

## **M.L.2018 Project Abstract**

For the Period Ending June 30, 2021

**PROJECT TITLE:** YES! Students Take on Minnesota Water Quality Challenge

**PROJECT MANAGER:** Shelli-Kae S. Foster

**AFFILIATION:** Prairie Woods Environmental Learning Center

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**FUNDING SOURCE:** Environment and Natural Resources Trust Fund

**LEGAL CITATION:** M.L. 2018, Chp. 214, Art. 4, Sec. 02, Subd. 05b as extended by M.L. 2020, First Special Session, Chp. 4, Sec. 2

**APPROPRIATION AMOUNT:** \$213,000

**AMOUNT SPENT:** \$212,560

**AMOUNT REMAINING:** \$ 440

### **Sound bite of Project Outcomes and Results**

Our project, YES! Students Take on Water Quality Challenge, brought water quality and conservation knowledge and expertise to over 800 students from 126 communities across Minnesota. In 3 years, 81 hands-on water quality and prairie/habitat restoration projects were completed, and 20 waterbodies were improved while engaging with 30 resource experts.

### **Overall Project Outcome and Results**

Our project goal was to engage Minnesota's youth in taking on the challenge to improve our state's water ways. We accomplished this goal by:

- Supporting 54 youth-led YES! teams, with over 800 students, in 126 Minnesota communities
- Completing 81 new student-driven water quality and prairie/habitat restoration projects
- Providing 3 Fall Summit events and 27 regional workshops
- Leveraging the expertise and kindness of 6,564 volunteer hours including 3,125 hours of YES! student volunteer hours and \$75,000 in community funds
- Awarding the Water Quality Stewardship award in 2019 and 2020

Our aim was to help students to better understand the interconnectedness of their daily actions and water quality. We accomplished this through leveraging the expertise of 30 water quality experts who educated and trained our students about local water quality challenges, techniques to improve and conserve water quality and then assisted them in doing related student-driven projects.

YES! student-driven projects benefited Minnesota communities by improving waterways, cleaning up shorelines, restoring native prairies and establishing new native plantings and habitats. Other projects included Aquatic Invasive Species (AIS) monitoring, assessing drinking water, installing hydration stations, storm drain stenciling (Adopt-a-Drain), water usage tracking and water-related events and peer education.

As one YES! student from Minnewaska said, "I enjoy YES! because of the positive interactions-people taking time out of their day to teach you things. It's something for yourself and it's something to do for your community." Another student from Carlton stated, "It feels really rewarding to know that we are actually making a difference!" Resource expert Phil Votruba commented, "You guys serve as an inspiration for youth across the state and across the country!"

A Sleepy Eye Student remarked “As a part of YES! team I got to participate in River Watch which consists of monitoring Minnesota’s rivers and helping to keep them safe. I was able to learn more about what makes the rivers healthy or unhealthy and was able to help in the monitoring process.”

### **Project Results Use and Dissemination**

During this project (July 1, 2018, to June 30, 2021) YES! staff have tabled or presented at 20 events. YES! was featured in 22 outside articles, radio broadcasts and videos. In addition, staff posted 86 blog posts to our website which were shared on our social media pages including Facebook and LinkedIn.

**YES! in Outside News Sources** (*TV, Radio, Newspaper*): 22 items during the project time. They are listed on our website and can be accessed here at [YES! in the News](#).

### **YES! Website**

- 86 blog posts written and posted by staff
- 12,954 visitors with 12,795 being new users
- [YES! website](#) continues to be updated with a Coaches Corner containing relevant YES! information for our YES! coaches

### **Print and electronic newsletters**

- YES! sent out 10 E-Newsletters. They are listed on our website and can be accessed here at [YES E-Newsletters](#)
- Prairie Woods Environmental Center sent out 4 editions of newsletter, the “Warbler”, which included a YES! feature; reaching over 1,300 people per edition
- Ney Nature Center send out 28 e-newsletters and 5 printed newsletters, which included a YES! feature

Other media and outreach links and activities:

- [YES! website](#) includes blog posts, news articles, press releases, alumni stories and project resource
- [YouTube](#)
- [Facebook](#)
- YES! [E-newsletters](#) (sent out to 600 people 3 times a year)
- [Photos](#)
- 2018-19 Team Accomplishments tabloid - attached
- 2019-20 Team Accomplishments tabloid - attached
- 2020-21 Team Accomplishments tabloid – attached
- [Interview with Mankato West YES! team](#) on Maverick FM
- Visual of Final Report - attached
- [UofM School of Medicine](#) presentation by YES! Program Director Shelli-Kae Foster



# Environment and Natural Resources Trust Fund (ENRTF) M.L. 2018 ENRTF Work Plan Final Report

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**Today's Date:** July 5, 2021

**Final Report**

**Date of Work Plan Approval:** 06/05/2018

**Project Completion Date:** June 30, 2021

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**PROJECT TITLE:** YES! Students Take on Minnesota Water Quality Challenge

**Project Manager:** Shelli-Kae S. Foster

**Organization:** Prairie Woods Environmental Learning Center

**College/Department/Division:**

**Mailing Address:** 12718 10<sup>th</sup> Street NE

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**Location:** Statewide

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**Total Project Budget:** \$213,000

**Amount Spent:** \$ 212,560

**Balance:** \$440

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**Legal Citation:** M.L. 2018, Chp. 214, Art. 4, Sec. 02, Subd. 05b as extended by M.L. 2020, First Special Session, Chp. 4, Sec. 2

**Appropriation Language:** \$213,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Prairie Woods Environmental Learning Center to expand the Youth Energy Summit (YES!) model to improve local waterways by training and mobilizing over 20 youth-led teams in Minnesota communities to complete 30 or more projects related to water quality including monitoring and reporting.

M.L. 2020 - Sec. 2. ENVIRONMENT AND NATURAL RESOURCES TRUST FUND; EXTENSIONS. [to June 30, 2021]

## **I. PROJECT STATEMENT:**

Youth Eco Solutions – formerly Youth Energy Summit (YES!) teams across the state will mobilize local watershed stewardship efforts in over 20 communities to help fill the urgent need for broad citizen participation to protect and clean up Minnesota waters. This project extends the successful youth-led program, which typically operates during the school year, into the summer and provides local water quality education in 20 communities. Teams of 5-20 youth, guided by a YES! Coordinator, will receive hands-on training from local natural resource professionals in the areas of aquatic invasive species (AIS), water quality monitoring and water quality improvement projects. Teams will then implement community awareness and mitigation projects and participate in on-water and shoreline activities to protect and improve local water quality. YES! is a youth-led, award-winning program that challenges and empowers students to solve environmental problems at the local level in partnership with their communities.

YES! engages tomorrow's leaders in seeking sustainable solutions to today's environmental and economic challenges through youth-led energy conservation, waste reduction, water quality improvement projects, renewable energy installations and other environmental stewardship projects. This project will use the successful YES! model to focus on water quality projects. Examples of YES! outcomes related to water quality projects that can be used as models for other teams include:

- A team of 8 students from the New London-Spicer YES! Team were trained by the Kandiyohi County Aquatic Invasive Species Coordinator and Middle Fork Crow River Watershed District (MFCRWD) in the summer of 2017 with the result of approximately 75 images of aquatic vegetation uploaded to the AquaHunter application for review and analysis by the DNR and AIS County Coordinator, students presented at River Days for 4<sup>th</sup> graders in the fall and the students learned they can be part of the solution to water quality challenges in their watershed.
- MFCRWD project of the Year was awarded to the Atwater-Cosmos-Grove City YES! team in January of 2017 for their tree trench project, a \$25,000 project completed to drain water away from a hallway that was constantly flooded and to provide a filtering system to clean water before it drains into local bodies of water. The award was designed to recognize groups who have improved or protected local water resources.
- The Virginia YES! team planted over 100 trees and shrubs covering 200 feet of shoreline along Silver Lake in the spring of 2017. They plan to restore the entire lake by working on 200 feet each year. They also installed signage to help educate the public about the project.

Through support from M.L. 2011, 2014 and 2016, YES! focused on energy and conservation education and projects. Completing over 600 action projects since 2011, YES! has demonstrated that youth can not only be a solution to today's environmental challenges, they can also be leaders in engaging their communities. For up to 20 teams, YES! will shift experiential learning opportunities to a clear focus on water quality. This project is a triple win for Minnesota – youth gain water quality knowledge, skills and career exposure; communities become more engaged and aware; and the state gains additional monitoring/testing data from its valuable waters.

YES! projects have generated volunteer, in-kind and cash investments in sustainability projects far exceeding the total ENRTF funds invested in the projects for both M.L.2011 and M.L.2014 funding.

### **Specific Goals for YES! Water Quality Project 2018-20:**

- 30 or more new youth-led water quality and citizen science projects will be completed.
- Up to 200 youth will engage 20 or more communities in water quality awareness and activities.
- Over 20 valuable Minnesota water bodies over 2 years will be monitored, tested, and reported on for invasive species and contribute to DNR EDDMapS, AquaHunter and other databases.
- YES! teams compete for the statewide Water Quality Stewardship award and will be recognized publicly.

ENRTF funding will support coordinator involvement with teams, provide assistance to cover team expenses for

attendance at events, and provide matching funds for water stewardship projects. In addition, funding supports key program staff.

**HOW:** YES! staff will reach out to schools to recruit new YES! teams and work with existing schools to retain YES! teams to attain the goals of completing 30 or more new youth-led water quality and citizen science projects and engaging up to 200 youth in 20 or more communities in water quality awareness training and activities. YES! has a network of water quality experts that will assist with training and leading our youth to understand the needs and opportunities to monitor, test, and report aquatic invasive species and contribute to the DNR EDDMapS, AquaHunter and other databases. YES! has an established system to recognize achievements through its regional and statewide spring awards. The statewide Water Quality Stewardship award will be a new category and the winner will be recognized publicly.

YES! staff meet directly with YES! teams 3 to 5 times per year to: assess community assets and needs, identify and involve community partners, create action-plans link teams with funding resources, and assist in the implementation of water quality projects. YES! staff provide on-going support to teams through: developing and sending out weekly updates, evaluating and offering relevant workshops and tours, organizing annual regional Summits bringing teams together for learning and networking, and in the spring teams present their completed projects to a panel of judges and awards are presented at community events.

During this project, Prairie Woods ELC will work closely with our partners including Ney Nature Center and Laurentian Environmental Center to continue to bring this unique program to each part of the state. Working with our partners, YES! will seek regional support as well as statewide support through private and public partnerships, fundraisers, sponsorships and social enterprise.

## II. OVERALL PROJECT STATUS UPDATES:

### **First Update January 31, 2019**

The YES! program has recruited and secured 22 teams for the 2018-19 season including: Carlton, Discovery Woods (Brainerd), DREAM Academy (Willmar), Forest Lake, Glencoe-Silver Lake, Lac qui Parle Valley, New London-Spicer (Middle and High school), Moorhead, Northern Lights Community (Warba), Parkers Prairie, ROCORI (Richmond & Cold Spring), Royalton, Sartell-St. Stephen, Yellow Medicine East, Mankato West, Minnetonka, New Prague, Sleepy Eye, Springfield, Westbrook-Walnut Grove and Wrenshall.

Over 150 YES! students have received hands-on training from regional experts at both the 2018 Fall Summit events at Prairie Woods Environmental Learning Center in Spicer, MN and at Laurentian Environmental Center in Britt, MN. Students learned from 6 regional water quality experts on Secchi disc water quality reading techniques, AIS identification methods, and how students can promote sustainable best practices in their communities.

Fifteen (15) customized winter workshops are being planned to provide students with the opportunity to learn about local water challenges and other relevant topics. Topics include: native prairie/shoreline restoration, aquaponic tours, rain gardens, water quality testing techniques, healthy soil health and how water conservation and quality affects climate change. Four of our workshops will be in collaboration with Climate Generation through partnership funding from the McKnight Foundation.

Teams have identified local sustainability challenges and needs, formulated goals and created action plans for the 2018-19 season. Projects range from aquaponics systems to river clean-ups to AIS monitoring.

The first ever Water Stewardship award has been announced to the teams. This will be part of the spring competition.

### **Second Update July 31, 2019**

The YES! program engaged 22 teams across Minnesota during this grant reporting period with 234 students directly participating in YES! events and activities. Nine (9) water-related workshops were completed. The workshops were led by regional experts from local Soil and Water Conservation Districts, Department of Natural Resources, universities, colleges, Watershed Districts, and more. Workshop topics included: native prairie/shoreline restoration, aquaponic design and construction, rain gardens, water quality and AIS testing techniques and monitoring, soil health, and native gardens.

The student-driven projects completed included; 17 water quality and conservation, 5 shoreline/lake restoration, 11 environmental education, and 28 community events. This involved 80 Community organizations resulting in 3,990 hours of volunteer time by teachers and students in addition to 312 hours donated by professionals for core programming. Over \$21,000 was raised through team outreach to local businesses and community members and 11,513 community members impacted by local projects.

The first ever YES! Water Stewardship Award went to New London-Spicer High School and New Prague High School and Alternative Learning Center. The State Water Stewardship award went to Northern Lights Community School in Warba! The team was presented with the award during the May 12<sup>th</sup>, pre-game show at Minnesota Twin's game.

### **Third Update January 31, 2020**

The YES! program has recruited and secured 24 teams for the 2019-20 season including 7 new teams! Over 180 YES! students received hands-on training from regional experts at the 2019 Fall Summit at Prairie Woods Environmental Learning Center in Spicer, and Laurentian Environmental Center in Britt, MN. Students have engaged with and learned from 14 regional water quality experts on Secchi disc techniques, AIS identification methods, water clarity, and how students can promote sustainable best practices in their communities.

Fifteen (15) customized winter workshops are being planned to provide students with the opportunity to learn about local water challenges and other relevant topics. Workshop topics may include; native prairie/shoreline restoration, aquaponics, rain garden design and plantings, water quality testing techniques, soil health, electric vehicles, and waste reduction and proper regional recycling and how it protects the water.

Teams have identified local sustainability challenges and needs, formulated goals and created action plans for the 2019-20 season. Projects range from aquaponics systems to river clean-ups to AIS monitoring. The Water Stewardship award will be awarded to the team the top performer in each region. Three regional winners will advance to the state competition on May 10, 2020 at the MN Twin's game.

### **AMENDMENT REQUEST April 14, 2020**

We are requesting funds be shifted from the Equipment/Supplies/District Expense budget line item to Professional Service Contracts to Ney Nature Center and a new contractor, Achieve Consulting.

- Equipment/Supplies/District Expenses budget would be reduced by \$5,000 to a revised budget of \$5,000.
- Professional Contract Services for Achieve Consulting would be added as a new contract for \$5,000.

These changes are being requested because of schools closing due to COVID-19 this spring and we no longer will be holding in-person workshops where teachers are attending and will need reimbursement for district expenses (substitute teacher, travel). We are moving our resources, workshops, and other support to online support and that is why we are seeking Achieve Consulting's expertise.

We are seeking to enter into a contract with Achieve Consulting to facilitate shifting our YES! Project Resources online to better position our program to be delivered online and to work with staff to make improvements to all

online teacher support materials and workshops. This is necessary as we are adapting to how we deliver our program in response to the COVID-19 pandemic.

In addition, Achieve Consulting will provide key operating support including overarching and partner budgets, contracts and reporting necessary to complete this project and put us in position to move into the next phase of our programming.

Achieve Consulting is uniquely qualified to support the YES! program during this challenging time because Cheryl Glaeser, owner/sole-proprietor, has an in-depth knowledge of the program's operations. In fact, Ms. Glaeser developed the YES! program back in 2007 while working for the Southwest Initiative Foundation. Prairie Woods ELC has reached out to Ms. Glaeser over the course of 13 years to assist in times of transition and when her unique expertise is required to maintain the program's consistently successful model. Ms. Glaeser has not only previous experience and knowledge of the program but also the unique skills required to assist the program in adapting workshops to an online format. Her years of experience in organizational development also provide much needed short-term skills in securing and improving operational functions due to sudden changes from COVID-19 and economic uncertainties.

Due to the short turn-around of outcomes and deliverables we believe it is in the best interest of our organization and the YES! program to contract with someone who knows the program, the region, our state, and has the unique skills we need to satisfy the remaining outcomes of the grant. We do not believe it is in our best interest to take the time to seek other contractors at this time.

We are also requesting funds be shifted from the Travel budget line item to Professional Service Contract to Ney Nature Center and to Achieve Consulting.

- Professional Contract Services for Ney Nature Center would increase by \$2,200 for a revised budget of \$28,200
- Professional Contract Services for Achieve Consulting would be added for \$1,000.

These changes are being requested because of schools closing this spring due to COVID-19 and our staff will not be travelling to visit schools/teams, nor will we be traveling to host workshops or events. The additional funds will go to support the Southern Coordinator at NNC to move workshops and resources online, facilitate the online regional and state tournaments and to collect and report on data necessary for final reporting for this project.

We are adjusting Outcome 2 in Activity 2 by adding the language "and to be completed at home." We have adjusted our programming to include initiatives such as the YES! Daily Challenge, resulting in smaller projects being completed in and around a student's home.

We are adding Outcome 5 in order to account for changes made to how we deliver our program due to the closing of schools due to COVID-19 while continuing to work towards completion of the outcomes of our grant and to continue to work to improve water quality in Minnesota. Outcome 5 states: "Adjust and improve programming to be online accessible and create virtual workshops that can be delivered online to YES! students and coaches including our YES! regional and state competitions this spring. "

Note: adjustment to Activity 2 outcomes are on page 17.

**Amendment Approved by LCCMR 4/15/2020**

**Project extended to June 30, 2021 by LCCMR 6/18/20** as a result of M.L. 2020, First Special Session, Chp. 4, Sec. 2, legislative extension criteria being met.

## **AMENDMENT REQUEST July 20, 2020**

Prairie Woods Environmental Learning Center has been granted an extension of this project through June 30, 2021. Therefore, we are seeking an amendment request to shift the dollars where they can be best utilized to help improve water quality in Minnesota through youth-led action projects. Due to COVID -19 we see our role as bringing project ideas and resources to students remotely through a virtual Fall Summit followed up with small group workshops (if allowed). We will continue to provide our resources online and to connect with students through zoom and other virtual methods. This is why we are shifting the majority of our remaining resources to personnel.

Prairie Woods ELC seeks to make the following changes:

- Shift \$4,000 from Project Seed Funds to Personnel
- Shift \$500 from Project Seed Funds to Equipment/Supplies
- Shift \$450 from Contract with Laurentian Environmental Learning Center to Personnel
- Shift \$403 from Contract with Ney Nature Center to Personnel
- Shift \$2,350 from Contract with Achieve Consulting to Personnel

Total seeking to shift is \$7,203

**Amendment Approved by LCCMR 8/20/2020**

**Project Status as of July 31, 2020:** (Submitted September 8)

YES! engaged 21 teams across Minnesota with nearly 350 students directly participating. Eight (8) water-related workshops were completed. Many more were planned and ready to implement this spring, but due to the closing of schools, projects were put on hold. The program adapted to distance learning by providing a Daily Challenge during Earth Week and providing online resources for hands-on projects at home. YES! logged in over 3,000 hours of volunteer time, organized 52 organizational events and leveraged over \$60,000 for action projects overall.

Students toured Camp Ripley, Crow Wing Hazardous Waste facility, and Lake Superior Sanitary District. Students learned about conservation and the importance of managing waste in order to preserve water quality. Completed workshops included; Paddling Lake Andrew & Learning About AIS, Southern Prairies and Help Our Waters. Water quality experts conducted water quality training to over 100 students.

The regional YES! Water Stewardship Awards went to **Royalton High School** and **Carlton High School**. We held our first YES! State Awards virtually this spring. **Carlton High School** was awarded the 2020 YES! State Water Stewardship award for their exemplary work to protect and preserve water quality. They replaced all the shower heads in their locker room with low flow units, reducing water consumption from 5 to 1.5 gallons per minute!

**Project Status as of January 31, 2021:** (submitted February 26, 2021)

The world has changed dramatically this past year. This we all know. Our program has had to pivot and adapt to these changes by providing our programming virtually. During the 6 months of this report we managed to retain 13 of our teams, shift our Fall Summit to a virtual platform and create new learning opportunities for our YES! students. YES! hosted our 2020 Fall Summit on Climate Change in MN, created a Climate Change Speaker Series featuring 3 regional experts on effects on our flooding, drinking water and changing ecosystem, and provided support via zoom to students and YES! coaches to over 150 students in Minnesota.

YES! students are planning projects to protect and preserve water and other natural resources such as prairie restoration, lakeshore and river clean-ups, paddling events to survey local waterways for invasive aquatic

species, installing water and energy saving devices in their home, restoring local soil by making seed bombs, launching a composting program, stenciling local drains to educate others about clean drains, and more.

Plans are moving ahead to recognize the good work of the students through our virtual spring competition to be held on May 5. Exemplary work to protect Minnesota's water will be recognized with the Water Steward award.

### **Final Update July 31, 2021**

Our project goal was to engage Minnesota's youth in taking on the challenge to improve our state's water ways. We accomplished this goal by:

- Supporting 54 youth-led YES! teams, with over 800 students, in 126 Minnesota communities
- Completing 81 new student-driven water quality and prairie/habitat restoration projects
- Providing 3 Fall Summit events and 27 regional workshops
- Leveraging the expertise and kindness of 6,564 volunteer hours including 3,125 hours of YES! student volunteer hours and \$75,000 in community funds
- Awarding the Water Quality Stewardship award in 2019 and 2020

Our aim was to help students to better understand the interconnectedness of their daily actions and water quality. We accomplished this through leveraging the expertise of 30 water quality experts who educated and trained our students about local water quality challenges, techniques to improve and conserve water quality and then assisted them in doing related student-driven projects.

YES! student-driven projects benefited Minnesota communities by improving waterways, cleaning up shorelines, restoring native prairies and establishing new native plantings and habitats. Other projects included Aquatic Invasive Species (AIS) monitoring, assessing drinking water, installing hydration stations, storm drain stenciling (Adopt-a-Drain), water usage tracking and water-related events and peer education.

As one YES! student from Minnewaska said, "I enjoy YES! because of the positive interactions-people taking time out of their day to teach you things. It's something for yourself and it's something to do for your community." Another student from Carlton stated, "It feels really rewarding to know that we are actually making a difference!" Resource expert Phil Votruba commented, "You guys serve as an inspiration for youth across the state and across the country!"

A Sleepy Eye Student remarked, "As a part of the YES! team I got to participate in River Watch which consists of monitoring Minnesota's rivers and helping to keep them safe. I was able to learn more about what makes the rivers healthy or unhealthy and was able to help in the monitoring process."

### **III. PROJECT ACTIVITIES AND OUTCOMES:**

#### **ACTIVITY 1: Recruit, Educate and Provide Hands-on Training for up to 20 YES! Teams on Water Quality Challenges in Minnesota**

**Description:** YES! Coordinators recruit new YES! teams and confirm participation of existing teams to complete water quality projects. By partnering with local water quality experts to put on a Fall Summit and up to 2 workshops per region, YES! students will receive training in aquatic invasive species (AIS) testing and reporting, Adopt-A-Drain, citizen science, water stewardship, shoreline and buffer restoration and conservation best practices. Training will include hands-on identification of aquatic invasive species, how to correctly use water quality measurements such as a Secchi disk, how to accurately record water temperature, and how to identify what watershed they are located in. Students will then better understand water quality challenges in their local community and learn how they can be part of the solution. After training is completed, students will decide on one or more water quality projects to complete in their community. Using the YES! Metric Tracking Tool, specific

metrics will be developed by coordinators for each water quality project. Students will educate community members about water quality issues in their area to further the awareness.

YES! Coordinators organize annual Fall Summits and more than 10 tours and workshops per year which are specific to team project goals.

(1) Annual Summit Event: Teams gather for orientation, networking, education, goal-setting, and project planning. The event has been held at Saint John’s University, Southwest Minnesota State University, Gustavus Adolphus College, Prairie Woods ELC & Redwood Falls.

(2) Annual Workshops and Tours: YES! Coordinators organize more than 10 tours and workshops per year, specific to team project goals. Topics have included: composting, recycling, renewable energy, lunch room waste reduction, energy efficiency strategies for schools and communities, visits to solar and wind farms, supermileage vehicle design, and local food initiatives. Each team participates in 1 or 2 workshops or tours per year. Workshops are typically held at Prairie Woods ELC, College of St. Benedict/St. John’s University, schools, community centers or regional businesses and organizations. Many organizations have participated in the past including: power cooperatives, county waste facility managers, Clean Energy Resource Teams (CERTs), University of MN/Extension educators, renewable energy businesses such as Blattner Energy Inc. and Silicon Energy of Mount Iron. For this project, YES! teams will partner with local water experts from local watershed districts, University of Minnesota, AIS County Taskforces, Sea Grant and others.

(3) Annual Spring Celebration and Judging: public recognition of team project outcomes and prize awards (prizes from local foundations such as SWIF & Initiative Foundation). The statewide competition will publicly recognize an outstanding YES! team that shows exemplary work in water mitigation and improvement.

The project impact will be evaluated by the number of students as well as community members and volunteers involved in each project. YES! will add a question to our existing YES! Graduate Exit survey to measure interest in conservation careers.

**ENRTF BUDGET:           \$72,060**  
**Amount spent:           \$72,060**  
**Remaining balance:     \$0**

<b>Outcome</b>	<b>Completion Date</b>
1. <b>Recruit</b> up to 20 existing and new YES! teams in over 30 communities to participate in citizen science, AIS monitoring and other water quality related project topics	Nov. 2018, 2019
2. <b>Educate</b> over 200 youth by connecting them to their local watershed experts (DNR, SWCD, MPCA, University of MN, lake associations) to learn about the challenges to their community’s specific watershed	May 2019, 2020
3. <b>Provide hands-on training</b> to over 20 YES! teams through customized water quality workshops on AIS monitoring, Secchi disk reading techniques, buffer restoration and water stewardship best practices	Oct. 2018, 2019

**First Update January 31, 2019**

**Outcome 1 – Recruit:** YES! has recruited and retained 22 teams in over 30 communities for the 2018-19 season. Here are the details per region:

REGION	PARTNER Organization	SCHOOLS
<b>Northeast</b> 3 teams	Laurentian Environmental Center Britt, MN	<ul style="list-style-type: none"> <li>• Carlton High School</li> <li>• Northern Lights Community School (Warba)</li> <li>• Wrenshall High School</li> </ul>
<b>Northwest - Central</b> 4 teams	Prairie Woods Environmental Learning Center, Spicer, MN	<ul style="list-style-type: none"> <li>• Discovery Woods Montessori (Brainerd)</li> <li>• Moorhead – Youth Educational Services (ALC)</li> <li>• Parkers Prairie High School</li> <li>• Royalton High School</li> </ul>
<b>West-central</b> 8 teams	Prairie Woods Environmental Learning Center Spicer, MN	<ul style="list-style-type: none"> <li>• DREAM Academy (Willmar)</li> <li>• Glencoe-Silver Lake High School</li> <li>• Lac qui Parle Valley High School</li> <li>• New London-Spicer High School</li> <li>• New London-Spicer Middle School</li> <li>• ROCORI High School (Cold Spring, Richmond)</li> <li>• Sartell-St. Stephen Middle School</li> <li>• Yellow Medicine East High School</li> </ul>
<b>Southern</b> • 5 teams	Ney Nature Center Henderson, MN	<ul style="list-style-type: none"> <li>• Mankato West High School</li> <li>• New Prague ALC</li> <li>• Sleepy Eye High School,</li> <li>• Springfield High School</li> <li>• Westbrook - Walnut Grove High School</li> </ul>
<b>Metro</b> • 2 teams	Prairie Woods Environmental Learning Center Spicer, MN	<ul style="list-style-type: none"> <li>• Forest Lake High School</li> <li>• Minnetonka High School</li> </ul>

**Outcome 2 - Educate:** YES! kicked off the year with the Fall Summit at Prairie Woods Environmental Learning Center for the west-central, northwest-central, metro, and southern teams. Northeast teams met at Laurentian Environmental Center to kick-off their YES! season. Over 150 students and coaches gathered to learn about water quality and conservation best practices along with other relevant topics such as energy conservation, climate change, and renewable energy.

**Article on 2018 YES! Fall Summit by Ali Dahmes, West-central YES! Coordinator**

On October 3<sup>rd</sup> 2018, YES! teams from around the west, central, and southern regions of Minnesota came together for the 2018 YES! Fall Summit at Prairie Woods ELC. About 130 students and coaches were engaged in learning about



projects they could potentially do at their school around the environment, sustainability, and water quality. The student sessions include the Eco Project Sharing session, Water Quality session, and the Flying Squirrel team challenge. The Eco Project Sharing Session was to give students the opportunity to talk to experts in the fields of local foods, land restoration, energy efficiency, renewable energy, and climate change and to think of projects they want to implement at their school around these topics.



The 5 speakers that were present were Kira Liu from Climate Generation, Ben Larson from MN Youth Garden, Rick Reimer from Kandiyohi County Soil and Water Conservation District, Dan Tepfer from Kandiyohi Power Cooperative, and Tom McDougall (retired architect and now YES! metro Coordinator). Students had the option to talk about past projects that have been done at their school to give the other schools some insight to what teams are doing.

On October 3<sup>rd</sup> 2018, YES! teams from around the west, central, and southern regions of Minnesota came together for the 2018 YES! Fall Summit at Prairie Woods ELC. About 130 students and coaches were engaged in learning about projects they could potentially do at their school around the environment, sustainability, and



water quality. The student sessions include the Eco Project Sharing session, Water Quality session, and the Flying Squirrel team challenge. The Eco Project Sharing Session was to give students the opportunity to talk to experts in the fields of local foods, land restoration, energy efficiency, renewable energy, and climate change and to think of projects they want to implement at their school around these topics. The 5 speakers that were present were Kira Liu from Climate Generation, Ben Larson from MN Youth Garden, Rick Reimer from Kandiyohi County Soil and Water Conservation District, Dan Tepfer from Kandiyohi Power

Cooperative, and Tom McDougall (retired architect and now YES! metro Coordinator). Students had the option to talk about past projects that have been done at their school to give the other schools some insight to what teams are doing. After students shared, students spoke one on one with the presenters about their employment responsibilities, how the experts can help them at their school, and what projects around those fields are possible. One speaker said "It's great to see the students run off with so many questions and ideas of what they want to do at their school." Students and coaches alike learned about so many great things that they could accomplish in their community.

The water quality session was broken into three rotations, each with a unique take on water in our state, country, and world. Jon Morales (pictured at right) with Middle Fork Crow River Watershed District spoke with the students about why water quality matters and why it is important for each team to complete a water project this year. He touched on projects that have been completed in the past and then allowed students to brainstorm what projects they could do in their community that would have a positive impact on local water. He also demonstrated some of the equipment students may use while doing a water quality project (secchi disk/tube, thermometer, and others) and helped them figure out who in their community they would connect with to help them with a project involving local water (like a local watershed). Tina Wolbers with the Department of Natural Resources spoke with students about aquatic invasive species (AIS). She helped them understand what AIS is, what their impact on the environment is, and what the DNR is trying to do to rid of them. Students participated in an activity that taught them how to promote the adoption of sustainable behaviors, as it related to AIS as well as all other environmental aspects. Tina mentioned how “this is a very important topic since that is how problems will change but unfortunately it often gets overlooked and she is excited that young people are learning to do it.” Garry Bennett, an area hydrologist with the Department of Natural Resources, and his assistant Krista, played the Watershed Game with students. This game is an interactive tool that helped students and coaches understand the connection between land use and water quality. Participants learned how a variety of land uses impact water and natural resources, increased their knowledge of best management practices (BMPs), and learned how their choices could prevent adverse impacts.

A student favorite of the day was the Flying Squirrel. It was a chance for students to enjoy the outdoors, have fun with fellow YES! students, and challenge themselves in ways they probably never have before. This is a 40 foot high rope challenge where a team of students belay a “squirrel” into the air. While flying through the tree tops suspended by a rope, they learned about what it really takes to work as a team, trying your best, and that not all people are facing the same challenge!

### **Article on Northeast 2018 Fall Summit by Sam Horner, NE YES! Coordinator**

On October 1st, the Arrowhead region of Minnesota had their Fifth Annual Youth Eco Solutions! Fall Summit at the Laurentian Environmental Center. Of the three teams in the region, only one was able to make it to the event. The team from Carlton, MN may have been the only one, but they brought some students that were ready to find new solutions to problems in their school. While we only had one team come to the event, we had some great conversations and sparked new ideas for different projects that they were interested in for this upcoming year. Our day was filled with three speakers that each gave us some wonderful information and gave the students some inspiration for the new year.

To begin the morning off, Diana Siebels from Waste Management said a few words to the students. Diana has been a state judge for the YES! competition and she announced that Waste Management was partnering with YES! this year for the tune of \$5,000 dollars. We are very thankful for Diana and all the support we have received from Waste Management. She told the students no matter what project they will work on this year, to make sure they have fun and do their best work. Then we had Emily Nelson from Northern St. Louis County Soil and Water Conservation District (NSLCSWCD) present on AIS or better known as Aquatic Invasive Species. The students learned what different types of AIS were present in northern MN lakes and what they looked like. They also learned why they were a threat to all of lakes here in Minnesota. After our AIS talk, we moved on down to the lake to try out the equipment that Emily brought with her. Emily brought Secchi Disks, Van Dorn Water Samplers, and throw rake head tools. These tools were used to locate AIS, or to test the quality or purity of our Arrowhead Lake. The Laurentian Environmental Center lent some equipment to help test different aspects of the lake. There were tools to see the levels of Phosphates, Nitrates, pH, and Dissolved Oxygen levels.

In conclusion, after a great day of learning more about our environment and our world, the students from Carlton left the YES! Fall Summit more energized than ever. When the team found out that they were the only team coming today, one of the students said the following: “I guess we will have to save the world all by ourselves.”

**Outcome 3 - hands-on training:** Currently YES! staff are organizing regional workshops on a variety of topics from water quality testing and AIS monitoring and reporting to native prairie and shoreline restoration. All teams are assessing the quality of the water bodies in their region, working with local experts to assist with project planning.

In addition, bi-weekly updates go out to the teams with regional, relevant and timely information on water quality, climate change and sustainable best practice tips and information.

**Second Update July 31, 2019**

**Outcome 1 – Recruit:** YES! has recruited and retained 22 teams in over 30 communities for the 2018-19 season. Here are the details per region:

REGION	PARTNER Organization	SCHOOLS
<b>Northeast</b> 3 teams	Laurentian Environmental Center Britt, MN	<ul style="list-style-type: none"> <li>• Carlton High School</li> <li>• Northern Lights Community School (Warba)</li> <li>• Wrenshall High School</li> </ul>
<b>Northwest - Central</b> 4 teams	Prairie Woods Environmental Learning Center, Spicer, MN	<ul style="list-style-type: none"> <li>• Discovery Woods Montessori (Brainerd)</li> <li>• Moorhead – Youth Educational Services (ALC)</li> <li>• Parkers Prairie High School</li> <li>• Royalton High School</li> </ul>
<b>West-central</b> 8 teams	Prairie Woods Environmental Learning Center Spicer, MN	<ul style="list-style-type: none"> <li>• DREAM Academy (Willmar)</li> <li>• Glencoe-Silver Lake High School</li> <li>• Lac qui Parle Valley High School</li> <li>• New London-Spicer High School</li> <li>• New London-Spicer Middle School</li> <li>• ROCORI High School (Cold Spring, Richmond)</li> <li>• Sartell-St. Stephen Middle School</li> <li>• Yellow Medicine East High School</li> </ul>
<b>Southern</b> • 5 teams	Ney Nature Center Henderson, MN	<ul style="list-style-type: none"> <li>• Mankato West High School</li> <li>• New Prague ALC</li> <li>• Sleepy Eye High School,</li> <li>• Springfield High School</li> <li>• Westbrook - Walnut Grove High School</li> </ul>
<b>Metro</b> • 2 teams	Prairie Woods Environmental Learning Center Spicer, MN	<ul style="list-style-type: none"> <li>• Forest Lake High School</li> <li>• Minnetonka High School</li> </ul>

**Outcome 2** - Educate over 200 youth by connecting them to their local watershed experts (DNR, SWCD, MPCA, University of MN, lake associations) to learn about the challenges to their community’s specific watershed.

During the timeframe of this report (January 1 to June 30, 2019) 27 resource experts connected with YES! students to learn about challenges in their community's waterways as outlined below.

**West Central:** YES! held a workshop at Prairie Woods ELC called Plant Your Roots where students connected with Ryan Peterson from the Soil and Water Conservation District. Ryan spoke to students about urban storm water and rain gardens and how vegetation helps hold soil in place to prevent erosion and runoff. Beth Markhart from Prairie Restorations Inc. educated students on the varieties of prairie plants and their different characteristics. Christopher Lundeen from the North Fork Crow River Watershed District was also there to share past YES! projects with the students that involved fixing water issues such as erosion, runoff, and flooding. After learning all about native plants, water and soil and the relationships they share, the students made seed bombs which are made from soil, water, clay, and native grass seed to plant at their school or at home. Students took what they learned and sat down alongside the experts to plan their rain garden projects and pick out what type of plants would be best suited for the project and area.

Over 31 YES! students and coaches attended the Water is Life YES! workshop at St. John's University where Phil Votruba, Kara Fitzpatrick, and Andy Frank from the Minnesota Pollution Control Agency (MPCA) shared their expertise on the Mississippi River and talked about Minnesota's water quality strengths and challenges. Phil Votruba gave an overview of the Mississippi River watershed and talked about the MPCA's Volunteer Water Monitoring opportunity. Kara Fitzpatrick shared her experiences working with river monitoring, surveying, sampling for macroinvertebrates, and how they can determine the health of a water body. Andy Frank discussed his work with fish for the MPCA, showing the students how electrofishing works and what the goals are to determine the number of species in a river or stream. Amanda Guertin from the Benton County Soil and Water Conservation District shared her expertise on the Little Rock Lake Drawdown, sources of pollution, and how to prevent pollution, sediment, and debris from getting into our waterways. The students brought water samples from their home or school to test for nitrates. Adam Hjelm from the Sauk River Watershed District shared his expertise on Aquatic Invasive Species (AIS) and the Sauk River Watershed. He explained the various types of AIS, how they got here, and how to prevent the spread. He then conducted an AIS transmission lab with the students. This workshop allowed students to connect with experts and gain information on water quality to position them for success as they excel in team-based projects this school year.

**Northeast Region:** There were multiple times that the teams interacted with local water experts in the Northeast region of Minnesota. One instance was with the Northern Lights Community School. One of their projects was to raise and release Rainbow Trout into local water ways. The team raised the trout from fingerlings and up until they were ready to release. Before they released the fish, they worked with their local DNR Fisheries Department to make sure the fish were able to be released without any repercussions. They were able to release 120 Rainbow Trout into Tioga Pit Lake. YES! students worked closely with DNR Fisheries Advisors James Emery and David Weitzel.

Another instance of working with local water experts, was the Spring Judging Event. Emily Nelson of the Northern St. Louis County Soil and Water Conservation District was able to interact with the students about how their projects went in the last year. She was able to talk to them about their water projects and to give them advice on how to move forward with different projects as well.

During this timeframe, we were contacted by Megan Weber, Extension Educator at the Minnesota Aquatic Invasive Species Research Center, about the Starry Trek event that would be a great partnership for YES!. They talked about how we could bring students to several different lakes to see if the lakes were infested with Starry Stonewort. The webinar was very informative, and it eventually led us to participating in the event.

**Southern Region** YES! Coordinator Sophie Bishop connected YES! students in southern Minnesota with Mike Schultz – Manager at the Le Sueur County Soil & Water Conservation District, Karl Schmidtke – Farm Bill Technician at the Le Sueur County Soil & Water Conservation District, Jeremy Buckentin – District Technician at the Sibley County Soil & Water Conservation District and Jack Bushman – Conservation Technician at the Sibley

County Soil & Water Conservation District. These experts met with students and emphasized how to help stop pollution before it starts and how to clean it up once it has been introduced to the water by adding pollutants (bottles with different color liquids) and solutions to a water pollution table. Students also learned about aquatic invasive species (AIS) and made their own seed bombs. Mike took the students on a hike through the prairie to learn how the prairie helps water and about the ecosystem around a pond. Holly Kalbus – Environmental Resources Specialist at the Le Center Environmental Service was also contacted for additional resources and possible local projects in the Le Center area.

YES! students had the unique opportunity to hear David Montgomery – Professor of geomorphology at the University of Washington speak at a special event called “Healthy Soils=Healthy Lives.” This event was hosted by Gustavus Adolphus College with YES! Coordinator Sophie Bishop assisting in gathering students and connecting YES! students with college students in the Environmental Club at Gustavus Adolphus College.

**Northwest/Central:** Students from the Parkers Prairie YES! team worked with Robin Trott, University of Minnesota Extension Educator to design a native garden to filter water and deflect rainwater away from the school building. Robin introduced the students to the benefits of native plants for improving local water quality, helped select the best type of plants and facilitated the designing and site selection for the garden. Students worked with the art instructor and art students to plant the garden. Art classes will also use the garden for projects. YES! Program Director contacted Adam Hjelm from the Sauk River Watershed District about conducting water quality testing on Lake Adley with the students in the fall.

Students from Discovery Woods Montessori Community School in Brainerd spent a full day with Coralee Fox, University of Minnesota Master Gardener. Coralee shared her passion and expertise regarding the importance of native plants to impact water quality in the Brainerd area. Coralee orchestrated a hands-on project where students worked in teams of 2 to design a native garden, including site and plant selection, and specifically where the plants would be planted to maximize their benefits. In the spring, the students planted the garden in front of the school and plan to increase its size next year.

Dr. Lewis Struthers, University of Minnesota Master Gardener and retired physician & beekeeper presented to the students about beekeeping and native plants including pollinators. Dr. Struthers stressed the importance of keeping our bee population robust for the overall health of our land and water.

The Minnetonka Vantage YES! Team attended two aquaponics workshop/ field trips in February of 2019. The first was to the Gandhi Mahal, an Indian restaurant in South Minneapolis, that has an aquaponics garden in the basement, where they have been growing some of the food for their dishes for several years. The second visit was to the Spark Y Urban Agriculture lab in Northeast Minneapolis, where the students meet with Caitlin Barnhart, Urban Farm Manager and Education Facilitator.

Ruel Rahman, owner of the Gandhi Mahal, provided the students with a tour of the aquaponics system, where they produce Malabar spinach, hot peppers, a variety of salad greens, curry leaf, and large tilapia fish.

Caitlin at Spark Y demonstrated how their aquaponics large grow tower operates with a large fish tank at the bottom, where water is pumped to the top grow tray that is then angled to allow gravity to drain water to the next grow tray below. The students learned how many fish would be required to provide the right amount of nutrients for the plants, how fast the plants grow, and how many watering cycles the plants need per day.

### **Outcome 3 - hands-on training:**

YES! Staff organized 9 winter workshops providing opportunities for experts to engage students in hands-on activities related to water quality and conservation this past season. The water-related workshops per region include:

## **West Central:**

**March 5: Plant Your Roots** - This workshop was held at Prairie Woods Environmental Learning Center in Spicer, Minnesota. Local experts from the Soil and Water Conservation District, Prairie Restorations, and the Crow River Watershed District engaged students in the importance of soil health, water quality issues in the area and they created seed bombs to plant at home. This workshop allowed students to connect with local experts to gain information on water quality, erosion, urban storm water, rain gardens, and prairie restoration. Read [here](#) for full story.

**March 21: Water is Life** - This workshop was held at Saint John's University with local water quality experts from the Sauk River Watershed District and the local Soil and Water Conservation District. The workshop allowed students to connect with these experts to gain information on water quality issues including aquatic invasive species, river monitoring, macroinvertebrates surveying, fisheries management, storm water management and more. Read [here](#) for full story.

## **Southern:**

**February 13: Pond to Prairie** - YES! teams were invited to come to the Ney Nature Center to learn about water quality and prairie restoration from experts that work at the Sibley County Soil & Water Conservation District, Le Sueur County Soil & Water Conservation District, and the Le Center Environmental Services. They emphasized how we can all help stop pollution before it starts and how to clean it up once it has been introduced to the water. Afterwards, students did a rotation activity in which they learned about aquatic invasive species (AIS), adding pollutions (bottles with different color liquids) and solutions to a water pollution table, and made their own seed bombs. To get the students outside to see these things, we snowshoed to the prairie and Frog Pond. They learned about how prairie helps water and about the ecosystem around a pond. Throughout this whole workshop, students learned about the importance of water quality and management and native prairies. Read [here](#) for full story.

**March 20: Healthy Soil = Healthy Lives:** Healthy soil is the foundation for a healthy life. Students learned this at Gustavus Adolphus College at the Healthy Soil = Healthy Lives winter workshop. The keynote speaker, David Montgomery, a professor of geomorphology at the University of Washington, spoke on how we are changing soil and how changing a few things about our agriculture system can restore it and improve our water quality as well. Then the students split into 3 groups; they toured the thermal and PV solar panels, toured the greenhouse and composting system, and connected soil health and climate change together with the help of Kira Liu from Climate Generation. Students got to see that everything starts with healthy soil and that we can change the ways in which we do things to make our soil work for us. Read [here](#) for full story.

## **Northwest/Central:**

**February 22: Go Native and Help Water Quality** – Rain Gardens & Bees - part 1: Dr. Lewis Struthers is a retired physician who now has turned his attention to soil health, erosion control and raising bees. Dr. Struthers presented to 8 YES! students and 2 teachers at Parkers Prairie High School. Read [here](#) for full story.

**March 5: Rain Gardens, Water Conservation & Climate Chante:** Coralee Fox, University of Minnesota Master Gardener presented to 25 YES! students at the Northland Arboretum in Brainerd on the importance of native plants for soil health and water quality. Coralee's hands-on projects were a hit and were used to design and plant a native garden on the school's site. Jenna Tottz from Climate Generation worked with students to better understand the relevance of water quality to mitigating climate challenges in their region, which is very dependent on water for their local economy. Read [here](#) for the full story.

**March 8: Go Native and Help Water Quality - Native Plants – Part 2:** Robin Trott, University of Minnesota/Extension Educator presented to 7 students and 2 teachers at Parkers Prairie High School on native plants, how to select them for their school site, the benefits of native plants to stop erosion and improve soil health, along with adding beauty to the school grounds. Read [here](#) for full story.

**Metro:**

**December 20: Gandhi Mahi Restaurant** – This workshop focused on using aquaponics to raise local fish. It demonstrated an efficient use of water to grow local food sources. This was led by YES! Metro Coordinator Tom McDougall (retired engineer and president of the Weidt Group, Inc.)

In addition, bi-weekly updates go out to the teams with regional, relevant and timely information on water quality, climate change and sustainable best practice tips and information.

**Third Update January 31, 2020**

**Outcome 1 – Recruit:** YES! has recruited and retained 24 teams in over 35 communities for the 2019-20 season.

Here are the details per region:

REGION	PARTNER Organization	SCHOOLS
<b>Northeast</b> 5 teams	Laurentian Environmental Center Britt, MN	<ul style="list-style-type: none"><li>• Carlton High School</li><li>• Harbor City International School (Duluth)</li><li>• Northern Lights Community School (Warba)</li><li>• Virginia</li><li>• Voyageurs Expeditionary School</li></ul>
<b>Northwest - Central</b> 3 teams	Prairie Woods Environmental Learning Center, Spicer, MN	<ul style="list-style-type: none"><li>• Discovery Woods Montessori (Brainerd)</li><li>• Pelican Rapids High School</li><li>• Royalton High School</li></ul>
<b>West-central</b> 7 teams	Prairie Woods Environmental Learning Center Spicer, MN	<ul style="list-style-type: none"><li>• Lac qui Parle Valley High School</li><li>• Minnewaska Schools</li><li>• New London-Spicer High School</li><li>• New London-Spicer Middle School</li><li>• ROCORI High School (Cold Spring, Richmond)</li><li>• Willmar Middle School</li><li>• Yellow Medicine East High School</li></ul>
<b>Southern</b> 4 teams	Ney Nature Center Henderson, MN	<ul style="list-style-type: none"><li>• Mankato West High School</li><li>• Sleepy Eye High School,</li><li>• Springfield High School</li><li>• Westbrook - Walnut Grove High School</li></ul>
<b>Metro</b> 5 teams	Prairie Woods Environmental Learning Center Spicer, MN	<ul style="list-style-type: none"><li>• Edina High School</li><li>• Hopkins High School</li><li>• Minnetonka High School</li><li>• New World Learner (Chaska)</li><li>• Rockford Middle School</li></ul>

**Outcome 2:** Educate over 200 youth by connecting them to their local watershed experts (DNR, SWCD, MPCA, University of MN, lake associations) to learn about the challenges to their community's specific watershed.

During the time of the report (July 1 to Dec. 31, 2019) 18 water resource experts were connected with YES! students. How local experts and students interfaced is detailed below.

YES! kicked off the year with the Fall Summit at Prairie Woods Environmental Learning Center (PWECL) for the west-central, northwest-central, metro, and southern teams. On October 9<sup>th</sup>, YES! hosted the annual Fall Summit at Prairie Woods Environmental Learning Center in Spicer, MN where over 130 YES! students took part in a water quality session. The session was organized by Templer and taught in a joint effort by Prairie Woods ELC and Sauk River Watershed District staff. The session focused on the importance of water quality and how to determine the health of a body of water, while also teaching students how to paddle a canoe. At the beginning of the session Kory Klebe (Prairie Woods ELC) taught students the basics of canoeing, which many of the students hadn't done before. Kady Krivanek (Sauk River Watershed District) demonstrated how to take a proper water sample and secchi disk reading. After learning the basics, students climbed into canoes to take secchi disk readings and gather water samples from the slough to bring back to shore to test for nitrates, phosphates, pH, and more. The students had a blast learning about the slough's health and learned that testing water is sometimes tricky if you don't follow the exact steps! The students also learned what their local watershed districts do, why they are so important, and how they can help with student-led projects. Read about the 2019 Fall Summit at PWECL [here](#)

Northeast teams met at Laurentian Environmental Center to kick-off their YES! season. Our keynote speaker was Marte Kitson from the Minnesota Sea Grant. She is the Environmental Literacy Extension Educator and she has worked a lot on water education and Aquatic Invasive Species. At our event, Marte brought a variety of tools to help inspect Arrowhead Lake for its health and to see if it was infested with invasive species including the dissecting microscopes. The students were able to use all of the different tools to assess Lake Arrowwood. After working down at the lake, Marte helped us analyze all the data and samples that were captured. She then gave a talk to the students about how the students could start their careers in this field. The students worked with the equipment to collect and identify 20 different species! Read more about this event [here](#).

Between both events, over 180 students and coaches gathered to learn about water quality and conservation best practices along with other relevant topics such as energy conservation, climate change, and renewable energy.

On August 17<sup>th</sup>, West Central YES! Coordinator Taylor Templer promoted and organized the Starry Trek event at Salsbury Beach on Green Lake in Spicer, MN. The goal of the event was to educate the public and get them involved in aquatic invasive species (AIS) identification/surveying, to locate the species and to notify officials to help eradicate them from MN lakes. Templer also attended a Starry Stonewort identification training in Brainerd on August 16<sup>th</sup> to better understand the species in order to properly educate students and the public about it.

Sam Horner, YES! Coordinator in the Northeast also promoted the Starry Trek event to his teams. Due to conflicts and a personal emergency, no students were able to attend on August 17. Sam attended the event and met Bill Grantges and his team of AIS inspectors. They were very informative and had awesome ideas on how to combat invasive species. Sam plans to connect the Northern Lights Community School with the local experts he met during this event.

Currently the West Central YES! Coordinator is planning a prairie workshop that will take place in Marshall, MN and will focus on native prairie plants, the environmental benefits they have, and how they relate to soil conservation and water quality. Also, a water workshop is scheduled that will include all things water quality, focusing on aquatic invasive species, and what students can do to help Minnesota lakes and rivers! This workshop will give students the tools to be successful for the YES! summer kayaking and AIS surveying.

Students from the Royalton YES! team visited Camp Ripley’s Environmental Center. We met in the Martin J. Skoglund Environmental classroom to learn about the 53-acre site that is managed by staff at Camp Ripley. The site includes over 10 miles of shoreline along the Mississippi River and a solar array. Nancy Dietz, DNR Animal Survey Assistant described the diversity of animals and plants that thrive on the site including 565 types of plants, 202 bird species, 41 species of fish, 107 types of aquatic invertebrates, 65 species of butterflies, 51 mammal species, 23 reptiles and amphibians, and 8 mussel species. Wildlife species of interest include the bald eagle, white-tailed deer, black bear, gray wolf, and Blanding’s turtle. Mary Lee, AHATS Environmental Coordinator explained the many sustainable practices they have in place including composting, solar, and using drones to manage and monitor their conservation initiatives. Learn more about this learning opportunity [here](#).

A workshop for the Discovery Woods YES! team is planned for March 4. Students will tour the Crow Wing County Landfill, Recycling and Hazardous Waste Center, and plan a waste-less lunch. Doug Morris (County Coordinator) is scheduled to give the tour and he will discuss the importance of proper recycling and disposal of hazardous waste that does not jeopardize the local aquifers and waterways.

**Outcome 3 - hands-on training:**

Currently YES! staff are organizing regional workshops on a variety of topics from water quality testing and AIS monitoring and reporting to native prairie and shoreline restoration. All teams are assessing the quality of the water bodies in their region and working with local experts to assist with project planning.

The Royalton YES! students’ big take away from their Water Is Life workshop last spring was the need to test local water bodies for nitrates and to gather data and obscure data especially on the tributaries. This inspired them to purchase a water testing kit and to learn how to use it. Teachers taught the students how to test for nitrates on November 22 along the shores of the Platte River. They found very little obscure data and small traces of nitrates. They plan to test the Little Rock, Mississippi and Platte tributaries this spring. They anticipate more evidence of nitrates will be found due to run off. YES! Director Shelli-Kae Foster connected the team with Anthony Donatelle from MPCA offices in Brainerd and he will consult with the students as needed.

During the YES! Fall Summit at Prairie Woods Environmental Learning Center, each attendee was taught the basics of how to paddle a canoe and how to use a seechi disc. Students also collected and analyzed water samples from the slough under the guidance of Kady Krivanek (Sauk River Watershed District). One Hundred – twenty students attended the event from 4 regions; Metro, West Central, Southern and Northwest/Central.

In addition, bi-weekly updates go out to the teams with regional, relevant and timely information on water quality, climate change and sustainable best practice tips and information.

**Fourth Update July 31, 2020 (submitted September 8):**

**Outcome 1 – Recruit:** YES! has recruited and retained 21 teams in over 32 communities for the 2019-20 season.

Here are the details per region:

REGION	PARTNER Organization	SCHOOLS
Northeast  5 teams	Laurentian Environmental Center Britt, MN	<ul style="list-style-type: none"> <li>• Carlton High School</li> <li>• Harbor City International School (Duluth)</li> <li>• Northern Lights Community School (Warba)</li> </ul>

REGION	PARTNER Organization	SCHOOLS
		<ul style="list-style-type: none"> <li>• Virginia</li> <li>• Voyageurs Expeditionary School (Bemidji)</li> </ul>
<b>Northwest - Central</b> 3 teams	Prairie Woods Environmental Learning Center, Spicer, MN	<ul style="list-style-type: none"> <li>• Discovery Woods Montessori (Brainerd)</li> <li>• Pelican Rapids High School</li> <li>• Royalton High School</li> </ul>
<b>West-central</b> 5 teams	Prairie Woods Environmental Learning Center Spicer, MN	<ul style="list-style-type: none"> <li>• Lac qui Parle Valley High School</li> <li>• Minnewaska Schools</li> <li>• New London-Spicer High School</li> <li>• New London-Spicer Middle School</li> <li>• Yellow Medicine East High School</li> </ul>
<b>Southern</b> 4 teams	Ney Nature Center Henderson, MN	<ul style="list-style-type: none"> <li>• Mankato West High School</li> <li>• Sleepy Eye High School,</li> <li>• Springfield High School</li> <li>• Westbrook - Walnut Grove High School</li> </ul>
<b>Metro</b> 4 teams	Prairie Woods Environmental Learning Center Spicer, MN	<ul style="list-style-type: none"> <li>• Edina High School</li> <li>• Hopkins High School</li> <li>• New World Learner (Chaska)</li> <li>• Rockford Middle School</li> </ul>

**Outcome 2:** Educate over 200 youth by connecting them to their local watershed experts (DNR, SWCD, MPCA, University of MN, lake associations) to learn about the challenges to their community’s specific watershed.

During the time of the report (January 1 to August 25, 2020) 8 water resource experts were connected with YES! students. This number is lower than anticipated due to schools closing this spring, but students still connected with many experts prior to schools closing through our workshops as detailed in outcome 3.

**Outcome 3 - hands-on training:**

West Central YES! Coordinator, Taylor Templer took what the students learned from local experts at the Fall Summit and the Help Our Waters workshop and put it to work on Lake Andrew in early July. First students did a survey from shore by throwing a rake from the dock and collecting aquatic plants, they then looked at their ID books to help identify the species they raked in. Students found a variety of native species from the shore survey. Next they went out on the water by kayak and collected and observed the aquatic plants, identifying and discussing as they went. They found a variety of native species as well as a few invasive species including Eurasian watermilfoil. They also found the invasive species Curly-leaf pondweed, which they were concerned about because it wasn’t listed for Lake Andrew, only Zebra mussels and Eurasian watermilfoil were on the list. Read here for more information on the [YES! Students Paddle Their Way Into Summer](#) event.

Taylor planned a prairie workshop in Marshall, MN in early March focusing on native prairie plants, the environmental benefits they have, and how they relate to soil conservation and water quality. Read here for more information on the workshop [“Southern Prairies Workshop.”](#)

Taylor also coordinated a water workshop that included all things water quality, focusing on aquatic invasive species, and what students can do to help Minnesota lakes and rivers! This workshop held in early March gave students the tools to be successful for the YES! summer kayaking and AIS surveying. Read here for more information on the workshop [“Help Our Waters.”](#)

Shelli-Kae Foster, YES! Program Director organized the Workshop and tour of the Crow Wing County Landfill, Recycling and Hazardous Waste Center in February, and the students planned a waste-less lunch. Doug Morris (County Coordinator) told the students that “throwing something in the garbage is just the beginning of the journey.” Doug explained how the management of our waste is crucial to water quality in the region. Read here for more information on the workshop [“How Can We Do Better.”](#)

Sam Horner, NE YES! Coordinator organized a tour of the Lake Superior Sanitary District for Harbor City International students in January. They learned about all the things they do to keep Duluth clean and healthy. The team was able to learn about their Compost and Landfill Site, and their Wastewater Treatment Plant. After learning everything that they do at this facility, the students left with a great respect for everyone at this facility and for what they do to protect our waterways. Read here for more information on the workshop and tour of the [Lake Superior Sanitary District.](#)

Deb Groebner, Southern Coordinator led an educational activity to teach students at Westbrook-Walnut Grove (WWG) in early winter about water quality, invasive species and what they can do to help improve water quality in their region. This was meant to be a 3 part training session however, due to COVID and school closing, they only got to complete the first training. Deb hopes to continue the training sessions in the fall.

In addition, bi-weekly updates go out to the teams with regional, relevant and timely information on water quality, climate change and sustainable best practice tips and information. YES! also adapted its Project Guides and Resources for online learning this spring to assist educators in delivery high quality educational tools to their students.

YES! launched a week-long “Daily Challenge” over Earth Week that included 5 different ways to improve our planet through a daily action. The daily action included the “why” it is important.

**Fifth Update January 31, 2021:** (submitted February 26)

**Outcome 1 – Recruit:** YES! has retained 13 teams in over 20 communities for the 2020-21 season.

Here are the details per region:

REGION	PARTNER Organization	SCHOOLS
Northwest - Central 1 team	Prairie Woods Environmental Learning Center, Spicer, MN	<ul style="list-style-type: none"> <li>Royalton High School</li> </ul>

REGION	PARTNER Organization	SCHOOLS
<b>West-central</b> 6 teams	Prairie Woods Environmental Learning Center Spicer, MN	<ul style="list-style-type: none"> <li>• Lac qui Parle Valley High School</li> <li>• Minnewaska Schools</li> <li>• New London-Spicer High School</li> <li>• New London-Spicer Middle School</li> <li>• Rockford Middle School</li> <li>• Yellow Medicine East High School</li> </ul>
<b>Southern</b> 6 teams	Ney Nature Center Henderson, MN	<ul style="list-style-type: none"> <li>• Carlton High School</li> <li>• Mankato West High School</li> <li>• Sleepy Eye High School,</li> <li>• Springfield High School</li> <li>• Virginia High School</li> <li>• Westbrook - Walnut Grove High School</li> </ul>

**Outcome 2:** Educate over 200 youth by connecting them to their local watershed experts (DNR, SWCD, MPCA, University of MN, lake associations) to learn about the challenges to their community’s specific watershed.

During the time of this report (July 1, 2020 to February 26, 2021) we hosted our 2020 YES! Fall Summit virtually, launched our YES! Virtual Climate Change Speakers series, and offered a new opportunity for our students to engage with local businesses to learn more about environmentally focused career opportunities. Through these offerings YES! has directly engaged and educated over 150 youth in Minnesota.

Here are the highlights:

Over 150 students have participated in our virtual events where each presenter has provided information on their “green” career path, provided valuable information related to preserving and protecting our water and other natural resources in Minnesota.

- [YES! 2020 Virtual Fall Summit](#); Our theme was “Climate Change in Minnesota.” Dr. Heidi Root, UofM climate scientist engaged students during her presentation titled “Climate Change in MN: How we know, what we know and what you can do” with personal stories and pictures from her expeditions to Greenland and Antarctica. Luke Grenier from MN Department of Employment and Economic Development focused on environmental career choices during his session called “Put Your Passion and Talents to Work.” Jacob Selseth and Peter Lindstrom from Clean Energy Resource Teams (CERTs) provided information on energy use, production and ways to reduce our impact.
- [“How to Make Sense of Minnesota’s Changing Climate”](#) with Dr. Kenny Blumenfeld, climatologist from the Department of Natural Resources. Kenny emphasized that MN is getting warmer and wetter each year.
- [“Investigating Climate Change Using Ojibwe Traditional Ecological Knowledge and Scientific Ecological Knowledge”](#) with Catherine “Cat” Techtmann, Environmental Outreach Specialist with the University of Wisconsin-Extension. Cat demonstrated a new way to think about

climate change that integrates Ojibwe traditional ecological knowledge, scientific ecological knowledge, and place-based evidence one can observe.

- [“Climate Change: Effects on Flooding & Your Drinking Water”](#) with Erik Cedarleaf Dahl, Planning Director with the Environmental Quality Board (EQB) featured data and findings from the 2020 State Water Plan.
- “Step into a Green Job Experience” workshop to be held on March 3 in partnership with Central MN Jobs and Training Service and and SWMN Public Industries Council.

**Outcome 3 - hands-on training**

[Lac qui Parle Valley YES! Team Enjoys October Paddle](#) YES! West Central Coordinator and YES! Program Director Shelli-Kae Foster hosted a paddling event for students on the Lac qui Parle Valley YES! team on October 10. The students and their coach, Rachel Rigenhagen kayaked Signalness (Mountain) Lake. Students looked for evidence of the aquatic invasive species Zebra Mussels, which is known to be in the lake. Students learned what zebra mussels do to a lake’s ecosystem.

**Home Energy & Water Saving Kit.** YES! has partnered with Great River Energy, Kandiyohi Power Cooperative, Runestone Electric Association and Clean Energy Resource Teams (CERTs) to put together a Home Energy & Water Saving Kit. The contents include LED (9), aerator, flow-tester, and water temperature testing thermometer. YES! students from New London-Spicer and Minnewaska schools will be given the Kit along with a checklist of energy and water saving strategies for their home. A workshop is planned to explain “how-to and why” installing these items are important. This project is planned to launch the week of March 8, 2021.

**YES! week-long “Daily Challenge.”** We are planning this Earth Week activity again this year. It will include 5 different ways to improve our planet through a daily action. The daily action will include the “why” it is important.

YES! staff are planning hands-on training this spring, if possible. Some schools allow students to travel and some do not. Some schools allow outside visitors/experts others do not. We are adapting as we go.

**Final Update July 31, 2021: Activity 1**

**Outcome 1 – Recruit:** YES! supported 31 youth-led YES! teams in over 60 communities during this year project.

Here is a summary of teams per region for the 3-year project:

REGION	PARTNER Organization	SCHOOLS
Northwest - Central 5 teams	Prairie Woods Environmental Learning Center, Spicer, MN	<ul style="list-style-type: none"> <li>• Discovery Woods Montessori - Brainerd</li> <li>• Moorhead – Youth Educational Services (ALC)</li> <li>• Parkers Prairie High School</li> <li>• Pelican Rapids High School</li> <li>• Royalton High School</li> </ul>

REGION	PARTNER Organization	SCHOOLS
<b>West Central</b> 9 teams	Prairie Woods Environmental Learning Center Spicer, MN	<ul style="list-style-type: none"> <li>• DREAM Academy – Willmar</li> <li>• Glencoe-Silver Lake High School</li> <li>• Lac qui Parle Valley High School</li> <li>• Minnewaska Schools</li> <li>• New London-Spicer High School</li> <li>• New London-Spicer Middle School</li> <li>• ROCORI High School (Richmond and Cold Spring)</li> <li>• Sartell-St. Stephen Middle School</li> <li>• Yellow Medicine East High School</li> </ul>
<b>Southern</b> 5 teams	Ney Nature Center Henderson, MN	<ul style="list-style-type: none"> <li>• Mankato West High School</li> <li>• New Prague (ALC)</li> <li>• Sleepy Eye High School,</li> <li>• Springfield High School</li> <li>• Westbrook - Walnut Grove High School</li> </ul>
<b>Northeast</b> 6 teams	Laurentian Environmental Center Britt, MN	<ul style="list-style-type: none"> <li>• Carlton High School</li> <li>• Harbor City International – Duluth</li> <li>• Northern Lights Community School - Warba</li> <li>• Virginia High School</li> <li>• Voyageurs Expeditionary School - Bemidji</li> <li>• Wrenshall High School</li> </ul>
<b>Metro</b> 6 teams	Prairie Woods Environmental Learning Center	<ul style="list-style-type: none"> <li>• Edina High School</li> <li>• Forest Lake High School</li> <li>• Hopkins High School</li> <li>• Minnetonka High School</li> <li>• Rockford Middle School</li> <li>• New World Learner - Chaska</li> </ul>

**Outcome 2:** During the first 2 years of this project we produced and delivered 16 in person workshops along with our annual Fall Summit at Prairie Woods Environmental Learning Center each year. During our final year, 2020-21 we produced and delivered 10 virtual workshops and we held our annual Fall Summit virtually for a total of 29 workshops and events. These opportunities educated and directly impacted over 800 students over the past 3 years. In addition, each presenter provided information on their “green” career path, provided valuable information related to preserving and protecting our water and other natural resources in Minnesota.

YES! connected students with over 30 water resource experts. This number is lower than anticipated at the beginning of the grant due to the pandemic, which did not allow for in-person training and educational events. However, we still were able to bring unique experiences with regional experts to our students virtually. In fact, more students were able to participate from various parts of the state because we were virtual. Moving forward we plan to have a hybrid model for workshops where we still have some in-person and some virtual in order to reach as many students as possible.

### **Outcome 3 - hands-on training**

Since our last Status Update we reached over 100 students during our [“Step into a Green Job Experience”](#) workshop on March 3 This was produced in partnership with Central MN Jobs and Training Service and and SWMN Public Industries Council.

Over the past 3 years this project provided hands-on training through our workshops and events to over 800 students. Here are some highlights:

Taylor Templer, West Central Coordinator planned a water workshop that included all things water quality, focusing on aquatic invasive species, and what students can do to help Minnesota lakes and rivers! This workshop held in early March gave students the tools to be successful for the YES! summer kayaking and AIS surveying. Read here for more information on the workshop [“Help Our Waters.”](#)

Deb Groebner, Southern Coordinator led an educational activity to teach students at Westbrook-Walnut Grove (WWG) in early winter about water quality, invasive species and what they can do to help improve water quality in their region. This was meant to be a 3-part training session however, due to COVID and school closing, they only got to complete the first training.

[Lac qui Parle Valley YES! Team Enjoys October Paddle](#) YES! West Central Coordinator and YES! Program Director Shelli-Kae Foster hosted a paddling event for students on the Lac qui Parle Valley YES! team. The students and their coach, Rachel Rigenhagen kayaked Signalness (Mountain) Lake. Students looked for evidence of the aquatic invasive species Zebra Mussels, which is known to be in the lake. Students learned what zebra mussels do to a lake’s ecosystem.

**YES! week-long “Daily Challenge.”** YES! provided daily challenges for each day during Earth Week in 2020 and 2021. This opportunity was offered in order to allow students to participate whether they were distance learning or in-person. Earth Week activit

### **ACTIVITY 2: 20 YES! Teams Complete Over 30 New Water Quality Improvement Projects.**

**Description:** YES! coordinators work with local experts to support YES! teams to organize community events, supply watercrafts for on the water activities, and overall project support and guidance. YES! teams assess needs in their communities and schools, evaluate and help find local resources to meet these needs, and create an action plan to implement their projects with the support of their adult coach, YES! staff, and local water experts. Projects topics may include: Adopt-a-Drain, AIS testing, citizen science, Secchi disk readings, shoreline restoration, clean up and educational events, visits to water treatment facilities, and other projects as determined through a community needs assessment.

YES! staff provide ongoing guidance, resources, information, networking and other assistance as teams carry out action plans. YES! provides support and information to coaches/adult advisors and team leaders (youth) and assists with identifying organizations and businesses that share an interest in water quality and conservation. The YES! Data and Communications team maintains the YES! website, blog, social media, and tracks key data and creates and disseminates the YES! e-newsletter. Coordinators use in-person meetings and frequent e-mail contact to help teams stay informed with each other to share information on best practices and lessons learned. In addition, YES! conducts a pre-assessment prior to the Fall Summit and a post-assessment at the end of the school year. This data along with the Final Report and Power Point presentation used for spring judging assist in evaluating the effectiveness of the program in raising awareness of water quality issues and solutions.

ENRTF funds provide support for YES! staff time, program-related school district/organization expenses, and project seed funds. The school district/organization expense reimbursement allowance is intended to offset

expenses incurred by school districts and/or community organizations that sponsor a YES! team. This support allows teams to participate in YES! in a cost-effective manner. Eligible reimbursable expenses may include: 1. Reimbursement to offset the cost of hiring substitute teachers in order to allow YES! coaches/adult advisors to attend YES! events during the school day, and 2. Transportation expenses for buses or vans for students and coaches/adult advisors to travel to YES! events. The total allowance will be offered equally among participating teams.

**ENRTF BUDGET:**           \$ 140,940  
**Amount Spent:**           \$ 140,500  
**Remaining balance:**     \$     440

<b>Outcome</b>	<b>Completion Date</b>
1. Over 20 YES! teams assess, identify, prioritize, and select local water quality projects	May 2019 & 2020
2. Over 20 YES! teams develop action plans and complete over 30 new water quality related action projects in partnership with their communities <u>and completed at home.</u>	June 2019 & 2020
3. Over 20 YES! teams partner with local watershed experts to implement community awareness and mitigation projects and participate in on-water and shoreline activities to protect and improve local water quality	Oct. 2018 & 2019
4. <u>New</u> Water Quality Stewardship award established and given to the team that demonstrates exemplary work to mitigate water quality challenges each year during the annual judging	June 2019 & 2020
5. Adjust programming to be online accessible and create workshops that can be delivered online to YES! students and coaches, including our YES! spring regional and state competitions	April – June, 2020

**First Activity 2 Update January 31, 2019**

**Outcome 1:** Twenty-two (22) YES! teams across the state have identified local sustainability challenges and needs, formulated S.M.A.R.T. goals and are creating action plans to complete local water quality projects. Projects range from water monitoring for aquatic invasive species, water conservation efforts through restoration of native gardens, planting, and installing of hydration stations, and research into regional water quality challenges.

**Outcome 2:** Twenty-two (22) YES! teams across the state are researching and developing action plans to complete a variety of water quality related action projects in collaboration with their school and community. In our next report we will provide detailed information on completed projects.

**Outcome 3:** YES! team projects and events have provided over 100 volunteer hours this past 6 months to bring their expertise and knowledge to students at the 2 YES! Fall Summit events. Additional volunteer hours are being incurred by our metro YES! Coordinator, who is a volunteer and Cheryl Glaeser, Achieve Results, LLC for an additional 250 hours of volunteer time.

The following events took place with YES! students and their community:

- New London Water Days on July 21 – water education for community
- Lake Ringo on July 25 – YES! students conduct AIS testing, monitoring, and uploading to AquaHunter data base
- River Rally Days in New London at Near Park on September 10th and 11<sup>th</sup> - YES! students and staff educated over 110 4th graders about Aquatic Invasive Species and assisted the Middle Fork Crow River Watershed District and Prairie Woods Environmental Learning Center with water quality testing, water cycle education, and macro-invertebrate sampling.

**Outcome 4:** The first ever Water Quality Stewardship award has been added to our award categories for 2019. Teams will be evaluated on how their exemplary work towards solutions to water quality and conservation challenges. One award be given per region (3 regions).

Here is a list of projects per team in progress for the 2018-19 season:

**Carlton High School**

- Researching local lake restoration project

**Discovery Woods Montessori – Brainerd**

- Planning the annual environmental event for the school and community
- Researching which water bodies are greatest need of clean up and AIS monitoring and testing
- Clean up after local ice fishing contest – volunteer

**DREAM Academy – Willmar**

- Attend water quality training with local watershed district (Middle Fork Crow River)
- Plan to paddle on local water ways this summer to test water quality and provide images to EDDMaps for the DNR

**Forest Lake High School**

- Storm drain pencil project: 6 students stenciled 15 drains at Lakeside Park in Forest Lake. The stencil reads "Dump No Waste: Drains to Lake."
- Pollinator/Rain Garden project
- Environmental movie and educational night on January 18<sup>th</sup>
- Submission of Green Ribbon School application

**Glencoe-Silver Lake High School**

- Conducting water quality assessments of local water bodies and talking with local experts to determine most needed projects.
- Water quality projects will be featured at the Youth MN Convening on April 12

**Lac qui Parle Valley High School**

- Continuing to plant and harvest in their deep winter greenhouse Continuing to plant and harvest in their deep winter green house
- Determining how to capture and store rainwater to water plants even in the winter

**Mankato West High School**

- Collecting water data from the watershed near the Rasmussen woods

**Minnetonka High School - New Team!**

- Designing and constructing early season, low energy and water use green house
- Designing and constructing a small -scale aquaponics station for growing lettuce and basil during the winter

**Moorhead – Youth Educational Services**

- Water quality assessments with local experts to determine greatest need in the Moorhead area

**New London-Spicer Middle School**

- Continuing to plant and harvest in their deep winter green house and look for ways to conserve water throughout the winter season
- Assist High School team with the native plantings and rain garden this spring

**New London-Spicer High School**

- Designing and constructing a rain garden with native plantings near the wetlands by their school in order to help with erosion and run-off issues

**New Prague ALC and High School**

- Installing a hydration station
- Water testing in school and DIY filters for sinks
- Agriscaping design for school and Farmhouse Market
- Hosting a Community Green Day featuring results from water testing and aquaponics system
- Growing food using an aquaponics system with tilapia, sucker fish, and goldfish

- Growing food in a living tower system
- Creating signage for their rain garden and pollinator garden to inform the public on its benefits

#### **Northern Lights Community School**

- Implementing a water hydration station
- Educating their peers about water topics
- Tracking water usage in their schools

#### **Parkers Prairie High School - New Team!**

- Researching water quality improvement projects for local Lake Adly
- Researching and will attend a workshop put on by local Master Gardeners and the UofM/Extension on native plants and their benefits to water quality and the environment

#### **ROCORI High School (Cold Spring/Richmond)**

- Installing its 5<sup>th</sup> hydration station
- Planning to paddle the Sauk River and do water quality testing with Seechi disks

#### **Royalton High School**

- Researching best strategies for a river clean up this spring
- Exploring water quality testing options and connecting with local water quality/conservation experts

#### **Sartell-St. Stephen Middle School**

- Creating peer educational lessons related to water quality and conservation best practices
- Learning about the Little Rock Lake drawdown
- Exploring installing a hydration station

#### **Sleepy Eye High School**

- Creating signage for their prairie restoration project to inform the public of its benefits
- Participating in Minnesota Valley River Watch
- Building 8 bee homes

#### **Springfield High School**

- Continuing to plant and harvest in their deep winter greenhouse where greens get served at lunch

#### **Westbrook-Walnut Grove High School**

- Building a water collection system to collect water run-off from the roof of the bus garage which will trickle water into the school garden
- Writing a newspaper article on their water collection system for the website
- Work in the greenhouse

#### **Wrenshall High School**

- Getting the team started and doing assessment of school and community to identify water related projects that will improve the water quality in the area.

#### **Yellow Medicine East High School**

- Installing another hydration station
- Planting and harvesting in their community garden
- Brainstorming water collection and storage methods for their community orchard

### **Second Update July 31, 2019**

#### **Outcome 1: Over 20 YES! teams assess, identify, prioritize, and select local water quality projects**

Twenty-two (22) YES! teams across the state identified local sustainability challenges and needs, formulated S.M.A.R.T. goals and created action plans that included water quality projects. Projects range from water monitoring for aquatic invasive species, water conservation efforts through restoration of lakeshore and rivers, native gardens, erosion control through native plantings, installing of hydration stations, and research into regional water quality challenges.

**Outcome 2:** *Over 20 YES! teams develop action plans and complete over 30 new water quality related action projects in partnership with their communities*

Twenty-two (22) YES! teams across the state researched and developed action plans to complete a variety of water quality related action projects in collaboration with their school and community.

Below is a list of completed projects per team during the 2018-19 season:

**Carlton High School**

- Researched local lake restoration project
- Put together a poster contest for middle school students regarding recycling, threats to pollinators, and water quality. Winners from each grade received reusable water bottles and their posters were put up around the school
- Influenced teachers in their school to assign a project to students that included researching the importance of water conservation. This included interviewing someone outside of the school about water conservation and asking for additional education on the matter

**Discovery Woods Montessori – Brainerd**

- Exhibited at the Environmental Education Exhibition
- Researched which water bodies are in greatest need of clean up and AIS monitoring and testing
- Designed and planted a native garden on their school site to filter water away from the school
- Made environmentally-related posters for the local Art in the Park event
- Visit their [website](#) to see more!

**DREAM Academy – Willmar**

- Attended water quality training with local watershed district (Middle Fork Crow River)
- Plan to paddle on local water ways this summer to test water quality and provide images to EDDMaps for the DNR
- Researched water quality project for Willmar Lake
- Worked to construct a rain garden on the Minn West Technology campus

**Forest Lake High School**

- Storm drain pencil project: 6 students stenciled 15 drains at Lakeside Park in Forest Lake. The stencil reads "Dump No Waste: Drains to Lake."
- Researched and completed pollinator/rain garden project
- Hosted a free screening of Wall-E to alert local kids and adults to the dangers of ecological crisis
- Planned a public climate convening event via Youth Convening Minnesota
- Received the Minnesota Department of Education nomination for US Green Ribbon School award and submitted application
- Consulted city architect to help formulate a plan to expand their existing pollinator garden and possibly build a rain garden to collect runoff from the school in the future
- Hosted lectures on wastewater engineering from the city architect and from YES! Coordinator Tom McDougall on energy

**Glencoe-Silver Lake High School**

- Conducted water quality assessments of local water bodies and talked with local experts to determine most needed projects.
- Water quality projects were featured at the Youth Minnesota Convening on April 13
- Participated in solar boat regatta

**Lac qui Parle Valley High School**

- Continued to plant and harvest in their deep winter greenhouse
- Researched how to capture and store rain water to water plants even in the winter
- Partnering with Pheasants Forever in restoring 35+ acres of grasslands at their school into native prairie

**Mankato West High School**

- Collected water data from the watershed near the Rasmussen woods

- Focused on monitoring water quality and water data from the local watershed in Rasmussen Woods

#### **Minnetonka High School - New Team!**

- Designing and constructing early season, low energy and water use green house
- Designed and constructed a small -scale aquaponics station for growing lettuce and basil during the winter
- Visit their [website](#) to see more!

#### **Moorhead – Youth Educational Services**

- Water quality assessments with local experts to determine greatest need in the Moorhead area
- Planted the boxes with native plants to attract pollinators and to illustrate how native plants can improve water quality

#### **New London-Spicer Middle School**

- Continued to plant and harvest in their deep winter green house and look for ways to conserve water throughout the winter season
- Assisted High School team with the native plantings and rain garden this spring
- Participated in Aquatic Invasive Species surveying and education
- Taught outdoor science to 1st, 2nd and 3rd graders
- Visit their [website](#) to see more!

#### **New London-Spicer High School**

- Designed and constructed a rain garden with native plantings near the wetlands by their school in order to help with erosion and run-off issues with neighboring yards
- Had over 100 5th graders help plant 500 native prairie plants in the team’s parking lot prairie
- Participated in Aquatic Invasive Species surveying and education
- Visit their [website](#) to see more!

#### **New Prague ALC and High School**

- Installed a hydration station
- Conducted water tests at their school and building
- Tested DIY filters for the sinks
- Built an aquaponics system and living tower system
- Tested the water quality and determined what minerals grow plants the best
- Designed Agriscaping for school and Farmhouse Market
- Hosted a Community Green Day featuring results from water testing and aquaponics system
- Grew food using the aquaponics system with tilapia, sucker fish, and gold fish
- Grew food in a living tower system
- Created signage for rain garden and pollinator garden to inform the public on its benefits
- Created a team Instagram account on which they share “Water Fact Wednesdays”

#### **Northern Lights Community School**

- Implemented a water hydration station
- Educated peers about water topics through the production of the video “Image There is No Water.”
- Tracked water usage in their schools
- Completed a shoreline restoration project on Ice Lake to clean up garbage and debris from the Grand Rapids Fairgrounds
- Worked with the DNR to raise and release Rainbow Trout into local waterways

#### **Parkers Prairie High School - New Team!**

- Designed and planted a school garden full of native plants
- Completed a human impact study on Lake Adley, a local lake, including water testing and a biodiversity index of the health of the lake
- Visit their [website](#) to see more!

#### **ROCORI High School (Cold Spring/Richmond)**

- Installing its 5<sup>th</sup> hydration station

- Explored option of paddling the Sauk River and do water quality testing with Seechi disks
- Continuing school wide recycling, collecting items from bins weekly and educated staff and students about what items are and are not recyclable – which saves water!

Once again collected shoes (417 pounds worth!) for reuse in their community (at ROCORI Community Closet) and donation to World Wear for those shoes not needed at the Community Closet

### **Royalton High School**

- Over 30 students gathered to learn how to eradicate buckthorn. Then they spent over 2 hours pulling out buckthorn from the roots and hauling it away. Students participated in a competition to see which group could pull up the most buckthorn and which group pulled the largest buckthorn plant
- Cleaned up school forest area of buckthorn and other invasive species
- Researched best strategies for a river clean up next year
- Explored water quality testing options by connecting with local water quality/conservation experts

### **Sartell-St. Stephen Middle School**

- Created peer educational lessons related to water quality and conservation best practices
- Assessed learning by their peers after their lessons, showing that their peers gained valuable knowledge from these lessons on water quality
- Learned about the Little Rock Lake drawdown
- Installed a hydration station
- Visit their [website](#) to see more!

### **Sleepy Eye High School**

- Created signage for the prairie restoration project to inform the public of its benefits
- Participated in Minnesota Valley River Watch
- Built 8 bee homes
- Visit their [website](#) to see more!

### **Springfield High School**

- Continuing to plant and harvest in their deep winter greenhouse where greens get served at lunch
- Worked with aquaponics system in the greenhouse towards better efficient use of water
- Participated in Adopt-a-highway
- Visit their [website](#) to see more!

### **Westbrook-Walnut Grove High School**

- Designed and built a water collection system to collect water run-off from the roof of the bus garage which will trickle water into the school garden
- Researched, designed and planted a rain garden at their school
- Wrote a newspaper article on their water collection system for the website
- Worked in the greenhouse
- Visit their [website](#) to see more!

### **Wrenshall High School**

- Getting the team started and doing assessment of school and community to identify water related projects that will improve the water quality in the area
- Created a solar boat for the solar boat regatta this year
- Plan to present their vehicle and boat at various events in their school and community

### **Yellow Medicine East High School**

- Installed another hydration station
- Planted and harvested in their community garden
- Brainstormed water collection and storage methods for community orchard

**Outcome 3:** Over 20 YES! teams partner with local watershed experts to implement community awareness and mitigation projects and participate in on-water and shoreline activities to protect and improve local water quality.

A majority of the twenty-two YES! teams (listed in Outcome 2) worked with watershed experts to inform students about local water quality challenges and then implement a project to help solve that problem. For example, Roylton YES! Students attended the [Water is Life](#) workshop in January at Saint John's University where 5 professionals shared their knowledge about the Mississippi River and Minnesota water quality. Students came away with a desire to monitor their local waterways including the Platte River. They intend to purchase a water quality testing kit to allow students to monitor and report on various waterways in Morrison County.

Another example is from the Parkers Prairie YES! team who met in a series of workshops with Robin Trott (UofM Extension). Trott emphasized the importance of native plants for both water quality and pollinators. Trott provided guidance on plant and site selection and soil amendment. This resulted in a beautiful native garden planted by students to divert water, filter run-off from the school roof and provide a pleasant space.

During the 2019 YES! season the New London-Spicer YES! team took a large problem into their own hands. The problem was that the back yard neighboring the school's wetland was flooding because of the amount of impervious surfaces at the school, not enough ground for the water to infiltrate, and a failed retention pond design. Superintendent Paul Carlson brought this issue to the YES! students. The students worked very closely with the superintendent to view blueprints of the retention pond and parking lot, which was recently redesigned by an engineering firm from the cities. The students called the engineering firm to talk about the issues the school was having with the retention pond design and the engineering firm couldn't answer the questions because the person who did the design no longer worked with the firm. The students then spoke with many local experts including Jon Morales from the Middle Fork Crow River Watershed District, and local DNR hydrologist, Ethan Jenzen for their recommendations to solve this issue. The students decided that the first step would be to plant native prairie plants in the area to hold in the soil. Over 150 5th graders helped seed, plant, and water the native plants. The high school students also educated the 5th grade students about the benefits of prairie plants in relation to soil health and water quality. This project will hopefully be successful in preventing the neighbor's property from flooding while providing habitat for pollinators and improving soil health and water quality.

YES! Coordinators work along-side the watershed experts to organize the hands-on workshops, surveys and on-water paddling events.

#### **Outcome 4: Regional and State Water Stewardship Awards Winners**

##### Central Region Spring Judging

New London-Spicer High School YES! Team named [Water Stewardship Award Winner](#)

They planted a 500 native plant prairie in their parking lot to prevent erosion/soil loss and to prevent runoff, pollution, and sediment from entering the school's wetland area. The prairie will hold the soil together and it is a natural filter for water. They also participated in Aquatic Invasive Species (AIS) surveying and education.

##### Southern & Metro Region Spring Judging

New Prague YES! Team named [Water Stewardship Award Winner](#). They installed a hydration station in their school, conducted water testing of the school's water and built DIY filters for the sinks, grew food in an aquaponics system with tilapia, sucker fish, and gold fish, grew food in a living tower system and tested the best possible water to grow different plants in, and created a team Instagram account in which they share "Water Fact Wednesdays".

#### **State Awards**

The [Third Annual YES! State Award Ceremony](#) was held at Target Field on May 12<sup>th</sup>, 2019. This event was attended by over 100 YES! students, coaches, staff, and supporters. The teams were New London-Spicer Middle School, Sartell Middle School, Sleepy Eye Schools, and Northern Lights Community School. Students were

escorted on the field near home base to announce the awards. The 2019 State Champion All Star Award went to New London-Spicer Middle School for their dedication to completing many different projects including Christmas light recycling, raising money for LED lights, hosting an outdoor science day for their younger peers, and much more. **The 2019 State Champion Water Stewardship Award went to Northern Lights Community School for their hard work on many water-related projects. They implemented a water hydration station and tracked water usage in their schools. They educated their peers about water topics like the Rusty Crayfish and how to stop the spread of AIS, completed a shoreline restoration project on Ice Lake, and worked with the DNR to raise and release Rainbow Trout into local waterways.**

### **Third Update January 31, 2020**

#### **Outcome 1:** *Over 20 YES! teams assess, identify, prioritize, and select local water quality projects*

Twenty-four (24) YES! teams across the state have identified local sustainability challenges and needs, formulated S.M.A.R.T. goals and are creating action plans to complete local water quality projects. YES! Staff are working with the students to identify a local challenge; then connect the students with local experts and resources to move the project forward; and organizing tours and workshops to give students the tools necessary to take the next steps in completing the identified projects.

#### **Outcome 2:** *Over 20 YES! teams develop action plans and complete over 30 new water quality related action projects in partnership with their communities*

Twenty-four (24) YES! teams across the state are researching and developing action plans to complete a variety of water quality related action projects in collaboration with their school and community. In our next report we will provide detailed information on completed projects.

Here is a list of projects being worked on for the 2019-20 season: (Note; most projects are completed in the spring.)

#### **Carlton High School**

- Attending the Race 2 Reduce Summit
- Replacing shower heads in their locker room with low flow units

#### **Discovery Woods Montessori – Brainerd**

- Participating in Grades of Green Waste Campaign to reduce plastics
- Touring Crow Wing County Recycling, Landfill and Hazardous Waste site on March 4 and making the connection between reducing pollution and proper handling of hazardous waste will affect the water quality of their local lakes
- Exploring how to reduce plastic use in their school and how to inspire others to reduce plastics in their community
- Visit our [website](#) to learn more about our team!

#### **Edina High School – New team!**

- Hosting the Project Earth Youth Climate Summit on Saturday, April 25<sup>th</sup> from 10 am to 2 pm at their school where local and state government officials will be attending
- Campaigning to have the student body implement effective composting and plastic bag reduction to keep bags out of the storm drains, etc.
- Planting a pollinator garden on school grounds to improve bee habitat and water quality

#### **Harbor City International School – Duluth – New team!**

- Encouraging others to participate in the recycling and composting initiative
- Potentially going to Lake Superior for a clean-up event

#### **Hopkins High School – New team**

- Developing a campaign to encourage the student body to be effective at recycling and composting waste within the school and reducing water consumption
- Completing the B3 Benchmarking assessment of the school's energy performance and water consumption, identifying opportunities for saving energy and water for their school

- Planting pollinator flowers on school grounds

#### **Lac qui Parle Valley High School**

- Installing a rain collection system including large storage tanks for their greenhouse to eliminate having to filter their school's water through a reverse osmosis water filtration system
- Restoring 38 acres of land at their school to native prairie

#### **Mankato West High School**

- Replacing energy-hungry fluorescent tubes with LED lighting in the school's common areas as part of the team's "RetroLED the Hallways" project
- Exploring water quality projects around Mankato area

#### **Minnetonka Vantage Program**

- Developing a research project to learn what the barriers are for why people do not invest in roof top solar when it can provide a steady return on investment that is much better than the average stock market return

#### **Minnewaska Schools – New team**

- Informing fellow students about the waste they produce and how to recycle and compost
- Participating in aquatic invasive species surveying/kayaking this summer

#### **New London-Spicer Middle School**

- Planning their Outdoor Science day where they teach elementary students about nature
- Planning their Energy Week where they spread energy and water conservation awareness
- Reaching out to local water quality experts to figure out how to conduct water testing on private lakes
- Visit our [website](#) to learn about our team!

#### **New London-Spicer High School**

- Continuing to work on their parking lot prairie to reduce run-off into neighboring yards
- Visit our [website](#) to learn about our team!

#### **Northern Lights Community School – Warba**

- Working with area experts on aquatic invasive species projects
- Continuing to monitor food waste in their cafeteria and water usage at their hydration station

#### **Pelican Rapids – New team!**

- Assessing their school & community to find out what water quality and other environmental challenges are present

#### **ROCORI (Cold Spring/Richmond) High School**

- Sorting and gathering recycling for the entire middle school and high school every Friday after school
- Assessing water quality issues to determine needed projects

#### **Rockford Middle School – New team!**

- Completing the B3 Benchmarking assessment of the school's energy performance and water consumption while identifying opportunities for saving energy and water for their school
- Creating a prairie restoration/pollinator garden on school grounds

#### **Royalton High School**

- Purchased water quality testing kit and tested the Platte River for nitrates and collected data on other substances in the water
- Plan to test local tributaries of the Mississippi and Platte Rivers and Little Rock Lake this spring
- Working with MPCA to interpret results from testing
- Toured Camp Ripley's Environmental Center to learn about land and water conservation

#### **Sleepy Eye (Public and St. Mary's) High Schools**

- Collecting and reporting data on water quality through the Friends of the Minnesota River Valley "River Watch" Project and MN Pollution Control Agency
- Teaching about environmental issues to elementary students during Earth Week classroom activities and to the public during Sleepy Eye's annual Party in the Park event
- Creating interpretive signs about pollinators and native plants to display at prairie plots established by the YES! team
- Visit our [website](#) to learn more about our team!

### **Springfield High School**

- Collecting used mascara wands to be recycled by the Appalachian Wildlife Refuge, which uses the wands to remove fly eggs and larva from animal fur and feathers
- Building observation bee houses to be installed near school and possibly sold with an informational pamphlet
- Collecting donations to help wildlife affected by Australian wildfires
- Visit our [website](#) to learn more about our team!

### **Virginia High School**

- Working on a group video to encourage fellow students to recycle and not to pollute local water ways
- Participating in the adopt-a-drain program and possibly stenciling drains to raise awareness around storm water

### **Voyageurs Expeditionary High School – *New School!***

- Creating a school garden and bee habitat
- Reducing electricity usage in their school and looking at ways to reduce water consumption

### **Westbrook-Walnut Grove High School**

- Planning and implementing a school rain garden with native plants in order to improve water quality by reducing parking lot run-off and water erosion
- Making bracelets out of colorful plastic bags and selling these upcycled accessories at sporting events in order to raise money
- Visit our [website](#) to learn more about our team!

### **World Learner – Chaska – *New team!***

- Building birdhouses from reclaimed materials to improve bird habitat on school grounds, as well as at student homes
- Planting pollinator flowers on school grounds to improve bee habitat
- Installing a hydration station to reduce the use of plastic water bottles
- Completing the B3 Benchmarking assessment of the school's energy performance and water consumption while identifying opportunities for saving energy for their school

### **Yellow Medicine East High School**

- Creating a pollinator garden by the school
- Creating a sign for their community garden and orchard
- Getting a water storage system for their community garden

**Outcome 3:** *Over 20 YES! teams partner with local watershed experts to implement community awareness and mitigation projects and participate in on-water and shoreline activities to protect and improve local water quality.*

Each YES! team is planning and preparing for projects both on the shore and on-water this spring as noted in Outcome 1.

One goal was to get students out onto the waterways of Kandiyohi County over the summer (July – Sept) to conduct AIS testing, and other water quality projects, this did not play out the way we originally envisioned due to scheduling conflicts and weather. West Central YES! Coordinator, Taylor Templer organized a training and paddle to educate students on water quality testing and AIS monitoring with a MN DNR AIS expert. However, the weather was not conducive for safely completing this event and the decision was made to cancel the event. Templer made numerous attempts to reschedule the on-the-water training, but due to the busy schedules of the students and the MN DNR expert, the training was not able to be rescheduled. Templer decided to do the training during the 2019-20 YES! season. The training will occur on March 11<sup>th</sup>, 2020 and already has a lot of interest from students.

YES! team projects and events have provided over 35 volunteer hours this past 6 months to bring their expertise and knowledge to students at the 2 YES! Fall Summit events and the Platte River water testing workshop.

Additional volunteer hours are being incurred by our metro YES! Coordinator, who is a volunteer and Cheryl Glaeser, Achieve Results, LLC for an additional 200 hours of volunteer time.

**Outcome 4:**

The Water Quality Stewardship award will again be part of the annual regional and State Championships. The State Championships will be held on May 10, 2020 at the Minnesota Twin's Game. Teams will be evaluated on how well they did to demonstrate their exemplary work towards solutions to water quality and conservation challenges. One Water Quality Stewardship Award will be given per region (3 regions) and one Statewide Champion will be awarded the Water Quality Stewardship Award.

**Fourth Update July 31, 2020 (submitted September 8):**

**Outcome 1:** *Over 20 YES! teams assess, identify, prioritize, and select local water quality projects*

Twenty-one (21) YES! teams across the state identified local sustainability challenges and needs, formulated S.M.A.R.T. goals and created action plans. Fifteen (15) projects were planned and ten (10) projects were completed. Due to schools closing in March, students were not able to finalize their water related projects. YES! Staff worked with the students to identify a local challenge; then connected students with over 14 local water quality experts. Staff, students and teachers organized 41 community events, tours and workshops over the course of the year to give students the tools necessary to take the next steps in completing the identified projects.

**Outcome 2:** *Over 20 YES! teams develop action plans and complete over 30 new water quality related action projects in partnership with their communities*

Twenty-one (21) YES! teams across the state researched and developed action plans to complete a variety of water quality related action projects in collaboration with their school and community.

Here is a list of projects completed during the 2019-20 season:

**Carlton High School**

- Attended the Race 2 Reduce Summit to learn about how to reduce water waste in their school
- Replaced shower heads in their locker room with low flow units which reduced water use from 5 gallons a minute to 1.5 gallons per minute
- Purchased new recycling bins for their football field

**Discovery Woods Montessori – Brainerd**

- Reduced plastic waste at lunch by 50%, from 60 pieces per day to 30 pieces per day.
- Toured Crow Wing County Recycling, Landfill and Hazardous Waste site on March 4. making the connection between how reducing pollution and proper handling of hazardous waste will affect the water quality of their local lakes
- Visit our [website](#) to learn more about our team!

**Edina High School – New team!**

- Planned to host Project Earth Youth Climate Summit on Saturday, April 25<sup>th</sup> from 10 am to 2 pm but had to be cancelled due to COVID and schools closing
- Developed a composting informational kiosk in the school cafeteria to improve student's ability to compost food and reduce water use

- Planted a pollinator garden on school grounds to improve bee habitat and water quality

### **Harbor City International School – Duluth – *New team!***

- Cleaned up 300 feet of Lake Superior shoreline during a beach sweep
- Hosted multiple Earth week events for students
- Hosted a food and clothing drive to support local groups related to their school

### **Hopkins High School – *New team***

- Developed and ran a campaign to encourage the student body to be effective at recycling and composting waste within the school and reducing water consumption
- Completed the B3 Benchmarking assessment of the school's energy performance and water consumption, identifying opportunities for saving energy and water for their school
- Planned to plant a pollinator garden on school grounds but did not complete due to COVID

### **Lac qui Parle Valley High School**

- Planned to install educational signs and create a benches for community members to enjoy the native prairie. This was put on hold due to COVID
- Continued work on restoring 38 acres of land at their school to native prairie and raised 10% of the \$38,000 through local sponsorship
- Recycled 20 lbs. of markers, 50 lbs. of holiday lights, and 320 lbs. of plastic bottles

### **Mankato West High School**

- Replaced 1,333 energy-hungry fluorescent tubes with 15-watt LED lighting in the school's common areas as part of the team's "RetroLED the Hallways" project. Saving the school \$5,125/yr and reduced the amount of carbon emitted from energy produced to power the lights by an estimated 45 tons of CO2/year
- Planned a lake clean-up project for spring but was cancelled due to COVID.

### **Minnewaska Schools – *New team***

- Created signs on composting, recycling, and trash so that students put waste in the proper place in the lunchroom.
- Planned to participate in aquatic invasive species surveying/kayaking in spring but was cancelled due to COVID.

### **New London-Spicer Middle School**

- Planned and hosted the Outdoor Science day where they taught elementary students about nature.
- Planned Energy Week to educate Middle School students about saving water and conserving energy.
- Reached out to local water quality experts to figure out how to conduct water testing on private lakes
- Planned aquatic invasive species surveying/kayaking for July.

- Visit our [website](#) to learn about our team!

### **New London-Spicer High School**

- Harvested and spread prairie seeds in their native rain garden.
- Planted over 200 native prairie plugs in their rain garden.
- Planned an Eco Art competition to celebrate the 50th Anniversary of Earth Day, but was cancelled due to COVID.
- Visit our [website](#) to learn about our team!

### **Northern Lights Community School – Warba**

- Working with area experts on aquatic invasive species projects.
- Continued to monitor food waste in their cafeteria and water usage at their hydration station.

### **Pelican Rapids – *New team!***

- Assessed their school & community to find out what water quality and other environmental challenges are present.
- Started a YES! team to help the school and community with eco awareness and to create a deeper understanding of the impacts on the Earth, good and bad.
- Started waste and water reduction campaign but was stalled out due to COVID. Will start up again in the fall.
- Informed approximately 420 non-YES! students and 100 staff at the Pelican Rapids High School about the benefit from the recycling bins.

### **Rockford Middle School – *New team!***

- Completed the B3 Benchmarking assessment of the school's energy performance and water consumption while identifying opportunities for saving energy and water for their school.
- Planned a prairie restoration/pollinator garden on school grounds and hope to complete it in the fall.

### **Royalton High School**

- Purchased water quality testing kit and tested the Platte River for nitrates and collected data on other substances in the water.
- Plan to test local tributaries of the Mississippi and Platte Rivers and Little Rock Lake this spring but was cancelled due to COVID.
- Will work with MPCA to interpret results from testing.
- Toured Camp Ripley's Environmental Center to learn about land and water conservation.
- Purchased a water quality testing kit and conducted 2 separate trainings concerning water quality testing.
- Students signed up for various sites to monitor with the MPCA and were prepared to test and collect data prior to school closings due to COVID-19.
- Maintained school's oil collection site.
- Participated in trail prep at Crane Meadows National Wildlife refuge.
- Toured Camp Ripley's Environmental Center to learn about land and water conservation.

### **Sleepy Eye (Public and St. Mary's) High Schools**

- Hosted Energy Conservation Week including hands-on displays, daily announcements, and daily activities for students in grades 7-12.
- Collected 996 pounds of holiday lights for recycling, recovering approximately 647 pounds of copper, a quantity which would have required 405 tons of copper ore to produce.
- Taught adults and youth about water quality by leading three activity stations during Sleepy Eye's annual Party in the Park event.
- Collected and reported water-quality data for a county drainage ditch and the Cottonwood River through the Friends of the Minnesota River Valley "River Watch" Project and MN Pollution Control Agency.
- Started planning interpretive signs about pollinators and native plants to display at prairie plots established by the YES! team.

### **Springfield High School**

- Collected 500 pounds of old or non-functioning holiday lights from the community to be recycled, reducing waste and encouraging energy-efficient alternatives like LED lights.
- Filled two large recycling bins with pop tabs collected throughout the year from the elementary and high school.
- Planned to build bee houses and install them near school.

### **Virginia High School**

- Participated in the adopt-a-drain program and planned on stenciling drains to raise awareness around storm water in the spring but did not happen due to COVID.
- Planned to plant trees around Silver Lake to continue shoreline restoration efforts but did not happen due to COVID.
- Toured the St. Louis County Recycling Center to learn about waste.
- Created videos of their tour of the St. Louis County Recycling Center to help educate students about their recycling efforts and how it helps water quality and planned a social media campaign.

### **Voyageurs Expeditionary High School – *New School!***

- Planned on creating rain gardens near their school to avoid yearly flooding.

### **Westbrook-Walnut Grove High School**

- Planted native species in the school's rain garden which the team created to improve aesthetics and water quality by reducing parking-lot runoff and erosion.
- Kept at least 360 plastic bags out of the landfill by cutting them into strips and weaving them to make colorful up-cycled bracelets. The team advertised the bracelets and sold 121 of them at basketball games in order to promote alternatives to throwing away materials and raise funds for improving the rain garden.
- Recycled over 4,200 pounds of waste by leading efforts in the school and community to collect aluminum cans, pop tabs, plastic bottles, and other items, which the team then sorted and documented in a database.

- Completed initial training to teach a water-quality education activity to elementary students.
- Visit our [website](#) to learn more about our team!

#### **World Learner – Chaska – New team!**

- Built 40 birdhouses from reclaimed materials to improve bird habitat on school grounds, as well as at student homes.
- Completing the B3 Benchmarking assessment of the school’s energy and water performance, identifying opportunities for saving energy and water for their school.

#### **Yellow Medicine East High School**

- Created a pollinator garden by the school.
- Created a sign for their community garden and orchard.
- Worked to get a water storage system for their community garden.

**Outcome 3:** *Over 20 YES! teams partner with local watershed experts to implement community awareness and mitigation projects and participate in on-water and shoreline activities to protect and improve local water quality.*

Twenty-one (21) YES! teams with over 350 students planning 25 projects and completing 8 water quality projects and connecting with over 10 water quality experts. Due to COVID and schools closing, many projects and events were not completed as indicated below:

#### **Northeast Completed:**

- Changed the Showerheads in the School Locker Rooms to a reduced flow unit (Carlton)

Planned, but not completed:

- Lake Superior Clean-Up (Harbor City)
- Ice Lake Clean-Up (Northern Lights Community School)
- Yearly Trout Release (Northern Lights Community School)
- 5th Grade Water Summit and Tall Timber Days events, AIS related events (NLCS)
- Water Summit Event (Harbor City)
- Rain Gardens to mitigate flooding (Voyageurs Expeditionary School”

Water Experts:

- Sarah Lerohl - Environmental Program Coordinator at Western Lake Superior Sanitary District

#### **Northwest Completed:**

- Royalton YES! team training on water testing kits by YES! coach Jeanne Omvig

Planned, but not completed:

- Royalton YES! Students were assigned tributaries and other water bodies to monitor. Monitoring may still happen this spring and into the summer

- Discovery Woods Montessori YES! students planned to visit the nearby lake with a local water quality expert. They were planning to learn how to test the local lake with a Seechi disc and how to test for nitrates and other compounds.
- Pelican Rapids planned to invite the local SWCD experts to visit and tell them more about the dam that is going to be taken out from their local river and what this means for water quality and recreational use.

Water Quality Experts:

- Jordan Donatell, MPCA Pollution Control Specialist, Little Falls
- Anthony Dingmann, MPCA Environmental Specialist III, Little Falls

**West Central** Completed:

- NL-S MS (water saving hose attachments)
- NL-S HS (native seed spreading to continue improving water retention area)

Planned but not completed:

- Paddling/AIS with NL-S
- LQPV possibly putting water storage tanks in
- NL-S HS possibly getting an educational sign for their prairie)
- NL-S MS, private lake sampling
- YME, rain garden

**Water Quality Experts**

- Jon Morales- Middle Fork Crow River Watershed District,
- Russ Hilbert- Kandiyohi AIS County Coord,
- Dianna Macziewski - MPCA,
- Eric Katzenmeyer, MN DNR AIS specialist,
- Sara Reagan - Pheasants Forever(working with LQPV on prairie restoration)

**Southern** completed projects:

- Westbrook-Walnut Grove: Raingarden project started last year is ongoing but students haven't worked on it in the last three months. Aquatic education project was planned (and training initiated) but will not be completed this spring.
- Sleepy Eye: Water monitoring is an ongoing project for this team
- Workshops: water quality was addressed in the Organics Recycling and Waste Management Workshops and were addressed during the Electric Vehicles and Clean Transportation Workshop in May. It was also included in the Prairies Workshop.

**Outcome 4: Regional and State Water Stewardship Awards Winners**

Despite schools closing due to COVID-19 YES! still conducted its regional and statewide competitions. We adapted many of our program deliverables to online, including our regional and state competition. Here are the results for the regional Water Stewardship Award:

- West Central/Northwest Region Water Stewardship Award Winner: Royalton High School
- Northeast Region Water Stewardship Award Winner: Carlton High School

Please read more the competition and the results of the 2020 [YES! Regional Competition Results](#) here.

Our State Competition was also held virtually. All regional winners were eligible for consideration in the state Water Stewardship competition. Top qualifying teams for the state competition *included* Lac qui Parle Valley High School, Royalton High School, Sleepy Eye Schools, Carlton High School, and Northern Lights Community School (Warba). **The winner of the YES! 2020 Water Stewardship Award went to Carlton High School!**

Please read more about the competition and the results from the 2020 YES! [State Competition Results](#) here

**Fifth Update January 31, 2021:** Submitted February 26, 2021

**Outcome 1:** *Over 20 YES! teams assess, identify, prioritize, and select local water quality projects*

This season (2020-21) 13 YES! teams across the state identified local water challenges and needs, formulated S.M.A.R.T. goals and created action plans. YES! staff are working with students to identify a local challenge; then connecting students with local water quality experts. Due to distance learning for the majority of this year, students are planning spring events and outdoor water related projects.

**Outcome 2:** *Over 20 YES! teams develop action plans and complete over 30 new water quality related action projects in partnership with their communities*

Thirteen (13) YES! teams across the state researched and developed action plans to complete a variety of water quality related action projects in collaboration with their school and community.

Here is a list of projects students are working on this season. A list of completed projects will be provided in the Final Report on July 31, 2021.

#### **Carlton High School**

- Planning water related projects for this spring

#### **Lac qui Parle Valley High School**

- Kayaked Signalness (Mountain) Lake at Glacial Lakes State Park to learn about aquatic invasive species and water quality
- Restored a 38 acre prairie at their school by planting natives! Students raised 10% of the funds through local sponsorship
- Working to design and make signs, bee homes, and benches for their restorative prairie project
- Participating in “Step into a Green Job Experience” virtual workshop
- Participated in Climate Change & Water Virtual Speaker series (3, one hour speakers)

#### **Mankato West High School**

- Working on a solar installation at their school
- Planning a river clean up project this spring
- Participated in Climate Change & Water Virtual Speaker series (3, one hour speakers)

#### **Minnewaska Schools –**

- Maintaining composting & recycling system so that students put waste in the proper place in the lunchroom.
- Hosting a virtual tour of their composting system for Royalton YES! team

- Planning to participate in aquatic invasive species surveying/kayaking this spring
- Participated in Climate Change & Water Virtual Speaker series (3, one hour speakers)
- Planning to participate in YES! Home Energy & Water Saving Kit project

#### **New London-Spicer Middle School**

- Planning to kayak and do aquatic invasive species surveying/kayaking this spring/early summer
- Planning to participate in YES! Home Energy & Water Saving Kit project
- Researching and planning to start a motor oil collection site

#### **New London-Spicer High School**

- Working to design a sign for their parking of prairie restoration project
- Participating in “Step into a Green Job Experience” workshop
- Planning to paddle local lakes this spring/early summer to do AIS surveying
- Visit our [website](#) to learn about our team!

#### **Rockford Middle School**

- Planning a prairie restoration/pollinator garden on school grounds and hope to complete it in spring

#### **Royalton High School**

- Building a stand-alone 12-volt DC solar power system by using the We Share Solar Suitcase kit and will deploying the Kit to Uganda for a school to use
- Finishing up building 3 E-bikes to demonstrate the use of alternative energies
- Researching how to compost school lunch waste
- Planning a prairie restoration project this spring
- Planning a spring activity such as paddling a local river or lake to learn about AIS and water quality

#### **Sleepy Eye (Public and St. Mary’s) High Schools**

- Made seed bombs using seeds students collected from their pollinator garden
- Collected holiday lights and delivered to local recycling center
- Planning interpretive signs about pollinators and native plants to display at prairie plots established by the YES! team.
- Participated in Climate Change & Water Virtual Speaker series (3, one hour speakers)

#### **Springfield High School**

- Planning to build bee houses and install them near school
- Working on spring water quality activity

#### **Virginia High School**

- Planning to plant trees around Silver Lake to continue shoreline restoration efforts this spring

#### **Westbrook-Walnut Grove High School**

- Maintaining school’s rain garden which the team created to improve aesthetics and water quality by reducing parking-lot runoff and erosion.
- Plan to continue training by West Central YES! Coordinator Deb Groebner to teach a water-quality education activity to elementary students.

- Participating in “Step into a Green Job Experience” virtual workshop

### **Yellow Medicine East High School**

- Maintaining the pollinator garden by the school established by YES! team
- Participating in “Step into a Green Job Experience” virtual workshop
- Working to get a water storage system for their community garden

**Outcome 3:** *Over 20 YES! teams partner with local watershed experts to implement community awareness and mitigation projects and participate in on-water and shoreline activities to protect and improve local water quality.*

YES! teams are planning and working to complete their water quality projects with support from local water quality experts. Due to schools operating in distance learning and hybrid models projects may be taking on a different look this year. We have moved our events to virtual and adapted some of our projects to be done at home. We will file a list of completed projects and water quality experts we connected with for our Final Report on July 31, 2021.

### **Outcome 4: Regional and State Water Stewardship Awards Winners**

We are planning a State Competition to be held virtually on May 5. We adapted our spring competition to a virtual platform last spring, due to school’s closing and going to distance learning. We will take this approach for spring 2021.

### **Final Update July 31, 2021: Activity 2**

**Outcome 1:** Over the 3-year project 31 YES! teams across the state identified, prioritized and selected local water quality projects. Students formulated S.M.A.R.T. goals and created action plans. YES! staff worked with the students to identify a local challenge; then connected students with over 30 local water quality experts.

**Outcome 2:** Over the course of this project 853 Minnesota students researched and developed action plans to complete 81 water quality and conservation projects and prairie/habitat restoration projects in collaboration with their school and community. YES! students leveraged over \$75,000 in partnership funds, serving 126 communities and logging in over 6,500 volunteer hours from teachers, students and community members.

Here are highlights from the past 3 years for each participating school:

### **Carlton High School**

- Attended the Race 2 Reduce Summit to learn about how to reduce water waste in their school
- Replaced shower heads in their locker room with low flow units which reduced water use from 5 gallons a minute to 1.5 gallons per minute
- Gave virtual presentations for middle school students on climate change and its impacts on water and other areas of their community
- Influenced teachers in their school to assign a project to students that included researching the importance of water conservation and interviewing someone outside of the school regarding the subject of water conservation and providing them with education on the matter
- Replaced plastic silverware with reusable, metal silverware. Met with the school board to make this happen

- Put together a poster contest for middle school students regarding recycling, threats to pollinators, and water quality. Winners from each grade received reusable water bottles and had their posters put up around the school

#### **Discovery Woods Montessori – Brainerd**

- Reduced plastic waste at lunch by 50%, from 60 pieces per day to 30 pieces per day
- Exhibited at Environmental Education Day in Brainerd
- Toured Crow Wing County Recycling, Landfill and Hazardous Waste site on March 4. making the connection between how reducing pollution and proper handling of hazardous waste will affect the water quality of their local lakes
- Visit our [website](#) to learn more about our team!

#### **Edina High School –**

- Planned to host Project Earth Youth Climate Summit on Saturday, April 25<sup>th</sup> from 10 am to 2 pm but had to be cancelled due to COVID and schools closing
- Developed a composting informational kiosk in the school cafeteria to improve student’s ability to compost food and reduce water use
- Planted a pollinator garden on school grounds to improve bee habitat and water quality

#### **Forest Lake High School**

- Storm drain stencil project: 6 students stenciled 15 drains in Lakeside Park, Forest Lake. The stencil read, “Dump No Waste; Drains to Lake”
- Received the Minnesota Department of Education nomination for US Green Ribbon School award
- Consulted city architect to help formulate a plan to expand their existing pollinator garden and to build a rain garden to collect runoff from the school in the future
- Hosted lectures on wastewater engineering from the city architect and from YES! Coordinator Tom McDougall on energy
- Planted over 250 seeds in recycled milk cartons to give away on Earth Day
- Entered a tree with recycled ornaments into the Marine Holiday Tree Festival!

#### **Glencoe-Silver Lake**

- Built a Supermileage vehicle for the 31st annual Supermileage Challenge at Brainerd International Raceway. Students learned how to maximize gas engine efficiency and reduce emissions through building this vehicle

#### **Harbor City International School – Duluth**

- Cleaned up 300 feet of Lake Superior shoreline during a beach sweep
- Hosted multiple Earth week events for students
- Hosted a food and clothing drive to support local groups related to their school

#### **Hopkins High School**

- Developed and ran a campaign to encourage the student body to be effective at recycling and composting waste within the school and reducing water consumption
- Completed the B3 Benchmarking assessment of the school’s energy performance and water consumption, identifying opportunities for saving energy and water for their school
- Planned to plant a pollinator garden on school grounds but did not complete due to COVID

### **Lac qui Parle Valley High School**

- Planted 38 acres of land at their school to native prairie and raised 10% of the \$38,000 through local sponsorship
- Kayaked Signalness (Mountain) Lake at Glcail Lakes State Park to learn about aquatic invasive species
- Recycled 20 lbs. of markers, 50 lbs. of holiday lights, and 320 lbs. of plastic bottles

### **Mankato West High School**

- Replaced 1. 333 energy-hungry fluorescent tubes with 15-watt LED lighting in the school's common areas as part of the team's "RetroLED the Hallways" project. Saving the school \$5,125/yr and reduced the amount of carbon emitted from energy produced to power the lights by an estimated 45 tons of CO2/year

### **Minnetonka High School**

- Designed and constructed a small scale aquaponics station for growing lettuce and basil all winter long

### **Minnewaska Schools**

- Created signs on composting, recycling, and trash so that students put waste in the proper place in the lunchroom
- 15 students participated in the "Lights!Water!Action!" project to reduce water consumption
- Planned to participate in aquatic invasive species surveying/kayaking but was cancelled due to COVID
- Researched, designed and planted a native garden at the middle school

### **Moorhead – Youth Educational Service ALC**

- Completed water quality assessments with local experts to determine the greatest needs in the Moorhead area
- Designed and built planter boxes, which they then planted with native plants to attract pollinators and to illustrate how native plants can improve water quality

### **New London-Spicer Middle School**

- Planned and hosted the Outdoor Science day where they taught elementary students about nature
- Planned Energy Week to educate Middle School students about saving water and conserving energy
- Reached out to local water quality experts to figure out how to conduct water testing on private lakes
- Visit our [website](#) to learn about our team!
- 33 students participated in the "Lights!Water!Action!" home energy and water saving kits
- Participated in Aquatic Invasive Species surveying and education during the summer

### **New London-Spicer High School**

- Harvested and spread prairie seeds in their native rain garden
- With the help of 100 5th graders, we planted 500 native prairie plants in the team's parking lot prairie
- Planted over 200 native prairie plugs in their rain garden
- Planned an Eco Art competition to celebrate the 50 Anniversary of Earth Day - cancelled -COVID
- Visit our [website](#) to learn about our team!
- Kayaked several lakes in the area to monitor and test for aquatic invasive species over the summer

### **New Prague High School - Alternative Learning Center**

- Collected water data from 4 different taps in their school and tested with water quality test kits

- Based on the water quality tests, we designed and built water filters and tested how this changed the water quality
- Used hydroponics to grow over 80 pollinator plants and natural insecticide plants, which were sold at their Community Green Day
- Amended soil at 3 Agriscape Landscapes
- Hosted second annual Community Green Day
- Planted an Agriscape/pollinator garden at Ney Nature Center that is used as an educational tool for visitors
- Planted 2 additional agriscapes in their town
- Built over 20 bee hotels

### **Northern Lights Community School – Warba**

- Continued to monitor food waste in their cafeteria and water usage at their hydration station
- Educated peers about water topics including speaking about the Rusty Crayfish and how to stop the spread of aquatic invasive species
- Tracked water usage in our schools
- Completed a shoreline restoration project on Ice Lake to clean up garbage and debris from the Grand Rapids Fairgrounds
- Worked with the DNR to raise and release Rainbow Trout into local waterways

### **Parkers Prairie High School**

- Designed and planted a school garden full of native plants
- Completed a human impact study on Lake Adley, a local lake, including water testing and a biodiversity index of the health of the lake

### **Pelican Rapids High School**

- Assessed their school & community to find out what water quality and other environmental challenges are present.
- Started a YES! team to help the school and community with eco awareness and to create a deeper understanding of the impacts on the Earth, good and bad.
- Started waste and water reduction campaign but was stalled out due to COVID.
- Informed approximately 420 non-YES! students and 100 staff at the Pelican Rapids High School about the benefit from the recycling bins

### **Rockford Middle School**

- Completed the B3 Benchmarking assessment of the school's energy performance and water consumption while identifying opportunities for saving energy and water for their school
- Planned a prairie restoration/pollinator garden on school grounds and hope to complete it in the fall

### **ROCORI (Cold Spring/Richmond)**

- Installed a 4-panel solar panel for their school courtyard

- Continuing school wide recycling, collecting items from bins weekly and educated staff and students about what items are and are not recyclable
- Installed a hydration station

### **Royalton High School**

- Purchased water quality testing kit and tested the Platte River for nitrates and collected data on other substances in the water
- Plan to test local tributaries of the Mississippi and Platte Rivers and Little Rock Lake but was cancelled due to COVID
- Toured Camp Ripley’s Environmental Center to learn about land and water conservation.
- Conducted 2 separate trainings concerning water quality testing
- Maintained school’s oil collection site
- Participated in trail prep at Crane Meadows National Wildlife refuge
- Built a 12 volt solar suitcase that was deployed to a refugee camp in Uganda

### **Sartell-St. Stephen Middle School**

- Created six peer educational lessons on water quality and aquatic invasive species which were then used by students and teachers
- Assessed learning by their peers after their lessons, showing that their peers gained valuable knowledge from these lessons
- Learned about the Little Rock Lake drawdown
- Continued their efforts to reduce waste at their school
- Visit their **website** to see more!

### **Sleepy Eye Schools**

- Collected water quality data for the Minnesota Pollution Control Agency in conjunction with Friends of the Minnesota Valley. One day a month for eight months, students collected water quality data from a county ditch and the Cottonwood River, both tributaries to the Minnesota River.
- Taught adults and youth about water quality by leading three activity stations during Sleepy Eye’s annual Party in the Park event
- Collected and reported water-quality data for a county drainage ditch and the Cottonwood River through the Friends of the Minnesota River Valley “River Watch” Project and MN Pollution Control Agency
- Created interpretive signs about pollinators and native plants to display at prairie plots established by the YES! team
- Built a pollinator garden in their community, planting over 600 grasses and forbs! Their team has a three year commitment in maintaining the garden for success of plant survival, weeding, and planning for future educational signage, species identification, a walk path with a bench for the residents to view once the growth shows sustainability

### **Springfield High School**

- Built a hydroponics system
- Grew lettuce and spinach in their school greenhouse using the hydroponics system
- Installed 2 hydrations stations in the school

### **Virginia High School**

- Participated in the adopt-a-drain program and planned on stenciling drains to raise awareness around storm water in the spring but did not happen due to COVID
- Planned to plant trees around Silver Lake to continue shoreline restoration efforts but did not happen due to COVID
- Toured the St. Louis County Recycling Center to learn about waste.
- Created videos of their tour of the St. Louis County Recycling Center to help educate students about their recycling efforts and how it helps water quality and planned a social media campaign

### **Voyageurs Expeditionary High School**

- Planned rain gardens near their school to avoid yearly flooding

### **Westbrook-Walnut Grove High School**

- Planted native species in the school's rain garden which the team created to improve aesthetics and water quality by reducing parking-lot runoff and erosion
- Kept at least 360 plastic bags out of the landfill by cutting them into strips and weaving them to make colorful up-cycled bracelets. The team advertised the bracelets and sold 121 of them at basketball games in order to promote alternatives to throwing away materials and raise funds for improving the rain garden
- Recycled over 4,200 pounds of waste by leading efforts in the school and community to collect aluminum cans, pop tabs, plastic bottles, and other items, which the team then sorted and documented in a database
- Completed initial training to teach a water-quality education activity to elementary students.
- Visit our [website](#) to learn more about our team!
- Hosted a community talk where students taught those in attendance about ways to save money on heating, energy, and water. They also gave away objects to help get people started on this journey such as a low-flow shower head, smart surge protectors, LED light bulbs, and outlet insulation.

### **World Learner – Chaska**

- Built 40 birdhouses from reclaimed materials to improve bird habitat on school grounds, as well as at student homes
- Completing the B3 Benchmarking assessment of the school's energy and water performance, identifying opportunities for saving energy and water for their school

### **Wrenshall**

- Created a supermileage vehicle, starting with a trike design-reaching an estimated 100 MPG
- Created a solar boat for the solar boat regatta this year

### **Yellow Medicine East High School**

- Attended a workshop on environmental careers
- Created a sign for their community garden and orchard
- Worked to get a water storage system for their community garden
- Installed a hydration station in their gym, requiring approval from their Superintendent and school board, research the best location and type of station for their school, and raise funds for the installation

**Outcome 3:** Over the course of this 3-year project 54 YES! teams and 863 students connected with 30 water quality experts to complete on-water and shoreline activities to protect and improve local water quality. Due to

COVID-19 and the challenges of distance learning, not as many on-water and shoreline activities were completed as expected. However, in 2020 we moved our workshops and fall summit to virtual allowing us to connect our students with regional experts including Dr. Heidi Root/UofM, Eric Dahl/EQB, Cat Techtman/UofW, Kenny Blumenfeld, DNR Climatologist.

#### **Water Quality Experts (workshops and events) - 30**

- Jon Morales- Middle Fork Crow River Watershed District,
- Russ Hilbert- Kandiyohi AIS County Coordinator
- Dianna Macziewski - MPCA
- Eric Katzenmeyer, MN DNR AIS specialist,
- Sara Reagan - Pheasants Forever
- Sarah Lerohl - Environmental Program Coordinator at Western Lake Superior Sanitary District
- Jordan Donatell, MPCA Pollution Control Specialist, Little Falls
- Anthony Dingmann, MPCA Environmental Specialist III, Little Falls
- Garry Bennet, DNR Hydrologist
- Tina Wolber, DNR
- Katy Krivanek, Sauk River Watershed District
- Ryan Peterson, RIM Coordinator for the Soil and Water Conservation District
- Christopher Lundeen, Watershed Program Coordinator North Fork Crow River Watershed District
- Beth Markhart, Outreach and Training Coordinator for Prairie Restorations Inc.
- Phil Votruba, Pollution Control Specialist for the Minnesota Pollution Control Agency (MPCA)
- Kara Fitzpatrick, Stressor Identification Specialist, Minnesota Pollution Control Agency (MPCA)
- Andy Frank, Environmental Specialist, Minnesota Pollution Control Agency (MPCA)
- Amanda Guertin, Water Plan Technician, Benton County Soil and Water Conservation District
- Adam Hjelm, Public Outreach Coordinator for the Sauk River Watershed
- Ethan Jenzen, Hydrologist for the Minnesota DNR Ecological and Water Resources
- Kory Klebe, Environmental Coordinator for Prairie Woods Environmental Learning Center
- Tom Parlman, Writer for the Green Lake Breeze, Green Lake Property Owners Association
- Megan M. Weber, University of Minnesota Extension Educator, Aquatic Invasive Species
- Felix Amenumey, AIS Trainer for Minnesota DNR
- Dr. Heidi Roop, UofM Climate Scientist
- Eric Dahl, Planning Director, Environmental Quality Board (EQB)
- Cathy Techtman, Environmental Outreach Specialist, University of Wisconsin- Extension
- Kenny Blumenfeld, DNR Climatologist
- Scott Gluff, U.S. Fish and Wildlife Service
- Tom McDougall, B3 expert/consultant

#### **Outcome 4: State Award Winners**

Our 2021 State Competition was held virtually with a panel of 5 judges. First place went to Westbrook-Walnut Grove, 2nd place was a tie between Sleepy Eye Schools and Mankato West High School. Please read more about the competition and the results from the 2021 YES! [State Competition Results](#) here.

#### IV. DISSEMINATION:

**Description:** Information, updates and reports will be made available via the YES! website ([www.youthenergysummit.org](http://www.youthenergysummit.org)), YES! e-newsletter, Prairie Woods ELC, Laurentian Environment Center, Lakes Country Service Cooperative and Ney Nature Center newsletters and websites, Foundation communication vehicles & local media as available and on an ongoing basis. YES! will present at relevant opportunities such as Earth Day events, MN Science Teachers Association, SciMathMN, and CERTs (Clean Energy Resource Teams) conferences and other relevant events. Project accomplishments are recognized and publicized via website, newsletters, conference presentations and local, regional and state-wide news media.

#### First Update January 31, 2019

##### YES! E-Newsletter

- The Fall 2018 edition of the YES! E-Newsletter was sent on November 12 to 970 people with a 24% open rate. The most viewed story was about the YES! Fall Summit.
- The Summer 2018 edition of the YES! E-Newsletter was sent on July 31, 2018 to 828 people with a 28% open rate. The most viewed story was about the YES! State Championship award.
- Sixteen (16) articles about YES! were posted as blogs on the website.

Ney Nature Center E-Newsletter includes a YES! feature in each volume.

- The Ney News: Volume 18, Number 2 – Summer 2018  
Sent out to about 250 people in June 2018
- The Ney News: Volume 18, Number 4 – Winter 2018-19  
Sent out to about 250 people in December 2018

##### Print Newsletters:

- Prairie Woods Environmental Center's Fall Newsletter, the "Warbler" featured a YES! article reaching over 1,400 people

##### YES! in Outside News Sources

- September 6, 2018: [A Climate Voice: Kately Dorry](#)

Facebook: frequent posts by staff and students on projects and events

##### Website:

- 16 blog posts written and posted by staff and students
- Website continues to be updated with a Coach's Corner containing relevant information to YES! coaches
- 2838 users with 91.5% being returning visitors and 8.5% being new users

##### Presentations, Exhibitor Tables & Volunteer opportunities:

- Shelli-Kae Foster, YES! Program Director and Taylor Bishop (interim YES! West-central Coordinator), attended and tabled at the MN Science Teachers Association event called MN Conference on Science Education (MNCSE), Nov. 8, 2018
- Sophie Bishop, Southern YES! Coordinator represented YES! at the Minnesota Naturalist Association Conference from November 9<sup>th</sup> to the 11<sup>th</sup>
- Two (2) YES! staff participated in River Rally Days in New London at Near Park on September 10<sup>th</sup> and 11<sup>th</sup>. YES! students and staff educated over 110 4<sup>th</sup> graders about Aquatic Invasive Species and assisted the Middle Fork Crow River Watershed District and Prairie Woods Environmental Learning Center with water quality testing, water cycle education, and macro-invertebrate sampling.

#### Second Update July 31, 2019

##### YES! E-Newsletter

- The [Winter 2019 YES! E-Newsletter](#) was sent on March 1<sup>st</sup> to 888 people with a 27% open rate. The most viewed story was about the about the current YES! team projects.

- The [Spring 2019 YES! E-Newsletter](#) was sent on June 3<sup>rd</sup> to 877 people with a 20% open rate. The most viewed story was about the about the State Awards.

Ney Nature Center E-Newsletter includes a YES! feature in each volume.

- January 4 edition sent to 1076 people
- February 5 edition sent to 1,099 people
- March 1 edition sent to 1,136 people
- April 11 edition sent to 1,202 people
- May 2 edition sent to 1,238 people
- June 7 edition sent to 1,255 people

Print Newsletters:

- Prairie Woods Environmental Learning Center’s Spring Newsletter, the “Warbler” includes a YES! article in each edition, this edition highlighted YES! winter workshops. This newsletter was printed and mailed in April to 1,242 people.

YES! in Outside News Sources

- **June 6, 2019:** [Sleepy EyYES! Team is Number 1](#)
- **May 19, 2019:** [NLCS Wins Eco Solutions Competition](#)
- **May 3, 2019:** [Carlton, Wrenshall Students Find Solutions to Environmental Challenges](#)
- **April 13, 2019:** [Students Attend Soil Health Workshop](#)
- **April, 2019:** [Solar panels the newest addition to ROCORI Schools outdoor classroom](#)
- **March 7, 2019:** [Montessori Students Learn About Environment](#)

Facebook

- Frequent posts by staff on projects and events
- 279 people follow our page
- Each post reaches approximately 515 people

Website:

- 25 [blog](#) posts written and posted by staff, students, and coaches
- Website continues to be updated with a Coach’s Corner containing relevant information to YES! coaches
- 4,747 pageviews
- 1,929 users with 92.3% being returning visitors and 7.7% being new users

Presentations, Exhibitor Tables & Volunteer Opportunities:

- Shelli-Kae Foster (YES! Program Director) co-presented with Rivers Edge Academy and Edison High School for the session “Getting to Green in MN” at the 9<sup>th</sup> Annual National Green Schools conference on April 8<sup>th</sup>. Sophie Bishop (Southern Coordinator) and Taylor Templer (West Central Coordinator) volunteered at the conference. Tom McDougal (Metro Coordinator) also attended the conference.
- Sophie Bishop and Taylor Templer hosted/attended the Healthy Soils=Healthy Lives workshop on March 20<sup>th</sup> at Gustavus Adolphus College. David Montgomery was the key note speaker, David is a professor of Earth and Space Sciences at the University of Washington who studies soil health.

### Third Update January 31, 2020

YES! E-Newsletter Period of July 1, 2019 to Dec. 31, 2019:

- YES! E-Newsletters for July 1 to Dec. 31, 2019: 2 were sent during this time frame:
  - September 6, 2019 to 866 people
  - October 30, 2019 to 853 people
- YES! in Outside News Sources: 6 are listed on our website during this time period. You can access all of those here:

December 12, 2019: [Recycle Your Holidays](#)

December 7, 2019: [Connecting Youth With Great Adventures](#)

October 12, 2019: [Passion for the Prairie](#)

October 3, 2019: [YES! Coach Patrick Merrick honored with MREA award!](#)

September 14, 2019: [Sporting Journal Radio Interview](#)

Print Newsletters:

- Prairie Woods Environmental Center's Fall Newsletter, the "Warbler" featured a YES! article reaching over 1,400 people

Facebook: frequent posts by staff and students on projects and events

Website:

- 18 blog posts written and posted by staff and students
- Website continues to be updated with a Coach's Corner containing relevant information to YES! coaches
- 6,557 visitors with 5,164 being new visitors

Presentations, Exhibitor Tables & Volunteer opportunities:

- YES! Staff attended and tabled at the Nobel Conference entitled "Climate Changed" at Gustavus Adolphus College on September 24, 2019.
- YES! Staff participated in a YES! Story workshop with Jothsna Harris (Climate Generation) on October 14, 2019. The purpose of the team building workshop was to develop a deeper understanding of the YES! program and create a story to better articulate our passion and commitment to the program
- Taylor Templer (West Central YES! Coordinator) attended the full day session on the New Science Standards on November 7, 2019
- Tom McDougall (Metro YES! Coordinator) and Sam Horner (NE YES! Coordinator) tabled at the MN Science Teachers Association event called MN Conference on Science Education (MNCOSE), Nov. 8, 2019
- Shelli-Kae Foster (YES! Program Director) participated as an expert during a panel discussion following the viewing of "The Human Element" as part of the MN Science Teacher's Conference.
- Deb Groebner (Southern YES! Coordinator) attended the STEM conference at the Science Museum of Minnesota on December 3, 2019.

**Fourth Update July 31, 2020** (submitted September 8):

YES! E-Newsletters for January 1 to August 26<sup>th</sup>, 2020: 2 were sent during this time frame:

- Winter E-Newsletter sent on February 14<sup>th</sup> to 931 people
- Spring/Summer E-Newsletter sent on June 12<sup>th</sup> to 920 people

YES! in Outside News Sources: 6 are listed on our website during this time period. You can access all of those here: <https://yesmn.org/media/yes-in-the-news/>

- July 11, 2020: [Home on the prairie: Lac qui Parle Valley students are bringing the prairie back](#)
- July 9, 2020: [Winners again — YES! Team earns Regional and State awards](#)
- June 9, 2020: [Southcentral Minn. Clean Energy Council Seeking Feedback from Area Residents](#)
- May 14, 2020: [Seeds of Hope: Our Spring 2020 Mini Grant Recipients](#)
- January 27, 2020: [Mankato Are Public Schools Talks Climate Change With Its Students](#)
- January 14, 2020: [Mankato West to Receive Clean Energy Resource Team Grant](#)

Website:

- 19 blog posts written and posted by staff and students

- Website continues to be updated with a Student & Coaches Corner containing relevant YES! information
- 2,578 visitors with 2,556 being new visitors

Print Newsletters:

- Prairie Woods Environmental Center’s Fall Newsletter, the “Warbler” featured a YES! article reaching over 1,400 people

Ney Nature Center E-Newsletter includes a YES! feature in each edition. For January 1, to August 31, 2020:

- January 30, 2020 edition sent to 1,303 people
- February 26, 2020 edition sent to 1,312 people
- April 3, 2020 edition sent to 1,316 people
- May 5, 2020 edition sent to 1,317 people
- June 19, 2020 edition sent to 1,334 people

**Presentations, Exhibitor Tables & Volunteer opportunities:**

- Organics Recycling and Waste Reduction Workshop (in-person) - March 4, 2020
  - This workshop explored systems for keeping food waste and other compostable materials out of landfills, making connections to water quality and climate change. Participants toured an organics-composting system at MSU-Mankato, learned from Mankato Area Zero Waste about engaging ways to teach people how to reduce food waste, and heard from local farmers about how they've partnered with a local restaurant to recycle organics on their farm.
- Belle Plaine Rotary Club Presentation to generate awareness and support for the YES! program (in-person) - March 11, 2020
- Water Education Training Workshop with Westbrook-Walnut Grove YES! Team (in-person) – March 12, 2020
- Students discussed threats to water quality and participated during a demonstration of the “Would You Drink This Water?” lesson they will teach to elementary students once schools open again and education events like the Science and Nature Conference return.
- Electric Vehicles and Clean Transportation Workshop (virtual) - May 12, 2020
  - The goal of this workshop was to help students understand how their own decision about what to drive impacts larger systems like climate, water quality, and human health. Participants learned from presenter Jukka Kukkonen about types of electric vehicles (EVs), ways to charge them, and how much money households can save by switching to an EV. They saw YES! staff demonstrate PlugShare, an app that helps EV drivers find charging stations and plan road trips, and CarbonCounter.com, an interactive graph that compares emissions and lifetime costs for driving particular models including EVs and gasoline-or diesel-powered vehicles.
- Presentation for Southcentral MN Clean Energy Council Forum (virtual) – July 10, 2020
- This presentation generated awareness and support for the YES! program and helped foster relationships with clean energy experts and sustainability advocates in southern MN. Co-presenters were the coach and two students from the Mankato West YES! Team; they highlighted the “RetroLED the Hallways” project, which was funded by a grant from CERTs, and shared how participating in YES! has impacted them personally.
- West Central YES! Coordinator, Taylor Templer, attended the Southwest Minnesota Foundations Conference on January 29<sup>th</sup> and hosted an exhibitor table at the Lions Convention on January 25<sup>th</sup>.

Facebook: frequent posts by staff and students on projects and events

### **Fifth Update January 31, 2021:**

YES! E-Newsletter Period of July 1, 2020 to February 26, 2021:

- YES! E-Newsletters for July 1 to Dec. 31, 2019: 2 were sent during this time frame:
  - September 6, 2019 to 866 people
  - October 30, 2019 to 853 people
- YES! in Outside News Sources: 3 are listed on our website during this time period. You can access all of those here:
  - **February 17, 2021:** [YES program continues to show students the importance of their environmental impact](#)
  - **November 30, 2020:** [Sleepy Eye YES! Team says: Recycle your Holidays!](#)
  - **September 22, 2020:** [Students at Mankato West High School lead on energy-saving LED lighting project](#)

Print Newsletters:

- Prairie Woods Environmental Center's Fall Newsletter, the "Warbler" featured a YES! article reaching over 1,400 people

Facebook: frequent posts by staff and students on projects and events

Website:

- 7 blog posts written and posted by staff and students
- Website continues to be updated with a Coach's Corner containing relevant information to YES! coaches
- 6,557 visitors with 5,164 being new visitors

Presentations, Exhibitor Tables & Volunteer opportunities:

- Shelli-Kae Foster represents YES! at the West Central Clean Energy Resource Teams (CERTs) virtual monthly committee meeting
- Shelli-Kae Foster, Deb Groebner (Southern YES! Coordinator) and Taylor Templer (WC YES! Coordinator) attended the 2 part ITEST Virtual Workshop conducted by the UofM's Institute on the Environment
- Due to COVID and most events being cancelled we have had less participation in presentations, exhibitor tables and volunteer opportunities outside of our own virtual events.

### **Final Update July 31, 2021: Dissemination**

During this project (July 1, 2018, to June 30, 2021) YES! staff have tabled or presented at 20 events. YES! was featured in 22 outside articles, radio broadcasts and videos. In addition, staff posted 86 blog posts to our website which were shared on our social media pages including Facebook and LinkedIn.

**YES! in Outside News Sources (TV, Radio, Newspaper):** 22 items during this 3-year project. They are listed on our website at [YES! in the News](#).

Since our last Update we have this wonderful interview on Maverick FM Radio to share [KEYC Interview with YES! Students from Mankato West](#)

**YES! Website (Results for July 1, 2018 to June 30, 2021):**

- 86 blog posts written and posted by staff
- 12,954 visitors with 12,795 being new users
- [YES! Website](#) continues to be updated with a Coaches Corner containing relevant YES! information for our YES! coaches

**Print and electronic newsletters:**

- YES! sent out 10 E-Newsletters. They are listed on our website and can be accessed here at [YES E-Newsletters](#).
- Since our last reporting (February 27, 2021) we sent out 1 E-newsletter, Summer 2021 E-Newsletter sent on June 30,2021 to 927 people
- Prairie Woods Environmental Center sent out 4 editions of newsletter, the “Warbler”, which included a YES! feature; reaching over 1,300 people per edition
- Ney Nature Center send out 28 e-newsletters and 5 printed newsletters, which included a YES! feature

**Presentations, Exhibitor Tables & Volunteer opportunities:**

Since our last reporting (February 27, 2021) we have had the following activity:

- Shelli-Kae Foster presented at the UofM School of Medicine lecture series [“Youth Action: Health & Climate Change.”](#)
- Deb Groebner, YES! Coordinator/Southern regions, presented to over 100 science teacher at Teach Outdoors

Other media and outreach links and activities:

- [YES! website](#) includes blog posts, news articles, press releases, alumni stories and project resource
- [YouTube](#)
- [Facebook](#)
- [Photos](#)
- 2018-19 Team Accomplishments tabloid - attached
- 2019-20 Team Accomplishments tabloid - attached
- 2020-21 Team Accomplishments tabloid – attached
- Visual of Final Report – attached

**V. PROJECT BUDGET SUMMARY:**

ENRTF funds provide support for YES! staff time, travel, and project seed funds. The total allowance will be offered equally among participating teams. Each partner organization intends to have a part-time employee that has other responsibilities within the organization in order to create a full -time position. If this is not available, a part-time contractor may fulfill the duties as assigned.

ENRTF funds provide support for YES! staff time, program-related school district/organization expenses, and project seed funds. The school district/organization expense reimbursement allowance is intended to offset expenses incurred by school districts and/or community organizations that sponsor a YES! team. This support allows teams to participate in YES! in a cost-effective manner. Eligible reimbursable expenses may include: 1. Reimbursement to offset the cost of hiring substitute teachers in order to allow YES! coaches/adult advisors to attend YES! events during the school day, and 2. Transportation expenses for buses or vans for students and coaches/adult advisors to travel to YES! events. The total allowance will be offered equally among participating teams.

Project seed funds are made available to teams to enable water related action projects to get a start. These funds are usually matched by community support, fundraisers and volunteer time. Projects will vary depending upon school/community needs and student interests. YES! Coordinators will have a good understanding of team projects by mid-December or early January of each year. Funds will be used only for items deemed eligible as outlined in M.L. 2018 RFP “Guidance on Allowable Expenses.”

Eligible expenses may include:

1. Materials for water quality and conservation education activities
2. Water conservation kits for community distribution

3. Equipment for tracking and measuring water consumption and savings, to be made available for public use
4. Professional or technical services with qualified individuals for consultation or labor relating to teams' water quality or conservation action projects
5. Materials and supplies for developing native plantings, pollinator gardens and promotion of other restorative practices that support clean water
6. Rental of boats to get students out on the water for AIS testing, Secchi disc readings, etc.
7. Water saving devices for installation in public buildings such as schools, city buildings, or county buildings

**A. Preliminary ENRTF Budget Overview:** See attached budget spreadsheet

**Explanation of Capital Expenditures Greater Than \$5,000:** none

**Explanation of Use of Classified Staff:** none

**Total Number of Full-time Equivalents (FTE) Directly Funded with this ENRTF Appropriation:**

Enter Total Estimated Personnel Hours for 2 years: 4,160	Divide by 2,080 = TOTAL FTE: 2.0
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**Total Number of Full-time Equivalents (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation:**

Enter Total Estimated Personnel Hours for 2 years: 2,080	Divide by 2,080 = TOTAL FTE: 1.0 FTE
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**B. Other Funds:**

SOURCE OF AND USE OF OTHER FUNDS	Amount Proposed	Amount Spent	Status and Timeframe
<b>Other Non-State \$ To Be Applied to Project During Project Period:</b>			
<i>Note: dollars listed below will be applied to the YES! program to maintain 5 (.5 FTE positions) supporting 4 regional cohorts of up to 10 teams each.</i>			
McKnight Foundation	\$ 180,000	\$178,000	Secured
Team registrations for 3 years 54 teams	\$24,000	\$32,400	Secured
Sponsorships and other foundation support projected for 3 years	\$ 32,000	\$16,000	Secured
Waste Management	\$5,000	\$5,000	Secured – 2019 for State awards
Geronimo Wind	\$1,000	\$1,000	Secured – 2018-19
United Way of West Central MN	\$3,500	\$3,000	Secured – 2018-19
Walmart	\$1,000	\$1,000	Secured – 2018-19
<b>Other State \$ To Be Applied to Project During Project Period:</b>			

<b>SOURCE OF AND USE OF OTHER FUNDS</b>	<b>Amount Proposed</b>	<b>Amount Spent</b>	<b>Status and Timeframe</b>
LYFT Career Pathways – SWWC Service Cooperative	\$49,000	\$21,000	2020-21
AIS Kandiyohi County grant	\$1,000	\$1,000	2020
AIS Kandiyohi County grant	\$3,400	\$2,805	2019
AIS Kandiyohi County grant	\$2,500	\$2,500	2017-18
<b>Past and Current ENRTF Appropriation:</b>			
M.L. 2016, Chp. 186, Sec. 2, Subd. 05c.	\$400,000	\$339,980	Completed
M.L. 2014, Chp. 226, Art. 3, Sec. 2 Subd. 09b	\$350,000	\$320,000	Completed
M.L. 2011, First Special Session, Chp. 2, Art. 3, Sec. 2, Subd. 08a	\$250,000	\$245,871	Completed
<b>Other Funding History:</b> includes funding for the YES! program from 2007 through 2017, this project will be an extension of the original program			
Southwest Initiative Foundation	\$317,600	\$317,600	2007-2017
Minnesota Renewable Energy Marketplace	\$202,000	\$202,000	2007-2009
McKnight Foundation	\$170,000	\$110,000	\$60,000 for 2017-18 season
AgStar	\$25,000	\$25,000	2009-2010
Southern MN Initiative Foundation	\$33,530	\$33,530	2008-2011
Bush Prize Award	\$10,000	\$10,000	2016-17
Southwest Private Industry Council	\$ 7,500	\$7,500	2007
Great River Energy	\$3,000	\$3,000	2010
Center for Energy & Environment	\$1,500	\$1,500	2010
Initiative Foundation	\$5,000	\$5,000	2011-2013
Ney Nature Center	\$ 13,000	\$13,000	2015-17 (in-kind)
Laurentian Environmental Center	\$15,000	\$15,000	2014 – 2017 (in-kind)
Prairie Ecology Bus	\$1,500	\$1,500	2008
Central Regional Sustainable Development Partnership	\$11,000	\$11,000	2012-14
Northeast Regional Sustainable Development Partnership	\$10,000	\$10,000	2014-16
Prairie Woods ELC	\$300,000	\$300,000	2007- 2017 (in-Kind)
Other contributors	\$10,500	\$10,500	2007 - present

**VI. PROJECT PARTNERS:**

**A. Partners receiving ENRTF funding**

Name	Title	Affiliation	Role
Rebecca Pollack	Executive Director	Ney Nature Center	Program Partner - south
Karl Brown	Executive Director	Laurentian Environmental Center	Program Partner - northeast

**B. Partners NOT receiving ENRTF funding**

Name	Title	Affiliation	Role
Charlene Brooks	Aquatic Invasive Species Coordinator	Kandiyohi AIS Task Force	Resource Expert West-central region
Jonathan Morales	Watershed Technician	Middle Fork Crow River Watershed District	Resource Expert West-central region
Adam Hjelm	Water Education Specialist	Sauk River Watershed District	Resource Expert West – central region
Jill Sweet	Aquatic Invasive Species Technician	Minnehaha Creek Watershed District	Resource Expert Southern region
Allison Gamble	Invasive Species Specialist	MN Department of Natural Resources	Resource Expert Southern region
Karl Schmidtke	Program Manager	Friends of the Minnesota Valley River Watch	Resource Expert Southern region
Emily Nelson	Water Resources Specialist	N. St. Louis Soil and Water Conservation District	Resource Expert Northeast region
Marte Kitson	Environmental Literacy Extension Educator	MN Sea Grant	Resource Expert Northeast region
Rich Rezanka	Invasive Species Specialist	MN Department of Natural Resources	Resource Expert Northeast region
Karen Terry	Extension Educator, Water Resources	University of Minnesota	Resource Expert NW/WC

**VII. LONG-TERM- IMPLEMENTATION AND FUNDING:**

With major assistance from ENRTF, YES! has developed a solid network of partners, students, educators, experts and a proven model for mobilizing youth-led environmental stewardship projects. YES! will utilize this successful model to impact water quality in watersheds throughout Minnesota. YES! teams bring education from workshops, tours and events back to their school and community through blog posts, school newsletters and hosting their own educational events, developing informed and engaged citizens for a lifetime. Project accomplishments are recognized and publicized via website, newsletters, conference presentations and local, regional and state-wide news media. PWELC and YES! are currently implementing a Fund Development Plan including recruitment of sponsors and developing a donor database.

**VIII. REPORTING REQUIREMENTS:**

- The project is for 3 years, will begin on July 1, 2018, and end on June 30, 2021.
- Periodic project status update reports will be submitted January 31 and July 31 of each year.
- A final report and associated products will be submitted between June 30 and August 15, 2021.

**IX. SEE ADDITIONAL WORK PLAN COMPONENTS:**

- A. Budget Spreadsheet

- B. Visual Component or Map
- C. Parcel List Spreadsheet - NA
- D. Acquisition, Easements, and Restoration Requirements - NA
- E. Research Addendum - NA

**FINAL Attachment A:** Budget Worksheet for M.L. 2018  
 Environment and Natural Resource Trust Fund projects  
**Environment and Natural Resources Trust Fund**



**M.L. 2018 Budget Spreadsheet**

**Legal Citation:** M.L. 2018, Chp. 214, Art. 4, Sec. 02, Subd. 05b  
**Project Manager:** Shelli-Kae S. Foster  
**Project Title:** YES! Students Take on Water Quality Challenge  
**Organization:** Prairie Woods Environmental Learning Center  
**Project Budget:** \$213,000  
**Project Length and Completion Date:** 3 years, June 30, 2021 (extension)  
**Last Update:** February 26, 2021  
**Today's Date:** July 5, 2021

<b>ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET</b>	<b>Revised Budget 8/20/2020</b>	<b>Amount Spent through (2/16/2021)</b>	<b>Balance</b>
<b>BUDGET ITEM</b>			
<b>Personnel (Wages and Benefits)</b>	\$138,002	\$137,993	9
(1) ~ 0.73 FTE Program Manager and Team Coordination at \$81,000 total cost for two years. 75% salary, 25% benefits each year for 2 years. Note: Program Manager will provide support to teams in NW/NC regions.			
(1) 0.30 FTE Team Coordinator at \$31,000 for two years to coordinate and lead water quality project initiatives. 75% salary, 25% benefits each position for 2 years			
(1) ~0.25 FTE Administrative Assistant \$18,800 for two years 75% salary, 25% benefits each year for 2 years			
<b>Professional Service Contracts</b>			
Professional Service Contracts: Laurential Environmental Learning Center 1) .25 FTE Regional Coordinator to facilitate water quality related projects and activities; \$ 13,000/year, total \$25,550 for 2 years.	\$25,550	\$25,550	\$0
Professional Service Contract: Ney Nature Center (1) 0.25 FTE Regional YES! Team Coordinator to facilitate water quality related projects and activities; \$13,000/year, total \$27,798 for two years .	\$27,798	\$27,797	\$1
Professional Service Contract: Achieve Consulting. 120 hours x \$50 hour for a total of \$6,000 to move YES! to an online platform to better meet the outcomes of the project and for core programming support. This contractor has been completed.	\$3,650	\$3,650	\$0
<b>Equipment/Supplies/District Expenses:</b> Supplies for events and workshops and travel (substitute teacher & mileage) for student teams to attend events & workshops. Boat rental as needed in some regions. In many regions boats will be provided through in-kind support.	\$5,500	\$5,480	\$20
<b>Travel expenses in Minnesota:</b> Coordinators & Project Director travel: 850 miles/month x 24 months = 19,065 miles x .535 = \$ 10,200 Note 1 : Travel required to support and meet with teams and partners and to coordinate activities in rural regions across the state of Minnesota Note 2: LCSC & NNC will cover a portion of travel within their region Note 3: LEC will cover a majority of travel within their region	\$7,000	\$6,616	\$384
<b>Other: Project Seed Funds;</b> Allows for teams to purchase materials and services necessary to initiate projects for water quality and conservation related projects, events, monitoring, testing and reporting. This includes cost for the New London Spicer YES! team to attend a conference in order to recruit attendees for the Adopt-A-Storm Drain program.	\$5,500	\$5,474	\$26
<b>COLUMN TOTAL</b>	<b>\$213,000</b>	<b>\$212,559</b>	<b>\$440</b>



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