1742 - Critical Conservation Areas (CCAs) - Mississippi River Basin - 2018 - Baraboo River Watershed II

Project Name: 1742 - Baraboo River Watershed II

Funding Pool: Critical Conservation Areas (CCAs)

CCA: Mississippi River Basin

Lead Partner: Sauk County Conservation, Planning, and Zoning Department (076165513)

Partner Name: Gus Johnson

Lead State: WI

Partner States:

Partner Address: 505 Broadway Street,, , Baraboo, WI 53913

Partner Contact: gus.johnson@saukcountywi.gov | 6083554839

Project Start and End Years: 2018 - 2022

Primary Resource Concern: Water Quality Degradation

Secondary Resource Concern:

Tertiary Resource Concern:

Additional Resource Concerns: Degraded Plant Condition, Soil Quality Degradation, and Soil Erosion

Adjustment of Terms Request: No

Total Producers in Project Area: 3137

Alternative Funding Request: No

% of Eligible Producers Who May Participate: 75 %

Executive Summary

The Baraboo River Watershed RCPP II will focus on improving water quality within the Baraboo River Watershed in Sauk County and Juneau County in Wisconsin through the promotion and installation of soil and water conservation practices using USDA-NRCS standards and specifications. These activities will be carried out through collaborating partner agencies utilizing partner provided financial and technical assistance. This project is a continuation of a previous RCPP in the Baraboo River Watershed, which covered all six counties in the watershed. The Baraboo River has been identified as the second greatest contributor of total phosphorus loading to the Wisconsin River, wich is a large tributary of the Upper Mississippi River. The Wisconsin Department of Natural Resources (WDNR) conducted extensive water quality monitoring throughout the watershed from 2006-2012 for the development of the Wisconsin River TMDL. This monitoring provided important baseline data, including the documentation of mean total phosphorus level of the Baraboo River as 259 ? g/l (state standard = 100 ? g/l). In 2017, WDNR released final results from their study of the Wisconsin River Basin indicating areas of highest runoff and highest subsequent surface water degradation. Conservation practice installation will be prioritized in sub-watersheds within the project area identified in the WDNR TMDL study as contributing the most to phosphorus and sediment loading to surface waters. The primary resource concern that will be addressed through the Baraboo River Watershed RCPP is Water Quality Degradation, or specifically high phosphorus and sediment levels being contributed to surface waters within the watershed.

Partner Information

Partner Organization Name	Partner Type	TA Contributed	FA Contributed	Administrative Costs	Project Coordination	Producer TA	Lead O/E	Conduct Monitoring	Conservation Funding	Administrative Funding
City of Reedsburg Wastewater Treatment Plant	MW-Municipal water or wastewater treatment entity	0.00	450000.00	0.00	☐	☐	☐	☑	☑	☐
Juneau County Land Conservation Department	CD-County Government	17600.00	35600.00	0.00	☐	☑	☐	☑	☑	☐
Sauk County Conservation, Planning, & Zoning Department	CD-County Government	430000.00	140000.00	0.00	☑	☑	☑	☑	☑	☑
		447600.00	**625600.00**	**0.00**						

Financial Information

State	Program	Fiscal Year	Funds Requested			Funds Contributed (from Partner Information)			Acres
			Partner TA	NRCS TA	NRCS FA	TA	FA	Admin Costs	
WI	EQIP	2023	0.00	42928.00	171712.00				
WI	EQIP	2022	0.00	42928.00	171712.00				0
WI	EQIP	2021	0.00	42928.00	171712.00				0
WI	EQIP	2020	0.00	42928.00	171712.00				0
WI	EQIP	2019	0.00	42928.00	171712.00				0
			0.00	**214640.00**	**858560.00**	**447600.00**	**625600.00**	**0.00**	**0**

TA Funds Requested	**214640.00**	**TA Funds Contributed**	**447600.00**	**% TA Contributed of Total TA**	**67.59**	**Total Project TA**	**662240.00**
FA Funds Requested	**858560.00**	**FA Funds Contributed**	**625600.00**	**% FA Contributed of Total FA**	**42.15**	**Total Project FA**	**1484160.00**
Total Funds Requested	**1073200.00**	**Total Funds Contributed**	**1073200.00**	**% Contributed of TOTAL Project**	**50.00**	**TOTAL Project**	**2146400.00**

Narratives

1 (Pre-Proposal) Does the applicant plan to request Alternative Funding Arrangements (AFA)? If the project requires AFA, please describe how it will meet the goals and objectives of RCPP. Refer to Section III, Part C. for AFA eligibility and requirements and Appendix A in the APF for Definitions.
No Alternative Funding Agreement is being requested.

2 (Pre-Proposal) Has this project application (or an application with the same project scope, purpose, or target geographic projectarea) been submitted to RCPP in previous years?
YES

3 (Pre-Proposal) If this application has been previously submitted to RCPP, what was the previous project name(s), and who was/were the Lead Partner(s) who submitted the application(s)? Briefly describe the scope, purpose, and targeted geographic project area of the similar, previously-submitted application.
The Baraboo River has been identified as the second greatest contributor of total phosphorus loading to the Wisconsin River. As a result, the current Baraboo River Watershed Regional Conservation Partnership Program began in 2015 with a scheduled end date in 2019. This project was created in an effort to address water quality-related resource concerns within the 420,000-acre Baraboo River Watershed. This HUC 8 watershed is located in the Driftless Area of southwest Wisconsin in Sauk County. The Sauk County Conservation, Planning, & Zoning Department is acting as the lead partner to coordinate a conservation partnership between the USDA-NRCS and five neighboring county partners. This partnership has successfully promoted and installed conservation practices according to USDA-NRCS standards and specifications throughout the watershed. These conservation practices were funded through the USDA-NRCS Environmental Quality Incentives Program (EQIP) as well as financial and technical assistance contributions from the other county conservation departments. Additional partners including the Wisconsin Department of Natural Resources and University of Wisconsin-Extension also provided various in-kind services.

4 (Pre-Proposal) If this application has been previously submitted to RCPP, was it withdrawn prior to project review and final selection?
NO

5 (Pre-Proposal) If this application has been previously submitted to RCPP, was it selected for funding?
YES

6 (Pre-Proposal) If this application was previously selected for funding, did it move forward and become an existing project (versus being selected, and subsequently cancelled prior to agreement finalization)?
YES

7 (Pre-Proposal) If the application was selected for funding, why are you returning with a proposal? Provide reasons for resubmitted applications.
A previous proposal was selected for funding in 2015 and is currently being implemented. Due to the success of the current project, the Sauk County Conservation, Planning, & Zoning (CPZ) department wishes to continue with the installation of another RCPP. The current RCPP project is expected to have exhausted the majority of the USDA-NRCS financial assistance within the next year. This would leave only technical assistance and significantly smaller financial contributions available to landowners for the remaining two and a half years of the project. The USDA-NRCS EQIP program was the major source of financial assistance for implementation of conservation practices in the Baraboo River Watershed. The Sauk County CPZ department is submitting another RCPP proposal after recognizing more effective methods of improving local soil health and water quality. New partnership opportunities and specific geographic areas of focus within the Baraboo River Watershed present a greater opportunity to make an impact if additional USDA-NRCS assistance became available. The proposed project would narrow down the focus of the conservation efforts to only the Sauk County and Juneau County portion of the Baraboo River Watershed.

8 (Pre-Proposal) If this application covers an area that currently has or has had a funded RCPP project(s), explain how this project differs from the previous or current project(s). Relate the differences to the four pillars: Solutions, Innovation, Contribution, and Participation.
The proposed project would narrow down the focus of the conservation efforts specifically to the Sauk County and Juneau County portion of the Baraboo River Watershed. The current RCPP project is focused on improving water quality by implementing conservation practices that address water quality and soil health resource concerns within the entire six-county watershed. The new, proposed RCPP project would continue to address the same resource concerns; however, after evaluating the success with the previous project, priority will be given to specific conservation practices and priority sub-watersheds. The new project will focus on the highest phosphorus and sediment loading HUC12 watersheds within the Baraboo River Watershed. In addition, the proposed project will focus efforts on implementing practices that address resource concerns that cover a larger landscape (i.e. cover crops, rotational grazing, streambank protection, etc.). New measurable outcomes will accompany the practices, which specifically focus on edge of field runoff, phosphorus loss, and precipitation infiltration. New partners have also been identified for the proposed RCPP. There are a number of municipalities located within the proposed project area that have wastewater treatment facilities that are nearing the expiration of their current Wisconsin Pollutant Discharge Elimination System (WPDES) program permits from the Wisconsin Department of Natural Resources (DNR). In order meet standards for their new permits, wastewater treatment facilities must make upgrades to their facilities or participate in a phosphorus reduction watershed project to offset the excess phosphorus they are discharging. At least two facilities within the project boundary will be participating in the watershed project making funding available for land conservation staff to install conservation practices to reduce phosphorus loading to the Baraboo River. These municipalities would be new partners that have the potential to increase support for the proposed RCPP along with the many existing partners. Similarly, staff have been successful in engaging with the Amish community, who traditionally do not participate in county, state, and federal programs. In the proposed RCPP, additional efforts will be made to engage with these landowners including workshops, field days, and one-on-one conversations. For years, the environmental benefits of conservation practices had been highlighted as the principal reason for agricultural producers to adopt these practices. Recently, an innovative approach for ÔsellingÕ conservation practices and conservation management was developed by the Sauk County Conservation, Planning, & Zoning Department. Staff within the department have been utilizing a financial planning tool that lays out the potential financial incentives to agricultural producers that are interested in adopting certain conservation practices, such as No-Till/Minimum-Till farming and Managed Rotational Grazing. Along with the innovative financial planning tool, the Sauk County Conservation, Planning, and Zoning Department purchased a rainfall simulator that demonstrates the impacts of a severe rainfall event on different land uses. Currently, The Sauk County Conservation, Planning, and Zoning Department is the only County Conservation Department in the state of Wisconsin that owns a rainfall simulator of this caliber. The rainfall simulator has proven to be a vital, innovative outreach tool that serves an eye-opening example of the runoff and lack of infiltration associated with different agricultural practices.

9 (Pre-Proposal) Use the space below to detail how the key partners are performing in moving the project forward. Address the following questions: Were partner contribution goals met? Were project deliverables in the agreement met? Was Financial Assistance (FA) fully expended? Was partner Technical Assistance (TA) fully utilized if applicable? What challenges have arisen since the beginning of the project, and how have partners addressed thosechallenges?
The current RCPP project has been moving forward with great success. The Sauk County CPZ Department and other key partners have been on-track or ahead of the goals specified in the project timeline. The County Conservation departments have been contributing technical support and financial support for conservation projects close to what was planned on in the original Baraboo River Watershed RCPP timeline. Goals for technical assistance with modeling and biological sampling/monitoring have been met, and goals for technical assistance with outreach and education for the project have been exceeded. One objective for the current RCPP that was not met was a nutrient management planning goal. Since USDA-NRCS updated requirements to Nutrient Management planning between the project being accepted and the projectÕs implementation, this goal became impractical. USDA-NRCS financial assistance is projected to be fully expended within a yearÕs time, and the projectÕs lifespan is only approximately halfway complete. This accomplishment has also become an issue as USDA-NRCS funding for projects will become less available. Another objective that will more than likely not me met by the end of the current project lifespan is the attempt to provide technical assistance to at least 50% of the priority landowners within the Baraboo River Watershed identified using the

EVAAL Model. Although special focus was given to these Ôpriority landownersÕ, generating enough interest to participate in the program was determined to be very difficult and unlikely. Some challenges arose with the current RCPP project. USDA-NRCS EQIP batching date availability became an issue for implementing desired projects; however, this issue was resolved as soon as concerns were expressed with State USDA-NRCS administrative staff. Staffing turnover within the county conservation departments became a slight issue in developing and maintaining relationships throughout the partnership. However, seasoned staff were committed to training new staff and were able to rely on strong working relationships with farmers that had been established over the past half-century in order to implement conservation practices.

10 (Pre-Proposal) Is this project solely for research to address a natural resource concern?
NO

11 (Pre-Proposal) Briefly describe your RCPP team. Include a description of each partner's expertise and experience implementing similar projects. If partners are providing cash and/or in-kind services, "Letters of Financial Contribution" will be required in the Full-proposal application phase.
2. The RCPP team includes both the Sauk County Conservation, Planning, & Zoning Department and Juneau County Land Conservation Department, as well as the USDA-NRCS Service Centers in these counties. All of these agencies have a strong background in identifying resource concerns on the landscape and working with landowners to address these concerns. Many staff have job approval required to plan conservation practices necessary to address the resource concerns being presented in this proposal. The county Conservation Departments and USDA-NRCS Service Centers work together on a daily basis and are familiar with the current environmental concerns for the area. Alongside theses agencies, other partners will provide technical, administrative, and outreach/educational support for the project. These other partners include: University of Wisconsin Extension, The City of Reedsburg Wastewater Treatment Plant, The City of Baraboo Sewer Utility, Wisconsin Department of Natural Resources, Wisconsin Department of Agriculture, Trade & Consumer Protection, Friends of the Baraboo River, Wisconsin Land and Water Conservation Association, Inc., Madison Area Technical College Ð Farm Business Program, Lake Redstone Protection District, Lake Wisconsin Alliance, River Alliance of Wisconsin, and The Nature Conservancy. These agencies have been successful at working cooperatively and developing a strong partnership over the course of the current RCPP project.

12 (Pre-Proposal) Specify the geographic focus of the project area. Provide background for why and how the project area was selected. (Note that the project area does not need to be contiguous, but all areas should have a common primary resource concern that the project addresses.) In the description, discuss any areas that will be specifically targeted within the project area and explain why those areas are to be prioritized. Is the proposed project an expansion of existing work and/or a funded RCPP project?
3. The project area is the Sauk County and Juneau County portion of Baraboo River Watershed (HUC 07070004). The watershed is located in the Driftless Region of southwest Wisconsin. The watershed is approximately 419, 731 acres in size, but Sauk County and Juneau County encompass 313, 297 acres of the watershed. This project area was selected based on the success of the current RCPP project. Sauk County and Juneau County have been the most active areas of the watershed with the greatest number of participants and technical and financial assistance contributions. With a smaller, more-concentrated area of focus within the watershed, more resources will be at the disposal for these two counties than there currently are with the project area covering six counties. Within the watershed, Narrows Creek(0707000403), Cleaver Creek (070700040101) and Dutch Hollow Lake (070700040206)sub-watersheds, will be given priority for technical and financial assistance. Preliminary results from the Wisconsin River Total Maximum Daily Load (TMDL) project indicate these sub-basins are contributing the highest amounts of sediment and phosphorus. Additionally, during the current project, engagement with landowners in this area of the watershed has been successful resulting in a number of practices being installed; therefore, it seems natural to continue to focus efforts in these sub-watersheds.

13 (Pre-Proposal) Describe the natural resource concern(s) of the project area. Include how the resource concerns were identified through watershed plans, scientific literature, etc. See the listing of priority resource concerns in Section II.B. A complete list of NRCS approved natural resource concerns may be found on the RCPP Web site at:http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/farmbill/rcpp/
4. The Baraboo River has been identified as the second greatest contributor of total phosphorus loading to the Wisconsin River. The Wisconsin Department of Natural Resources (WDNR) conducted extensive water quality monitoring throughout the watershed from 2006-2012 for the development of the Wisconsin River TMDL. This monitoring provides important baseline data, including the documentation of mean total phosphorus level of the Baraboo River as 259 µ g/l (state standard = 100 µ g/l). The Wisconsin DNR is currently conducting a comprehensive study of the Wisconsin River Basin, which will result in the development of a plan to improve water quality in the watershed. Within the next year, the Wisconsin DNR will announce a Total Maximum Daily Load (TMDL). A TMDL is the amount of a pollutant that can be discharged into a waterway and still meet water quality standards. Preliminary results from development of the Wisconsin River TMDL, identify the total phosphorus and sediment discharging from sub-watersheds within the Baraboo River Watershed. This is further broken down into dairy agriculture and cash grain agriculture. This information will assist RCPP partners with identifying areas to prioritize efforts within the project area. Considering these observations, the primary resource concern that will be addressed through the Baraboo River Watershed RCPP is Water Quality Degradation, or specifically high phosphorus and sediment levels being contributed to surface waters within the watershed. The secondary resource concerns are Degraded Plant Condition, Soil Erosion, and Soil Quality Degradation. Conservation practices will be installed to prevent soil loss on cropland and pastures, reduce agricultural runoff to surface and ground water, and improve soil health on all agricultural lands.

14 (Pre-Proposal) Project Scope: Describe the role of each partner during the project preparation, implementation, monitoring and evaluation phases. Identify the NRCS conservation programs to be used (EQIP, CStP, ACEP, etc) and conservation systems selected to address the resource concern(s) in the geographical focal area (conservation practices, activities, enhancements, restoration work, easement acquisition, and other partner approaches). Provide a brief description of the sequence of practice implementation or timeline.

Collaborating partners will make financial and technical assistance contributions in order to leverage funds for soil and water conservation within for the Baraboo River Watershed. Land conservation department staff will provide technical assistance in the form of planning, surveying, and designing USDA-NRCS practices that address certain resource concerns. A USDA-NRCS Environmental Quality Incentives Program (EQIP) financial assistance contribution is being requested to fund conservation practices that will address the identified resource concerns. No technical assistance funding is being requested from USDA-NRCS. Partners will provide the environmental evaluation of conservation practices that are installed. Municipalities, WDNR, and land conservation department staff will sample and monitor water bodies to determine relative water quality and any potential trends in data. In-kind assistance consisting of outreach and education as well as grant and contract administration will be provided by partners. Outreach and education has become an effective method of indirectly improving soil health and water quality within the Baraboo River Watershed. Some outreach and education activities that will occur include workshops, field days, presentations, and direct mailings and newsletters. There are full-time staff within partner agencies/organizations responsible for these outreach and education efforts. Sauk County recently purchased a rainfall simulator that will be used extensively throughout the project area. This tool has been quite useful in demonstrating the impact of rainfall events on different land uses and has resulted in a number of farmers adopting soil health practices or converting to rotational grazing. The proposed RCPP project is expected to last five years from the start date. The nine step planning processed will be followed and conservation practices will be planned for implementation throughout the duration of the project. With an RCPP project in the same area already being implemented, the framework and relationship building needed to implement projects has already been developed. Partners will continue to work within USDA-NRCS program guidelines to ensure applications are submitted on time and completed so as to be considered high priority projects.

15 (Pre-Proposal) Describe any activities that have already taken place that support the proposed project. Characterize the existing infrastructure and capacity of partner(s) that provide a solid foundation from management of the proposed project. Consider future partnership resource needs and describe any other steps that are needed to ensure project success, such as hiring, coordination, outreach, training, etc.

With the current RCPP project being implemented in the project area, much has been set up in order to support another potential RCPP project in the future. There have been significant investments of time and financial resources in the Baraboo River Watershed of Sauk and Juneau Counties. In order for the current RCPP project to be successful, a full-time RCPP Manager position was created within the Sauk County Conservation, Planning, & Zoning Department in 2015. This position has effectively developed strong relationships between USDA-NRCS and collaborating partners. In order for a future RCPP Project to be successful, these relationships must be maintained, and this will be accomplished through partner meetings, training opportunities, and combined coordination on outreach/educational events. Investments in tools and technologies, such as a county-owned rainfall simulator, a working county demonstration farm, and conservation farming financials calculator have also helped to provide trustworthy and credible relationships with landowners. Investments like these willcontinue into the future in order for a future RCPP program to be successful. Continued collaboration with the Wisconsin Department of Natural Resources will also be crucial in the future once the Wisconsin River Basin Water Quality Improvement TMDL is completed and implementation strategies are announced.

16 (Pre-Proposal) Detail how project outcomes will be evaluated. This may include monitoring, modeling, measurements, and/or photo points, etc. Specify how the partners will collect data and report progress that demonstrates project objectives have been met or exceeded. If requesting PL-566 watershed authority, describe who will complete the watershed plan-environmental assessment and provide the timeline for completing the planning-EA process.

7. Outcomes will be measured using models prior to and after practice implementation, including the Soil Nutrient Application Program (SNAP Plus) and Revised Universal Soil Loss Equation 2 (RUSLE2). These models will be used to estimate phosphorus and sediment loss reduction with each practice installed. Along with these models, the USDA-NRCS Infiltration Test and USDA-NRCS Soil Erosion Calculator will be conducted prior to and after practice implementation (where applicable). Phosphorus loss reductions will be estimated using a soil test concentration and the associated soil loss. The WDNR heavily monitored water quality within the Baraboo River Watershed from 2006-2012 as a component of developing the Wisconsin River Total Maximum Daily Load (TMDL) project. Water quality monitoring will continue throughout the project period and afterwards, providing an opportunity to compare baseline data to data collected after the project ends. Partners will meet annually to discuss progress and strategies to achieve identified objectives.

17 (Pre-Proposal) If applicable, indicate how the project will "assist producers in meeting or avoiding the need for natural resource regulatory requirements." Section 1271B (d) (4)(A) of the 1985 Act.

8. Within the Baraboo River Watershed, there are eight townships zoned exclusive agriculture and one established Agriculture Enterprise Area (AEA). Landowners within these areas are eligible to participate in the Farmland Preservation Program (FPP). All FPP participants must meet state agriculture performance standards to remain eligible for program participation. RCPP funding will assist landowners in the Baraboo River Watershed to meet these agriculture performance standards if they choose to participate in farmland preservation. Status reviews are conducted on farms participating in FPP every four years to ensure they are meeting the agriculture performance standards. This allows for the tracking and monitoring of conservation practices installed. Sauk County recently updated Chapter 26 Manure Management Ordinance to incorporate all state

agricultural performance standards. These standards include best management practices for both cropland and livestock producers. RCPP funding will assist landowners with meeting these standards. Once the Wisconsin River TMDL is developed, allocations will be announced and the plan will move towards implementation. Point sources will be required to meet new permit requirements and agriculture will be expected to reduce their contribution as well. The current approach with nonpoint sources will be voluntary participation and maximizing opportunities for water quality restoration by using available resources. Available resources will not be enough and the success of the TMDL will rely on collaboration between agencies and partners to leverage funding. Providing adequate technical and financial support for implementation of practices that will reduce agricultural runoff will reduce the need for enforcement and is essential to keeping agriculture as a vital component to the culture and economy of Sauk and Juneau Counties.

18 (Pre-Proposal) Use this space to provide additional information about the project that has not been requested. Onlyinclude information and/or examples that will provide a greater understanding of your proposal.

19 (Pre-Proposal) Partners are strongly encouraged to work with NRCS to fully understand program purpose and limitations. If Adjustment of Terms are needed in order to achieve project objectives, please describe here.Refer to Appendix A in the APF for Definitions.
No Adjustment of Terms are needed.

20 (Full Proposal) Describe the partnership team. What makes this partnership adept at addressing the resource concern(s) and capable of accomplishing the proposed project? List past successes of lead partner with respect to experience executing projects of similar size, scope, and duration.
The RCPP team includes both the Sauk County Conservation, Planning, & Zoning Department and Juneau County Land and Water Resources Department, The City of Reedsburg Wastewater Treatment Facility, as well as the USDA-NRCS Service Centers in both Sauk and Juneau counties. The County Conservation Departments and NRCS offices have a strong background in identifying resource concerns on the landscape and working with landowners to address these concerns. Many staff have job approval required to plan conservation practices necessary to address the resource concerns being presented in this proposal. The County Conservation Departments and USDA-NRCS Service Centers work together on a daily basis and are familiar with the current environmental concerns for the area. Much of the project infrastructure has already been set up in order to support another potential RCPP project in the future. There have been significant investments of time and financial resources in the Baraboo River Watershed of Sauk and Juneau Counties. In order for the current RCPP project to be successful, a full-time RCPP Manager position was created within the Sauk County Conservation, Planning, & Zoning Department in 2015. This position has effectively developed strong relationships between USDA-NRCS and collaborating partners. In order for a future RCPP Project to be successful, these relationships must be maintained, and this will be accomplished through partner meetings, training opportunities, and combined coordination on outreach/educational events. Investments in tools and technologies, such as a county-owned rainfall simulator, a working county demonstration farm, and conservation farming financials calculator have also helped to provide trustworthy and credible relationships with landowners. Investments like these will continue into the future in order for a future RCPP program to be successful. Continued collaboration with the Wisconsin Department of Natural Resources will also be crucial in the future once the Wisconsin River Basin Water Quality Improvement TMDL is completed and implementation strategies are announced. Currently, these partners have been working alongside other agencies in neighboring counties for the past two years in an existing Regional Conservation Partnership Program for the entire Baraboo River Watershed in southwestern Wisconsin. Sauk County and Juneau County staff would build upon the existing foundation that has been constructed during the first RCPP. Many relationships with landowners have been established through the first two years of the current RCPP. A future RCPP would continue to give agency staff opportunities to forge strong, positive relationships with the public they serve. While County boundaries separate the departments' area of work, the staff from both counties are in contact on a weekly basis in order to coordinate monitoring efforts, organize outreach events, provide technical/planning support, and much more. In the past, there have been several county-coordinated watershed projects that have taken place to address other causes of natural resource concerns within the Baraboo River Watershed. Crossman Creek and the Little Baraboo River Watershed was an active priority watershed from 1983-1996. In 2014, Crossman Creek was delisted from the impaired resource waters for sediment/total suspended solids, confirming the success of practices installed to help restore this watershed. However, in the same year, it was placed on the impaired resource waters list due to total phosphorus. The Narrows Creek and Baraboo River Watershed was an active priority watershed project from 1992 to 2005 enabling agreements to be signed with landowners to address the sources of nonpoint pollution arising from the farming operations in the watershed. Participation rates within the project were very high with approximately 60 percent of eligible landowners choosing to participate through the program.

21 (Full Proposal) Describe the natural resource concern(s) that your project proposes to address. (See APF page 10 & 11). Your description should include relevant scientific data such as resource assessments, models, physical data, and trends that support your selection.
The Baraboo River has been identified as the second greatest contributor of total phosphorus loading to the Wisconsin River. The Wisconsin Department of Natural Resources (WDNR) conducted extensive water quality monitoring throughout the watershed from 2006-2012 for the development of the Wisconsin River TMDL. This monitoring provides important baseline data, including the documentation of mean total phosphorus level of the Baraboo River as 259 µ g/l (state standard = 100 µ g/l). The Wisconsin DNR is currently conducting a comprehensive study of the Wisconsin River Basin, which will result in the development of a plan to improve water quality in the watershed. Preliminary results from development of the Wisconsin River TMDL, identify the total phosphorus and sediment discharging from sub-watersheds within the Baraboo River Watershed. This is further broken down into dairy agriculture and cash grain agriculture. This information will assist RCPP partners with identifying areas to prioritize efforts within the project area. Considering these observations, the primary resource concern that will be addressed through the Baraboo River Watershed RCPP is Water Quality Degradation, or specifically

high phosphorus and sediment levels being contributed to surface waters within the watershed. The secondary resource concerns are Degraded Plant Condition, Soil Erosion, and Soil Quality Degradation. Conservation practices will be installed to prevent soil loss on cropland and pastures, reduce agricultural runoff to surface and ground water, and improve soil health on all agricultural lands. Lack of perennially vegetated landscapes and degraded, over-grazed pastures have been proven to have significant runoff as a result of rainfall events. This runoff can, in part, be attributed to the lack of surface cover, insufficient sub-surface root growth, and soil compaction. Dozens of rainfall simulator tests on working pastures and row crop fields from actual Baraboo River Watershed farms have consistently shown the extreme differences in runoff from degraded pastures when compared to rotationally grazed pastures. Infiltration tests done on every farm for producers interested in the benefits of rotational grazing support the idea that there is the potential for severe runoff in degraded pastures and row crop fields.

22 (Full Proposal) Describe the planned project area. Provide sufficient background to explain why this area was selected by your partnership team. How will the project target area lead to successful, measurable outcomes in addressing the selected resource concern(s)?
A previous Regional Conservation Partnership Program proposal was selected for funding in 2015 and is currently being implemented. The current RCPP project is focused on improving water quality by implementing conservation practices that address water quality and soil health resource concerns within the entire six-county watershed. Due to the success of the current project, the Sauk County Conservation, Planning, & Zoning (CPZ) department wishes to continue with the installation of another RCPP. The current RCPP project is expected to have fully utilized the USDA-NRCS financial assistance within the next year, which is nearly two years ahead of the original project schedule. The Sauk County CPZ department is submitting applying RCPP project after recognizing more effective methods of improving local soil health and water quality. New partnership opportunities and specific geographic areas of focus within the Baraboo River Watershed present a greater opportunity to make an impact if additional USDA-NRCS assistance became available. The new planned project area covers the Sauk County and Juneau County portions of the Baraboo River Watershed located in Southwestern Wisconsin. This portion of the watershed is approximately 313,000 acres and encompasses 75% of the entire HUC 8 Watershed. Agriculture is the dominant land use within the project area. The proposed project would narrow down the focus of the conservation efforts specifically to the Sauk County and Juneau County portion of the Baraboo River Watershed. The new, proposed RCPP project would continue to address the same resource concerns; however, after evaluating the success with the previous project, priority will be given to specific conservation practices, priority sub-watersheds, and priority landowners identified using the Erosion Vulnerability Analysis for Agricultural Lands (EVAAL) model. This model was developed by the WDNR to be used to identify farms vulnerable to sheet, rill, and gully erosion using topography, soils, rainfall, and land cover information. This modeling will help prioritize the implementation of soil and water conservation practices in the project area. As part of their TMDL research, the Wisconsin DNR has identified these highest phosphorus and sediment loading HUC12 watersheds. The new project will focus on the highest phosphorus and sediment loading HUC12 watersheds within the Baraboo River Watershed. Addressing resource concerns in these priority areas with conservation practices should result in a measurable reduction in sediment erosion and phosphorus loss. When ranking potential projects for funding, priority will be given to projects located within the sub-watersheds that have been identified as contributing the highest pollutant loads.

23 (Full Proposal) Describe the project timeline/plan of work. Specifically describe the roles and responsibilities of each partner, including NRCS. Consider NRCS program policies and timelines and how your project scope will integrate or align. Consider application recruitment, ranking, and practice/program implementation.
The proposed RCPP project is expected to last five years from the start date. For the first year of the project, the City of Reedsburg will be the only contributing partner (other than NRCS), and they will continue to contribute for the remaining four years. The Sauk County CPZ Department and Juneau County Land and Water Resources Department will contribute Financial Assistance (FA) and Technical Assistance (TA) for four years once the existing RCPP project agreement has ended. In the proposed RCPP, NRCS will act as a major funding source through the use of their Environmental Quality Incentives Program (EQIP). NRCS will provide technical and financial assistance through this program to eligible producers within the project area. NRCS will administer the program as usual with additional assistance coming from partners when needed. The NRCS staff time that is being requested is for the coordination and management of the additional workload of EQIP-RCPP contract obligations. NRCS will incorporate specific EQIP ranking questions give priority to producer projects that: are located within the three highest pollutant-loading sub-watersheds, are located on EVAAL identified priority farms, and projects that incorporate a conservation practice listed under a priority practice list generated by the Sauk County CPZ Department. The City of Reedsburg will be funding a significant fraction of the financial assistance contribution from the non-NRCS partners. In order meet standards for their new permit, the City of Reedsburg - Wastewater Treatment Facility must make upgrades to their facilities or participate in a phosphorus-reducing watershed project to offset the excess phosphorus they are discharging. The city plans to implement a phosphorus-reducing watershed plan to meet the standards of their permit. They plan to provide funds for the Sauk County Conservation, Planning, and Zoning (CPZ) Department to use for the cost sharing of NRCS approved conservation practices. The Sauk County CPZ Department and Juneau County Land and Water Resources Department will continue to build upon the successes of the existing RCPP project. Both departments with provide technical assistance and financial assistance to landowners interested in implementing conservation practices to address resource concerns. In addition to the planning and funding of conservation practices in the Baraboo River Watershed, the departments will provide outreach and educational resources to producers and other landowners. Both departments have found great success in generating interest in resource conservation by using innovative educational tools, developing positive landowner relationships, and by providing opportunities for informative, constructive conversations. I addition to providing TA and FA contributions to the project, the Sauk County CPZ Department will also serve as the lead partner. As the lead partner, the Sauk County CPZ Department will be responsible for coordinating all partner activities for the Baraboo River Watershed RCPP. These activities include: acting as the primary contact for NRCS regarding and RCPP discussions, reporting on the progress of the project when requested, and organizing any other activities related specifically to the RCPP project.

24 (Full Proposal) Describe your project approach. What NRCS programs and practices will you use to combine with your teams' ongoing efforts? Use relevant scientific data to support your approach, and justify the expected measurable changes in resource concerns.
Collaborating partners will make financial and technical assistance contributions in order to leverage funds for soil and water conservation within for the Baraboo River Watershed. County conservation department staff will provide technical assistance in the form of planning, surveying, and designing USDA-NRCS practices that address certain resource concerns. A USDA-NRCS Environmental Quality Incentives Program (EQIP) financial assistance contribution is being requested to fund conservation practices that will address the identified resource concerns. Certain management practices will be a priority in addressing resource concerns on the landscape. These practices have been identified as the most beneficial to the efforts to improve surface water and groundwater quality. Efforts will be focused on implementing many NRCS conservation practices including the following: Cover Crop (340), Residue and Tillage Management, No-Till (329), Prescribed Grazing (528), Nutrient Management (590), Streambank and Shoreline Protection (580), Water Well Decommissioning (351), and Grassed Waterway (412). This project area was selected based on the success of the existing RCPP project and the existing need for natural resource improvements. These resource concerns have be clearly illustrated with the data provided by the Wisconsin DNR in their TMDL research – as described in Question 2. Sauk County and Juneau County have been the most active areas of the watershed with the greatest number of participants and technical and financial assistance contributions. With a smaller, more-concentrated area of focus within the watershed, more resources will be at the disposal for these two counties than there currently are with the existing project area covering six counties.

25 (Full Proposal) Is your project approach innovative? Explain how innovation will contribute to solving the targeted resource concern(s).
For years, the environmental benefits of conservation practices had been highlighted as the principal reason for agricultural producers to adopt these practices. Recently, an innovative approach for 'selling' conservation practices and conservation management was developed by the Sauk County Conservation, Planning, & Zoning Department. Staff within the department have been utilizing a financial planning tool that lays out the potential financial incentives to agricultural producers that are interested in adopting certain conservation practices, such as No-Till/Minimum-Till farming and Managed Rotational Grazing. Along with the innovative financial planning tool, the Sauk County Conservation, Planning, and Zoning Department purchased a rainfall simulator that demonstrates the impacts of a severe rainfall event on different land uses. Currently, The Sauk County Conservation, Planning, and Zoning Department is the only County Conservation Department in the state of Wisconsin that owns a rainfall simulator of this caliber. The rainfall simulator has proven to be a vital, innovative outreach tool that serves an eye-opening example of the runoff and lack of infiltration associated with different agricultural practices.

26 (Full Proposal) Describe how this project may build on activities that have already taken place. Does your project supplement or complete an existing project, initiative, or local/regional plan? Have there been any previous barriers to success? If so, describe how your project approach will overcome them.
A previous RCPP proposal was selected for funding in 2015 and is currently being implemented. Due to the success of the current project, the Sauk County Conservation, Planning, & Zoning (CPZ) department wishes to continue with the installation of another RCPP. In 2016 alone, 45 different projects were either funded by County Conservation Departments or obligated through the USDA-NRCS as part of the RCPP. This number of participants is estimated to be twice the amount compared to the number of funded projects in a typical year in the Baraboo River Watershed. The current RCPP project is expected to have completely utilized the remaining USDA-NRCS financial assistance two years ahead of schedule. This would leave only technical assistance and significantly smaller financial contributions available to landowners for the remaining two and a half years of the project. The USDA-NRCS EQIP program was the major source of financial assistance for implementation of conservation practices in the Baraboo River Watershed. The Sauk County CPZ department is submitting another RCPP proposal after recognizing more effective methods of improving local soil health and water quality. New partnership opportunities and specific geographic areas of focus within the Baraboo River Watershed present a greater opportunity to make an impact if additional USDA-NRCS assistance became available. The proposed project would narrow down the focus of the conservation efforts to only the Sauk County and Juneau County portion of the Baraboo River Watershed The current RCPP project has been moving forward with great success. The Sauk County CPZ Department and other key partners have been on-track or ahead of the goals specified in the project timeline. The County Conservation departments have been contributing technical support and financial support for conservation projects close to what was planned on in the original Baraboo River Watershed RCPP timeline. Goals for technical assistance with modeling and biological sampling/monitoring have been met, and goals for technical assistance with outreach and education for the project have been exceeded. The Sauk County CPZ Department has also just finished drafting its Land and Water Resource Management Plan, which is required to be revised every ten years by the State of Wisconsin in order to receive funds for staffing and financial assistance for conservation projects. This extremely comprehensive plan covers the department's goals and strategies for maintaining and improving the integrity of the County's natural resources. This plan outlines specific, measurable goals that the department plans to achieve. The goals and objectives of the proposed Baraboo River Watershed RCPP coincide very well with those of the 2018-2028 Sauk County Land and Water Resource Management Plan. The WDNR is currently developing the Wisconsin River Basin TMDL. The TMDL will identify sources and quantities of sediment and phosphorus loading throughout the basin and provide an implementation plan that will identify opportunities for water quality improvement in the Wisconsin River Basin. The entire proposed RCPP project area is located within the Wisconsin River Basin TMDL study area, and the efforts of the proposed RCPP project would help achieve the goals set forth in the TMDL study.

27 (Full Proposal) Describe how partner cash and in-kind contributions will integrate with NRCS program funds. Letters of Financial Contribution committing to specific cash or in-kind contributions and associated specific tasks are required in the full proposal submission package. Please upload them to the Data Tool, "Upload Letters" tab.

Collaborating partners will make FA and TA contributions in order to leverage funds for soil and water conservation within for the Baraboo River Watershed. County conservation department staff will provide technical assistance in the form of planning, surveying, and designing USDA-NRCS practices that address certain resource concerns. Financial assistance from the City of Reedsburg will be used to fund the installation of conservation practices. A USDA-NRCS Environmental Quality Incentives Program (EQIP) financial assistance contribution is being requested to fund conservation practices that will address the identified resource concerns. The nine-step planning processed will be followed and conservation practices will be planned for implementation throughout the duration of the project. With an RCPP project in the same area already being implemented, the framework and relationship building needed to implement projects has already been developed. Partners will continue to work within USDA-NRCS program guidelines to ensure applications are submitted on time and completed so as to be considered high priority projects.

28 (Full Proposal) Estimate how many eligible producers, in the planned project area, are likely to participate. How was this estimation calculated? (This can include existing application demand, participant surveys, etc). Describe any comprehensive strategies for encouraging participation of historically underserved producers (see definition in APF).

It is estimated that at least 230 eligible producers in the planned project area are likely to participate. This number is generated from the number of participants currently enrolled in an existing RCPP that covers a slightly larger project area. The estimated amount of participating landowners does not take into account any annual growth in participation as this project gains popularity. Every year of the existing RCPP has shown an increase in participation from the previous year. Included in the estimation of participating producers, is a significant number of Amish producers. Over the last two years, county conservation departments and NRCS field offices have been developing relationships with Amish communities near LaValle, Wisconsin and Loganville, Wisconsin. Many of the Amish producers in the project area meet the criteria of "Beginning Farmer" or "Limited Resource Farmer or Rancher", which are types of Historically Underserved Producers. The relationships formed with these communities goes beyond simply signing them up for financial assistance from NRCS or the county conservation departments. County staff and NRCS staff have helped Amish producers establish records with the Farm Service Agency, come up with grazing plans without a constant supply of electricity, give rides to local field days, and much more. Staff were also able to register for an informational booth at the local Amish Farm Technology Conference. In the future, the Sauk County CPZ department plans to hold educational field days for this specific group of "Historically Underserved" producers in order encourage even more adaptation of natural resource best management practices.

29 (Full Proposal) How will you measure and document project success? What measurable natural resource concern changes will occur from this project?

Project success will be measured and documented by several factors. The number of project participants will be documented and compared to years past. These landowner relationships that are formed are arguably one of the most beneficial outcomes of such a project. Programs such as RCPP, give conservation staff an opportunity to reach out to landowners that might have been historically underserved or unwilling to participate in any conservation programs. After evaluating the success of reducing soil erosion from crop fields with past projects, the goal of reducing 1,700 tons of soil erosion per year is a reasonable, measurable goal for RCPP projects in the future. The soil erosion reduction can be estimated using the Revised Universal Soil Loss Equation (RUSLE2) program for most practices that are implemented. Along with the soil loss reduction that is calculated for projects, an associated goal for reduction of pounds of phosphorus leaving the fields of a project area will be 102 pounds per year. An average phosphorus concentration was used to estimate phosphorus runoff reduction. This conservative average was generated from hundreds of soil test done throughout the county. Partners will provide the environmental evaluation of conservation practices that are installed. Municipalities, WDNR, and conservation department staff will sample and monitor water bodies to determine relative water quality and any potential trends in data. The Wisconsin Department of Natural Resources and Sauk County CPZ Department as part of the existing RCPP have already collected baseline water quality data, macroinvertebrate data, and fish sampling data. There are several natural resource concern changes that will be measured in streams, lakes, ponds, and other surface waters throughout the project area. Water quality data that is collected in streams will show and general decrease in total suspended solids (TSS), decrease in total phosphorus, and increase in dissolved oxygen levels. Macroinvertebrate monitoring conducted in several streams will show a positive trend in improving habitat based off Hilsenhoff Biotic Index values. Wisconsin DNR will continue to monitor and report on the comprehensive fish surveys that are being conducted on an annual basis. Ideally, these reports will indicate some improvement of fish populations and communities in some water bodies within the project area.

30 (Full Proposal) Describe the cost effectiveness of the approach. Were other alternatives considered, including a no action alternative? Are project costs in line with current regional averages? When measuring outcomes, is there a reasonable cost per unit of progress?

Practices that have historically been referred to as 'soft' practices will be the priority of the proposed project (i.e. cover crops, rotational grazing implementation, conversion to no-till agriculture, etc.). Practices such as planting a cover crop after a cash crop can be one of the most inexpensive methods for reducing sediment from eroding off of crop fields during the roughly six months out of the year that there is typically not protective cover over the soil. Many of these 'soft' conservation practices that are seasonal management changes often prove to be very effective at addressing runoff and erosion processes from the very source of the issue, rather than attempting to simply control runoff and erosion after they have already occurred. For example, the current NRCS EQIP financial assistance rate for a single-species cover crop (practice code 340) in the state of Wisconsin is $62.48/acre for non-historically underserved applicants. A producer might be able to reduce 20 tons of soil (and 1.2 pounds of phosphorus) from eroding on a 40-acre field using a cover crop according to RUSLE2 modeling and soil test averages. This means that a producer would be able to greatly reduce their sediment and nutrient losses through the utilization of only approximately $2,500 in NRCS EQIP funding. These types of practices have been determined to be one of the most cost-effective means of addressing natural resource concerns affecting surface waters in the project area. Practices that directly reduce sediment and nutrients from reaching surface water and ground

water will also be prioritized (i.e. streambank/shoreline protection, stream crossing, etc.). These practices have been determined to be another cost-effective method of achieving our goal of addressing particular resource concerns. These practices address resource concerns that would remain or continue to get worse if not addressed directly. Farm management changes have been determined sometimes ineffective at addressing some of these resource concerns.

31 (Full Proposal) Does this project require Alternative Funding Arrangements (AFA)? Please describe how it will meet the goals and objectives of RCPP. Refer to Section III, Part C for AFA eligibility and requirements and Appendix A in the APF for Definitions.
N/A

32 (Full Proposal) Will this project address any environmental justice or persistent poverty concerns that have long term economic consequences if not addressed?
Over one-thousand miles south of the proposed project area, fisherman of the Gulf of Mexico are feeling the effects of the water quality degradation of the Mississippi River and its tributaries. Commercial fisherman in the gulf are having to travel further and work harder to find fish to catch to support their families and communities. A "Dead Zone" has been created in the Gulf of Mexico where extremely polluted waters have created an area devoid much fish habitat that area commercial fisherman had historically relied on. This is an environmental, economic, and social struggle that continues to get worse as polluted waters entering the Gulf of Mexico from the Mississippi River continue to reduce and degrade existing fish habitat. The Baraboo River is a major contributor of the Wisconsin River, which a major contributor of the degraded Mississippi River. By attempting to improve the water quality at a local level within the project area, RCPP partners assist in efforts to indirectly improve the commercial fishing economy of the Gulf Coast Area. By reducing erosion and runoff from crop fields in the Baraboo River Watershed of Sauk and Juneau Counties, producers are potentially reducing the damaging effects the Mississippi River has on the Gulf Coast and the commercial fishing industry in that area.

33 (Full Proposal) Indicate how the project will assist "producers in meeting or avoiding the need for natural resource regulatory requirements". Briefly describe the regulation or potential regulation (e.g., TMDL, Endangered Species Act, etc.); the impact or potential impact of the regulation on producers, including any economic impact or impact on production; what mechanism (e.g., State-level or "safe harbor" agreement or Candidate Conservation Agreement with Assurances) will allow project activities to be considered under the regulation?
Within the next year, the Wisconsin DNR will announce a Total Maximum Daily Load (TMDL). A TMDL is the amount of a pollutant that can be discharged into a waterway and still meet water quality standards. The TMDL study will generate a strategic framework for achieving water quality improvement within a targeted area. The study will help identify areas to prioritize conservation efforts with producers in order to reduce the producers' potential impact on pollutant runoff into surface water. NRCS-approved conservation practices have been created and occasionally modified in an effort to address resource concerns while maintaining or improving crop production. If funded, this RCPP proposal would utilize EQIP funds to address resource concerns on the landscape identified in the TMDL plan. These EQIP funds would be a critical component of the strategy for achieving a successful TMDL plan implementation. Once the Wisconsin River TMDL is developed, allocations will be announced and the plan will move towards implementation. Point sources will be required to meet new permit requirements and agriculture will be expected to reduce their contribution as well. The current approach with nonpoint sources will be voluntary participation and maximizing opportunities for water quality restoration by using available resources. Available resources will not be enough and the success of the TMDL will rely on collaboration between agencies and partners to leverage funding. Providing adequate technical and financial support for implementation of practices that will reduce agricultural runoff will reduce the need for enforcement and environmental regulation and is essential to keeping agriculture as a vital component to the culture and economy of Sauk and Juneau Counties. In addition to meeting the phosphorus goals set by the Wisconsin River TMDL plan, Sauk County recently updated Chapter 26 Manure Management Ordinance to incorporate all state agricultural performance standards. These standards include best management practices for both cropland and livestock producers. RCPP funding will assist landowners with meeting these standards. Within the Baraboo River Watershed, there are eight townships zoned exclusive agriculture and one established Agriculture Enterprise Area (AEA). Landowners within these areas are eligible to participate in the Farmland Preservation Program (FPP). All FPP participants must meet state agriculture performance standards to remain eligible for program participation. RCPP funding will assist landowners in the Baraboo River Watershed to meet these agriculture performance standards if they choose to participate in farmland preservation. Status reviews are conducted on farms participating in FPP every four years to ensure they are meeting the agriculture performance standards. This allows for the tracking and monitoring of conservation practices installed.

34 (Full Proposal) Does the proposal include any activities that are not included in an NRCS conservation practice standard or enhancement? If so, briefly identify the beneficial and adverse effects of those activities on affected natural resources (soil, water, air, plants, and animals) and specifically statutorily protected resources (e.g., cultural and historic resources, wetlands, threatened and endangered species, etc.).
N/A

35 (Full Proposal) This question is mandatory for projects requesting PL-566 watershed authority funding (only available in the CCA funding pool): Explain how the required watershed plan-Environmental Assessment (EA)/Environmental Impact Statement (EIS) will be completed for the PL-566 portion of the project. Provide details on who will complete the watershed plan-EA/EIS and funding and time needed to complete the watershed plan-EA/EIS. If your project already has an approved PL-566 watershed plan-EA/EIS, provide the name of the plan and date approved. Previously approved plans over 5 years old may need to be supplemented to update natural resource and economic conditions. If a supplemental plan-EA/EIS is needed, provide details on who will complete the plan, how much funding is

needed, and timeline for completing the plan. A current, up to date and approved watershed plan-EA/EIS is required prior to starting PL-566 implementation.
N/A