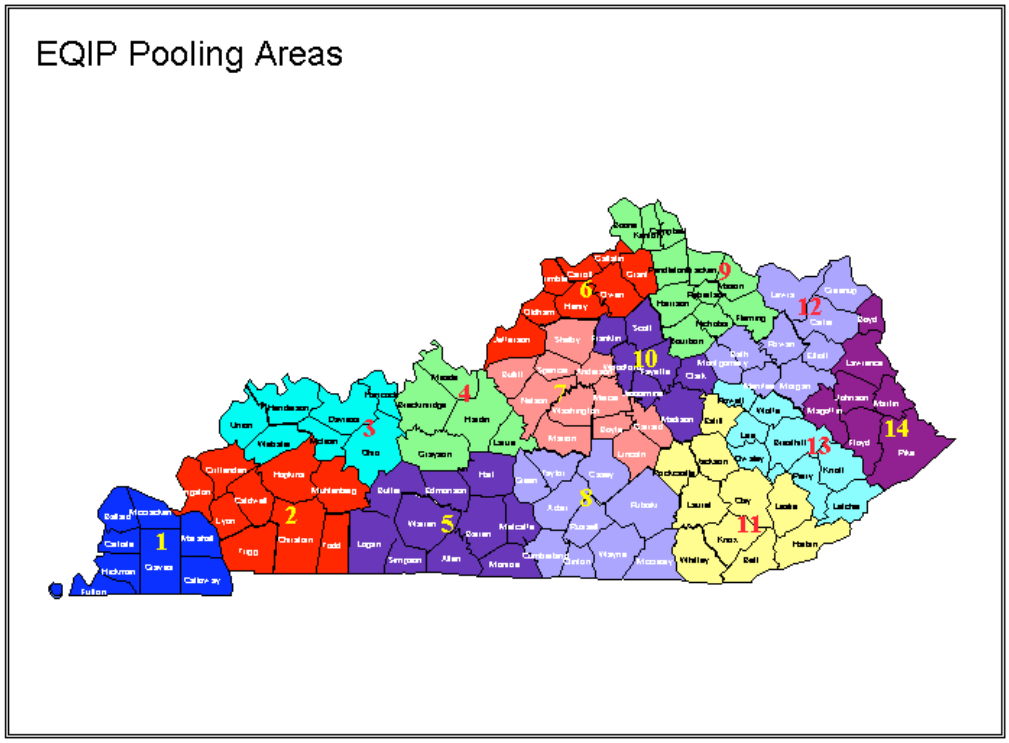
Goals

EWG did not find evidence to suggest that Kentucky EQIP has a) established explicit quantitative or qualitative goals for EQIP to clean up agricultural sources of pollution, b) identified which lakes, streams, or tributaries are priorities for improvement, c) set a timetable to achieve those goals, or d) established a means to track progress toward the goals. Kentucky's application ranking systems do create an implicit set of priorities for treating water quality, but measurable goals and timelines do not exist.

EWG recommends that Kentucky EQIP set clear and specific goals for how much and what types of agricultural pollution need to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals. EWG also recommends that Kentucky EQIP develop systems to track, evaluate, and report on the environmental performance of EQIP.

Fund Allocation

All of Kentucky's EQIP funds are distributed to the 14 pooling areas.



Source: http://www.ky.nrcs.usda.gov/programs/EQIP2008/map142007.html

Kentucky's 120 counties are grouped into one of the 14 pooling areas with about 6 to 11 counties comprising each pool. While each of the 14-pooled areas is guaranteed to receive funding, individual counties within each pooling area are not guaranteed funding. According to Tony Nott, Kentucky EQIP Principal, the State Technical Committee sets up the pooling areas and determines the regional formulas to allocate funds.

A state allocation formula is used to allocate funds to each of these 14 pooling areas. The formula is based on a variety of factors, including:

1. Number of livestock
2. Number of farms
3. Acres of prime farmland
4. Water quality concerns*
5. Wildlife concerns.

*The water quality concerns include the consideration of the Kentucky Department of Water's 305b report, agricultural-impaired waters, Outstanding Resource Waters, wild rivers, karst basin areas, wells and public water supply areas in each pooling area. The last time Kentucky EQIP reviewed this allocation formula was 2004 and Nott anticipates a new review of the formula soon.

EWG recommends that if funds are allocated directly to local jurisdictions, Kentucky EQIP should use allocation formulas based primarily on natural resource and environmental factors (rather than generic production factors) to channel more funding to localities with significant environmental problems associated with agriculture.

EWG recommends that Kentucky EQIP's best opportunity for improving water quality is to fund well-designed, watershed-based clean-up projects. This approach encourages multiple farmers within a watershed to reduce pollution to a specific lake, stream, or tributary to the Mississippi River.

The problem-solving advantages of this approach are well understood. They include focusing resources in specific locations to solve well-defined problems using a strategy that directs funding to those farmers within the watershed who can do the most to reduce pollution. Ideally, such water quality improvement projects include developing monitoring and evaluation systems to adjust the strategy and resource allocations based on the results that are being realized. Ramping up the emphasis in EQIP on such watershed-based clean-up projects would dramatically increase the effectiveness of the program.

EWG recommends that Kentucky EQIP allocate 60 percent of its EQIP funds to watershed-based clean-up projects by 2012. Kentucky EQIP should then allocate the remaining 40 percent of funds by 2012 to funding pools that target high priority natural

resource and environmental problems. These state-level funding pools create important opportunities to focus EQIP on the most pressing designated problems. The funding pools allow EQIP managers to select the best applications from all the applications proposing to address the same natural resource or environmental problem.

Application Ranking Criteria

Applications to participate in EQIP are evaluated using the specific ranking criteria document (called the Kentucky EQIP Application Field Worksheet) for the pooling area where the applicant's operation is located. Each of the 14 Worksheets has: (1) 5 questions, related to national EQIP priorities that are the same for each pooling area (2) 8 questions related to state criteria that are identical in each pooling area, (3) 7 to 10 different local issue questions specific to each of the 14 pooling areas, and (4) a cost-efficiency component. See Box 1 for background information on the cost-efficiency score.

Box 1. The Cost-Efficiency Score

A cost-efficiency score is generated for each application to determine how effective the cost-shared practices will be at addressing the priority resource concerns (soil, water, air, plant, animal, and human). The cost-efficiency score is calculated by multiplying the practice(s)'

Conservation Practice Physical Effects (CPPE) value(s)
x Service life of the practice(s)
/ Average cost of installing and maintaining the practice(s)

NRCS maintains a national database of each practice's CPPE value. CPPE values range from -5 to + 5 reflecting the practice's ability to worsen or improve each resource concern. The CPPE value can be modified by the state or local jurisdiction to reflect the soil, weather, topographic, and other state or local conditions that may impact the effectiveness of the practice.

All 10 Mississippi River border states are using the NRCS Pro-Tracts Cost-Efficiency software to calculate a Cost-Efficiency score for each application. However, because the Cost-Efficiency score is embedded in the software, this step in the ranking process is not transparent since the state EQIP managers were unable to fulfill our request of reviewing the CPPE values given to practices funded by EQIP.

Kentucky assigns 15 percent of the total ranking score to the national issues section, 20 percent to the state issues section, 30 percent to the local issues section, and 35 percent to the cost effectiveness factor. For information purposes, to achieve the aforementioned percentage of the total ranking score specified, the total points in the national section are multiplied by 0.6, the total points in the state section are multiplied by 0.8, and the total points in the local section are multiplied by 0.6. These multipliers

are used to adjust the points in each section to achieve the desired percentage of points for each section. After each section's total points has been added up and adjusted by the weighting system, applications that receive a greater total point score get a higher priority for selection.

According to Nott, the EQIP application process usually begins with a farmer inquiring at one of the 120 Soil Conservation and Water Quality Districts (SWCD) about a particular practice or problem they're experiencing. One of the Soil Conservationists or the District Conservationists would open up a case file of the farmer, complete an application, do a field visit with the farmer and fill out the Application Field Worksheet. The Conservationist then enters the results of the Worksheet into the national ProTracts database system.

Applications are collected at the SWCDs, ranked at the 90 or so Farm Service Agency Centers, and then sent to the State Conservationist's office where the ranked applications are then pooled into the 14 pooling areas. The EQIP personnel and the State Conservationist will determine a ranking cut-off score for each pool based on the funding available for each pool. Applications that have ranking scores lower than the cut-off score will be deemed ineligible for competition for funds in that pooling area. Applications will be awarded contracts in order of their ranking score. If there are funds leftover in one pooling area, they can be shifted to fund applications in another pooling area rather than fund applications that are below the cut-off score.

Each of the 14 Field Worksheets is a two-page document. (See Appendix for the Worksheet for Pooling Area 1 for FY2007, which was the most recent one available online) The first page lists National, State, and Local Issue questions. The second page is a checklist of 40 resource concerns and 40 eligible practices. However not all 40 resource concerns or practices are considered priorities in each pooling area. Thus, applications that pick the resource concerns and the practices that are priorities in each pooling area will receive greater ranking priority.

All the ranking criteria questions are in a Yes/No format and no points are provided online. Nott provided a version of the FY 2007 Application Field Worksheet for Pooling Area 1 with the points displayed.

To determine how much emphasis Kentucky EQIP places on the reduction of nutrient and sediment pollution and on geographic priority areas, we attempted a rough estimate of the percentage of raw, un-weighted points assigned to questions that appear to address these priorities. We acknowledge that this approach is incomplete and potentially misleading, as it does not account for the effect of the cost-efficiency score in the ranking criteria. We did not evaluate the cost-efficiency score since it is necessary to know which practices will be funded by EQIP in each application. We did include a review of the effect of the multipliers on the points provided in each National, State, and Local Issues section.

Overall, the lack of specificity in the ranking criteria made it difficult to identify points for reducing sediment and nutrient pollution and points for applications located in priority areas. Those complications are described in Box 2.

Box 2. The Lack of Specificity in Ranking Criteria

The ranking criteria in all 10 Mississippi River border states lacked sufficient specificity for us to determine with real certainty the emphasis each state was giving in its ranking sheets to the reduction of sediment and nutrient pollution and to areas of geographic importance. For example, many ranking factors do not specify the particular source of natural resource or environmental problems, such as sediment or nutrient loss from cropland. Instead, the ranking factors refer to more generic sources of problems, such as nonpoint source pollution.

In those cases where more specific types of pollutants like sediments or nutrients were cited, they were usually included in a longer list of pollutants, such as pathogens, pesticides, or excess salinity, making determination of the priorities implicit in the ranking criteria difficult. A similar lack of specificity hampered our ability to determine the emphasis placed on location of an application within a priority watershed or other geographic unit.

Despite these difficulties, it is clear that the factors used in ranking criteria and the priority assigned those factors through point allocations and multipliers are critical determinants of effectiveness of EQIP in reducing sediment and nutrient pollution.

Regarding emphasis on geographic priorities, a review of the FY 2007 Application Field Worksheet for Pooling Area 1 with the points displayed (see Appendix) indicates that Kentucky does not appear to give much emphasis to geographic priorities. In the National Issues section, Kentucky asks National Priorities Question 1 which includes a reference to impaired watersheds:

> "Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?"

This question does give some priority to an application located in an impaired watershed as part of a larger priority for addressing nonpoint and point source pollution.

The State Issues section of Kentucky's Pooling Area 1 ranking sheet clearly gives points for two geographic priority areas:

> "Is the majority of the application's acreage included in either a Kentucky Department of Water (DOW) identified watershed or high quality waters / classified stream?" (7 out of 100 total state section points or 7 percent)
>
> "Is the majority of the application's acreage included in either a well head protection area or karst area as identified by DOW?" (also 7 out of 100 total state section points or 7 percent).

The Local Issues section does give 10 points for the following geographic priority:

> "Does all fencing in this application exclude livestock by a minimum of 20' from sensitive areas such as water, woods, and wetlands?"

The 24 points for these 3 geographic priority factors represent just 6 percent of the 400 total points in the entire ranking system.

Regarding emphasis on reducing nutrient and sediment pollution, a review of Kentucky's Pooling Area 1 ranking sheet does not provide clear answers about how much priority Kentucky EQIP places on these two specific water quality impairments. For example, the National Priority Question 1 does mention the words "nutrients" and "sediment" but the question lacks sufficient specificity for us to distinguish between points awarded for treatment of nutrients and sediments versus points awarded for reducing excess salinity or pesticides.

The National Priorities Question 4 does allocate 24 points (24 percent of the 100 total points available from the National Priorities section) for applications that specifically address soil erosion and sedimentation.

> "Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?"

In the State Issues section, there is one question related to water quality (installing buffers along surface waters and/or limiting livestock access to streams) and it receives the highest number of points, 20 out of 100 possible points (20 percent). Another question asks if the planned practices on cropland will reduce erosion and it receives 15 out 100 points (15 percent). However, there is no indication that the erosion occurring on the applicant's cropland may be causing a sedimentation problem in a body of water.

In the Local Issues Section of Worksheet for Pooling Area 1[1] (which is the only pooling area that is contiguous with the Mississippi River), there are 9 local questions. Three of

[1] ftp://ftp-fc.sc.egov.usda.gov/KY/EQIP/EQIP2007/PA01.pdf

the 9 questions provide points for addressing soil erosion: a) gully erosion – 70 points, b) ALL actively eroding gullies – 50 points, and c) streambank erosion – 8 points. Again, there is no discussion of whether these erosion problems are causing sedimentation problems. Three other questions relate to protecting water quality: a) inclusion of filter strips, buffers, borders – 30 points, b) fencing of livestock 20' from sensitive areas – 10 points, and c) stream crossing protection – 4 points. In total, these 6 out of 9 questions are likely to result in a reduction in sediment and nutrient pollution and provide 172 of the 200 possible local section points (86 percent).

Thus, 255 out of 400 maximum possible points (64 percent) in Kentucky's Pooling Area 1 Application Field Worksheet are provided for applications that are likely to reduce sedimentation and nutrient pollution and are located in geographically important areas. This evaluation of raw, un-weighted points is incomplete as it excludes the potential impact of the ranking criteria multipliers.

EWG applied the multipliers for the national (0.6), state (0.8) and local (0.6) issues section to the raw points estimated above and found that the points changed significantly. The multipliers slightly reduced the 64 percent of the raw, un-weighted points (255 out of 400) in the Pooling Area 1 Worksheet awarded for addressing the priority problems in priority areas to 62 percent (81 out of 130 weighted points). The percentage of points awarded in the national section for our priority issues was 24 percent (24 out of 100 points) and remained 24 percent (7.2 out of 30 weighted points) when the multiplier was applied. The 49 percent of points (49 out of 100 points) in the state section for the priority issues dropped to 48 percent (19.2 out of 40 weighted points) when the multiplier was applied. And the 91 percent of points (182 out of 200 points) in the local section remained at 91 percent (54.6 out of 60 weighted points) when the multiplier was applied.

Despite Kentucky EQIP appearing to give about 60 percent of unweighted points in the reviewed Worksheet to the most pressing concerns – nutrient and sediment pollution reduction in high priority areas – only about 2 percent of points are given to applications from priority watersheds. Thus, it is unlikely that Kentucky's ranking system can ensure that applications in the priority watersheds will rise to the top of the ranking list and get selected for funding.

EWG recommends that Kentucky EQIP revise their ranking systems to increase the priority given to applications located in high priority watersheds that will reduce sediment and nutrient pollution. Sediment and nutrient pollution are the two most important pollutants of streams, lakes, and reservoirs in the 10 states bordering the Mississippi River, the main stem of the Mississippi River, and the Dead Zone in the Gulf of Mexico.

Conclusion

We find that EQIP has not been deployed as effectively as it could be in Kentucky or any of the 9 states that border the Mississippi River. The methods used to decide how to spend EQIP dollars within the state and which farmers will get those dollars are more likely to result in diffuse and fragmented efforts to reduce pollution from farms rather than the focused and coordinated effort needed to solve both local and regional water pollution problems.

Watershed-based water quality clean-up projects are the best use of federal taxpayer resources and offer the greatest hope for cleaning up the unintended environmental damage of agriculture. These projects entail setting goals to clean up specific bodies of water that are deemed the highest priorities, determining how many of the most cost effective practices are needed, and persuading key farmers to participate in the project.

To quickly ramp up the effectiveness of EQIP, Kentucky NRCS should:

1. Set clear and specific goals for how much pollution needs to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals.

2. Use 60 percent of EQIP dollars by 2012 to fund watershed-based water quality clean-up projects that encourage multiple farmers within selected watersheds to reduce pollution to specific lakes, streams, or tributaries to the Mississippi River.

3. Use 40 percent of EQIP funds by 2012 in state-level funding pools to target the highest priority natural resource and environmental problems in each state.

4. Select farmers to participate in EQIP who can do the most to contribute to watershed-based clean-up projects or solve high priority problems.

APPENDIX—2007 Kentucky EQIP Ranking Criteria

Pooling Area 1

Kentucky Environmental Quality Incentives Program (EQIP)

2007 Application Field Worksheet

Applicant(s):

Contract Number: Date:

Answer each question below, considering conservation practices planned to receive EQIP financial assistance. All applicants must sign a CCC-1200 in addition to this form to be considered for EQIP Funding.

	National Issues		
1	Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds consistent with TMDL's where available as well as the reduction of groundwater contamination or point source such as contamination from confined animal feeding operations?	Yes	No
2	Will the treatment you intend to implement using EQIP result in the conservation of a considerable amount of ground or surface water resources?	Yes	No
3	Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	Yes	No
4	Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	Yes	No
5	Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	Yes	No
	State Issues		
1	Planned EQIP practice(s) include installing buffers on perennial or intermittent streams, wetland, sinkholes, or permanent waterbodies and/or limiting or excluding livestock access to streams.	Yes	No
2	Application includes EQIP planned practice(s) that will improve grazing efficiency through a prescribed grazing system.	Yes	No
3	Will the practice benefit federally listed threatened or endangered species?	Yes	No
4	EQIP planned practice(s) on offered cropland acres include a conservation practice(s) that will reduce sheet and rill and/or gully erosion from the existing condition.	Yes	No
5	Will the offered acres be in a grassland bird conservation area identified in KY's Wildlife Action Plan including at least two practices identified in the State EQIP Handbook.	Yes	No
6	Application includes planned forest stand improvement to improve forest health species diversity and/or planned treatment of eroding areas on forest land.	Yes	No
7	Is the majority of the application acreage's included in either a DOW identified watershed or high quality waters/classified stream?	Yes	No
8	Is the majority of the application's acreage included in either a well head protection area or karst area as identified by DOW?	Yes	No
	Local Issues		
1	Does this application address gully erosion?	Yes	No
2	Are ALL actively eroding gullies being addressed in ALL fields included in this application?	Yes	No
3	Does this application include Filter Strips, Riparian Buffers and/or Field Borders?	Yes	No
4	Will planned EQIP practices include livestock watering facilities and/or fencing development practices to improve livestock grazing distribution?	Yes	No
5	Does all fencing in this application exclude livestock by a minimum of 20' from sensitive areas such as water, woods, and wetlands?	Yes	No
6	Does this application address streambank erosion concerns?	Yes	No
7	Does this application include the conversion of fescue to other species (or endophyte free fescue) and legumes to improve forage quality?	Yes	No
8	Does this application protect stream crossing areas to enhance water quality?	Yes	No
9	Does this application include the establishment of wildlife friendly plants?	Yes	No

Comments:

Pooling Area 1

Kentucky Environmental Quality Incentives Program (EQIP)

2007 Application Field Worksheet

Resource Concerns

Select the appropriate resource concerns that will be addressed through this EQIP application.

_____ Adverse Air Temperature
_____ Excessive Greenhouse Gas – CO2
_____ Objectionable Odors
_____ Inadequate Quantities and Quality of Feed and Forage
_____ Inadequate Stock Water
_____ Stress and Mortality
_____ Habitat Fragmentation
_____ Inadequate Cover/Shelter
_____ Inadequate Food
_____ Inadequate Water
_____ T&E Species: Declining Species, Species of Concern
_____ Threatened and Endangered Fish and Wildlife Species
_____ Forage Quality and Palatability
_____ Noxious and Invasive Plants
_____ Plants not adapted or suited
_____ Productivity, Health and Vigor
_____ Compaction
_____ Contaminants – Animal Waste and Other Organics – N
_____ Contaminants – Animal Waste and Other Organics – P
_____ Contaminants – Commercial Fertilizer – N
_____ Contaminants – Commercial Fertilizer – P
_____ Damage from Sediment Deposition
_____ Organic Matter Depletion
_____ Classic Gully
_____ Ephemeral Gully
_____ Mass Movement
_____ Sheet and Rill
_____ Streambank
_____ Excessive Nutrients and Organics in Groundwater
_____ Excessive Nutrients and Organics in Surface Water
_____ Excessive Suspended Sediment and Turbidity in Surface Water
_____ Harmful Levels of Pathogens in Groundwater
_____ Harmful Levels of Pathogens in Surface Water
_____ Harmful Levels of Pesticides in Groundwater
_____ Harmful Levels of Pesticides in Surface Water
_____ Harmful Temperatures of Surface Water
_____ Excessive Runoff, Flooding, or Ponding
_____ Inadequate Outlets
_____ Reduced Capacity of Conveyances by Sediment Deposition
_____ Reduced Storage of Water Bodies by Sediment Accumulation

Planned Conservation Practices

The following list contains every conservation practice eligible for 2007 EQIP. List the field(s) and acres or extent for each conservation practice(s) that is planned for financial assistance through this EQIP application.

_____ Animal Trails and Walkways
_____ Composting Facility
_____ Conservation Cover
_____ Contour Buffer Strips
_____ Critical Area Planting
_____ Diversion
_____ Fence
_____ Field Border
_____ Filter Strip
_____ Forest Stand Improvement
_____ Forest Trails and Landings
_____ Grade Stabilization Structure
_____ Grassed Waterway
_____ Heavy Use Area Protection
_____ Hedgerow Planting
_____ Lined Waterway or Outlet
_____ Nutrient Management
_____ Pasture and Hay Planting
_____ Pipeline
_____ Pond
_____ Prescribed Grazing
_____ Restoration & Mgt of Declining Habitats
_____ Riparian Forest Buffer
_____ Shallow Water Management for Wildlife
_____ Silvopasture Establishment
_____ Sinkhole and Sinkhole Area Treatment
_____ Spring Development
_____ Stream Crossing
_____ Management
_____ Streambank and Shoreline Protection
_____ Terrace
_____ Tree/Shrub Establishment
_____ Upland Wildlife Habitat Management
_____ Use Exclusion
_____ Waste Storage Facility
_____ Waste Treatment Lagoon
_____ Water and Sediment Control Basin
_____ Water Well
_____ Watering Facility
_____ Wildlife Watering Facility

Applicant Signature

I am submitting this Environmental Quality Incentives Program (EQIP) application to NRCS for consideration. I understand that any practices started prior to an application being selected for funding and approved as a contract are not eligible for EQIP funding.

_____ **Signature of Applicant** **Date**

_____ **Signature of NRCS Technical Representative** **Date**

KY-EQIP Ranking Tool Summary for FY2007 – Priority Area 1 – provided by Tony Nott.

Ranking Tool Summary

for FY2007 - PA 1

(Released 02/27/2007)

Description:

2007 EQIP Programs Ranking Tool for Pooling Area 1.

Land Uses:

Crop, Forest, Hay, Headquarters, Mined, Pasture, Recreation, Wildlife

Efficiency Score:

Scoring Multiplier: 72.00

Scoring Ranges and Results Text:

High: 400 - 144	Medium: 143 - 20	Low: 19 - 0
Cost of requested practice(s) provide a high level of environmental benefits per program dollars invested. Requested practices fully treat the identified natural resource concerns.	Cost of requested practice(s) provide an average level of environmental benefits per program dollars invested. Requested practices may not fully treat the identified natural resource concerns.	Cost of requested practice(s) provide a low level of environmental benefits per program dollars invested. Requested practices may not treat the identified natural resource concerns.

Optional Notes:

National Priorities:

Scoring Multiplier: 0.60

Scoring Ranges and Results Text:

High: 60 - 15	Medium: 14 - 6	Low: 5 - 0
High score range for this element is 60-15 pts. Applications evaluated in this scoring range have addressed two or more of the national priorities.	Medium score range for this element is 14-6 pts. Applications evaluated in this scoring range have addressed at least one of the national priorities.	A low score for this element is 0 pts. Applications evaluated have not addressed any of the national priorities.

Questions:

Number	Question	Points
1	Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds consistent with TMDL's where available as well as the reduction of groundwater contamination or point source such as contamination from confined animal feeding operations?	30
2	Will the treatment you intend to implement using EQIP result in the conservation of a considerable amount of ground or surface water resources?	16
3	Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	10
4	Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	24
5	Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	20
	Total Points	100

State Issues:

Scoring Multiplier: 0.80

Scoring Ranges and Results Text:

High: 80 - 28	Medium: 27 - 17	Low: 16 - 0

High score range for this element is 80-28 pts. Applications evaluated in this scoring range have addressed two of the state's top four priorities or any other four priorities.	Medium score range for this element is 27-17 pts. Applications evaluated in this scoring range have addressed at least one of the state's top four priorities and one other lesser priority or three or more of the lesser priorities.	Low score range for this element is 16-0 pts. Applications evaluated in this scoring range have addressed none of the of the state's top four priorities and no more than one of the lesser priorities.

Questions:

Sub-heading Number	Question Number	Question	Points
	1	Planned EQIP practice(s) include installing buffers on perennial or intermittent streams, wetland, sinkholes, or permanent waterbodies and/or limiting or excluding livestock access to streams.	20
	2	Application includes EQIP planned practice(s) that will improve grazing efficiency through a prescribed grazing system.	15
	3	EQIP planned practice(s) on offered cropland acres include a conservation practice(s) that will reduce sheet and rill and/or gully erosion from the existing condition.	15
	4	Will the practice benefit federally listed threatened or endangered species?	15
	5	Will the offered acres be in a grassland bird conservation area identified in KY's Wildlife Action Plan including at least two practices identified in the State EQIP Handbook.	12
	6	Application includes planned forest stand improvement to improve forest health species diversity and/or planned treatment of eroding areas on forest land.	9
	7	Is the majority of the application's acreage included in either a well head protection area or karst area as identified by DOW?	7
	8	Is the majority of the application acreage's included in either a DOW identified watershed or high quality waters/classified stream?	7
		Maximum Points: Total Points	100

Local Issues:

Scoring Multiplier: 0.60

Scoring Ranges and Results Text:

High: 120 - 30	Medium: 29 - 15	Low: 14 - 0
High score range for this element is 120-30 pts. Applications evaluated in this scoring range have addressed at least two or more of the top three priorities or one of the top three local priorities and two or more of the lower priorities.	Medium score range for this element is 29-15 pts. Applications evaluated in this scoring range have addressed one of the top four local priorities and at least one of the top seven priorities or three or more of the top seven priorities.	Low score range for this element is 14-0 pts. Applications evaluated in this scoring range have addressed none of the top five local priorities.

Questions:

Sub-heading Number	Question Number	Question	Points
	1	Does this application address gully erosion?	70
	2	Are ALL actively eroding gullies being addressed in ALL fields included in this application?	50
	3	Does this application include Filter Strips, Riparian Buffers and/or Field Borders?	30
	4	Will planed EQIP practices include livestock watering facilities and/or fencing development practices to improve livestock grazing distribution?	20
	5	Does all fencing in this application exclude livestock by a minimum of 20' from sensitive areas such as water, woods, and wetlands?	10
	6	Does this application address streambank erosion concerns?	8
	7	Does this application include the conversion of fescue to other species (or endophyte free fescue) and legumes to improve forage quality?	6
	8	Does this application protect stream crossing areas to enhance water quality?	4
	9	Does this application include the establishment of wildlife friendly plants?	2
		Maximum Points: Total Points	200

Selected Resource Concerns and Practices:

Air Quality: Adverse Air Temperature
- Hedgerow Planting (422)
- Riparian Forest Buffer (391)
- Silvopasture Establishment (381)
- Streambank and Shoreline Protection (580)
- Tree/Shrub Establishment (612)
- Upland Wildlife Habitat Management (645)

Air Quality: Excessive Greenhouse Gas - CO2 (carbon dioxide)
- Forest Stand Improvement (666)
- Prescribed Grazing (528)
- Riparian Forest Buffer (391)
- Silvopasture Establishment (381)
- Tree/Shrub Establishment (612)
- Waste Treatment Lagoon (359)

Air Quality: Objectionable Odors
- Composting Facility (317)
- Hedgerow Planting (422)
- Nutrient Management (590)
- Riparian Forest Buffer (391)
- Tree/Shrub Establishment (612)

Domestic Animals: Inadequate Quantities and Quality of Feed and Forage
- Fence (382)
- Forest Stand Improvement (666)
- Nutrient Management (590)
- Pasture and Hay Planting (512)
- Pipeline (516)
- Pond (378)
- Prescribed Grazing (528)
- Riparian Forest Buffer (391)
- Silvopasture Establishment (381)
- Spring Development (574)
- Stream Crossing (578)
- Upland Wildlife Habitat Management (645)
- Use Exclusion (472)
- Watering Facility (614)

Domestic Animals: Inadequate Stock Water
- Fence (382)
- Pipeline (516)
- Pond (378)
- Spring Development (574)
- Stream Crossing (578)
- Water Well (642)
- Watering Facility (614)

Domestic Animals: Stress and Mortality
- Forest Stand Improvement (666)
- Heavy Use Area Protection (561)
- Nutrient Management (590)
- Pasture and Hay Planting (512)
- Pipeline (516)
- Pond (378)
- Prescribed Grazing (528)
- Riparian Forest Buffer (391)
- Spring Development (574)
- Stream Crossing (578)
- Tree/Shrub Establishment (612)
- Use Exclusion (472)
- Water Well (642)
- Watering Facility (614)

Fish and Wildlife: Habitat Fragmentation
- Conservation Cover (327)
- Contour Buffer Strips (332)
- Field Border (386)
- Filter Strip (393)
- Forest Stand Improvement (666)

SEIZING A WATERSHED MOMENT

Making EQIP Work for Water Quality in 10 Mississippi River Border States

Environmental Quality Incentives Program
State Report 3 of 10

ENVIRONMENTAL WORKING GROUP

APPENDIX – STATE REPORTS

IOWA
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM

OVERVIEW

Iowa received an average of $23 million in EQIP funds per year for technical and financial assistance from 2003 to 2007, ranking it second out of the 10 states that border the Mississippi River for EQIP funds. Ninety percent of Iowa EQIP funds are distributed to the 100 county Natural Resources Conservation Service (NRCS) offices.

Applications to participate in the county EQIP program are evaluated using a ranking sheet that includes: (1) national ranking factors, (2) state ranking factors, (3) county ranking factors, and (4) cost-efficiency factors. Iowa uses separate ranking sheets for its Comprehensive Nutrient Management Plan (CNMP) and Forestry resource concerns that include only (1) national ranking factors, (2) state ranking factors, and (3) cost-efficiency factors.

The Iowa State Technical Committee provides input on resource concerns, practices needed to treat the resource concerns, financial incentives and EQIP implementation. The Local Work Groups have the same duties at the local level but also are involved in developing local ranking criteria.

IOWA EQIP WEBSITE

http://www.ia.nrcs.usda.gov/programs/stateeqip.html

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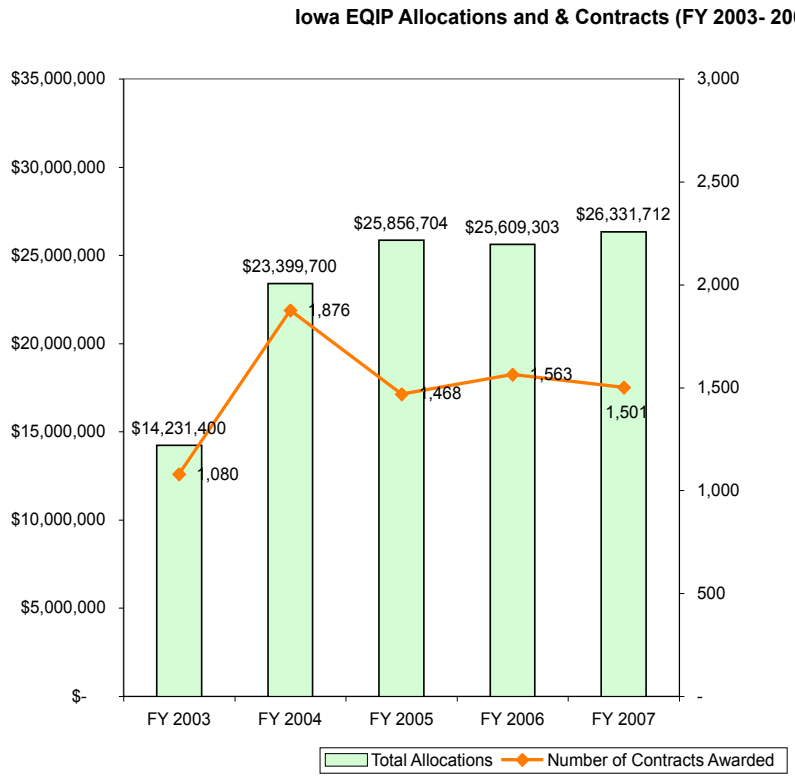
FUNDING AND REACH OF EQIP

EQIP funding is allocated to states using a national formula. The chart below shows the amount of financial and technical assistance Iowa has received from FY 2003 to 2007 and the number of contracts awarded each fiscal year. A total of 7,488 contracts have been entered into with producers between 2003 and 2007 providing $115.4 million addressing 968,966 acres in the state.



Source: EWG compiled annual data from EQIP's "Allocation" and "Contract" tables found on the USDA NRCS website: http://www.nrcs.usda.gov/programs/EQIP/.

KEY FACTORS ANALYSIS

We analyzed the following factors for indications of the extent to which EQIP in Iowa is focused on reducing sediment and nutrient loads to streams, lakes, and rivers: (1) the presence or absence of qualitative or quantitative goals for pollutant reductions, (2) methods used to allocate state-level funds to counties or other sub-state levels or to specific projects or priorities, and (3) the application ranking criteria used to select participants in EQIP. We relied primarily on the information and data presented on the NRCS website to complete this analysis and followed up on our investigation with interviews of the state EQIP program manager.

Goals

Iowa EQIP has implemented 2 watershed-based water quality projects in the Lake Rathbun watershed and the Whitebreast Creek watershed that have received 1.3 percent of the state EQIP funds in the last 3 years.

Other than these 2 projects, EWG did not find evidence to suggest that Iowa EQIP has a) established explicit quantitative or qualitative goals for EQIP to clean up agricultural sources of pollution, b) identified which lakes, streams, or tributaries are priorities for improvement, c) set a timetable to achieve those goals, or d) established a means to track progress toward the goals. Iowa's application ranking systems do create an implicit set of priorities for treating water quality, but measurable goals and timelines do not exist.

EWG recommends that Iowa EQIP set clear and specific goals for how much and what types of agricultural pollution need to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals. EWG also recommends that Iowa EQIP develop systems to track, evaluate, and report on the environmental performance of EQIP.

Fund Allocation

Iowa EQIP distributes about 90 percent of its funds to the state's 100 county-based soil and water conservation districts using the funding allocation formula below. In addition, each of the 4 factors has a specific weight assigned.

1. The percent of agricultural land in the county with impaired waters due to agricultural concerns (as identified by Section 303(d) of Clean Water Act) – 40 percent.
2. The number of livestock in each district (county) – 30 percent.
3. The extent of land with Land Capability Class rating of IIe or greater[1] – 20 percent.
4. The number of acres needing wildlife habitat conservation systems – 10 percent.

EWG commends Iowa for using a funding allocation formulas based primarily on natural resource and environmental factors (rather than generic production factors) to channel more funding to localities with significant environmental problems associated with agriculture.

[1] A Land Capability Class rating of II is defined as "soils (that) have moderate limitations that reduce the choice of plants or require moderate conservation practices while Subclass e "is made up of soils for which the susceptibility to erosion is the dominant problem or hazard affecting their use. Erosion susceptibility and past erosion damage are the major soil factors that affect soils in this subclass." Thus, Class ratings of greater than IIe have greater limitations and greater susceptibility to erosion and other environmental hazards.

The remaining 10 percent of EQIP funds are used for special projects funded on a statewide basis. There are currently three types of special projects: Comprehensive Nutrient Management Plan (CNMP)-only projects, forestry resource concern projects, and "Supershed" projects.

According to David Brommel, IA-EQIP/WHIP Coordinator, the so-called "Supershed" projects are those overseen by the State Technical Committee that provides Requests for Proposals (RFP) to the Soil and Water Conservation Districts to develop watershed-based projects. These projects propose to treat resource concerns through multiple sources of assistance. Funding is often culled from state sources, private sources, technical assistance, and various Farm Bill programs such as the Wetlands Reserve Program (WRP) and EQIP.

There have been two such Supershed Projects in Lake Rathbun in Wayne County and the Whitebreast Creek Watershed (Clarke, Lucas, Marion & Warren Counties). The Lake Rathbun Supershed Project has received over $760,000 or 1.1 percent of Iowa's EQIP funds from FY 2006 to 2008 while the Whitebreast Creek Supershed Project received over $470,000 or 2.3 percent of Iowa's FY 2006 funds. In all, EQIP funds have provided $1.2 million for these Supershed Projects or 1.3 percent of the EQIP funds it has spent in 3 years. (See tables below.)

Lake Rathbun Supershed Project			
Fiscal Year	**Supershed Project**	**All EQIP Funds**	**Percent of EQIP Funds for Supershed Projects**
2008	$98,900	$31,235,873	0.3%
2007	$288,300	$20,817,801	1.4%
2006	$375,300	$20,327,205	1.8%
Total	$762,500	$72,380,879	1.1%

Whitebreast Creek Watershed Supershed Project			
Fiscal Year	**Supershed Project**	**All EQIP Funds**	**Percent of EQIP Funds for Supershed Projects**
2006	$474,200	$20,327,205	2.3%

Source: David P. Brommel, EQIP/WHIP Coordinator, provided this information upon request.

EWG commends Iowa EQIP for carrying out these two Supershed Projects. EWG recommends that Iowa EQIP's best opportunity for improving water quality is to fund well-designed, watershed-based clean-up projects. This approach encourages multiple farmers within a watershed to reduce pollution to a specific lake, stream, or tributary to the Mississippi River.

The problem-solving advantages of this approach are well understood. They include focusing resources in specific locations to solve well-defined problems using a strategy that directs funding to those farmers within the watershed who can do the most to

reduce pollution. Ideally, such water quality improvement projects include developing monitoring and evaluation systems to adjust the strategy and resource allocations based on the results that are being realized. Ramping up the emphasis in EQIP on such watershed-based clean-up projects would dramatically increase the effectiveness of the program.

EWG recommends that Iowa EQIP allocate 60 percent of its EQIP funds to watershed-based clean-up projects by 2012. Iowa EQIP should then allocate the remaining 40 percent of funds by 2012 to funding pools that target high priority natural resource and environmental problems. These state-level funding pools create important opportunities to focus EQIP on the most pressing designated problems. The funding pools allow EQIP managers to select the best applications from all the applications proposing to address the same natural resource or environmental problem

Application Ranking Criteria

Applications to participate in the county EQIP program are evaluated using a ranking document called the "Application Ranking Summary" which includes: (1) national ranking factors, (2) state ranking factors, (3) county ranking factors, and (4) cost-efficiency factors. There are 100 "County Application Ranking Summaries" that supply the county ranking factors. (See the Appendices for the Ranking Summaries) To evaluate applications to the special projects, Iowa uses separate Comprehensive Nutrient Management Plan (CNMP) and Forestry resource concerns ranking sheets. Iowa's ranking criteria documents provide a specified number of positive or negative points for each question in each of the ranking section.

To generate a final ranking score, Iowa assigns 15 percent of the total ranking points to the national ranking factors, 25 percent to the state factors, 45 percent to the county factors, and 15 percent to the cost-efficiency factor. In order to achieve this desired percentage weighting system for each of the 4 sections of the ranking sheet, Iowa EQIP uses the following multipliers (planned for 2009) which it multiplies by the total points summed in each of the 4 sections: National - .08, State - .53, Efficiency - 100.0, and Local - Varies by county depending on total points of questions in each county. After, each section's total points has been added up and has been adjusted by the weighting system, applications that receive a greater total point score get a higher priority for participation in EQIP. See Box 1 for background information on the cost-efficiency score.

Box 1. The Cost-Efficiency Score

A cost-efficiency score is generated for each application to determine how effective the cost-shared practices will be at addressing the priority resource concerns (soil, water, air, plant, animal, and human). The cost-efficiency score is calculated by multiplying the practice(s)'

Conservation Practice Physical Effects (CPPE) value(s)
x Service life of the practice(s)
/ Average cost of installing and maintaining the practice(s)

NRCS maintains a national database of each practice's CPPE value. CPPE values range from -5 to + 5 reflecting the practice's ability to worsen or improve each resource concern. The CPPE value can be modified by the state or local jurisdiction to reflect the soil, weather, topographic, and other state or local conditions that may impact the effectiveness of the practice.

All 10 Mississippi River border states are using the NRCS Pro-Tracts Cost-Efficiency software to calculate a Cost-Efficiency score for each application. However, because the Cost-Efficiency score is embedded in the software, this step in the ranking process is not transparent since the state EQIP managers were unable to fulfill our request of reviewing the CPPE values given to practices funded by EQIP.

To determine how much emphasis Iowa EQIP places on the reduction of nutrient and sediment pollution and on geographic priority areas, we attempted a rough estimate of the percentage of raw, un-weighted points assigned to questions that appear to address these priorities. We acknowledge that this approach is incomplete and potentially misleading, as it does not account for the effect of the multipliers and the cost-efficiency score in the ranking criteria. In addition, the lack of specificity in the ranking criteria made it difficult to identify points for reducing sediment and nutrient pollution and points for applications located in priority areas. Those complications are described in Box 2.

Regarding emphasis on geographic priorities, a review of the FY 2008 General Application Ranking Summary (see Appendix) indicates that Iowa does not appear to give much emphasis to geographic priorities. In the National Ranking Factors section, Iowa asks National Priorities Question 1 which includes a reference to impaired watersheds:

> "Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?"

This question does give some priority to an application located in an impaired watershed as part of a larger priority for addressing nonpoint and point source pollution.

Box 2. The Lack of Specificity in Ranking Criteria

The ranking criteria in all 10 Mississippi River border states lacked sufficient specificity for us to determine with real certainty the emphasis each state was giving in its ranking sheets to the reduction of sediment and nutrient pollution and to areas of geographic importance. For example, many ranking factors do not specify the particular source of natural resource or environmental problems, such as sediment or nutrient loss from cropland. Instead the ranking factors refer to more generic sources of problems, such as nonpoint source pollution.

In those cases where more specific types of pollutants like sediments or nutrients were cited, they were usually included in a longer list of pollutants, such as pathogens, pesticides, or excess salinity, making determination of the priorities implicit in the ranking criteria difficult. A similar lack of specificity hampered our ability to determine the emphasis placed on location of an application within a priority watershed or other geographic unit.

Despite these difficulties, it is clear that the factors used in ranking criteria and the priority assigned those factors through point allocations and multipliers are critical determinants of effectiveness of EQIP in reducing sediment and nutrient pollution.

Regarding emphasis on geographic priorities, a review of the FY 2008 General Application Ranking Summary (see Appendix) indicates that Iowa does not appear to give much emphasis to geographic priorities. In the National Ranking Factors section, Iowa asks National Priorities Question 1 which includes a reference to impaired watersheds:

> "Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?"

This question does give some priority to an application located in an impaired watershed as part of a larger priority for addressing nonpoint and point source pollution.

In Iowa's State Ranking Factors section, there are clearer indications of a priority for applications located in geographic priority areas. Two questions are awarded 5 and 20 points for reduction of non-point source pollution in geographic priority areas:

> "Is the application within a watershed listed in 'Iowa Section 303(d) Impaired Waters Listing' or one of the following water quality approved projects: Watershed Protection Program Fund (WSPF), Water Protection Fund (WPF), EPA 319 Project, or Iowa Watershed Improvement Review Board (IWIRB) Fund)?" (5 points)
>
> "Do the practice(s) in the application address the identified Ag related nonpoint source impairment within a TMDL, a watershed listed in 'Iowa Section 303(d) Impaired Waters Listing' or one of the following water quality approved projects: Watershed Protection Program Fund (WSPF), Water Protection Fund (WPF), EPA 319 Project, or Iowa Watershed Improvement Review Board (IWIRB) Fund)?" (20 points)

Lee County's FY2008 Application Ranking Summary was chosen for review as a county ranking criteria because Lee is the southeastern-most county in Iowa and borders the Mississippi River. Lee County asked one question about geographic priorities and identified 5 watersheds by name. Applications located within the "East Sugar Creek Watershed" received the greatest number of points (10) while applications in the "Cedar Creek Watershed" received the least number of points (7). However, applications located in all other watersheds (other than the 5 named watersheds) received 6 points. Thus, the difference emphasized by Lee County's ranking criteria between its highest priority watershed and a non-priority watershed was just 4 points.

The 35 total possible points for these three geographic priority factors represent 11 percent of the 305 points in the entire ranking system.

Regarding emphasis on reducing nutrient and sediment pollution, a review of Iowa's General Application Ranking Summary does not provide clear answers about how much priority Iowa EQIP places on these two specific water quality impairments. For example, the National Priority Question 1 does mention the words "nutrients" and "sediment" but the question lacks sufficient specificity for us to distinguish between points awarded for treatment of nutrients and sediments versus points awarded for reducing excess salinity or pesticides.

The National Priorities Question 4 does allocate 18 points (18 percent of the 100 total points available from the National Priorities section of the ranking system) for applications that specifically address soil erosion and sedimentation.

> "Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?"

The State Ranking Factors section awards 20 points (21 percent of 95 total points in the State Ranking section) for applications that treat livestock waste—an important source of nutrient pollution.

> "NON-POINT REDUCTION /EMISSIONS REDUCTION: Will practice(s) in the application treat livestock waste for an existing livestock operation with a resource concern problem identified?"

The State Ranking Factors section awards 35 points (37 percent of 95 total points in the State Ranking section) for applications that answer affirmatively to 5 questions under the heading: "SOIL EROSION & SEDIMENTATION REDUCTION."

Lee County awarded the greatest number of points, 40 or 36 percent of the 110 total Local Issues section points, to a factor tangentially related to sediment pollution. Priority is given to applications that offer to treat soil resource concerns through a "resource management system" per the NRCS Field Office Technical Guide standards on cropland. Five points— 5 percent of the 110 total points—are awarded for applications that address water quality resource concerns through wetland restoration, enhancement, or creation.

Despite Iowa EQIP appearing to give about half its unweighted points in the reviewed ranking factors to the most pressing concerns – nutrient and sediment pollution reduction in high priority areas – only about 11 percent of points are given to applications from priority watersheds. Thus, it is unlikely that Iowa's ranking system can ensure that applications in the priority watersheds will rise to the top of the ranking list and get selected for funding.

EWG recommends that Iowa EQIP revise their ranking systems to increase the priority given to applications located in high priority watersheds that will reduce sediment and nutrient pollution. Sediment and nutrient pollution are the two most important pollutants of streams, lakes, and reservoirs in the 10 states bordering the Mississippi River, the main stem of the Mississippi River, and the Dead Zone in the Gulf of Mexico.

Conclusion

We find that EQIP has not been deployed as effectively as it could be in Iowa or any of the 9 states that border the Mississippi River. The methods used to decide how to spend EQIP dollars within the state and which farmers will get those dollars are more likely to result in diffuse and fragmented efforts to reduce pollution from farms rather than the focused and coordinated effort needed to solve both local and regional water pollution problems.

Watershed-based water quality clean-up projects are the best use of federal taxpayer resources and offer the greatest hope for cleaning up the unintended environmental

damage of agriculture. These projects entail setting goals to clean up specific bodies of water that are deemed the highest priorities, determining how many of the most cost effective practices are needed, and persuading key farmers to participate in the project.

To quickly ramp up the effectiveness of EQIP, Iowa NRCS should:

1. Set clear and specific goals for how much pollution needs to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals.

2. Use 60 percent of EQIP dollars by 2012 to fund watershed-based water quality clean-up projects that encourage multiple farmers within selected watersheds to reduce pollution to specific lakes, streams, or tributaries to the Mississippi River.

3. Use 40 percent of EQIP funds by 2012 in state-level funding pools to target the highest priority natural resource and environmental problems in each state.

4. Select farmers to participate in EQIP who can do the most to contribute to watershed-based clean-up projects or solve high priority problems.

APPENDIX—Iowa EQIP Ranking Criteria

Iowa FY2008 – EQIP National Ranking Factors

Number	Question	Points
1	Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?	18
2	Will the treatment you intend to implement using EQIP result in a considerable amount of ground or surface water conservation?	18
3	Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	18
4	Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	18
5	Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	28
	Total Points	100

Iowa FY2008 – EQIP State Ranking Factors

Question Number	Question	Points
1	NON-POINT REDUCTION/EMISSIONS REDUCTION: Will practice(s) in application treat livestock waste for an existing livestock operation with a resource concern problem identified? (Can only answer Yes to one of questions 1-5.)	20
2	NON-POINT REDUCTION/EMISSIONS REDUCTION: Will practice(s) in application treat livestock waste for an existing livestock operation with a resource concern problem identified, where the entire facility is relocated to a new less environmentally sensitive location? (Can only answer Yes to one of questions 1-5.)	20
3	NON-POINT REDUCTION/EMISSIONS REDUCTION: Will practice(s) in the application treat livestock waste for an existing livestock operation with resource concern problem identified where expansion of the livestock operation is planned? (Can only answer Yes to one of questions 1-5.)	5
4	NON-POINT REDUCTION/EMISSIONS REDUCTION: Will practice(s) in the application treat livestock waste for a new livestock operation? (Can only answer Yes to one of questions 1-5. If both questions 4 & 5 can be answered yes, only answer yes to question 5.)	-5
5	NON-POINT REDUCTION/EMISSIONS REDUCTION: Will practice(s) in the application treat livestock waste for a new livestock operation located in a watershed listed in "Iowa Section 303(d) Impaired Waters Listings" or one of the following water quality approved projects: Watershed Protection Program Fund (WSPF), Water Protection Fund (WPF), EPA 319 Project, or Iowa Watershed Improvement Review Board (IWIRB) Fund? (Can only answer Yes to one of questions 1-5. If both questions 4 & 5 can be answered yes, only answer yes to question 5.)	-10
6	NON-POINT REDUCTION: Is the application within a watershed listed in "Iowa Section 303(d) Impaired Waters Listings" or one of the following water quality approved projects: Watershed Protection Program Fund (WSPF), Water Protection Fund (WPF), EPA 319 Project, or Iowa Watershed Improvement Review Board (IWIRB) Fund?	5
7	NON-POINT REDUCTION: Do the practice(s) in the application address the identified Ag related nonpoint source impairment within a TMDL, a watershed listed in "Iowa Section 303(d) Impaired Waters Listings" or one of the following water quality approved projects: Watershed Protection Program Fund (WSPF), Water	20

	Protection Fund (WPF), EPA 319 Project, or Iowa Watershed Improvement Review Board (IWIRB) Fund?	
8	SOIL EROSION & SEDIMENTATION REDUCTION: Does the application address an invasive species problem with pasture management or forest management?	5
9	SOIL EROSION & SEDIMENTATION REDUCTION: Will the implementation of practices in this application convert row crop acres to hayland, pastureland, forestland or wildlife acres on at least 5% of the application acres? (Must be new acres converted, not part of normal rotation.)	5
10	SOIL EROSION & SEDIMENTATION REDUCTION: Are all expiring CRP acres and all pasture and hayland acres within all tracts included in this EQIP application maintained as hayland, pastureland, forestland or wildlife acres? (Maintenance of these acres as hayland, pastureland, forestland or wildlife acres must be covered in the EQIP contract.)	10
11	SOIL EROSION & SEDIMENTATION REDUCTION: Is Soil Conditioning Index improved at least 0.3 points by applying the practices in this application? (Use predominant soil map unit.)	7
12	SOIL EROSION & SEDIMENTATION REDUCTION: Is STIR rating improved at least 30 points by applying the practices in this application? (Use predominant soil map unit.)	8
13	AT-RISK SPECIES HABITAT PROMOTION: Does the application of practice(s) in this EQIP application result in land being converted to wildlife habitat on at least 3 acres?	5
14	Is the contract participant a Limited Resource Producer?	10
	Maximum Points: Total Points	105

Application Ranking Summary – Lee County FY08 EQIP

Application Ranking Summary
Lee FY08 EQIP

Local Issues Addressed

Issue Questions	Points
1. Soil Resource: Application is for practice(s) that, when combined with other practices in the conservation plan, completes a resource management system that treats the resource concerns for the row cropping acres in the application area per the NRCS eFOTG	40 Point(s)
2. Soil Resource: Application is for practice(s) that, when combined with other practices in the conservation plan, completes a resource management system that treats the resource concerns for grazing lands for the application area per the NRCS eFOTG	30 Point(s)
3. Water Quality: Application is located within the East Sugar Creek Watershed	10 Point(s)
4. Water Quality: Application is located within the West Sugar Creek Watershed	9 Point(s)
5. Water Quality: Application is located within the Lost Creek Watershed	8 Point(s)
6. Water Quality: Application is located within the Cedar Creek Watershed	7 Point(s)
7. Water Quality: Application is located in all other watersheds	6 Point(s)
8. Water Quality: Application will apply wetland restoration/enhancement/creation (> or = 2 acres)	5 Point(s)
9. Domestic Animal/Livestock Resource: Application will install a grazing system containing more than 7 new paddocks	25 Point(s)
10. Domestic Animal/Livestock Resource: Application will install a grazing system containing 5-6 new paddocks	20 Point(s)
11. Domestic Animal/Livestock Resource: Application will install a grazing system containing 3-4 new paddocks	15 Point(s)
12. Plants/Wildlife: Applicant will seed short native grasses for quail habitat or plant trees on 5 or more acres.	25 Point(s)
13. Plants/Wildlife: Applicant will seed short native grasses for quail habitat or plant trees on 4 - 4.9 acres.	20 Point(s)
14. Plants/Wildlife: Applicant will seed short native grasses for quail habitat or plant trees on 3 - 3.9 acres.	15 Point(s)
15. Plants/Wildlife: Applicant will seed short native grasses for quail habitat or plant trees on 2 - 2.9 acres.	10 Point(s)
16. Plants/Wildlife: Applicant will seed short native grasses for quail habitat or plant trees on 1 - 1.9 acre.	5 Point(s)
17. Plants/Wildlife: Applicant will complete Timber Stand Improvement (TSI) on at least 5 acres on application tract.	5 Point(s)

Application Ranking Summary
Iowa – State FY08 Comprehensive Nutrient Management Plan

State Issues Addressed

Issue Questions	Points
1. NON-POINT REDUCTION/EMISSIONS REDUCTION: Is the Comprehensive Nutrient Management Plan (CNMP) associated with the treatment of livestock waste for an existing livestock operation with a resource concern problem identified? (Can only answer Yes to one of questions 1-5.)	20 Point(s)
2. NON-POINT REDUCTION/EMISSIONS REDUCTION: Is the Comprehensive Nutrient Management Plan (CNMP) associated with the treatment of livestock waste for an existing livestock operation with a resource concern problem identified, where the entire facility is relocated to a new less environmentally sensitive location? (Can only answer Yes to one of questions 1-5.)	20 Point(s)
3. NON-POINT REDUCTION/EMISSIONS REDUCTION: Is the Comprehensive Nutrient Management Plan (CNMP) associated with the treatment of livestock waste for an existing livestock operation with resource concern problem identified where expansion of the livestock operation is planned? (Can only answer Yes to one of questions 1-5.)	5 Point(s)
4. NON-POINT REDUCTION/EMISSIONS REDUCTION: Is the Comprehensive Nutrient Management Plan (CNMP) associated with the treatment of livestock waste for a new livestock operation? (Can only answer Yes to one of questions 1-5.)	-5 Point(s)
5. NON-POINT REDUCTION/EMISSIONS REDUCTION: Is the Comprehensive Nutrient Management Plan (CNMP) associated with the treatment of livestock waste for a new livestock operation located in a watershed listed in "Iowa Section 303(d) Impaired Waters Listings" or one of the following water quality approved projects: Watershed Protection Program Fund (WSPF), Water Protection Fund (WPF), EPA 319 Project, or Iowa Watershed Improvement Review Board (IWIRB) Fund? (Can only answer Yes to one of questions 1-5.)	-10 Point(s)
6. NON-POINT REDUCTION: Is the application within a watershed listed in "Iowa Section 303(d) NON-POINT REDUCTION: Is the application within a watershed listed in "Iowa Section 303(d) Impaired Waters Listings" or one of the following water quality approved projects: Watershed Protection Program Fund (WSPF), Water Protection Fund (WPF), EPA 319 Project, or Iowa Watershed Improvement Review Board (IWIRB) Fund?	5 Point(s)
7. NON-POINT REDUCTION: Is the Comprehensive Nutrient Management Plan (CNMP) associated with the treatment of practice(s) that address the identified Ag related nonpoint source impairment within a TMDL, a watershed listed in "Iowa Section 303(d) Impaired Waters Listings" or one of the following water quality approved projects: Watershed Protection Program Fund (WSPF), Water Protection Fund (WPF), EPA 319 Project, or Iowa Watershed Improvement Review Board (IWIRB) Fund?	20 Point(s)
8. Is the contract participant a Limited Resource Producer?	10 Point(s)
9. Is the Comprehensive Nutrient Management Plan (CNMP) in this application associated with an EQIP funded Waste Storage or Treatment Facility that has not began construction? (Can only answer Yes to one of questions 9-12.)	100 Point(s)
10. Is the Comprehensive Nutrient Management Plan (CNMP) in this application associated with an EQIP funded Waste Storage or Treatment Facility that has either began or completed construction?(Can only answer Yes to one of questions 9-12.)	65 Point(s)
11. Is the Comprehensive Nutrient Management Plan (CNMP) in this application NOT associated with an EQIP funded Waste Storage or Treatment Facility that has not began construction? (Can only answer Yes to one of questions 9-12.)	30 Point(s)
12. Is the Comprehensive Nutrient Management Plan (CNMP) in this application NOT associated with an EQIP funded Waste Storage or Treatment Facility that has either began or completed construction?(Can only answer Yes to one of questions 9-12.)	-10 Point(s)

SEIZING A WATERSHED MOMENT

Making EQIP Work for Water Quality in 10 Mississippi River Border States

Environmental Quality Incentives Program
State Report 2 of 10

ENVIRONMENTAL WORKING GROUP

APPENDIX – STATE REPORTS

ILLINOIS
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM

OVERVIEW

Illinois received an average of $16 million in EQIP technical and financial assistance funds per year from 2003 to 2007, ranking it seventh out of the 10 states that border the Mississippi River for EQIP funds. Illinois is the only state among those ten states that has a statewide competition for all of its EQIP funds.

EQIP applicants choose to participate in one or more of six statewide EQIP categories: (1) General EQIP, (2) Grazing Land Operations, (3) Confined Livestock Operations, (4) Comprehensive Nutrient Management Plan, (5) Forest Management Plan, and (6) Forest Management Implementation. Each EQIP category has its own ranking criteria document called "Ranking Criteria" to evaluate applications. Since all applications compete statewide, there are no local level ranking factors or ranking criteria documents. Only the General EQIP ranking criteria document has (1) a national issues section and (2) a state issues section. The remaining 5 ranking criteria documents only have "state issues" sections.

The Illinois State Technical Committee provides input to the Illinois Natural Resources Conservation Service (NRCS) during the development of ranking criteria categories. Effort is underway in Illinois to revitalize the Local Work Group system. Applications are collected and ranked at local field offices and the state NRCS establishes the ranking cut off points needed for funding on a statewide basis.

ILLINOIS EQIP WEBSITE

http://www.il.nrcs.usda.gov/programs/eqip/

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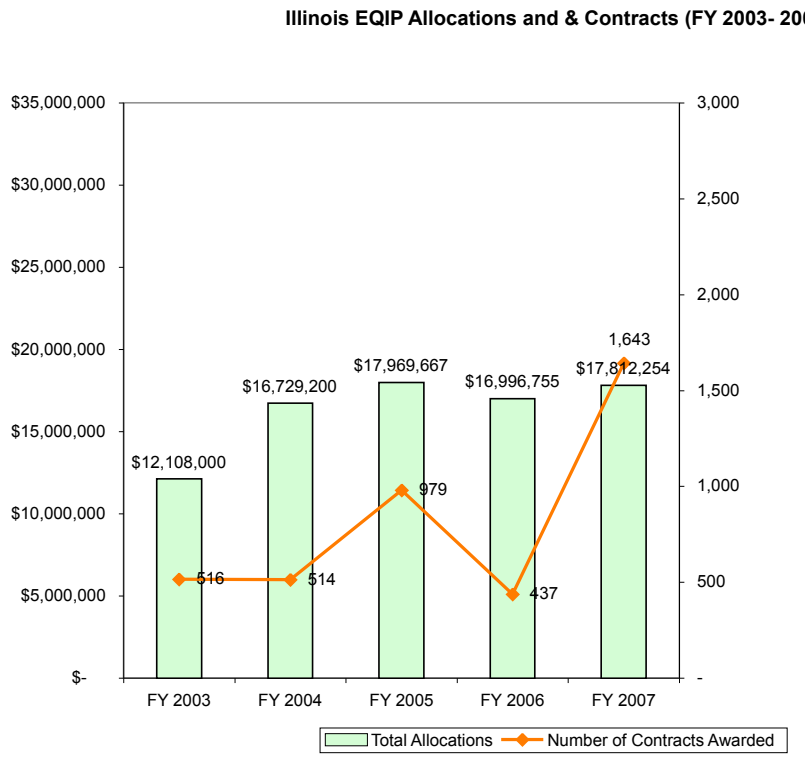
FUNDING AND REACH OF EQIP

EQIP funding is allocated to states using a national formula. The chart below shows the amount of financial and technical assistance Illinois has received from FY 2003 to 2007 and the number of contracts awarded each fiscal year. A total of 4,089 contracts have been entered into with producers between 2003 and 2007 providing $81.6 million and addressing nearly 658,107 acres in the state.



Source: EWG compiled annual data from EQIP's "Allocation" and "Contract" tables found on the USDA NRCS website: http://www.nrcs.usda.gov/programs/EQIP/.

KEY FACTORS ANALYSIS

We analyzed the following factors for indications of the extent to which EQIP in Illinois is focused on reducing sediment and nutrient loads to streams, lakes, and rivers: (1) the presence or absence of qualitative or quantitative goals for pollutant reductions, (2) methods used to allocate state-level funds to counties or other sub-state levels or to specific projects or priorities, and (3) the application ranking criteria used to select participants in EQIP. We relied primarily on the information and data presented on NRCS websites to complete this analysis and followed up on our investigation with interviews of the state EQIP program managers.

Goals

Illinois EQIP did establish the Spoon River Special Project, which had a goal of reducing agricultural sediment pollution to the Illinois River Watershed, and dedicated about 7 percent of its EQIP funds to the project.

Regarding the balance of Illinois EQIP funds, EWG did not find evidence to suggest that Illinois EQIP has a) established explicit quantitative or qualitative goals for EQIP to clean up agricultural sources of pollution, b) identified which lakes, streams, or tributaries are priorities for improvement, c) set a timetable to achieve those goals, or d) established a means to track progress toward the goals. Illinois' application ranking systems do create an implicit set of priorities for treating water quality, but measurable goals and timelines do not exist.

EWG recommends that Illinois EQIP set clear and specific goals for how much and what types of agricultural pollution need to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals. EWG also recommends that Illinois EQIP develop systems to track, evaluate, and report on the environmental performance of EQIP.

Fund Allocation

Illinois EQIP is the only program among the 10 state programs reviewed that pool all of their funds into statewide funding pools. Illinois EQIP pools funding into the program's 6 designated resource concern categories. (See the first 6 categories in the table below). Based on input from the State Technical Committee, Illinois EQIP allocated funds in FY2007 and 2008 to the following 7 funding categories:

Funding by Resource Concern Areas in Illinois (FY 2007 & 2008)				
	Funding for FY 2008	**Percent**	**Funding for FY 2007**	**Percent**
General EQIP	$ 5,445,000	42%	$ 4,485,000	32%
Confined Livestock Operations	$ 4,082,000	32%	$ 5,381,000	38%
Comprehensive Nutrient Management Plans	$ 1,224,000	9%	$ 0	0%
Forest Management Plans	$ 251,000	2%	$ 403,000	3%
Forest Management Implementation	$ 928,000	7%	$ 0	0%
Grazing Land Operations	$ 0	0%	$ 319,000	2%
Spoon River Special Project	$ 0	0%	$ 785,000	6%
Total	$ 12,954,000		$ 14,055,000	

Source: Paula Hingson, the Farm Bill Coordinator for Illinois, provided this table to EWG.

Though many of Illinois EQIP's funding categories are likely to address nutrient and sediment pollution, the six funding categories suffer from a lack of specificity. The

funding categories do not mention the types of pollutants they are addressing, rather they are named after best management practices (CNMPs and Forest Management Plans) or agricultural sectors (Confined Livestock Operations, Grazing Land Operations). In addition, though the title of this table identifies these funding categories as "resource concern areas," there is no mention of EQIP's 8 resource concerns: air quality, domestic animals, fish and wildlife, plant condition, soil condition, soil erosion, water quality, and water quantity. Finally, it is unclear what type of pollutant or source of pollutants are being addressed by Illinois' "General EQIP" fund, which receives nearly half of the state's EQIP funds.

The State Conservationist can move funding between categories depending on the level of interest in particular categories. Ivan Dozier, Assistant State Conservationist (Programs) and Paula Hingson (Farm Bill Coordinator) provided the following description of Illinois EQIP's fund allocation process.

"With input and concurrence from the State Technical Committee, Illinois NRCS starts out by targeting funds into two sub-categories, consistent with national guidelines, with 60% of EQIP funds being focused on livestock agriculture and the remaining 40% on non-livestock (general) agriculture.

Of the livestock related agricultural issues, we target 60% (of the original 60%) for livestock confinement agriculture, and 40% on grazing lands. Funds dedicated to CNMP (Comprehensive Nutrient Management Plan) incentives are sub-pool of the confined livestock category of funds. To help avoid potential contracting violations (such as starting a practice within the first 12 months and not completing practices on schedule) we constantly monitor the backlog of previously approved CNMP completion so we don't approve more applications than our cadre of Technical Service Providers and NRCS personnel can complete.

The remaining 40% of funds that is dedicated to non-livestock practices is also currently divided into a sub-pool of forest management plans and forestry implementation incentives. Currently there is no set targeted spending amount for these funds but again we monitor interest and workload backlog before approving."

Illinois conducted a "special project" in FY 2006 and 2007. The Spoon River had been identified as one of the highest contributors of sediment in the Illinois River Watershed and streambank erosion was identified as a major resource concern. Therefore, EQIP developed a special project to increase adoption of streambank stabilization practices.

What follows is a written description of the Spoon River Special Project from Illinois EQIP managers Dozier and Hingson.

> "Special projects (watersheds, target areas, target resources) are established as a sub-pool under the appropriate livestock/non-livestock category of funds. The

Spoon River Watershed is an example of a special EQIP project. We have had others in the past as well."

"The Spoon River special EQIP project targeted the Spoon River sub-watershed of the Illinois River Watershed. The Illinois River Watershed is a State Priority Watershed for NRCS and the Illinois Conservation Partnership. When the Spoon River Special EQIP project first started in FY 2006, Illinois NRCS pledged a target of $600,000 of EQIP financial assistance to the project. The Illinois Department of Natural Resources, US-EPA, IL-EPA, Illinois Department of Agriculture, local Soil and Water Conservation Districts and the Spoon River Ecosystem Partnership were all involved as partners and the Lt. Governor's Illinois River Coordinating Council endorsed the project.

NRCS established a 75% cost-share rate and separate ranking pool for this watershed (as a sub account of the non-livestock category of funds). IDNR provided additional cost-share that could bring the total share amount up to 100%. EPA assisted with water quality monitoring of the sub-watershed, the Iowa Department of Agriculture (IDoA) provided technical assistance for practice designs, the SWCDs assisted IDNR with administration and the local watershed group helped develop the ranking.

Within the Spoon River Watershed, the Cedar Creek sub-watershed was selected as a reasonable size to have the opportunity for a significant impact with our practices. Although any landowners in the Spoon River Watershed were eligible, additional ranking points were given to projects in the Cedar Creek sub-watershed. The cost share rate was established at 70% (most other practices were at 60%) and the area had it's own cost list based on local cost of raw materials. The interest was high so we directed more funds than was targeted.

In the first year (FY 06) NRCS targeted $750,000 to the watershed but based on interest nearly double that amount was obligated. We finished FY 2006 with 35 contracts totaling $951,729 in the Cedar Creek Watershed and 9 contracts totaling $528,508 in the rest of the Spoon. For a total of 44 contracts with $1,480,237 of EQIP funds. This total amount was a little more than 10% of our total EQIP Financial Assistance allocation in FY 06. On certain sites that also help protect CREP easements, IDNR paid an additional percentage (not to exceed 100% total cost) depending on the proximity the CREP land. IDOA provided some technical assistance with practice designs. IL EPA and US EPA are conducting monitoring.

We originally intended the project to run for one year but because there were still some projects that we had not funded, we ran the special project again in FY 2007, without any emphasis on the Cedar Creek sub-watershed. In FY 2007 we got another 18 contracts totaling $483,420 of EQIP financial assistance. That

was about 3 1/2% of our FY 2007 EQIP allocation. IDNR did not have a supplemental incentive in 2007 and IDOA did not provide technical assistance. NRCS discontinued the special project for 08 because there was no backlog of eligible sites and the State no longer had funds for the partnership. The project was considered a success. Monitoring is ongoing."

EWG commends Illinois for carrying out the Spoon River Special Project. EWG recommends that Illinois EQIP's best opportunity for improving water quality is to ramp up funding for these well-designed, watershed-based clean-up projects.

EWG recommends that Illinois EQIP allocate 60 percent of its EQIP funds to watershed-based clean-up projects by 2012. Illinois EQIP should then allocate the remaining 40 percent of funds by 2012 to funding pools that target high priority natural resource and environmental problems. These state-level funding pools create important opportunities to focus EQIP on the most pressing designated problems. The funding pools allow EQIP managers to select the best applications from all the applications proposing to address the same natural resource or environmental problem.

Application Ranking Criteria

Applications to participate in EQIP in Illinois are evaluated using multiple ranking sheets that include (1) national ranking factors and (2) state ranking factors. Because Illinois is the only state where all EQIP funds compete on a statewide basis, there are no local-level ranking factors. In addition to the General EQIP ranking criteria document which is used to evaluate "non-specific" applications, Illinois uses 5 other ranking sheets to evaluate applications: (1) Comprehensive Nutrient Management Plan (CNMP), (2) Forest Management Plan, (3) Forest Management Implementation, (4) Confined Livestock Operations, and (5) Grazing Land Operations. Each of the 102 counties in Illinois receives applications to all 6 ranking criteria categories. Applications are ranked on a statewide basis against each other within the 6 ranking categories.

Only the General EQIP ranking criteria document has (1) a national issues section and (2) a state issues section. The remaining 5 ranking criteria documents only have "state issues" sections. Illinois EQIP uses a system of Yes/No questions combined with positive points for each ranking category to evaluate applications. Applications that receive a greater total point score get a higher priority for selection and participation in EQIP. The final component of Illinois EQIP's ranking tool is the Cost Efficiency Score, which is a benefit-cost calculation of the practices selected for implementation in the contract. See Box 1 for background information on the cost-efficiency score.

Box 1. The Cost-Efficiency Score

A cost-efficiency score is generated for each application to determine how effective the cost-shared practices will be at addressing the priority resource concerns (soil, water, air, plant, animal, and human). The cost-efficiency score is calculated by multiplying the practice(s)'

Conservation Practice Physical Effects (CPPE) value(s)
x Service life of the practice(s)
/ Average cost of installing and maintaining the practice(s)

NRCS maintains a national database of each practice's CPPE value. CPPE values range from -5 to + 5 reflecting the practice's ability to worsen or improve each resource concern. The CPPE value can be modified by the state or local jurisdiction to reflect the soil, weather, topographic, and other state or local conditions that may impact the effectiveness of the practice.

All 10 Mississippi River border states are using the NRCS Pro-Tracts Cost-Efficiency software to calculate a Cost-Efficiency score for each application. However, because the Cost-Efficiency score is embedded in the software, this step in the ranking process is not transparent since the state EQIP managers were unable to fulfill our request of reviewing the CPPE values given to practices funded by EQIP.

Unlike other states that assign a certain percentage of the total ranking score to the national, state, and cost-efficiency section of their ranking criteria, Illinois' national and state ranking points are not weighted but merely additive to provide a total score for an application. According to Dozier and Hingson, the cost-efficiency factor is weighted within Illinois to provide enough weighting to allow one application to rise above another because the improvement to the environment is higher and the cost of the practices is lower.

To participate in the General EQIP application pool, a producer must agree to address one or more of the following resource concerns in order to qualify for the program: Soil Erosion, Soil Condition, Water Quality, Water Quantity, Fish and Wildlife, and Plant Condition.

To determine how much emphasis Illinois EQIP places in its ranking criteria on the reduction of nutrient and sediment pollution and on geographic priority areas, we attempted a rough calculation of points assigned to questions that appear to address these priorities. We acknowledge that this approach is incomplete and potentially misleading, as it does not account for the effect of the cost-efficiency score in the Ranking Criteria. In addition, the lack of specificity in the ranking criteria made it difficult to identify points for reducing sediment and nutrient pollution and points for applications located in priority areas. Those complications are described in Box 2.

Box 2. The Lack of Specificity in Ranking Criteria

The ranking criteria in all 10 Mississippi River border states lacked sufficient specificity for us to determine with real certainty the emphasis each state was giving in its ranking sheets to the reduction of sediment and nutrient pollution and to areas of geographic importance. For example, many ranking factors do not specify the particular source of natural resource or environmental problems, such as sediment or nutrient loss from cropland. Instead the ranking factors refer to more generic sources of problems, such as nonpoint source pollution.

In those cases where more specific types of pollutants like sediments or nutrients were cited, they were usually included in a longer list of pollutants, such as pathogens, pesticides, or excess salinity, making determination of the priorities implicit in the ranking criteria difficult. A similar lack of specificity hampered our ability to determine the emphasis placed on location of an application within a priority watershed or other geographic unit.

Despite these difficulties, it is clear that the factors used in ranking criteria and the priority assigned those factors through point allocations and multipliers are critical determinants of effectiveness of EQIP in reducing sediment and nutrient pollution.

Regarding emphasis on geographic priorities, a review of the FY2008 General EQIP Ranking Criteria document (see Appendix) indicates that Illinois does not appear to give much emphasis to geographic priorities. Illinois does ask National Priorities Question 1 which includes a reference to impaired watersheds:

> "Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?"

This question does give some priority to an application located in an impaired watershed as part of a larger priority for addressing nonpoint and point source pollution.

In the State Issues section of the General EQIP sheet, Illinois gives applications priority for being located in important areas but only 10 of the 175 total possible points (6 percent) in the State section are awarded for these geographic priorities:

> "The EQIP application area is located in a watershed of a 303d stream segments(s) impaired agriculture as identified on Map 2 of the "EQIP '08 map references", or a watershed with an active, locally-led committee with a resource plan as identified on Map 3 of the "EQIP '08 Map references"." (See the Appendix for these maps)

Regarding emphasis on reducing nutrient and sediment pollution, a review of the General EQIP Ranking Criteria document provides unclear answers about how much priority Illinois places on these two types of water pollutants. For example, the National Priority Question 1 does mention the words "nutrients" and "sediment" but the question lacks sufficient specificity for us to distinguish between points awarded for treatment of nutrients and sediments versus points awarded for reducing excess salinity or pesticides.

The National Priorities Question 4 does allocate 10 points (25 percent of the 40 total points available from the National Priorities section of the ranking system) for applications that specifically address soil erosion and sedimentation.

> "Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?"

In the State Issues section, a sub-group of questions entitled "Soil Erosion Questions" provides 20 more points (11 percent of the 175 points in the State section) for reducing the following types of erosion: streambank, ephemeral, classic gully or sheet and rill. However, there is no indication whether the erosion occurring on the applicant's cropland is causing a sedimentation problem in a body of water.

There is another sub-group of questions in the State Issues section entitled "Positive Effects of Practices on the Soil and Water Resource Concerns" that are likely to include reductions in sediment and nutrient pollution, among other types of water quality pollutants. These 3 questions award 10 points each if the applicant agrees to implement at least one of the selected practices that positively affects a) soil resource concerns, b) soil and/or water resource concerns, and c) water quality and/or water quantity.

Finally, there are 2 questions that award the largest and second largest numbers of points in Illinois' General EQIP Criteria. Applicants that agree to implement a Resource Management System (RMS) plan that address a) all or b) at least 2 resource concerns receive 70 and 35 points, respectively. The resource concerns listed are: soil erosion, soil condition, water quality, water quantity, fish and wildlife, or plant condition. Thus, assuming that nutrient pollution will be addressed by the "water quality" resource concern and that sediment pollution will be addressed by the "soil erosion" resource concern and assuming that the applicant chooses to address at least these 2 resource concerns, then it is likely that the applicant will reduce nutrient and sediment pollution. If an applicant agrees to address all resource concerns and use EQIP dollars to do it, then 20 more points are awarded. Thus, 90 more points may possibly result in a reduction of nutrient and sediment pollution.

Altogether, the 140 points that are implicitly related to nutrient and sediment pollution represent 80 percent of the points in the State Issues section of the ranking system.

For comparison purposes, we performed a cursory review of the Illinois Confined Livestock Operations Ranking Criteria and Comprehensive Nutrient Management Plan (CNMP) Ranking Criteria. Note that the Confined Livestock Operations funding pool received the second highest percentage of Illinois EQIP funds. Ten of the total 140 total points (7 percent) are provided if the application is in a watershed on the 303d list that is impaired by agriculture (see Map 2) or in a watershed with a locally led committee with a resource plan (see Map 3). There are two other geographically related criteria. Twenty-five points (18 percent) is given if the "livestock facility is within 500 feet of a water body and contaminated runoff is not now but will be controlled." And 10 points (7 percent) is given if "a positive change in management will result in manure application no closer than 1,320 feet from a water body."

Illinois' Comprehensive Nutrient Management Plan (CNMP) Ranking Criteria asks only three questions worth a total of 45 points. Twenty of the 45 points (44 percent) is provided if the applicant has been cited by a state or federal regulator agency for improper manure or mortality management.

Despite Illinois EQIP appearing to give a large number of unweighted points in the reviewed ranking criteria to the most pressing concerns – nutrient and sediment pollution reduction in high priority areas – only about 6 percent of points are given to applications from priority watersheds. Thus, it is unlikely that Illinois' ranking system can ensure that applications in the priority watersheds will rise to the top of the ranking list and get selected for funding.

EWG recommends that Illinois EQIP revise their ranking systems to increase the priority given to applications located in high priority watersheds that will reduce sediment and nutrient pollution. Sediment and nutrient pollution are the two most important pollutants of streams, lakes, and reservoirs in the 10 states bordering the Mississippi River, the main stem of the Mississippi River, and the Dead Zone in the Gulf of Mexico.

Conclusion

We find that EQIP has not been deployed as effectively as it could be in Illinois or any of the 9 states that border the Mississippi River. The methods used to decide how to spend EQIP dollars within the state and which farmers will get those dollars are more likely to result in diffuse and fragmented efforts to reduce pollution from farms rather than the focused and coordinated effort needed to solve both local and regional water pollution problems.

Watershed-based water quality clean-up projects are the best use of federal taxpayer resources and offer the greatest hope for cleaning up the unintended environmental

damage of agriculture. These projects entail setting goals to clean up specific bodies of water that are deemed the highest priorities, determining how many of the most cost effective practices are needed, and persuading key farmers to participate in the project.

To quickly ramp up the effectiveness of EQIP, Illinois NRCS should:

1. Set clear and specific goals for how much pollution needs to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals.

2. Use 60 percent of EQIP dollars by 2012 to fund watershed-based water quality clean-up projects that encourage multiple farmers within selected watersheds to reduce pollution to specific lakes, streams, or tributaries to the Mississippi River.

3. Use 40 percent of EQIP funds by 2012 in state-level funding pools to target the highest priority natural resource and environmental problems in each state.

4. Select farmers to participate in EQIP who can do the most to contribute to watershed-based clean-up projects or solve high priority problems.

APPENDIX—Illinois EQIP Ranking Criteria
Illinois FY2008 – General EQIP Ranking Criteria National Issues section

EQIP
Environmental Quality Incentives Program

NRCS Natural Resources Conservation Service

General EQIP Ranking Criteria

October 5, 2007

State Issues

SCREENING QUESTIONS	1. Will one or more of the resource concerns listed below (check all that apply) be addressed by the EQIP application? ☐ Soil Erosion ☐ Soil Condition ☐ Water Quality ☐ Water Quantity ☐ Fish and Wildlife ☐ Plant Condition **If no, stop ranking** application and the applicant will receive no points on the entire ranking criteria.	○ Yes ○ No	0
	2. The minimum EQIP application area is an entire field or series of fields. **If no, stop ranking** application and the applicant will receive no points on the entire ranking criteria.	○ Yes ○ No	0

Resource Planning Questions

A maximum of one question can be answered "Yes" for questions 3 and 4		
3. Applicant has been presented Resource Management System (RMS) level alternatives for all resource concerns for the tract(s) that encompass the application area (as defined in Attachment 1, items A and B), prior to applying for EQIP. **AND the applicant has agreed to:** • a plan that addresses **all** of the resource concerns. • implement at least one practice from the plan using EQIP dollars.	○ Yes ○ No	70
4. Applicant has been presented RMS level alternatives for all resource concerns for the tract(s) that encompass the application area (as defined in Attachment 1, items A and B), prior to applying for EQIP. **AND the applicant has agreed to:** • a plan that address at least 2 resource concerns (as identified in screening question #1) prior to applying for EQIP. • implement at least one practice from the conservation plan using EQIP dollars.	○ Yes ○ No	35
5. If question 3 was answered yes, will all remaining practices of the RMS plan be implemented using EQIP dollars? (Part of the RMS plan may already be in place and the remaining practices will be put in place using EQIP dollars or the entire RMS plan will be put in place using EQIP dollars.)	○ Yes ○ No	20

Location

6. The EQIP application area is located in a watershed of a 303d stream segment(s) impaired by agriculture as identified on Map 2 of the "EQIP '08 Map references", or in a watershed with an active, locally-led committee with a resource plan as identified on Map 3 of the "EQIP '08 Map references".	○ Yes ○ No	10

Soil Erosion Questions – Select all that apply

7. EQIP dollars will be used to reduce streambank erosion.	○ Yes ○ No	10
8. EQIP dollars will be used to reduce ephemeral or classic gully erosion.	○ Yes ○ No	5
9. EQIP dollars will be used to reduce sheet and rill erosion.	○ Yes ○ No	5

Positive Effects of Practices on the Soil and Water Resource Concerns

10. Application includes EQIP dollars for **at least one structural or vegetative practice that positively affects the soil** resource concerns (choose from the list below only). Terrace, WASCOB, Grassed Waterway, Grade Stabilization Structure, Critical Area Planting, Diversion, Streambank and Shoreline Protection, Tree and Shrub Establishment	○ Yes ○ No	10
11. Application includes EQIP dollars for **at least one management practice that positively affects the soil and/or water** resource concerns (choose from the list below only). Nutrient Management *(addressing one or more items listed on Attachment J, C)*, Residue and Tillage Management (No-Till/Strip-till), Drainage Water Management, Irrigation Water Management	○ Yes ○ No	10
12. Application includes EQIP dollars for **at least one structural or vegetative practice that positively affects water quality and/or water quantity** (choose from the list below only). Field Border, Streambank and Shoreline Protection, Filter strips, Riparian Forest Buffers, At least 3 acres of Constructed Wetland, At least 3 acres of Wetland Restoration, Structure for Water Control	○ Yes ○ No	10

Positive Effects of Practices on the Wildlife Habitat Resource Concern

A maximum of one question can be answered "Yes" for questions 13-15		
13. Application includes EQIP dollars for **one or more structural or management practice that positively affects wildlife habitat** on a total of 3-10 acres while meeting the minimum acreage requirement for a practice (choose a single practice or combination of practices from the list below only). At least 3 acres of Wetland Restoration, At least 3 acres of Shallow Water Development and Management, At least 3 acres of Restoration and Management of Declining Habitats, At least 3 acres of Prescribed Burning, At least 3 acres of Early Successional Habitat Development/Management	○ Yes ○ No	10

14. Application includes EQIP dollars for **one or more structural or management practice that positively affects wildlife habitat** on a total of more than 10 acres meeting the minimum acreage requirement for a practice (choose a single practice or combination of practices from the list below only). At least 3 acres of Wetland Restoration, At least 3 acres of Shallow Water Development and Management, At least 3 acres of Restoration and Management of Declining Habitats, At least 3 acres of Prescribed Burning, At least 3 acres of Early Successional Habitat Development/Management	○ Yes ○ No	20
15. The application includes EQIP dollars for a **Stream Habitat Improvement and Management project.**	○ Yes ○ No	20

Providing Habitat for Pollinators

16. Application will provide habitat for pollinators using EQIP dollars by: • establishing or enhancing a border practice or block of perennial vegetation at least ½ acre in size • including in the practice, at least 15 native flowering forbs and/or shrubs with flowering periods that span the growing season. • Applying no insecticide to the area or within a 30 foot buffer of the area. • Allowing not more than 1/3 of the site to be disturbed for early successional management of the vegetation, according to the NRCS 643 standard. (See Attachment 1, item D)	○ Yes ○ No	5

National Issues *(reference "**EQIP '08 National Issues Definitions and scoring**" for more explanation; if the state screening questions1-2 are answered no, the applicant will receive no points on the National Issues.)*

		Points
1. Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?	○ Yes ○ No	10
2. Will the treatment you intend to implement using EQIP result in a considerable amount of ground or surface water conservation?	○ Yes ○ No	5
3. Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	○ Yes ○ No	5
4. Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	○ Yes ○ No	10
5. Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	○ Yes ○ No	10

Skipped pages 4, 5, & 7 of the Illinois General EQIP Ranking Criteria document but included page 6 which details the "Positive Environmental Change" increased per acre payments for advanced nutrient management practices:

Attachment 1
Definitions and Guidance for General EQIP Applications

A) Resource Management System (RMS) Plan

The RMS plan must accurately reflect the practices in the EQIP application, and must be signed as approved by NRCS. At a minimum, the RMS plan is to include a combination of conservation practices and resource management, identified by land or water uses, for the treatment of all resource concerns for soil, water, air, plants, and animals that meets or exceeds the quality criteria in the Field Office Technical Guide (FOTG) for resource sustainability, as outlined in the National Planning Procedures Handbook **(NPPH),** section **600.11 (a) Resource Management System (RMS).**

B) Planning prior to an EQIP Application

The applicant may garner points for having an RMS plan (as described in part A, above), or a conservation plan, in place prior to applying for EQIP financial assistance. If an RMS plan is developed after the original application date the ranking score cannot be upgraded until a subsequent batching period.

C) Achieving "Positive Environmental Change" *(to be documented in a Nutrient Management Plan)*

1) To receive the $10 per acre incentive (flat rate payment)

In order for the applicant to qualify for the $10 incentive their **Nutrient Management Plan must include the basic requirements of the NRCS 590 standard) plus one or more of the following management changes**:

Rate of nitrogen or phosphorus application

a. The rate of nitrogen or phosphorus will be reduced by at least 11 lbs./acre from the current level of application. Do not add nitrogen and phosphorus reductions together to determine total reduction in application rate.

Timing of nitrogen application

b. When Nitrogen is currently being applied in the fall, applicant agrees to apply the majority of the nitrogen in the spring. Nitrogen being applied in the fall will now be delayed and/or a nitrification inhibitor will be used according to University of Illinois recommendation.

c. Nitrogen application will be changed from fall application to spring preplant and/or sidedress on corn or sorghum.

Phosphorus placement

d. Phosphorus is currently being broadcast on the soil surface and future phosphorus applications will be injected, or placed, at least 2 inches deep.

Note: The 590 standard requires soil samples on a 2.5 acre grid or the industry standard (not to exceed 5 acre grid soil samples). If industry standard is used Area ASTC approval must be obtained.

2) To receive the $15 per acre incentive (flat rate payment)

In order for the applicant to qualify for the $15 incentive the requirements of item 1 above must be met **plus one or more of the following management changes**:

a. Applicant will *change management* to apply phosphorus fertilizer using Variable Rate Technology (VRT) based on current soil tests (less than or equal to 4 years old) and will not apply any phosphorus fertilizer in areas of the field where the soil test phosphorus exceeds 70 lbs./acre *(i.e., applicant has not been already been applying phosphorus using VRT: a uniform rate across the whole field is currently being applied, OR applicant has been applying phosphorus fertilizer using VRT but phosphorus was being applied in areas with soil tests greater than 70 lbs./acre.)*

b. All Nutrients are applied using VRT based on current soil tests (less than or equal to 4 years old). **Note: Starter fertilizer containing phosphorus is allowed in locations not receiving maintenance phosphorus. Phosphorus applied in the starter will not exceed 35 lbs. P_2O_5/acre.**

3) To receive the $ 5 per acre incentive (flat rate payment)

In order for the applicant to qualify for the $5 incentive the requirements outlined in item 1 above are already in place and the applicant is only applying the requirements outlined in item 2 above.

IL-EQIP FY2008 - Confined Livestock Operations Ranking Criteria (Attached are the first 3 of 10 pages only)

EQIP
Environmental Quality Incentives Program

NRCS Natural Resources Conservation Service

Confined Livestock Operations Ranking Criteria

October 5, 2007

State Issues

			Points
----SCREENING QUESTIONS----	1. The applicant currently has livestock that are used to produce food and/or fiber on the land where EQIP treatment is proposed (subject to exception as described in Attachment 1, item A). **If no, stop ranking** application and the applicant will receive no points on the entire ranking criteria.	○ Yes ○ No	0
	2. The planned project is on an existing facility, as defined in Attachment 1, item B, and all practices in the contract will address an existing livestock-related resource concern. **If no, stop ranking** application and the applicant will receive no points on the entire ranking criteria.	○ Yes ○ No	0
	3. The applicant has or can obtain access to the amount of acres needed to spread manure from the operation (see documentation requirement in Attachment 1, item C). **If no, stop ranking** application and the applicant will receive no points on the entire ranking criteria.	○ Yes ○ No	0
	4. The applicant will include measures necessary to bring soil erosion to the quality criteria level in eFOTG section III (subject to exception per, Map 1) on all land where manure is applied *(land must be owned or controlled by the applicant, or on which the applicant has a contract to apply manure)*. **If no, stop ranking** application and the applicant will receive no points on the entire ranking criteria.	○ Yes ○ No	0
	5. The applicant will implement a Waste Utilization Plan that meets the requirements of the NRCS-IL Standard 633, for the operation receiving EQIP funding, by the end of the EQIP contract. *Note: if animals will be moved from confinement to grazing, a prescribed grazing plan is also required.* **If no, stop ranking** application and the applicant will receive no points on the entire ranking criteria. (See attachment 3 for requirements)	○ Yes ○ No	0
	6. A CNMP completed by a qualified TSP or written and approved by NRCS will be developed prior to installation of waste storage or treatment facilities, and the CNMP will be implemented no later than 3 years after the installation of waste storage or treatment facilities. **If no, stop ranking** application and the applicant will receive no points on the entire ranking criteria.	○ Yes ○ No	0

Ranking Questions		
7. A CNMP completed by a qualified TSP or written and approved by NRCS (as described in Attachment 1, item D) was developed prior to the time the EQIP application was submitted.	○ Yes ○ No	40

8. Part of the EQIP application will be located in a watershed of a 303d stream segment(s) impaired by agriculture as identified on Map 2 of the "EQIP '08 Map references", or in a watershed with an active, locally-led committee with a resource plan as identified on Map 3 of the "EQIP '08 Map references".	○ Yes ○ No	10
9. The applicant has completed a nationally recognized third party environmental assessment of the confined livestock operation, as described in Attachment 1, item E.	○ Yes ○ No	10
10. The applicant is a Certified Livestock Manager, according to Illinois Department of Agriculture Specifications, at the time the EQIP application is submitted.	○ Yes ○ No	10
A maximum of one question can be answered "Yes" for questions 11 and 12		
11. Waste storage utilization will be improved by more frequent manure application using EQIP dollars, instead of increasing waste storage capacity, as described in Attachment 1, item G.	○ Yes ○ No	20
12. Waste Storage Capacity for the existing number of animals will be increased to at least six months but no more than 12 months using EQIP dollars, as described in Attachment 1, item F.	○ Yes ○ No	15
13. A new practice (such as a composting facility) will be installed using EQIP dollars to improve an existing mortality management area.	○ Yes ○ No	5
14. Waste impoundment(s) will be closed using EQIP dollars, as described in Attachment 1, item I.	○ Yes ○ No	5
15. Abandoned water well(s) will be sealed using EQIP dollars, on land owned or controlled by the applicant.	○ Yes ○ No	5
16. Livestock facility is within 500 feet of a water body (as defined in Attachment 1, item J) and contaminated runoff is not now but will be controlled, as identified in Attachment 1, item H, using EQIP dollars.	○ Yes ○ No	25
A maximum of one question can be answered "Yes" for questions 17 and 18		
17. A positive change in management will result in manure application no closer than 200 feet but less than 1320 feet from a water body (as described in Attachment 1, items J and K). Waste Utilization (633) will be implemented using EQIP dollars. *Note: Positive environmental change must be documented on Attachment 3.*	○ Yes ○ No	5
18. A positive change in management will result in manure application no closer than 1320 feet from a water body (as described in Attachment 1, items J and K). Waste Utilization (633) will be implemented using EQIP dollars. *Note: Positive environmental change must be documented on Attachment 3.*	○ Yes ○ No	10

National Issues *(reference "**EQIP '08 National Issues Definitions and scoring**" for more explanation; if the state screening questions 1-6 are answered no, the applicant will receive no points on the National Issues.)*

		Points
1. Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?	○ Yes ○ No	10
2. Will the treatment you intend to implement using EQIP result in a considerable amount of ground or surface water conservation?	○ Yes ○ No	5
3. Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	○ Yes ○ No	10
4. Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	○ Yes ○ No	10
5. Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	○ Yes ○ No	15

IL-EQIP FY2008 – Comprehensive Nutrient Management Plan (CNMP) Ranking Criteria (Attached 1 of 2 pages only)

EQIP
Environmental Quality Incentives Program

NRCS Natural Resources Conservation Service

Comprehensive Nutrient Management Plan (CNMP) Ranking Criteria

October 5, 2007

State Issues

SCREENING QUESTIONS	1. Is the applicant requesting the CNMP incentive only for a site that does not already have a CNMP? **If no, stop ranking** and the applicant will receive no points on the entire ranking criteria.	○ Yes ○ No	0
	2. Does the applicant currently have more than 15 animal units (that are used to produce food and/or fiber), or have they requested a waiver from the NRCS State Conservationist? **If no, stop ranking** and the applicant will receive no points on the entire ranking criteria.	○ Yes ○ No	0

Ranking Questions		
3. Applicant had an "eligible" CNMP application in ProTracts in FY 2007 that was not selected for funding.	○ Yes ○ No	20
4. Applicant has been cited by a state or federal regulator agency for improper manure or mortality management. *(Documentation from applicant is required)*	○ Yes ○ No	20
5. Applicant has 15 or more animal units *(or a waiver from the NRCS State Conservationist)* and no previously written CNMP for the application area (site)?	○ Yes ○ No	5

National Issues: The **development of a** Comprehensive Nutrient Management **Plan does not improve the resource concerns** until implemented; therefore, all National questions must be answered "No".

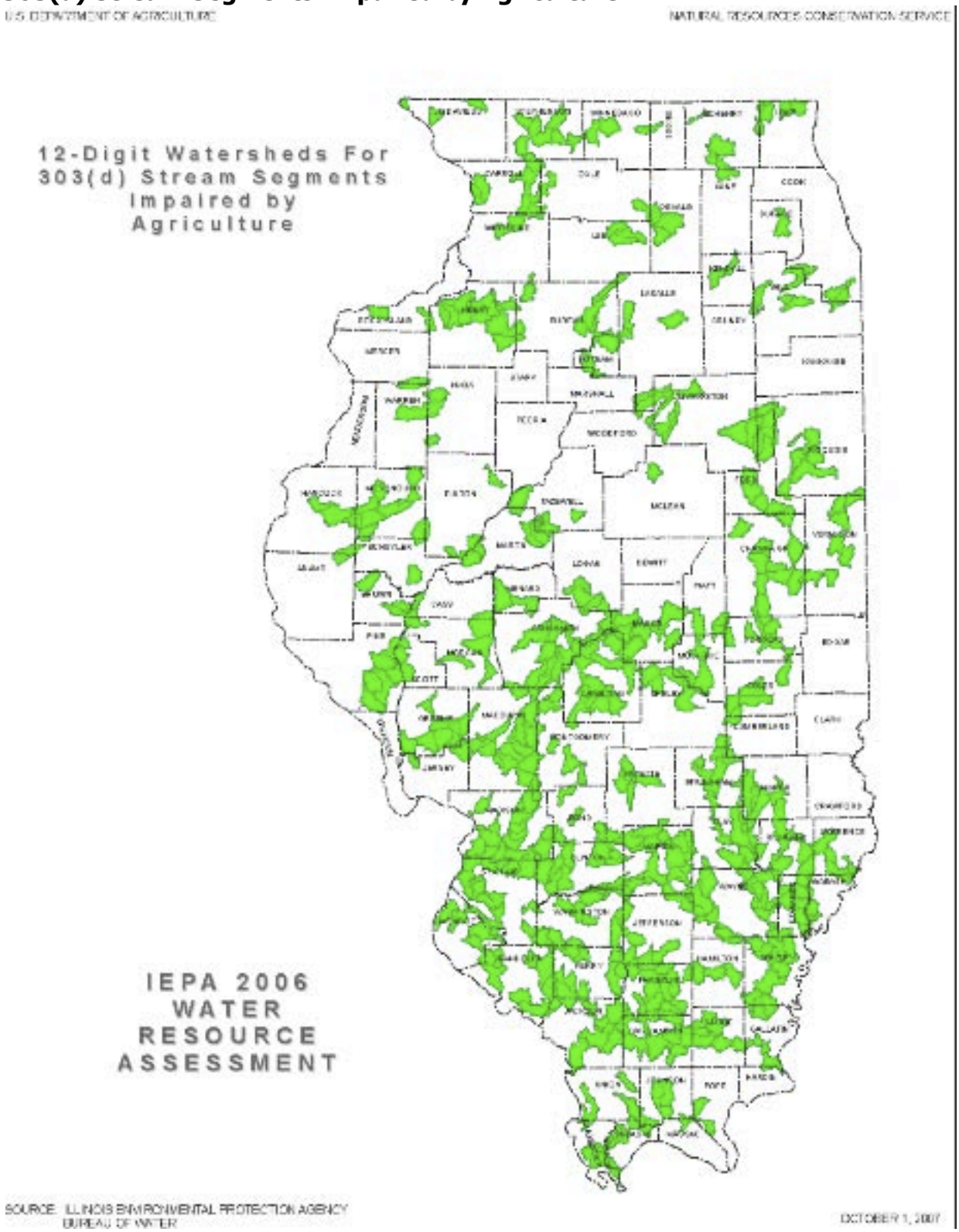
		Points
1. Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?	○ Yes ● No	0
2. Will the treatment you intend to implement using EQIP result in a considerable amount of ground or surface water conservation?	○ Yes ● No	0
3. Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	○ Yes ● No	0
4. Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	○ Yes ● No	0
5. Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	○ Yes ● No	0

Map 1 –Soil Erosion Quality Criteria Exceptions

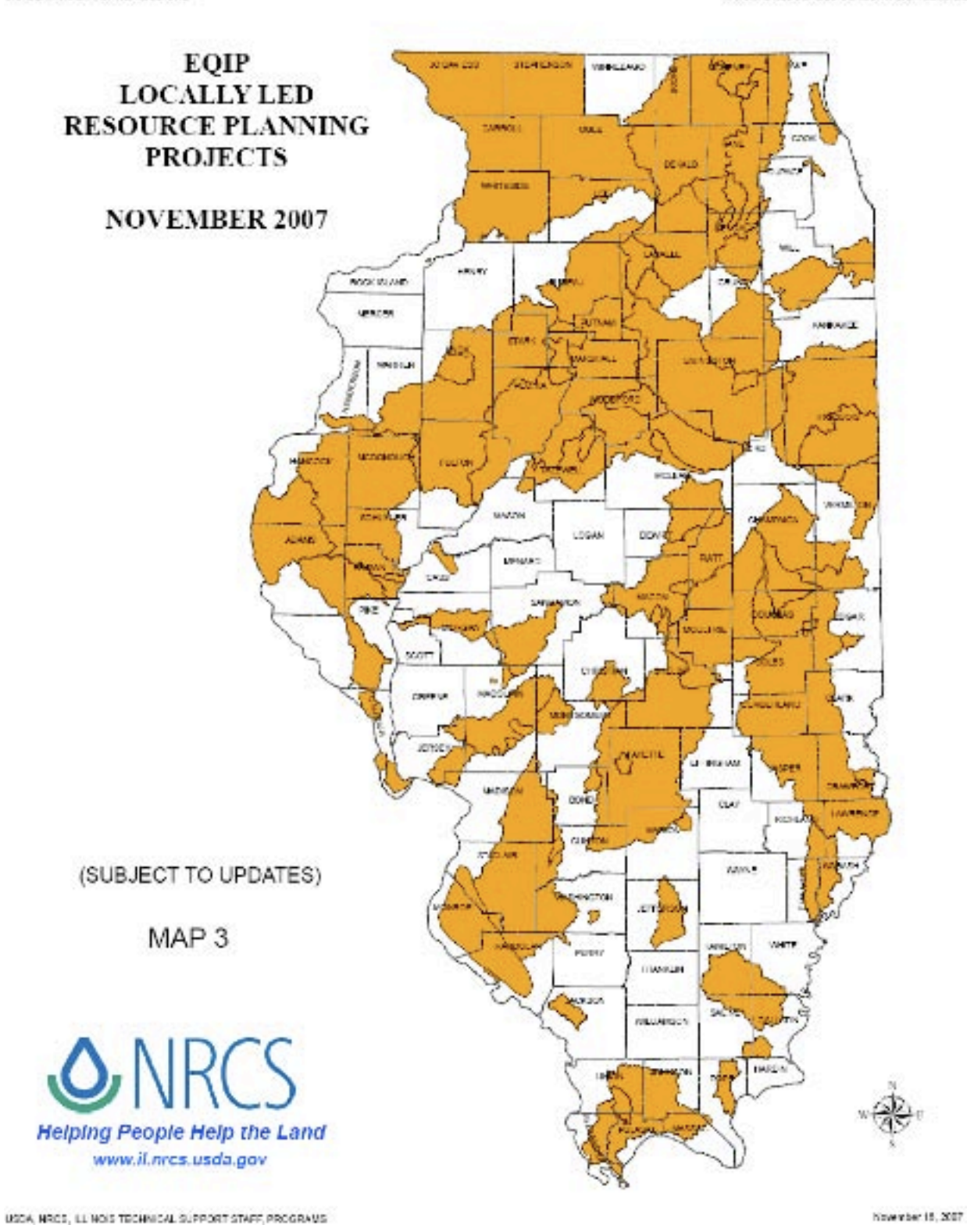
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

OCTOBER 1, 2007

Map 2 – IEPA 2006 Water Resource Assessment – 12-Digit Watersheds for 303(d) Stream Segments Impaired by Agriculture



Map 3 – EQIP Locally Led Resource Planning Projects (November 2007)



SEIZING A WATERSHED MOMENT

Making EQIP Work for Water Quality in 10 Mississippi River Border States

Wisconsin

Environmental Quality Incentives Program
State Report 10 of 10

ENVIRONMENTAL WORKING GROUP

APPENDIX – STATE REPORTS

WISCONSIN
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM

OVERVIEW

Wisconsin received an average of $19.1 million in EQIP funds for technical and financial assistance per year from 2003 to 2007, ranking it 5th out of the 10 states that border the Mississippi River for EQIP funds. Two-thirds of Wisconsin EQIP's funds are distributed to the state's 72 counties while the remaining third is spent on the Waste Storage / Alternative Waste Solutions funding category.

Applications to participate in EQIP are evaluated using multiple ranking sheets that include: (1) national priorities, (2) state issues, (3) local issues, and (4) and cost-efficiency score. Applications are evaluated using either the Waste Storage ranking criteria document or one of four Area ranking criteria documents, called "Application Ranking Summaries," for the Northeast, the Southeast, the Southwest, and the Northwest, depending on where the applicant's operation is located. County-level applications compete against each other within each county while the Animal Waste Storage/Alternative Waste Solutions applications compete on a statewide basis.

The Wisconsin State Technical Committee (WSTC) provides input and recommendations to develop the list of eligible practices, cost share rates and limits, eligible resource concerns, and scoring criteria for waste storage. The Local Work Groups (LWG) provides input on the list of eligible practices for the countywide signups, county scoring criteria, and eligible resource concerns. Area Work Groups convene to establish the four Area Summaries.

WISCONSIN EQIP WEBSITES

http://www.wi.nrcs.usda.gov/programs/eqip.html

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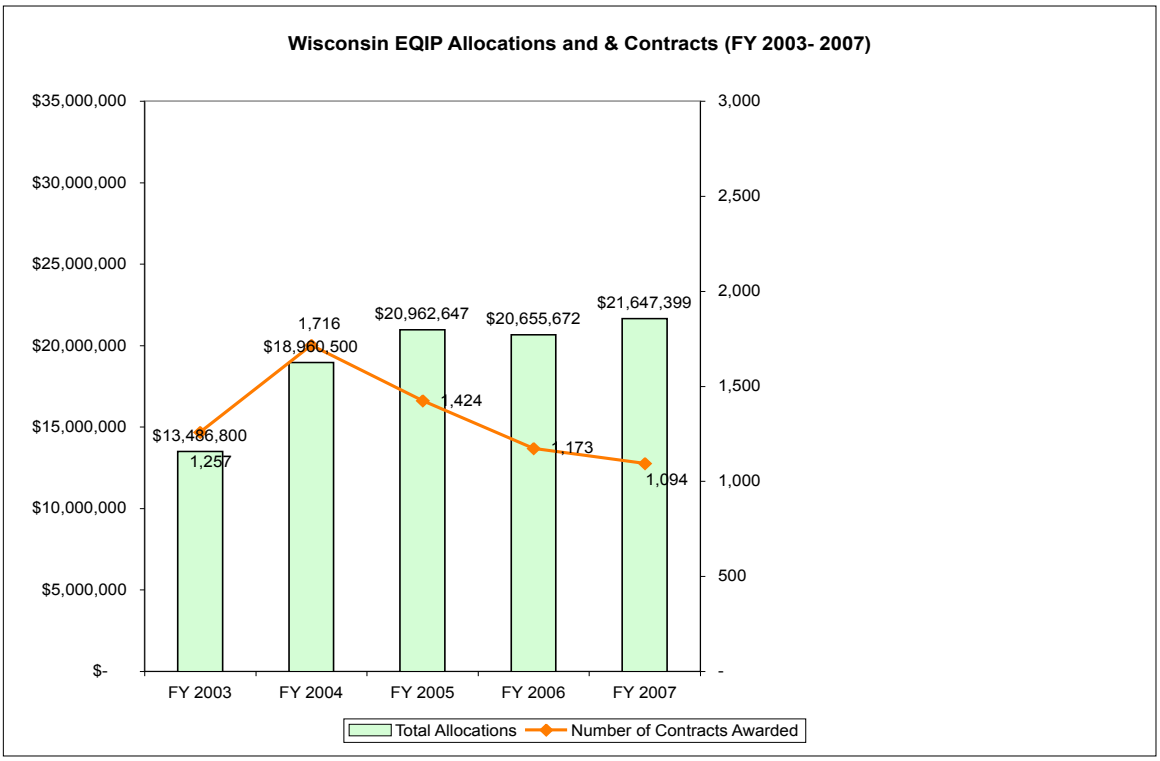
FUNDING AND REACH OF EQIP

EQIP funding is allocated to states using a national formula. The chart below shows the amount of financial and technical assistance Wisconsin has received from FY 2003 to 2007 and the number of contracts awarded each fiscal year. A total of 6,664 contracts have been entered into with producers between 2003 and 2007 providing $95.7 million and addressing nearly 1,407,572 acres in the state.



Source: EWG compiled annual data from EQIP's "Allocation" and "Contract" tables found on the USDA NRCS website: http://www.nrcs.usda.gov/programs/EQIP/.

KEY FACTORS ANALYSIS

We analyzed the following factors for indications of the extent to which EQIP in Wisconsin is focused on reducing sediment and nutrient loads to streams, lakes, and rivers: (1) the presence or absence of qualitative or quantitative goals for pollutant reductions, (2) methods used to allocate state-level funds to counties or other sub-state levels or to specific projects or priorities, and (3) the application ranking criteria used to select participants in EQIP. We relied primarily on the information and data presented on the Natural Resources Conservation Service (NRCS) website to complete this analysis and followed up on our investigation with interviews of the state EQIP program managers.

Goals

EWG did not find evidence to suggest that Wisconsin EQIP has a) established explicit quantitative or qualitative goals for EQIP to clean up agricultural sources of pollution, b) identified which lakes, streams, or tributaries are priorities for improvement, c) set a timetable to achieve those goals, or d) established a means to track progress toward the goals. Wisconsin's application ranking systems do create an implicit set of priorities for treating water quality, but measurable goals and timelines do not exist.

EWG recommends that Wisconsin EQIP set clear and specific goals for how much and what types of agricultural pollution need to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals. EWG also recommends that Wisconsin EQIP develop systems to track, evaluate, and report on the environmental performance of EQIP.

Fund Allocation

Wisconsin distributes approximately two-thirds to three-fourths of its EQIP funding to its 72 county offices where farmers compete for EQIP funds within each county. Sign-up to develop Comprehensive Nutrient Management Plans for livestock operations is done through the local county sign-ups as well.

The remaining 25 to 33 percent is allocated to the Waste Storage/Alternative Waste Solutions funding category where farmers compete on a state-level basis. This funding category includes several different practices to separate liquid from solid waste, as well as the mechanical, chemical, and biological treatment of manure to reduce odor and nutrients and make handling easier. However, non-animal waste practices can still be funded from this account if applications for waste storage and alternative waste solutions include additional, no-animal waste practices. A map showing the locations and numbers of Waste Storage Structures applications in FY2008 is provided in the Appendix.

To allocate funds to the counties, Wisconsin uses a funding formula, which includes a base allocation (equal for all counties) and then the remaining funds are distributed to each county based on the:

- Percent of total state livestock numbers within a county (weighted 50 percent)
- Percent of total state cropland acres within a county (weighted 25 percent)
- Percent of total state highly erodible land acres within a county (weighted 25 percent).

EWG recommends that if funds are allocated directly to local jurisdictions, Wisconsin EQIP should use allocation formulas based primarily on natural resource and environmental factors rather than generic production factors to channel more funding

to localities with significant yet solvable environmental problems associated with agriculture.

Each county individually determines how they will allocate their funding. A random review of a few county EQIP programs indicates that some counties set funding allocation goals for each fiscal year. For example, Brown County Local Work Group (in the Northeast Area) decided to allocate its available 2008 EQIP funds in the following manner:

Surface Water Quality	55 percent
Comprehensive Nutrient Management Plans	30 percent
Groundwater Quality	10 percent
Fish & Wildlife Habitat	5 percent

The Adams County LWG (in the Southeast Area) decided to allocate their 2008 funds in the following manner:

Soil erosion, water quality-surface, water quality-ground, and streambank / shoreline degradation	75 percent
Wildlife habitat, Invasive Plant Control	25 percent

EWG recommends that Wisconsin EQIP's best opportunity for improving water quality is to fund well-designed, watershed-based clean-up projects. This approach encourages multiple farmers within a watershed to reduce pollution to a specific lake, stream, or tributary to the Mississippi River.

The problem-solving advantages of this approach are well understood. They include focusing resources in specific locations to solve well-defined problems using a strategy that directs funding to those farmers within the watershed who can do the most to reduce pollution. Ideally, such water quality improvement projects include developing monitoring and evaluation systems to adjust the strategy and resource allocations based on the results that are being realized. Ramping up the emphasis in EQIP on such watershed-based clean-up projects would dramatically increase the effectiveness of the program.

EWG recommends that Wisconsin EQIP allocate 60 percent of its EQIP funds to watershed-based clean-up projects by 2012. Wisconsin EQIP should then allocate the remaining 40 percent of funds by 2012 to funding pools that target high priority natural resource and environmental problems. These state-level funding pools create important opportunities to focus EQIP on the most pressing designated problems. The funding pools allow EQIP managers to select the best applications from all the applications proposing to address the same natural resource or environmental problem.

Application Ranking Criteria

Applications to participate in Wisconsin EQIP are evaluated using a single ranking sheet that includes: (1) national priorities, (2) state issues, (3) local issues, and (4) and a cost-efficiency score. Applications are evaluated using either the Waste Storage/Alternative Waste Solutions ranking criteria document or one of four Area ranking criteria documents (Northeast, Southeast, Southwest, Northwest) depending on the location of the operation. All five of these documents ask Yes/No format questions and no points are shown online. Like other states, Wisconsin EQIP uses the national ProTracts ranking tool, which includes points for the questions and weights for each of the four sections. Applications that receive a greater total point score get a higher priority for participation in EQIP. See Box 1 for background information on the cost-efficiency score.

For each of the five ranking criteria documents, the National and State Issue sections are identical. In the Local issue section of the four "Area Local Work Group Application Ranking Summary" documents there are a different set and number of questions regarding the following resource concerns, however, not all resource concerns are identified in all four of the documents: Soil Erosion, Soil Condition, Water Quality, Water Quantity, Air Quality, Plant Condition, Domestic Animal, and Fish & Wildlife.

Box 1. The Cost-Efficiency Score

A cost-efficiency score is generated for each application to determine how effective the cost-shared practices will be at addressing the priority resource concerns (soil, water, air, plant, animal, and human). The cost-efficiency score is calculated by multiplying the practice(s)'

Conservation Practice Physical Effects (CPPE) value(s)
x Service life of the practice(s)
/ Average cost of installing and maintaining the practice(s)

NRCS maintains a national database of each practice's CPPE value. CPPE values range from -5 to + 5 reflecting the practice's ability to worsen or improve each resource concern. The CPPE value can be modified by the state or local jurisdiction to reflect the soil, weather, topographic, and other state or local conditions that may impact the effectiveness of the practice.

All 10 Mississippi River border states are using the NRCS Pro-Tracts Cost-Efficiency software to calculate a Cost-Efficiency score for each application. However, because the Cost-Efficiency score is embedded in the software, this step in the ranking process is not transparent since the state EQIP managers were unable to fulfill our request of reviewing the CPPE values given to practices funded by EQIP.

According to Jan Whitcomb, to develop the four Area Summary documents, each county Local Work Group (LWG) develops their list of concerns, and the Area ranking is

developed to address the combined county concerns and focus of that Area. The ranking tool is then available for review and comment by each LWG to ensure that their issues are addressed. The largest Area in Wisconsin has 21 counties but only 16 service centers while the smallest Area in Wisconsin has 10 counties.

The county-level applications, which use one of the four Area Level Application Ranking Summaries, are collected, scored, ranked, and selected at the county-level. The Animal Waste applications are also collected and scored at the county-level but are ranked and selected at the state level.

Jan Whitcomb explained that Wisconsin EQIP has a rough target of 20 to 30 percent of the total ranking score going to both the National priorities section and the Efficiency score. The remaining sections' points (State issues and Local issues sections) can be split up any way the four Area level groups see fit. This can however, vary on an individual application, but the overall average should be within those ranges.

To determine how much priority Wisconsin EQIP places on nutrient and sediment pollution and on geographic priority areas, since EWG was unable to receive a copy of a Summary sheet with points, we will comment only on the number and quality of questions that appear to give priority to these three issues. We chose to review the "Southwest Area Local Work Group Application Ranking Summary" because it includes counties that border the Mississippi River and we chose the "Statewide Animal Waste Application Ranking Summary" since animal waste can be a major source of nutrient pollution if not managed properly.

The lack of specificity in the ranking criteria made it difficult to conclude whether many ranking questions were aiming to select applicants that would reduce sediment and nutrient pollution and applicants located in priority areas. Those complications are described in Box 2.

Regarding emphasis on geographic priorities, a review of the FY 2008 Southwest Area Summary and the Animal Waste Summary (see Appendix) does not provide clear answers as to how much of a priority Wisconsin EQIP places on geographically important locations. Both Summary sheets have all five National Priority Questions. National Priorities Question 1 includes a reference to impaired watersheds:

> "Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?"

This question does give some priority to an application located in an impaired watershed as part of a larger priority for addressing nonpoint and point source pollution.

Box 2. The Lack of Specificity in Ranking Criteria

The ranking criteria in all 10 Mississippi River border states lacked sufficient specificity for us to determine with real certainty the emphasis each state was giving in its ranking sheets to the reduction of sediment and nutrient pollution and to areas of geographic importance. For example, many ranking factors do not specify the particular source of natural resource or environmental problems, such as sediment or nutrient loss from cropland. Instead the ranking factors refer to more generic sources of problems, such as nonpoint source pollution.

In those cases where more specific types of pollutants like sediments or nutrients were cited, they were usually included in a longer list of pollutants, such as pathogens, pesticides, or excess salinity, making determination of the priorities implicit in the ranking criteria difficult. A similar lack of specificity hampered our ability to determine the emphasis placed on location of an application within a priority watershed or other geographic unit.

Despite these difficulties, it is clear that the factors used in ranking criteria and the priority assigned those factors through point allocations and multipliers are critical determinants of effectiveness of EQIP in reducing sediment and nutrient pollution.

Each of the State Issues sections in the "Southwest Area Summary" and the "Animal Waste Summary" include only administrative questions regarding the applicant's previous participation in EQIP and their record of completion of previous contracts, etc. That is, there are no State Issues section questions selecting participants that will conduct activities that will result in a reduction of nutrient or sediment pollution or select participants in geographic priority areas.

In the local issues section of the "Southwest Area Summary," three questions focus specifically on geographically related priorities:

> "Implementation of practices in this application will address ground water concerns within an Outstanding or Exceptional Resource Watershed."
>
> "Implementation of practices in this application will address ground water quality concerns within a 303d Watershed."
>
> "Identified ground or surface water concerns in this Unit of Government will be addressed with the implementation of practice(s) in this application. LWG must identify the locations, and identify in the EQIP Program Plan, and posted on the NRCS web page."

In the Local Issues section of the "Animal Waste Summary," there are four geographically focused questions:

> "The percent of acres that are farmed and that will receive manure that are HEL is a) less than 25 %, b) 25% or more but less than 50%, c) 50 % or more but less than 75%, or d) 75% or more."
>
> "Footprint of the planned waste storage facility (313) practice will be installed within a Water Quality Management Area (within 300 feet of a stream or 1,000 feet of a lake)."
>
> "Footprint of the planned waste storage facility (313) practice will be installed indicates severe limitations as indicated by groundwater or bedrock within 3 feet of the surface."
>
> "Weighted soil test P level average from UW Soil Test Labs or other soil labs following UW procedures and recommendations are a) less than 20, b) 20 or more but less than 30, c) 30 or more but less than 40, d) 40 or more but less than 50, or e) 50 or more but less than 60."

Without access to the points assigned to the factors listed above, it is impossible to know whether Wisconsin EQIP prioritizes low or high-risk environmental situations for selection for participation in the program.

Regarding emphasis on reducing nutrient and sediment pollution, a review of the two Summary sheets does not provide clear answers about how much priority Wisconsin EQIP places on these two specific water quality impairments. For example, the National Priority Question 1 does mention the words "nutrients" and "sediment" but the question lacks sufficient specificity for us to distinguish between points awarded for treatment of nutrients and sediments versus points awarded for reducing excess salinity or pesticides.

Both Summary sheets include the National Priorities Question 4 focused on sediment pollution:

> "Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?"

The Southwest Area Summary asked three questions focused on soil erosion (sheet, rill and/or wind erosion, ephemeral and classic gully erosion, and streambank or shoreline erosion). Except for applications responding affirmatively to addressing streambank and shoreline erosion, these ranking criteria questions do not specify whether the erosion is

causing a sedimentation problem and if addressing these erosion problems will reduce sedimentation.

The Southwest Area Summary asked three specific questions regarding nutrient pollution: a) soil contamination (Phosphorus) from animal waste, other organics and/or commercial fertilizer will be addressed, b) excess nutrients (N, P, and K) organics or Pathogens in surface water will be addressed, and c) Nutrient Management Planning will be implemented on a Livestock Operation (For CNMP applications only). Several other questions were entitled "Water Quality" but did not specify the type of water quality problem occurring or the type of pollutant that would be addressed.

The Animal Waste Summary specifically asks two questions whether "excessive nutrients and organics" in a) groundwater and b) in surface water will be addressed through the implementation of several waste storage facilities or treatments in conjunction with nutrient management.

Without access to the points assigned to the factors listed above, it is impossible to conclude how much emphasis in raw un-weighted points Wisconsin is providing for the reduction of sediment and nutrient pollution or to applications that are located in impaired watersheds or other geographically important locations.

On the "Waste Storage" website[1], there is an excel table that identifies three resource concerns that the Waste Storage funding category *must* address and an additional two more resource concerns that the Alternative Waste Treatment Practices *may* also address. Wisconsin is the only state of the 10 states we reviewed to explicitly describe a resource concern requirement for a funding category and to provide the following information for a funding category, in tabular format (See the Appendix for this table):

Resource Concern

1. Water Quality-Excessive Nutrients and Organics in Groundwater and Surface Water
2. Water Quality-Excessive Nutrients and Organics in Surface Water
3. Water Quality-Harmful Levels of Pathogens in Surface Water
4. Air Quality-Excessive Greenhouse Gas or Objectionable Odors
5. Soil Condition-Organic Matter Depletion

Practices that will address the resource concern
Description of Concern
National Quality Criteria
Measurement Units

EWG recommends that Wisconsin EQIP revise their ranking systems to increase the

[1] Resource Concerns Addressed by EQIP – Waste Storage. http://www.wi.nrcs.usda.gov/programs/eqipconc06.html

priority given to applications located in high priority watersheds that will reduce sediment and nutrient pollution. Sediment and nutrient pollution are the two most important pollutants of streams, lakes, and reservoirs in the 10 states bordering the Mississippi River, the main stem of the Mississippi River, and the Dead Zone in the Gulf of Mexico.

Conclusion

We find that EQIP has not been deployed as effectively as it could be in Wisconsin or any of the 9 states that border the Mississippi River. The methods used to decide how to spend EQIP dollars within the state and which farmers will get those dollars are more likely to result in diffuse and fragmented efforts to reduce pollution from farms rather than the focused and coordinated effort needed to solve both local and regional water pollution problems.

Watershed-based water quality clean-up projects are the best use of federal taxpayer resources and offer the greatest hope for cleaning up the unintended environmental damage of agriculture. These projects entail setting goals to clean up specific bodies of water that are deemed the highest priorities, determining how many of the most cost effective practices are needed, and persuading key farmers to participate in the project.

To quickly ramp up the effectiveness of EQIP, Wisconsin NRCS should:

1. Set clear and specific goals for how much pollution needs to be reduced, which lakes, streams or tributaries are priorities for improvement, and a timetable to achieve those goals.

2. Use 60 percent of EQIP dollars by 2012 to fund watershed-based water quality clean-up projects that encourage multiple farmers within selected watersheds to reduce pollution to specific lakes, streams, or tributaries to the Mississippi River.

3. Use 40 percent of EQIP funds by 2012 in state-level funding pools to target the highest priority natural resource and environmental problems in each state.

4. Select farmers to participate in EQIP who can do the most to contribute to watershed-based clean-up projects or solve high priority problems.

APPENDIX—Wisconsin EQIP Ranking Criteria
Wisconsin Southwest Area LWG Application Ranking Summary (FY2008)

Natural Resources Conservation Service

Application Ranking Summary

Southwest Area LWG

Program:	**Ranking Date:**	**Application Number:**
Ranking Tool: Southwest Area LWG		**Applicant:**
Final Ranking Score:		**Address:**
Planner:		**Telephone:**
Farm Location:		

National Priorities Addressed

Issue Questions	Responses
1. Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds, groundwater contamination or point source contamination from confined animal feeding operations?	Yes O or No O
2. Will the treatment you intend to implement using EQIP result in a considerable amount of ground or surface water conservation?	Yes O or No O
3. Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	Yes O or No O
4. Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	Yes O or No O
5. Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	Yes O or No O

State Issues Addressed

Issue Questions	Responses
1. Applicant has never had an EQIP contract or been offered an EQIP contract.	Yes O or No O
2. Applicant has successfully completed an EQIP contract and fulfilled all terms and conditions, including Operation and Maintenance of contracted items, OR has a current EQIP contract that is being implemented according to schedule.	Yes O or No O
3. Applicant did not successfully complete an EQIP contract according to the terms, however extenuating circumstances existed which resulted in the waiver of all liquidated damages by the State Conservationist or the resource concern was addressed through other means. (installed the practice on their own, sold the herd, enrolled the land in CRP)	Yes O or No O
4. Applicant did not successfully complete an EQIP contract, OR has a current EQIP contract that is NOT being successfully implemented.	Yes O or No O
5. Practices on this application will enable the application to address one or more identified concerns on an existing CNMP developed prior to this ranking period.	Yes O or No O

Local Issues Addressed

Issue Questions	Responses
1. Soil Erosion: Sheet, rill and/or wind erosion will be addressed with the implementation of practice(s) in this application	Yes O or No O
2. Soil Erosion: Ephemeral & classic gully erosion will be addressed with the implementation of practice(s) in this application.	Yes O or No O
3. Soil Erosion: Streambank or shoreline erosion will be addressed with the implementation of practice(s) in this application.	Yes O or No O
4. Water Quality: Soil contamination (P) from animal waste, other organics and/or commercial fertilizer will be addressed in this application.	Yes O or No O
5. Water Quality: Groundwater concerns will be benefited with the installation of practice(s) (well decommissioning and/or sinkhole treatment) in this application.	Yes O or No O

Page 1 of 3

6. Water Quality: Groundwater concerns will be addressed with the implementation of practice(s) (Pest Management) in this application.	Yes O or No O
7. Water Quality: Surface water quality management areas will be addressed with the implementation of practice(s) in this application.	Yes O or No O
8. Water Quality: Groundwater quality concerns will be addressed by the implementation of practice(s) (irrigation water management) on this application.	Yes O or No O
9. Water Quantity: Inefficient water use on irrigated land will be addressed with the implementation of practice(s) on this application.	Yes O or No O
10. Water Quality: Excess nutrients (N, P. and K) organics or Pathogens in surface water will be addressed with the implementation of practice(s) in this application.	Yes O or No O
11. Water Quality: Nutrient Management Planning will be implemented on a Livestock Operation (For CNMP applications only)	Yes O or No O
12. Air Quality: Chemical drift (pesticides) will be addressed with the implementation of practice(s) on this application.	Yes O or No O
13. Plant Condition: Forage quality and palatability will be addressed with the implementation of practice(s) on this application.	Yes O or No O
14. Plant Condition: Noxious and invasive plants will be addressed with the implementation of practice(s) on this application.	Yes O or No O
15. Plant Condition: Insect and disease control on forest land will be addressed with the implementation of practice(s) on this application.	Yes O or No O
16. Plant Condition: Forest resources will be addressed with the implementation of practice(s) on this application.	Yes O or No O
17. Domestic Animals: Inadequate quantity, quality or distribution of stock water will be addressed with the implementation of practice(s) on this application.	Yes O or No O
18. Water Quality: Implementation of practices in this application will address ground water concerns within an Outstanding or Exceptional Resource Watershed.	Yes O or No O
19. Water Quality: Implementation of practices in this application will address ground water quality concerns within an a 303d Watershed.	Yes O or No O
20. Water Quality: Identified ground or surface water concerns in this Unit of Government will be addressed with the implementation of practice(s) in this application.* LWG must identify the locations, and identify in the EQIP Program Plan, and posted on the NRCS web page.	Yes O or No O
21. All associated land use within the treatment unit will be treated to RMS level with the implementation of practice(s) on this application.	Yes O or No O
22. Implementaton of practice(s) included in this application, which enable the producer to comply with existing Federal, State, Local or Tribal Laws.	Yes O or No O
23. This application includes a practice that was cost-shared in a prior year NRCS program, and is in need of repair due to a 2007 rainfall and runoff event.	Yes O or No O
24. Bonus Question: Do the practices on this application address all resource concerns indentified in my CNMP?	Yes O or No O

Land Use:

Resource Concerns	Practices

Ranking Score

Efficiency:
Local Issues:
State Issues:
National Issues:
Final Ranking Score:

This ranking report is for your information. It does not in any way guarantee funding. When funding becomes available, you will be notified if your application is selected for funding. Some changes to the application may be required before a final contract is awarded.

Notes:

NRCS Representative: **Signature Date:**	**Application Signature Not Required for Contract Development unless required by State policy:** **Signature Date:**

Wisconsin Statewide Animal Waste Application Ranking Summary (FY2008)

Natural Resources Conservation Service

Application Ranking Summary

Statewide Animal Waste

Program:	Ranking Date:	Application Number:
Ranking Tool: Statewide Animal Waste		**Applicant:**
Final Ranking Score:		**Address:**
Planner:		**Telephone:**
Farm Location:		

National Priorities Addressed

Issue Questions	Responses
1. Will the treatment you intend to implement using EQIP result in a considerable reduction of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds with total maximum daily loads (TMDLs) where available, groundwater contamination or point sources such as contamination from confined animal feeding operations?	Yes O or No O
2. Will the treatment you intend to implement for water conservation or irrigation efficiency using EQIP result in a considerable reduction in water use?	Yes O or No O
3. Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?	Yes O or No O
4. Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?	Yes O or No O
5. Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?	Yes O or No O
6. Will the treatment that you intend to implement using EQIP result in considerable benefits to residue management, nutrient management, air quality management, invasive species management, pollinator habitat, and animal carcass management technology or pest management?	Yes O or No O
7. Will the treatment that you intend to implement using EQIP result in energy conservation benefits?	Yes O or No O

State Issues Addressed

Issue Questions	Responses
1. Applicant has never had an EQIP contract or been offered an EQIP contract before.	Yes O or No O
2. Applicant has successfully completed an EQIP contract and fulfilled all terms and conditions, including Operation and Maintenance of contracted items to date, OR has a current contract which is being successfully implemented.	Yes O or No O
3. Applicant did NOT successfully complete an EQIP contract according to the terms, however extenuating circumstances existed which resulted in a waiver of all liquidated damages by the State Conservationist OR the resource concern was addressed through other means (contract holder installed practices on their own, sold the herd, enrolled the land in CRP, etc.).	Yes O or No O
4. Applicant did not successfully complete a prior year EQIP contract they held, had been offered an obligation and declined, OR has an existing contract which is NOT being successfully implemented.	Yes O or No O
5. Applicant has a submitted, WRITTEN CNMP plan on file that meets NRCS standards prior to the end of the application ranking period (Feed mgmt. plan is developed IF needed, Nutrient Mgmt. plan is developed, upland treatment needs AND alternative practice needs identified, animal waste handling needs are identified, and alternative conservation practices identified PRIOR to the end of the ranking period AND the CNMP plan has been signed off on by all appropriate persons.	Yes O or No O
6. Applicant has received past EQIP financial assistance for a Waste Storage Facility (313), Solid-Liquid Waste Separation Facility (632), or Waste Treatment Facility- Digester/Incinerator (629) under the statewide program and is reapplying for another of the same practice, contracted previously.	Yes O or No O
7. Applicant has received a letter from the LCD that they must implement a waste handling practice, including Waste Storage Facility (313), Solid-Liquid Waste Separation Facility (632), or Waste Treatment Facility (629), that is included on this application.	Yes O or No O

Local Issues Addressed

Issue Questions	Responses
1. APPLIES TO APPLICATIONS FOR WASTE STORAGE FACILITY ONLY: Producer does NOT have existing storage that can safely store 30 days or more of manure production at current animal numbers.	Yes O or No O
2. APPLIES TO APPLICATIONS FOR WASTE STORAGE FACILITY ONLY: Other potential pollutants (milking center wastes, barnyard runoff, silage stack leachate, other) will be collected in the planned waste storage system (313).	Yes O or No O
3. The percent of the acres that are farmed and that will receive manure that are HEL is less than 25 %.	Yes O or No O
4. The percent of the acres that are farmed and that will receive manure that are HEL is 25 % or more, but less than 50 %.	Yes O or No O
5. The percent of the acres that are farmed and that will receive manure that are HEL is 50 % or more, but less than 75 %.	Yes O or No O
6. The percent of the acres that are farmed and that will receive manure that are HEL is 75 % or more.	Yes O or No O
7. The producer has successfully completed a UWEX or Technical College sponsored Nutrient Management Planner Training.	Yes O or No O
8. Footprint of the planned waste storage facility (313) practice will be installed within a Water Quality Management Area (within 300 feet of a stream or 1,000 feet of a lake).	Yes O or No O
9. Footprint of the planned waste storage facility (313) that will be installed indicates severe limitations as indicated by groundwater or bedrock within 3 feet of the surface.	Yes O or No O
10. RESOURCE CONCERN: Water Quality, Excessive Nutrients and Organics in Groundwater will be addressed through the implementation of a Waste Storage Facility (313), Solid/Liquid Waste Separation Facility (632), or Waste Treatment (629) included on this application in conjunction with Nutrient Management.	Yes O or No O
11. RESOURCE CONCERN: Water Quality, Excessive Nutrients and Organics in Surface Water will be addressed through the implementation of a Waste Storage Facility (313), Solid/Liquid Waste Separation Facility (632), or Waste Treatment (629) included on this application in conjunction with Nutrient Management.	Yes O or No O
12. RESOURCE CONCERN: Water Quality, Harmful Levels of Pathogens in Surface Water will be addressed through the implementation of a Waste Storage Facility (313), Solid/Liquid Waste Separation Facility (632), Waste Treatment (629) included on this application in conjunction with Nutrient Management.	Yes O or No O
13. RESOURCE CONCERN: Air Quality, Excessive Green House Gases, Methane will be addressed through the implementation of a Solid/Liquid Waste Separation Facility (632) or Waste Treatment (629) or Waste Storage Facility (313) with Waste Facility Cover (367), included on this application in conjunction with Nutrient Management.	Yes O or No O
14. RESOURCE CONCERN: Air Quality, Excessive Green House Gases, Objectionable Odors will be addressed through the implementation of a Solid/Liquid Waste Separation Facility (632) or Waste Treatment (629) or Waste Storage Facility (313) with Waste Facility Cover (367) included on this application in conjunction with Nutrient Management.	Yes O or No O
15. RESOURCE CONCERN: Soil Condition, Organic Matter Depletion will be addressed through the implementation of a Solid/Liquid Waste Separation Facility (632) or Waste Treatment (629) included on this application in conjunction with Nutrient Management.	Yes O or No O
16. SOIL TEST P LEVELS: Weighted soil test P level average from UW Soil Test Labs, or other soil labs following UW procedures and recommendations are less than 20. (Place a copy of the computation spreadsheet in the application folder).	Yes O or No O
17. SOIL TEST P LEVELS: Weighted soil test P level average from UW Soil Test Labs, or other soil labs following UW procedures and recommendations are 20 or more, but less than 30. (Place a copy of the computation spreadsheet in the application folder).	Yes O or No O
18. SOIL TEST P LEVELS: Weighted soil test P level average from UW Soil Test Labs, or other soil labs following UW procedures and recommendations are 30 or more, but less than 40. (Place a copy of the computation spreadsheet in the application folder).	Yes O or No O
19. SOIL TEST P LEVELS: Weighted soil test P level average from UW Soil Test Labs, or other soil labs following UW procedures and recommendations are 40 or more, but less than 50. (Place a copy of the computation spreadsheet in the application folder).	Yes O or No O
20. SOIL TEST P LEVELS: Weighted soil test P level average from UW Soil Test Labs, or other soil labs following UW procedures and recommendations are 50 or more, but less than 60. (Place a copy of the	Yes O or No O

computation spreadsheet in the application folder).	
21. SOIL TEST P LEVELS: Weighted soil test P level average from UW Soil Test Labs, or other soil labs following UW procedures and recommendations are 60 or more, but less than 70. (Place a copy of the computation spreadsheet in the application folder).	Yes O or No O
22. SOIL TEST P LEVELS: Weighted soil test P level average from UW Soil Test Labs, or other soil labs following UW procedures and recommendations are 70 or more, but less than 80. (Place a copy of the computation spreadsheet in the application folder).	Yes O or No O
23. SOIL TEST P LEVELS: Weighted soil test P level average from UW Soil Test Labs, or other soil labs following UW procedures and recommendations are 80 or more, but less than 90. (Place a copy of the computation spreadsheet in the application folder).	Yes O or No O
24. SOIL TEST P LEVELS: Weighted soil test P level average from UW Soil Test Labs, or other soil labs following UW procedures and recommendations are 90 or more. (Place a copy of the computation spreadsheet in the application folder).	Yes O or No O

Land Use:

Resource Concerns	Practices

Ranking Score

Efficiency:
Local Issues:
State Issues:
National Issues:
Final Ranking Score:

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Notes:

NRCS Representative: **Signature Date:**	**Application Signature Not Required for Contract Development unless required by State policy:** **Signature Date:**

Resource Concerns that the Waste Storage Application Must Address[2]

Resource Concern	*May Apply to Practice*	*Description of Concern*	*National Quality Criteria*	*Measurement Units*
Soil Condition - Organic Matter Depletion	**632, Solid/Liquid Waste Separation Facility, 629, Waste Treatment**	Soil organic matter has or will diminish to a level that degrades soil quality.	Soil Conditioning Index is positive.	Soil Conditioning Index improvement - positive improvement in index for the field or planning area/unit
Water Quality - Excessive Nutrients and Organics in Groundwater	**632, Solid/Liquid Waste Separation Facility, 629, Waste Treatment 313, Waste Storage Facility**	Pollution from natural or human induced nutrients such as N, P, S (including animal and other wastes) degrades groundwater quality.	Nutrients and organics are stored, handled, disposed of, and applied such that groundwater uses are not adversely affected.	Non Measurable
Water Quality - Excessive Nutrients and Organics in Surface Water	**632, Solid/Liquid Waste Separation Facility, 629, Waste Treatment 313, Waste Storage Facility**	Pollution from natural or human induced nutrients such as N, P, S (Including animal and other wastes) degrades surface water quality.	Nutrients and organics are stored, handled, disposed of, and managed such that surface water uses are not adversely affected.	Non Measurable
Water Quality - Harmful Levels of Pathogens in Surface Water	**632, Solid/Liquid Waste Separation Facility, 629, Waste Treatment 313, Waste Storage Facility**	Kinds and numbers of viruses, protozoa, and bacteria are present at a level that degrades surface water quality.	Materials that harbor pathogens are stored, handled, disposed of, applied, and managed such that surface water uses are not adversely affected.	Non Measurable

[2] Resource Concerns Addressed by EQIP – Waste Storage. http://www.wi.nrcs.usda.gov/programs/eqipconc06.html

Air Quality - Excessive Greenhouse Gas – CH4 (methane)	**632, Solid/Liquid Waste Separation Facility, 629, Waste Treatment**	Increased CH4 concentrations are adversely affecting ecosystem processes. .	Land use and management operations reduce CH4 emissions into the atmosphere and comply with requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and Local regulations.	Non Measurable
Air Quality - Objectionable Odors	**632, Solid/Liquid Waste Separation Facility, 629, Waste Treatment**	Land use and management operations produce offensive smells.	Odor-producing facilities and activities are planned and sited to mitigate potential nuisance impacts and meets all applicable Tribal, State, and Local regulations.	Non Measurable

Map of funded and unfunded Wisconsin-EQIP Waste Storage Structures FY2008