

V.B.1a. Project Title: MAEAP Verifications: Maximizing Conservation Benefits

V.B.1b. Project Manager: Elaine Brown, phone number: 517-284-5613 and email address: browne14@michigan.gov. Alternate email: Stephen Shine: shines@michigan.gov

V.B.1c. Name of lead partner submitting the application and other collaborating partners:

Lead partner: Michigan Department of Agriculture and Rural Development (MDARD)

Partners supporting with significant contribution: Michigan State University Extension, Michigan Farm Bureau, Michigan Pork Producers Association, Michigan Cattlemen's Association, Michigan Farm Radio Network, Michigan Blueberry Group Marketing, Cherry Marketing Institute, Michigan Apple Committee, Michigan Potato Industry Commission, Michigan Milk Producers Association, Consumers Energy, Michigan Wheat Producers, Michigan Department of Environmental Quality

Other collaborating partners include members of the MAEAP Advisory Council and the following MAEAP partners: GreenStone Farm Credit Services, Michigan Nursery and Landscape Association, Michigan Grape and Wine Council, Michigan Farmer, Michigan Horticulture Society, National Grape Cooperative, Michigan Corn Growers Association, Michigan Sugar Company, Michigan Christmas Tree Association, Michigan Food and Farming Systems, Michigan Aquaculture Association, Michigan Sheep Breeders Association, Michigan Soybean Promotion Committee, Michigan Association of Conservation Districts and Black Star Farms

V.B.1d. Mailing address and phone number for lead partner submitting application:

Michigan Department of Agriculture and Rural Development
Environmental Stewardship Division
PO Box 30017
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517-284-5613 (Elaine Brown)

V.B.1e. Funding Pool applying for: State Funding Pool

V.B.1f. Short general summary of project and description of resource issues to be addressed.

The Michigan Agriculture Environmental Assurance Program (MAEAP), Michigan's regulatory certainty program for agriculture, is a nationally recognized voluntary and innovative partnership program designed to address environmental risks and natural resource concerns on farms of all sizes and all commodities. Since its inception, its strengths of being partner-driven, proactive and voluntary enables farmers to become MAEAP verified through a holistic conservation systems approach to farm management and conservation stewardship practices that protect the environment.

This proposal, *MAEAP Verification: Maximizing Conservation Benefits* leverages the MAEAP Partnership and increases Natural Resources Conservation Service (NRCS) cost-share funds available to farmers. It addresses all three primary Michigan NRCS resource concerns: Water Quality Degradation, Soil Erosion, and Soil Quality Degradation.

When a MAEAP risk assessment is completed on a farm using A*Syst tools, the checklists, based on specific practices needed or applicable state and federal regulations for that component of the farm, serve as a catalog of conservation practices needed for the farm to become MAEAP verified. The resource concerns are identified and documented in an action plan. When the resource concerns can be addressed

through a NRCS Farm Bill program, a district technician works with the farmer to prepare a conservation plan and Conservation Program Application. Water quality degradation, soil erosion, and soil quality degradation resource concerns will be addressed through the installation of specific NRCS practices for Cover Crops, Filter Strips, Fueling Facilities, Vegetated Treatment areas, Prescribed Grazing, Residue Management, Nutrient Management, Drainage Water Management and Integrated Pest Management.

MAEAP provides for a continual assessment of conservation practices. A farm's MAEAP verification is valid for three years before expiring and requiring reverification. The Michigan Department of Agriculture and Rural Development (MDARD) staff serves as the third-party verifier for both the initial verification and subsequent reverifications. State legislative benefits are only provided for active MAEAP verifications. MAEAP standards are consistent with the Michigan Right to Farm (RTF) environmental Generally Accepted Agricultural and Management Practices (GAAMPs) and help farmers work to comply with state and federal environmental regulations.

As of FY13, 84 percent of all verifications since the program's first verifications in 2002 were active verifications as a percent of the accumulated total verifications. MAEAP verification inspections assure that all identified agricultural pollution prevention related practices are implemented, documented and appropriately addressed the site-specific risks. Some farms are achieving reverification for the fourth time, demonstrating a continued interest in maintaining and enhancing practice implementation to move their farm ventures into the future. Farms that are reverified must meet the new MAEAP standards in place at the time of their farm inspection.

This proposal for \$2 million annually will greatly augment a special MAEAP Environmental Quality Incentive Program (EQIP) fund of \$500,000 that has been made available for three years to assist farmers who are seeking MAEAP verification. This fund enables farmers who have one or two practices remaining prior to becoming MAEAP verified to apply for funds specifically for those practices. The project will annually result in an additional 94 verifications receiving funding for remaining practices. The conservation practices verified through MAEAP provide environmental outcomes of phosphorus and sediment reduction that impacts water quality, soil quality and erosion. Additionally, the verification process establishes a stewardship ethic that will benefit the next generation of farmers who inherit a sustainable approach to manage the farm.

The number of MAEAP verifications and improved Conservation Program enrollment of MAEAP participants will serve as a means to monitor results. Partners will continue to work closely with conservation districts and NRCS to encourage farmers to address emerging natural resource concerns. Additionally, the MAEAP Advisory Council will play an integral role by gauging success of the project each year and targeting efforts in the countryside to assist NRCS in ensuring the funds are allocated to their fullest potential. The purpose of the Advisory Council is to review and assess MAEAP standards annually and confirm that resource concerns are accurately addressed. A letter encouraging the Michigan Department of Agriculture and Rural Development to proceed with this application for additional funds associated to MAEAP and EQIP was provided by members of the Council. (See attached letter.) This ongoing cycle demonstrates a built-in method for continued program evaluation.

A certain conservation practice may be chosen to address a particular targeted resource concern. However many practices offer multiple benefits. Filter strips, for example, address water quality, soil quality and provide wildlife habitat. Implementation of EQIP practices through this proposal can also address a secondary national resource priority, improved habitat for fish and wildlife. Although this proposal speaks to funds for the last one or two practices needed for MAEAP verification, the verification ensures that all resource concerns have been addressed on the indicated land base.

V.B.1g. Specify the geographic focus of the project such as hydrologic unit codes for the watersheds, habitat areas for wildlife, political jurisdictions of state and local governments, ag land uses or other means of identifying project area.

This is a statewide partnership effort that builds on the network of technical assistance available across Michigan through conservation districts and NRCS service centers. (See attached map.)

V.B.1h. Application form SF-424.

Application for federal assistance is attached.

V.B.1i. Applicants must also clearly state, by project objective, how they intend to leverage Federal funds along with partner resources (identify in-kind and cash contributions).

See attached spreadsheet for details.

The overall objective of this proposal is to support Michigan farmers with the Farm Bill conservation tools and cost share funds necessary to achieve their conservation and stewardship goals. The environmental risks identified through a MAEAP risk assessment address the natural resource concerns on the farm that include the state resource concerns of Water Quality Degradation, Soil Erosion, and Soil Quality Degradation. When the farmer knows the risks to be addressed and is eligible to use the Farm Bill programs to cost share the expenses of the conservation and/or management practices needed, the conservation district (CD) technician and local NRCS staff assist him/her in completing the Conservation Application Forms for ranking and funding approval. Once the contract is awarded the CD technician can assist with the implementation of NRCS practice standards for NRCS staff approval. This results in the improvement and protection of water quality of the Great Lakes and associated watersheds. With the additional MAEAP EQIP funds requested through this proposal, contracts will be received to install the last one or two practices needed to become MAEAP verified resulting in an additional 94 verifications annually. Practices implemented through this project will result in a long term reduction of phosphorus and other nutrient and sediment run-off as well as reduced soil erosion and improved soil health.

The MAEAP Partnership is providing \$12,115,973 of in-kind contributions for promotion and outreach to farmers about the MAEAP program, raising awareness of the additional MAEAP EQIP funds available annually through this project. The MDARD is providing \$7,500,000 in state funds for technical assistance to farmers through 36 CD MAEAP Technicians as well as staff time to the project to work with partners on outreach and communications, manage the project, and report to NRCS regarding environmental outputs and outcomes, progress and successes. The Michigan Department of Environmental Quality is providing in-kind water quality monitoring and assessment services valued at \$9,300 to leverage the \$10 million in financial assistance for farmers requested from NRCS.

V.B.1j. Form 424A, Budget Information-Non-Construction Programs.

See attached 424A form.

V.B.1k. Proposed project start and end dates (not to exceed a period of 5 years), and a table showing how much FA and TA funds are being requested from covered programs by fiscal year. TA funds, if requested, should include only those funds needed by the partner to carry out identified activities. Identify the amount of program funding being requested from covered programs each year (ACEP, EQIP, CSP, HFRP, and for CCAs only, watershed authorities). Provide totals for all years and programs as illustrated in the following table.

The project would start January 1, 2015 and end December 31, 2019. Each year the project will use \$2 million of EQIP funds for financial assistance to farmers and about \$2,423,195 of Partner

Contributions and \$1,525,610 of state agency in-kind and cash contributions to achieve the goals of the project. (See the attached requesting program funds table.)

V.B.11. Budget Table for Activities and resource contributions by fiscal year.

See attached Budget table.

The only NRCS funds requested in this proposal are financial assistance (FA) funds to provide cost-share dollars to eligible farmers. MDARD will leverage the FA funds with in-kind funds provided by partner organizations to provide outreach and education to farmers. These efforts will enable farmers to learn about MAEAP and the MAEAP EQIP fund that enables participating farmers to compete only with other farmers applying for the last one or two practices needed to achieve verification. Michigan Department of Environmental Quality in-kind monitoring and watershed studies will be used to set the baseline for the monitoring and evaluation objective in the project. MDARD cash contribution will be used to provide grants to conservation districts to support the one-on-one technical assistance that technicians provide to farmers. See the attached table for financial details. See the attached by activity budget table. Annually, MAEAP supporters provide approximately 75 locally organized educational sessions that qualify for MAEAP educational requirements. These local meetings provide opportunity for promoting Farm Bill related initiatives for farmers working toward MAEAP verification.

V.B.1m. Describe intended producer and landowner participants.

There is no single type of producer who is targeted by the program. MAEAP is open to producers with farms of all sizes and types of commodities. Michigan is the second most diverse agricultural state in the country, producing over 200 agricultural products. Michigan's top commodity crops are corn, soybeans, forage-land use for hay, and wheat). According to *Michigan Agriculture Facts from the Michigan Agriculture Council*, Michigan ranks first in the nation for blueberries, impatiens, begonias, Easter lilies, cucumbers (for pickles), Niagara grapes, tart cherries, and dry black beans, cranberry beans, and small red beans, among others. All of these commodities are represented by MAEAP partners and supporters. MAEAP addresses a wide variety of conservation and environmental practices to ensure sustainable measures are available for all producers in the state. There are currently more than 2,300 MAEAP verifications and the project would add 470 additional verifications over the five year duration of the project, contributing nearly nine percent of the 5,000 verifications goal set by the Governor.

V.B.1n. Describe the land that will be the focus of the project.

The focus of the project is farmland, which is 9.9 million acres of land in Michigan. While row crops, fruits and vegetables are more common in the Lower Peninsula and forage and trees are more commonly produced in the Upper Peninsula, all farmlands are eligible for MAEAP verification. According to the 2012 USDA Census of Agriculture, 77% of all farmland in Michigan is used in crop production. These 52,194 farms encompass a total of 7,669,071 acres of cropland and range in size greatly, from one to nine acres to 2000 acres or more.

V.B.2. Letter of support from NRCS State Conservationist is not required for State Funding Pool per the Michigan NRCS Office.

V.B.3. Natural Resources Objectives and Actions.

V.B.3a. Identify the specific primary natural resource concern and any secondary resource concerns to be addressed through the project. Provide details about the natural resource concerns to be addressed and how they were identified.

1. The natural resource concerns that will be addressed are water quality degradation, soil erosion, and soil quality degradation, which are the state priorities for Michigan listed by NRCS. A secondary resource priority that can be addressed by EQIP practices is improved habitat for fish and wildlife. Wildlife use is one of the primary reasons landowners choose to restore windbreaks and native grasslands. The direct benefits of windbreaks and shelter belts and grassland restoration on wildlife populations are relatively easy to quantify; however, other ecological functions provided by these habitats are less understood and much more difficult to quantify. Windbreaks and shelter belts not only provide habitat for wildlife but also reduce soil erosion by wind and water. Establishing native grasslands adjacent to or near wetlands provides an important buffering effect and compounds the water quality functions that wetlands provide.

These resource concerns were identified from two different sources of input. Some are identified through on-farm risk assessments performed by conservation district (CD) technicians using four A*Syst systems for farmstead, livestock, cropping and forest, wetland and habitat. As directed in Michigan law, the risk assessment tools were developed by the MAEAP Advisory Council and associated work groups including state NRCS staff and are reviewed, revised and approved annually by the Michigan Commission of Agriculture and Rural Development to ensure that the risk assessments are consistent with Right to Farm Generally Accepted Agricultural and Management Practices (GAAMPs) and identified environmental laws.

More broadly, the State Technical Committee has an important role in identifying resource concerns pertaining to Michigan. Through analysis of conservation programs, state NRCS funds, such as the MAEAP EQIP fund code, can be prioritized to address specific resource concerns. Two responsibilities of the State Technical Committee are:

- “Provide information, analysis and recommendations to USDA on conservation priorities and criteria for natural resources conservation activities and programs, including application and funding criteria, recommended practices, and program payment percentages.”
 - “Identify emerging natural resource concerns and program needs.”
2. The overall objective of this proposal is to support Michigan farmers with the conservation tools and cost share funds necessary to achieve their conservation goals resulting in the improvement and protection of water quality of the Great Lakes and associated watersheds. Practices implemented through this project will result in long-term benefits for farmers and the environment.

Based on the history of the MAEAP program environmental outcomes, some assumptions can be made about the outcomes for this project. Each year, the erosion-reducing practices required to obtain MAEAP verification have kept almost 347,620 tons of farming soil where it belongs: in farm fields. Phosphorus delivery to lakes and streams through sedimentation was reduced by 1.4 million pounds over three years (fiscal years 2011-2013) and phosphorus delivery through sedimentation is reduced almost 600,000 pounds per year. Regarding practices installed, almost 730,000 acres receiving pesticides have approved pesticide management plans over three years (fiscal years 2011-2013) and over 13,000 acres of filter strips have been installed and almost 2,300 gullies have been stabilized, reducing erosion and improving water quality, during the same three year period. Therefore, this project should produce a sediment reduction of 69,000 tons annually and a phosphorus reduction of 120,000 pounds annually as well as similar prorated rates of conservation practice implementation.

V.B.3b. Project Objectives

Objective 1: Promote participation in MAEAP and the availability of additional Farm Bill funds to Michigan farmers through the partnership.

Objective 2: Provide Michigan farmers with additional access to EQIP Farm Bill dollars to address water quality degradation, soil erosion, and soil quality degradation.

Objective 3: Adhere to the practice implementation timeline by CD technicians work with farmer participants implement funded practices.

Objective 4: Encourage farmers to become MAEAP verified. Upon practice completion, CD technicians will work with the farmer to complete third party verification by MDARD.

Objective 5: Increase the number of MAEAP verifications statewide by 94 per year resulting in 470 new verifications over the life of the project.

Objective 6: Calculate and evaluate the environmental benefits of the MAEAP verifications annually and at end of project and complete project reporting requirements. Using standard methods for identifying outcomes such as acres of cover crops planted and calculating outcomes such as phosphorus and sediment reductions as well as review federal and state agency monitoring activities for any trends in environmental monitoring at the end of the project. This analysis effort will identify impacts and trends in the Michigan NRCS resource concerns: Water Quality Degradation, Soil Erosion, and Soil Quality Degradation.

Timeline for Completion:

Beginning in late 2014, Conservation Districts, NRCS offices and partners will promote the available dollars to farmers in the process of implementing conservation practices to become MAEAP verified.

Upon approval of federal funding for each fiscal year announce MAEAP EQIP fund availability and implement via Objective 2 tasks.

Upon award of contracts annually, work with funded contracts to implement practices via Objective 3 tasks.

Upon completion of last one or two conservation practices assist farmers with verification process via Objective 4 tasks.

Document the number of MAEAP EQIP contracts awarded and number of verifications as a result via Objective 5 tasks.

Annually evaluate outcomes and impacts of verifications via Objective 6 tasks.

Annually complete required project reporting through Objective 6 tasks.

Year five, complete final evaluation and monitoring requirements through Objective 6 tasks.

V.B.3c. For each objective, identify the actions to be completed to achieve the objective and to address the identified natural resource concern.

Objective 1: Promote participation in MAEAP and the availability of additional Farm Bill funds to Michigan farmers through the partnership that consists of agriculture commodity organizations, farm organizations, universities, environmental and conservation groups.

- MAEAP Partnership Communications Committee develops outreach and education tools and strategies to communicate the benefits and accomplishments. Non federal funding.

- Partner organizations promote the MAEAP program and the MAEAP EQIP funding opportunity through member communications, newsletters and radio spots. Non-federal funding.

Objective 2: Provide Michigan farmers with additional access to EQIP Farm Bill dollars to address water quality degradation, soil erosion, and soil quality degradation.

- Identify farmers through outreach efforts of Conservation Districts, NRCS and partners. Non-federal Outreach and Technical Assistance funds.
- Complete applicable A*Syst tools (risk assessments). Non-federal Technical assistance (TA) funds.
- Develop Conservation Action Plan with farmer via technical assistance. Non-federal TA funds and/or federal funds depending on if CD technician or NRCS staff develop plan.
- Coordinate with District Conservationist to complete the Conservation Plan. Non-federal TA funds and federal funds depending on if CD technician or NRCS staff develop plan. Farmer will sign 1200 Form: Conservation Program Application. Non-federal TA funds and/or federal funds depending on if CD technician or NRCS staff develop plan.
- EQIP applicant pre-ranking screening tool is used to identify them as “high priority” if they require two or less practices to be implemented to achieve MAEAP verification. Non-federal TA funds and federal funds depending on CD technician and NRCS staff role in the ranking process. The ranking tool provides farmers to be ranked against one another.
- Contract is developed and awarded. Non-federal TA funds and federal funds depending on CD technician and NRCS staff role in the contracting process.

Objective 3: Work with the participant to adhere to the practice implementation timeline.

- Assist farmer with implementation tasks to assure consistency with NRCS standards. Non-federal TA funds and/or federal funds depending on if CD technician or NRCS staff roles in implementation and approval of practice installation.
- Technician in partnership with District Conservationist will communicate with producer. Non-federal TA funds and/or federal funds depending on CD technician and NRCS staff roles in practice implementation.

Objective 4: Upon practice completion, technician will work with the farmer to complete third party verification with MDARD.

- Farmer contacts MDARD to request MAEAP verification. Non-federal TA funds.
- MAEAP verifier conducts verification and deems if it has been achieved. Non-federal TA funds.

Objective 5: Increase the number of MAEAP verifications statewide by 94 per year resulting in 470 new verifications over the life of the project.

- Promote verification success and positive impact of partners such as Conservation District, NRCS and partners working together to help farmers. Non-federal outreach and communications funds
- Provide technical assistance to farmers through the local NRCS and conservation district offices in order to identify resource concerns and determine program eligibility. Non-federal TA funds and federal non-project funds depending on CD technician and NRCS staff role in the contracting process.

Objective 6: Calculate and evaluate the environmental benefits of the MAEAP verifications annually and at end of project and complete project reporting requirements.

- Using standard methods annually calculate benefits and impacts of verifications including practices installed and nutrient and sediment reductions. Non-federal in-kind
- Using data gather by federal and state agencies to assess trends in improvements to resource concerns. Non-federal in-kind funds.

- Complete required project reporting. Non-federal in-kind funds.
- Complete project required final reporting in year five. Non-federal in-kind funds

V.B.4. Detailed application requirements.

V.B.4.a. A detailed map, accompanied by a narrative description of the geographic area covered by the application.

See the attached map.

V.B.4a.i. Describe the location and size of the proposed project area.

This project will cover the farmland in the entire state of Michigan, 9.9 million acres, in 83 counties as Conservation District with MAEAP technicians and NRCS service centers cover the entire Upper and Lower Peninsula. It is reasonable to expect that more of the funds will be used in the Lower Peninsula where a greater number of farms are located. (See the attached map.)

V.B.4a.ii. Briefly describe the major land uses of the area with special emphasis on the lands that will be included in the project.

According to the 2012 National Ag Statistics Service, Michigan has 52,194 farms and 9,948,564 acres of farmland. This farmland includes cropland, pasture and grazing land, woodland and farmsteads with structures and roads. The four MAEAP risk assessment systems address all of these land uses.

V.B.4a.iii. Briefly describe why the particular area was chosen.

The area was chosen due to the national significance of the Great Lakes as they contain 20 percent of the world's fresh surface water. It is important to protect water and soil quality through reducing the negative impacts of sedimentation and the harmful algal blooms. MAEAP is a statewide program that can be tailored to fit operations of any size or commodity. As Michigan ranks as the second most agriculturally diverse state in the nation, providing technical assistance that is unique and accurately addresses resource concerns is important. All waters in Michigan lead to one of the Great Lakes and this proposal will assist agricultural producers in protecting a national treasure. The Great Lakes Region is a critical conservation area and Michigan is the only state entirely in the Great Lakes basin.

V.B.4a.iv. Outline on the map or describe in the application the areas that need conservation treatment, and identify the number of acres involved.

See attached map.

Areas that need conservation treatments are those that pose a risk to environment and the long term sustainability of the farm. This would be far less than the 9.9 million acres of cropland.

V.B.4b. Describe the consideration of cost-effectiveness of the proposed approach in terms of achieving the stated goals of the project.

Using the successful MAEAP Partnership that includes NRCS is a very effective use of funds. The state and federal governments have committed millions of dollars to providing cost share and technical assistance funds that leverage the farmers' funds to implement systems and practices that protect the environment and farmers' future.

One alternative approach is the regulatory option with increased enforcement efforts across the state toward all farms of all sizes and commodities. Additionally, in Michigan farms with over 750 animal units are required to apply for a National Pollutant Discharge Elimination System (NPDES) Confined Animal Feeding Operation (CAFO) permit to address concerns about potential discharges from the

farm operation. This application is required based on size, regardless of discharge history. Michigan CAFO-sized farm operations can also voluntarily become MAEAP verified farms. They are required to take several additional steps beyond the CAFO permit requirements and use a systems approach to manage the operation. Increased enforcement efforts require increased funding and do not have the collaborative effect of the agricultural community's support such as MAEAP enjoys and encourages.

V.B.4c. A description of how the partner(s) will collaborate to achieve the objectives of the partnership agreement and the roles, responsibilities, and capabilities of the partner(s).

One of the MAEAP program's greatest strengths is the partners that support both the program and the farmers working toward verification. As the program has existed for more than a decade, partners continue to seek opportunities to continue promoting the program to their farmer members and clients. This proposal encourages partners to motivate farmers to work with their local Conservation District and NRCS staff to improve their operations.

The Michigan Technical Committee EQIP subgroup consists of MAEAP partners. Those resource individuals contribute to discussions that seek to evaluate and improve the EQIP program and maximize the potential for EQIP practices to assist farmers seeking MAEAP verification.

Partners including agriculture organizations will contribute to this project by conducting outreach activities to inform farmers about the environmental benefits of MAEAP verification. On average, 7,500 farmers annually participate in sessions that qualify for MAEAP environmental education. MDARD and conservation district staff will continue to be present at major agriculture events in the state, such as the three-day Michigan State University (MSU) Ag Expo and MSU Extension hosted Great Lakes Fruit, Vegetable and Farm Market Expo as well as the specialty crop commodity meetings often hosted by MSU Extension Educators. Several partner organizations provide incentives and recognition for efforts that target their industry. The Farm Radio Network produces special segments on the MAEAP program each month such as the MAEAP Minute. MSU Extension educators collaborate with technicians to offer training and education programming to local farmers.

Through project partner collaboration, the 36 technicians will host annual field days and workshops. Each of these events offers an opportunity to inform farmers that the special fund is available and can provide those farmers working toward verification with the dollars necessary to complete the final required practices. (See Partners sheet in the worksheet.)

How MAEAP Leverages NRCS Funding

MAEAP's comprehensive structure is designed to reduce farmers' legal and environmental risks through a three-phase process: 1) education; 2) farm-specific risk assessment and conservation plan development conducted by a conservation technician, followed by practice implementation; and 3) on-farm verification by MDARD that ensures the farmer has fully implemented conservation practices, has addressed site specific environmental risks and is effectively managing sound practices. The program's four systems include: Farmstead, Cropping and Livestock and the newly developed Forestry, Wetlands and Habitat. Cropping System verifications include specific risk assessments for field crops and vegetables, orchards and small fruit, nursery and Christmas trees and greenhouse.

In March 2011, the first pieces of legislation passed and signed by Governor Rick Snyder were to codify MAEAP into the state of Michigan statutes with full support of the state's agriculture community. The statutes describe the benefits to farmers who complete the program and the responsibilities of MDARD and the MAEAP Partnership in achieving those objectives. The Forest, Wetlands, and Habitat System was added in June 2013 with initial standards adopted in September 2014. An ambitious goal was also set,

5,000 verifications by September 30, 2016. From FY 2011-FY2013, 3,982 on-farm risk assessments were completed.

Progress is being made toward the goal as more than 2,300 verifications have been completed. However, several factors constrain the agriculture community in achieving this goal. One of these factors is the cost of implementing new conservation practices. Farmers recognize the opportunity to apply for dollars available through NRCS EQIP, but also know these funds are limited.

In both, FY13 and FY14 with the recommendation and support of the NRCS State Technical Committee and State Conservationist, a MAEAP EQIP fund of \$500,000 was allocated to assist farmers with payment of the remaining one or two practices needed to become MAEAP verified. In 2013, the request for funds exceeded the funding fourfold. By providing additional funding through the RCPP, hundreds of additional motivated farmers can complete MAEAP verification, reaping the benefits of their good stewardship, ensuring they meet all applicable environmental statutory requirements under Michigan law, and protecting the environment for future generations.

The special EQIP fund will enable more producers to become qualified for dollars for installing needed conservation practices. This fund will be limited to farmers that have addressed all resource concerns identified by a MAEAP risk assessment, except for the last remaining one or two practices. As established good stewards, these farmers face stiffer competition for limited funds for these remaining practices through traditional Farm Bill ranking tools. Demand and need for the dollars is evident as \$2.7 million in practice implementation funding was requested through farmer applications for the \$500,000 that was available to Michigan farmers through the special fund code in 2013.

V.B.4d. A description of the project timeline, not to exceed 5 years in length, and a project implementation schedule which details when the potential partner anticipates finishing the project and submitting annual reports and final report.

See attached timeline table.

V.B.4e. A listing and description of the conservation activity plans, conservation practices, enhancements, wetland restoration activities, easement acquisition activities, and other partner activities to be implemented during the project timeframe and the general sequence of implementation of the project.

Activities

Objective 1: Promote participation in MAEAP and the availability of additional Farm Bill funds to Michigan farmers through the partnership that consists of agriculture commodity organizations, farm organizations, university, conservation and environmental groups.

- MAEAP Partnership Communications Committee develops outreach and education tools and strategies to communicate the benefits and accomplishments. Non federal funding.
- Partner organizations promote the MAEAP program and the MAEAP EQIP funding opportunity through member communications, newsletters and radio spots. Non-federal funding.

Objective 2: Provide Michigan farmers with additional access to EQIP Farm Bill dollars to address water quality degradation, soil erosion, and soil quality degradation.

- Identify farmers through outreach efforts of Conservation Districts, NRCS and partners. Non-federal Outreach and Technical Assistance funds
- Complete applicable A*Syst tools (risk assessments). Non-federal Technical assistance (TA) funds.

- Develop Conservation Action Plan with farmer via technical assistance. Non-federal TA funds and/or federal funds depending on if CD technician or NRCS staff develop plan.
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- Contract is developed and awarded. Non-federal TA funds and federal funds depending on CD technician and NRCS staff role in the contracting process.

Objective 3: Work with the participant to adhere to the practice implementation timeline.

- Assist farmer with implementation tasks to assure consistency with NRCS standards. Non-federal TA funds and/or federal funds depending on if CD technician or NRCS staff roles in implementation and approval of practice installation.
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Objective 4: Upon practice completion, technician will work with the farmer to complete third party verification with MDARD.

- Farmer contacts MDARD to request MAEAP verification. Non-federal TA funds.
- MAEAP verifier conducts verification and deems if it has been achieved. Non-federal TA funds.

Objective 5: Increase the number of MAEAP verifications statewide by 94 per year resulting in 470 new verifications over the life of the project.

- Promote verification success and positive impact of partners such as Conservation District, NRCS and partners working together to help farmers. Non-federal outreach and communications funds.
- Provide technical assistance to farmers through the local NRCS and conservation district offices in order to identify resource concerns and determine program eligibility. Non-federal TA funds and federal non-project funds depending on CD technician and NRCS staff role in the contracting process.

Objective 6: Calculate and evaluate the environmental benefits of the MAEAP verifications annually and at end of project and complete project reporting requirements.

- Using standard methods annually calculate benefits and impacts of verifications including practices installed and nutrient and sediment reductions. Non-federal in-kind funds.
- Using data gather by federal and state agencies assess trends in improvements to resource concerns. Non-federal in-kind funds.
- Complete required project reporting. Non-federal in-kind funds.
- Complete project required final reporting in year five. Non-federal in-kind funds.

MDARD plans to continue the current level of funding for MAEAP technical assistance provided through local conservation districts. Thirty-six technicians provide outreach and technical assistance to farmers across the state. This level of technical assistance will remain the same or may increase in key areas such as the Western Lake Erie Basin and Saginaw Bay, if federal funds supporting technical assistance for non-point sources become available and awarded.

In addition, other conservation practices that may be implemented through this proposal include but are not limited to: critical area planting, grade stabilization structure, grassed waterway, heavy use area protection, mulching, and windbreak/shelterbelt establishment. There are 74 approved practice codes under the FY 2014 EQIP Payment Schedule for the MAEAP EQIP fund code. While many future funded practices will be the same as in the previous two years of the project, others may be new as the type of farm operations applying for funds over time varies.

V.B.4f. A description of the plans for assessing and evaluating the results of the project along with plans for reporting on progress to achieve the objectives of the application. Priority will be given to projects where the partner can provide resources or services or conduct activities to evaluate effects of conservation practices and activities implemented through the project.

This project will use a multi-faceted approach to evaluating outcomes and reporting progress to achieve the objectives of reducing phosphorus and sediment leaving farm fields and improving soil health in Michigan. The practices that will be funded with the additional MAEAP EQIP funding will impact the resource concerns of water quality degradation, soil erosion, and soil quality degradation.

The MAEAP program annually calculates specific environmental outcomes of implemented practices on MAEAP verified farms. For the FY11-FY13 timeframe, MAEAP verifications documented the installation of eight key conservation practices: acres in a nutrient or CNMP plan, acres of buffer/filter strips, acres of cover crops, acres of conservation tillage, acres of no-till, zone till, or grass cover, number of gullies stabilized, feet of livestock exclusion, size of silage pads (in acres) and acres of pesticide management plans. As a result of these verified practices, sediment delivery was reduced by 874,200 tons, phosphorus delivery was reduced by 1.485 million pounds and nitrogen delivery was reduced by 3.384 million pounds. These outcomes are calculated by MDARD staff based on a Michigan Department of Environmental Quality approved methodology. Based on historic verifications, each verification achieved an average 7,556 tons of sediment reduction and 15,718 pounds of phosphorus reduction. Therefore, using this as a basis we can project an outcome for the five years of this proposed project that 470 additional verifications will result in 3.35 million tons of sediment reduction and 7.387 million pounds of phosphorus reduction across the state.

This proposal will utilize existing state and federal agency modeling efforts in the Western Lake Erie Basin (WLEB) and Saginaw Bay Watershed to assess the impacts of practice implementation on phosphorus and sediment delivery in improving water quality in these critical areas. The DEQ conducts biological monitoring of all watersheds in the state on a five year rotational basis. These assessments will also be used as indication/confirmation of the impact of this project.

We expect to complete 94 additional verifications annually as a result of this project. MAEAP technicians report their activities monthly, third-party. MDARD verifications are reported monthly and we will report that progress quarterly. MDARD will annually calculate the sediment and phosphorus reductions achieved through MAEAP verifications and the projected impact of those reductions on the environment.

V.B.4g. Partners should consider different approaches for evaluating project outcomes and propose the best approach given partner resources and capacity

This project will use science-based measures to evaluate the outcome of the project recognizing that no partner has unlimited resources to implement evaluation practices. MDARD will work with its partners to find new and better methods of evaluating outcomes over the life of the project. Based on a social survey of farmers in the Maumee River Watershed, farmers have concern for the environment as well as making a profit. The study found that a majority of farmers are willing to take one action to implement practices that protect the environment (*Farmers, Phosphorus and Water Quality: A Descriptive Report of Beliefs, Attitudes and Practices in the Maumee Watershed in Northwest Ohio*, Wilson, et al, 2013).

V.B.4h. Identify potential criteria to be used by NRCS to evaluate and rank agricultural producers' or landowners' RCPP program applications in the project area.

The NRCS national ranking process, along with the state and local screening tools will be utilized to select the RCPP program applications. The ranking process and tools are in place as a result of past funding pools and have been functioning in Michigan in to allocate funds to farmers. As the project moves forward, modifications in state and local questions and scoring may occur. These changes will be implemented through the normal review channels for EQIP funds.

V.B.4i. An estimate of the percentage of eligible producers and landowners in the project area who may participate in the project.

The special EQIP fund will enable more producers to become qualified for dollars for installing needed conservation practices. This fund will be limited to farmers that have addressed all resource concerns identified by a MAEAP risk assessment, except for the last remaining one or two practices. As established good stewards, these farmers face stiffer competition for limited funds for these remaining practices through traditional Farm Bill ranking tools. Demand and need for the dollars is evident as \$2.7 million in practice implementation funding was requested through farmer applications for the \$500,000 that was available to Michigan farmers through the special fund code in 2013.

Based on the previous year of implementing the MAEAP EQIP code the request for funding will out strip the funds available. An additional 94 applications will be funded annually and hundreds of farmers will apply. Over the five years of the project, over 1,000 farmers will reach the need for funding the last one or two practices to become verified and 470 should receive funding and move to MAEAP verification.

The MAEAP Partnership and conservation districts have a long history of working with producers. The MAEAP process requires attendance at approved educational programs and project partners such as Farm Bureau, MSU Extension and other commodity partners often partner with conservation districts in workshops, field days and seminars. In particular, NRCS Field offices, conservation districts and MSU Extension provide technical assistance regarding conservation practices and planning. These long-standing practices will be a venue to promote this project and the success of the project to other potential farmer participants.

V.B.4j. If applicable, indicate how the project will help producers in the area in "assisting producers in meeting or avoiding the need for natural resource regulatory requirements."

Meeting or avoiding the need for natural resources regulatory requirements is one of the core underpinnings of MAEAP. The complete package of incentives for MAEAP verified farms is only available to farmers who are in compliance with all applicable MAEAP standards and maintain an active verification (renewal required every three years). This project will provide more farmers with the opportunity to complete verification in all of the systems that apply to their farms. Some of the verification systems under MAEAP require capital investment in areas such as appropriate fuel storage, fertilizer and/or pesticide mix load pads or agriculture chemical storage facilities that prevent water quality degradation.

Under Public Acts 1 and 2 of 2011, regulatory incentives for MAEAP verified farms include:

- If a farm that is actively MAEAP verified and following MAEAP standards has an accidental discharge and the farmer performs due diligence in notifying and addressing the spill, the farm will only be responsible for natural resource damage and not civil fines and penalties.

- If a MAEAP actively verified farm is following its verified land application practices and an unpredicted, significant rainfall event causes a discharge to the waters of the state, the precipitation is considered an “Act of God Weather Event” and the discharge will be considered “nonpoint source pollution.” In this case, the management practices would be evaluated to avoid future discharges.
- If a farm is actively MAEAP verified in all applicable MAEAP systems and is in a Total Maximum Daily Load (TMDL) watershed, the farm will be considered as implementing the practices needed to meet a TMDL.

Additionally, MAEAP verified farmers have the peace of mind knowing their practices are consistent with the identified environmental RTF GAAMPs.

V.B.4k. A description of any requested adjustments of terms, by program, with an explanation of why the adjustment of terms is needed in order to achieve the objectives of the project. If a partner is requesting specific program flexibilities that depend on detailed participant or project information, the application must provide the needed information. Partners should contact the appropriate NRCS State Conservationist, or his or her designee, to determine the specific information that may be required. (See list of NRCS State Conservationists and their addresses in Appendix B.)

Not applicable to this project.

V.B.4l. If the project will request an alternative funding arrangement, include a detailed description of the proposed arrangement.

Not applicable to this project.

V.B.4m. If the proposal includes any activities that are not covered by one of the NRCS conservation practice standards, briefly identify the beneficial and adverse effects of those activities on affected natural resources (soil, water, air, plants, and animals) and specially protected resources (e.g., cultural and historic resources, wetlands, threatened and endangered species, etc.). If these other actions are covered by an existing National Environmental Policy Act (NEPA) document, provide the name of the document, a link, or indicate how a copy can be obtained.

Not applicable to this project

V.B.4n. Certifications: SF-424B – Assurances, Non-Construction Programs.

See attached form.

V.B.4o. DUNS and SAM registration

DUNS #: 805335577

MDARD is registered with SAM.