June 18th 2019 Yahara WINS Executive Committee Meeting

**Agenda Item:** Yahara WINS 2019 Phosphorus Reducing Grant Program.

**Action Requested:** Approval of 2019 Recommendations to Yahara WINS Executive committee for funding

**Background:**

Yahara WINS has allocated $24,000 to the Yahara WINS competitive grant program in 2019. One grant programs was offered this year – innovation grants- and a total of one application for $9,500 was received. The grant review committee consisted of Martye Griffin, Paul Dearlove, Jeremy Balousek, and Gary Huth. The review committee represented members of the Intergovernmental Agreement and also other Yahara WINS partners. In full disclosure, it should be noted that one member of the review committee, Jeremy Balousek, does not work directly in the Dane County Land Conservation Division, but does work for the Water Resource Engineering Division. Both Divisions are housed in the Dane County Land and Water Resources Department.

The main review criteria used for ranking the innovation grant applications was based on the potential significance of the project relating to phosphorus reductions in the Yahara Watershed immediately and in the future; the feasibility of the project and the ability to quantify future reductions. Additional information about review criteria can be found in the grant submittal application materials included as attachment 1 to this document.

Additional specifics about the grant applications received are noted below.

**Submitted applications for the Innovation grant**

- Dane County Land Conservation - Conversion to permanently pastured cropland: 332 pounds per year over 15 years at $30 per pound reduced; Cover crops: 165.5 pounds per year at $26 per pound reduced.

**Recommendation:**

The review committee recommends funding the one project that was received at the requested funding level:

- Dane County Land Conservation – recommend full funding of $9,500
Appendix 1: Grant Instruction Application and Grant proposal submittal by Dane County Land Conservation
2019 Innovation Grant - Instructions

1. Up to $24,000 is available in 2019 to fund low-cost phosphorus reduction practices.
2. The maximum award for any single project is expected to be $10,000.
3. Projects should be relatively new or untested, and have compelling value as a test case. The applicant must describe why the proposed project is innovative and how it could benefit the Yahara WINs effort.
4. The applicant must describe the process they intend to use to estimate the pounds of phosphorus expected to be reduced by the innovative practice and provide rationale for using that process to estimate the phosphorus reduction.
5. **Applications will be accepted by email to** kathyl@madsewer.org **until May 3, 2019. Email subject shall be “Proposal for 2019 Yahara WINs Innovation Grant.”**
6. If funding remains after the initial review, applications received after the May 3, 2019 deadline will be considered.
7. Project ranking is intended to be based on the potential significance of the project relating to phosphorus reductions in the Yahara Watershed immediately and in the future; the feasibility of the project and the ability to quantify future reductions.
8. Application(s) that would be partially-funded when all funds are exhausted will be offered the remaining funds (or an equal share of the remaining funds, in the case of a tie).
9. Since this program aims to increase phosphorus reduction through innovation, awardees will develop a case study about the project. Prior to final payment, funded entities will submit a summary of their project including:
   - The actual cost of the project and number of pounds of phosphorus reduced by the project;
   - A description of the method used to calculate phosphorus reductions and a revised calculation of the potential phosphorus reduction from the funded activity and the associated cost;
   - A description of the viability of the funded activity to cost-effectively reduce phosphorus runoff in the Yahara basin, any potential partners and any barriers or conditions to viability uncovered during the project;
   - Recommendations for other entities that may attempt the same or similar innovative practices in the watershed, based on observations and experience in project implementation;
   - A description of challenges experienced with project planning, implementation and/or verification;
   - Photos of the project (if applicable).
10. The first 50% of the awarded cost incurred will be reimbursed to applicants, based on copies of invoices for project expenses. The remaining reimbursement will be provided once the case study (including case study and photos) is submitted to Yahara WINs (c/o Kathy Lake, kathyl@madsewer.org).
11. Questions? Please contact Kathy Lake at 608-222-1201, ext. 278 or kathyl@madsewer.org
2019 Yahara WINs Innovation Grant - Application

1. Organization:

2. Description of project:

3. Why is this project innovative?

4. How will phosphorus reductions be achieved and quantified?

5. How many pounds of phosphorus loss do you expect to be reduced? Please look at this from both the immediate project (funded by this grant) as well as the future impact of this on the phosphorus in the watershed:
   a. How many pounds of phosphorus loss do you expect that this specific project will reduce?
   b. What is the potential future impact of this project for the Yahara Watershed?

6. What information, past experience and/or other insight has led you to test this approach?

7. Who will be involved? (organizations and/or individuals)

8. Is there any permitting involved? Yes/No
   a. If yes, when do you expect that all permits will be received? ________________

9. Will the project be completed by December 31, 2019? Yes____No______
10. Will the project be completed by December 31, 2020? Yes____No______

11. Total dollars requested: _____________________ dollars

12. Will the project be located in the Yahara Watershed? Yes____No______
a. If yes, which TMDL Reach(es) (see Figure 1)? ___________________

13. Would you accept partial funding? Yes____ No______

14. Project contact information:
   a. Name _________________________________________________
   b. Municipality or organization________________________________
   c. Email address ___________________________________________
   d. Telephone number ________________________________________

Certification: The person noted below certifies that the information contained in this application is true and correct to the best of his/her knowledge. As a participant in a pilot project, the person noted below understands that the review committee reserves the right to work with applicants to develop a clearer understanding of the projects as well as cost opinions and projected phosphorus reductions.

Responsible Party: ___________________ Printed Name ___________________Signature

Return completed applications by May 3 2019 to Kathy Lake, kathyl@madsewer.org. Please include the email subject line, “Proposal for 2019 Yahara WINs Innovation Grant.”

Additional Information or continuation of previous answers (attach additional pages as needed):
Yahara WINS Innovation Grant – Application

1. Dane County Land Conservation
2. Facilitating the integration of annual and perennial grazing systems in the lower Yahara Watershed.
3. Although grazing is a standard practice utilized throughout the world, there is constant innovation to increase the management of grazing with new technology. This project is innovative in that it is approaching the use of grazing on the farm scale by integrating the use of annual cover crops with perennial pastures. By utilizing both sources of feed, farmers can reduce input costs of feed by essentially double cropping their row crops and reduce environmental impacts by increasing soil health through the use of integrated crop and livestock management. By incorporating cover crops into annual rotations, phosphorus will be cycled more efficiently, soil and phosphorus loss will be reduced, and the need for chemical phosphorus fertilizers will decrease. Overwintering cover crops, such as cereal rye are excellent scavengers of nutrients in the fall and help build healthy soils that retain nutrients.
4. The majority of quickly quantifiable phosphorus reductions captured in this project will be from reductions in soil erosion and chemical fertilizer application. Converting annual cropland to perennial grasses will almost completely eliminate soil erosion and subsequent attached phosphorus on site as well as the need for chemical fertilizers. Overwintering cover crops, such as cereal rye are excellent scavengers of nutrients in the fall and help build healthy soils that retain nutrients.
5. a. This specific project will reduce phosphorus by 332.1 pounds per year with a project lifespan of 15 years on the permanently pastured crop ground. This is at a cost of $30/lb of P reduced. In addition, 165.5 pounds of phosphorus will be reduced per year on the cover cropped portion of the farm at a cost of $26/lb of P.
b. If these practices can be expanded throughout the watershed, significant savings in phosphorus reaching surface waters can be achieved. By converting cropland to permanent managed pasture, 5.3 lbs of P/ac/year can be reduced. By utilizing cover crops, 1.9 lbs of P/ac/year can be reduced. The combination of grazing cover crops and permanent pasture has the potential to not just reduce nutrient loading, but reduce all chemical applications of fertilizers and pesticides in the watershed. In addition, managed grazing has been shown to improve wildlife habitat, soil health and profitability on livestock operations.
6. This is a multi-year multi-agency project. Dane County Land Conservation staff have been working with James Amera, Karl Sime, Kevin Opperman and Curt Watson for 3 years on several grazing and cover crop related projects. In addition, a Sustainable Agriculture Research and Education grant (USDA-SARE) was awarded to the department to research and promote the practice of grazing cover crops and rotational grazing to improve water quality and profitability on 5 farms in Dane and Columbia Counties. The project, titled, Building sustainable relationships around the use of grazing cover
crops on dairy and livestock farms in Southern Wisconsin, focuses on building relationships between mentor and mentees in the use of grazing and cover crops (https://projects.sare.org/proposals/show/511636/7107). This specific project is receiving funding from the Natural Resources Conservation Service (NRCS), Dane County, and SARE. By leveraging several funding sources this project is able to go above and beyond a typical cost-shared project. The participants have agreed to hold field days and collect data on the project over the next 2 years. Having additional funding through MMSD will allow for more outreach during the next 2 years and fill gaps in cost-share related practices.

7. Dane County grazing specialist, Marie Raboin has 15 years of experience with managed grazing, including a masters degree from the University of Wisconsin where she researched managed grazing on 7 farms in southern Wisconsin. Her experience working for NRCS, the UW, non-profits and Dane County Land Conservation has given her the skills to not just promote the use of cover crops and managed grazing, but to provide farmers the support and knowledge required to make the transition of management successfully. The soil health and environmental benefits of utilizing cover crop and managed grazing is well documented and accepted, but the adoption of these practices is still limited. Management changes on farms are slow and take support from not just university and agency staff, but from peers. This project, along with the SARE grant, will support farmers management transitions through the promotion of peer to peer learning, as well as taking some risk out of the transition through the use of cost-share for infrastructure and seed. Another good example of peer to peer learning is the Fox Demo Farms network in the Northeast part of Wisconsin (https://fyi.extension.wisc.edu/foxdemofarms/). Although this project is not proposing a demonstration network, it is supporting the farm-to-farm networking that makes management changes feasible and sustainable to farmers.

8. No permits required
9. No
10. Yes
11. $9,500 dollars requested

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<th>Description</th>
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<td>Fee for Service</td>
<td>Farmer Time</td>
<td>Compensating farmers for their time to implement project - 40 hours/year x 2 years x $25 per hour x 4 farmers</td>
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<td>Promotional Materials</td>
<td>Promote Field Days</td>
<td>Use newspaper, social media and other outlets to advertise field days</td>
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<td>Total:</td>
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12. Yes
   a. 68
13. Yes
14. Marie Raboin, Dane County Land Conservation, raboin.marie@countyofdane.com, 608-224-3742
15. Certification: The person noted below certifies that the information contained in this application is true and correct to the best of his/her knowledge. As a participant in a pilot project, the person noted below understands that the review committee reserves the right to work with applicants to develop a clearer understanding of the projects as well as cost opinions and projected phosphorus reductions.

16. Responsible Party: Marie Raboin

[Signature]