2016 Year End Summary of Red Cedar River Watershed Partnership Highlights and Accomplishments

The Red Cedar River Water Quality Partners:

Barron County Land Conservation Barron County UW-Extension Big Chetac and Birch Lakes Association **Chetek Lakes Protection Association** Desair Lake Restoration, Inc. **Dunn County Land and Water Conservation Dunn County UW-Extension** City of Menomonie Natural Resource Conservation Service Red Cedar Basin Monitoring Group **Red Cedar Lakes Association** Tainter/Menomin Lake Improvement Association **3M Corporation UW-Extension Natural Resources Education UW-Stout** West Wisconsin Land Trust Wisconsin Farmers Union Wisconsin Department of Natural Resources

Background

In January of 2016, "A River Runs Through Us: A Water Quality Strategy for the Land and Waters of the Red Cedar River Basin" was approved by the Wisconsin Department of Natural Resources and by the US Environmental Protection Agency, after being submitted in July of 2015. In the year since the Strategy was approved, the Red Cedar River Water Quality Partnership (authors of the Strategy and also tasked with implementing it) has worked toward many of the goals of the Strategy. What follows is a brief summary of some of the major accomplishments and events that have occurred thanks to the work of the Partnership and its individual members. This list is by no means comprehensive, as many smaller events, activities, installation of best management practices, presentations, etc., have taken place as well...some likely unknown to the Partnership, initiated by other organizations or residents.

Land Management Changes and Best Management Practices

Approximately 240 acres of land owned by 3M in Menomonie was leased for agriculture this year, but unlike previous years, the lease drawn up by 3M required that the land be managed with soil health principals in mind, such as no-till farming and cover crop usage. Five-Star Dairy signed on to lease the land under a five-year lease. They were happy with the crops being harvested from this land in 2016.

Thanks to the efforts of many Partners including both Dunn and Barron Counties, NRCS, UW-Extension and others, a substantial increase in the amount of acres in the watershed in which a cover crop was present for part of the year increased dramatically. While we don't have an exact count of acres, it's estimated that cover crop acres went from approximately 500 acres total just a few years ago, to approximately 20,000 acres in 2016. All NRCS cost-share funds for cover crops for 2016 were used up in both counties. Workshops on cover crops, Gabe Brown's presentations (see below), concerted efforts at educating land owners, and many other factors led to this rise. Considering that the goal for the tenyear strategy is to get approximately 107,000 acres of cover crops installed in the watershed, we're well on the way toward that goal.

West Wisconsin Land Trust is working to secure an easement on 67 acres of land (known as the Russian Slough) to be preserved upstream of Tainter Lake. It is mostly riparian and wetland forest, and will remain in that condition. The easement should be secured by early 2017.

Red Cedar River Conference

Led by the Tainter/Menomin Lake Improvement Association and a planning team made up of several Partnership members, the 2016 Red Cedar River Conference grew to approximately 420 attendees in 2016, the biggest attendance so far. Gabe Brown, a farmer from North Dakota and well-known advocate of farming with soil health in mind, was one of three keynote speakers. Gabe also remained in the area for a few days afterward for some field days and workshops with many area farmers, discussing cover crops, no-till, low chemical use, crop rotations, diversification on the farm, and remaining profitable in the midst of fluctuating commodity prices. Other keynote speakers at the Conference included Maude Barlow, an internationally known advocate for preserving and restoring the world's waters, and Tim Davis, a researcher with NOAA studying algae blooms in the Great Lakes region. Evaluations completed by Conference attendees were generally quite positive. Planning began in late 2016 for the 2017 Conference.

Red Cedar Basin Assessment Project

Thanks to work by several members of the Partnership, funding was secured from WDNR and the US Army Corp of Engineers to fund a \$600,000 project to assess and update water quality data in the watershed, model those results to get a better, updated picture of water quality issues in the watershed, and also to do some sociological and economic research in selected parts of the watershed. The \$600,000 also includes some matching funds from Dunn County, Barron County, and the Tainter/Menomin Lake Improvement Association. The project got underway in the summer of 2016 with monitoring, training on modeling, and survey work. Administration of this project is being carried out by the West Central Regional Planning Commission.

Barron County

Barron County Land Conservation Department signed on as a partner in the "Farmers of Barron County Watersheds" group; a farmer-led group organized mostly by Farm Bureau in Barron County. This group held a field day in April focused on cover crops.

Two large barnyard runoff control systems started in 2015 by the Barron County Land Conservation Department were finished in 2016.

Transect survey results in the County showed 18% of the County was planted using no-till methods, and this represents a steady increase.

In addition to the cover crops mentioned above, Barron County's cover crop cost share program added an additional 700 acres of cover crops in the watershed this year.

Dunn County

Dunn County Land and Water Conservation secured and began implementing a \$300,000 National Water Quality Initiative grant from NRCS in 2016 that is being used to monitor and sample Wilson Creek, and subsequently to get BMPs installed in that watershed with the goal of delisting Wilson Creek from the impaired waters list. Wilson Creek is not included in the Strategy for the Red Cedar Watershed simply because it flows into Lake Menomin very close to the dam, but improving water quality in Wilson Creek will improve water quality downstream in the Red Cedar River below the dam.

In 2016 Dunn County Land and Water Conservation completed their updated County Land and Water Plan, which contains a great deal of language about the Red Cedar Partnership and water quality in general.

With cooperation from other partners including NRCS and Dunn County Extension, a field day was held at the Red Cedar Demonstration Farm in Dunn County in September. The field day focused mostly on cover crops, and was attended by approximately 70 people.

Hay River Farmer-Led Council

Unfortunately, 2016 saw the departure of Julia Olmstead, the Farmer-Led Council Coordinator with UW-Extension. Julia left to take a position in St. Paul, MN, and due to funding issues, Extension was not able to fill her position for the two years remaining on the pilot project schedule. However, Amanda Hanson from the Land Conservation Department in Dunn County continues to work closely with the farmer-led council in the Hay River watershed, and the Council sees itself as continuing with their work despite not having an overall coordinator.

Training was held in the spring for those involved in farmer-led councils in northwest Wisconsin to learn more about the STEPL water quality model. Several members of the Partnership attended.

In March, a field day was held in Ridgeland for the regional farmer-led councils. The field day focused on cover crops and soil health. Mark Hazuga from WDNR did a presentation to the farmer-led groups in the region during this field day, and also another presentation at a subsequent field day held in August. His presentations included stream evaluation techniques, and a fish shocking demonstration.

Tainter/Menomin Lake Improvement Association

Much of the work of TMLIA is integral to many of the items spread throughout sections of this document. In addition to the many other activities listed, TMLIA has also been supporting work for

streambank stabilization and erosion mitigation work at the Colfax Wastewater Treatment Facility and the Dunn County Highway M sites on the Red Cedar River. They also do many presentations throughout the watershed focused on water quality issues.

Big Chetac and Birch Lakes Association

Work neared completion in 2016 on a new Lake Management Plan for the lakes led by the Association. It's hoped that this plan will be completed in 2017.

The Association worked with staff at UW-Eau Claire to complete an economic study of the impacts of clean water in twenty lakes in northwest Wisconsin. The study was completed in August and was well-received by area residents. The study general showed that property values are higher on lakes with cleaner water.

Red Cedar Lakes Association

After completing three years of chemical treatment for curly-leaf pondweed in 2015, some hand pulling of smaller beds took place with help from Blue Hills Charter School in Birchwood and others in 2016. Boy Scout troops continued helping with Clean Boats Clean Waters education programs at lake docks and parks, focusing on aquatic invasive species issues. This program expanded in 2016 to nine weekends over the summer.

Rice Lake District

While the Rice Lake District is not a formal "partner" in the group, several Partners work with this District on water quality projects. Rod Olson has helped install many small diversions, drainage basins, check dams and rain garden projects. The District has also installed buffers at some boat landings, and helped institute some no-till farming practices at other lands near the lake. There was also a beach restoration done creating more natural shorelines.

Desair Lake Restoration, Inc.

Rod Olson heads this group, and many projects have been implemented in this small watershed, including some small weirs and diversions to control gully erosion.

Chetek Lakes Protection Association

An algae harvester was purchased in 2016 by the Association and used in many locations in the lakes during the summer. Also the Association was successful in installing more "fishsticks" in the lakes to improve fish habitat.

Also a "meet and greet" day for the UW-Stout LAKES REU students was held in Chetek during the summer to help those students become more familiar with the Chetek region.

City of Menomonie

The City installed a new storage pond...the first of eight, in 2016. These storage ponds should help with controlling urban runoff in parts of the City.

Dredging on Wolske Bay was conducted in July. It's hoped that removing some of the sediment from this area of Lake Menomin will help reduce the severity and frequency of algal blooms that plague this part of the lake in the summer.

Some stream bank restoration work was completed on a portion of Jarret Creek. This work addressed erosion issues that were causing large amounts of sediment to wash directly into Lake Menomin.

A new rain garden was installed at Lakeside Park on Lake Menomin in October. Several members of the Partnership and other entities were involved in this work, including the City, the Tainter/Menomin Lake Improvement Association, The Blue Devil Lake Alliance, Dunn County, area schools, and UW-Extension. The garden will catch and infiltrate runoff from the one-acre parking lot that previously ran directly into the lake.

A winter salt application class was held in Menomonie in October, sponsored by the City and Rain to Rivers. Regional municipalities and counties sent staff to the day-long training.

Also, 120 acres of city land that is leased out for cropping was converted from standard tillage to no-till practices.

LAKES REU Project

The LAKES REU project at UW-Stout had a successful summer with several students coming from all over the country to help conduct science, sociological, and economic research in the watershed. Students once again shared their results with the public at a well-attended reception in Menomonie in August, with approximately 300 people in attendance. This was the third year of the three-year REU grant, and an application was submitted toward the end of 2016 seeking funding from the National Science Foundation for three more years. Late notice came in early 2017 that the application was accepted and will be funded.

Alyssa Quilling was hired in 2016 to act as a coordinator for the LAKES REU project.

Also, sociological surveys of non-farming land owners conducted through the REU project began in 2016.

Citizen Monitoring

The Red Cedar Basin Monitoring Group continues water quality monitoring of 19 streams with low-level monitoring, and 5 sites with higher-level monitoring, as well as 7 sites on Lakes Tainter and Menomin. Water quality at many of these sites showed phosphorus levels two or three times the water quality standard during the summer months.

Other Presentations

Dan Zerr of UW-Extension gave a presentation to the Dunn County Board about the Strategy in January of 2016. A good discussion followed, and the Dunn County News and Eau Claire Leader Telegram both ran stories about the presentation and the Strategy.

Ron Verdon of TMLIA, Ted Ludwig of the Red Cedar Basin Monitoring Group, and Dan Zerr gave a presentation about the Partnership to the statewide Wisconsin Lakes Partnership annual convention in Stevens Point in March.

Ron Verdon and Dan Zerr gave a presentation about the Red Cedar Partnership to the Yahara Lakes Watershed Partnership Summit in Waunakee in April.