**Project Abstract** 

M.L. 2011, First Special Session, Chp. 2, Art.3, Sec. 2, Subd. 08a For the Period Ending June 30, 2014

PROJECT TITLE: Youth-led Renewable Energy & Energy Conservation in West

& Southern Minnesota

PROJECT MANAGER: Shelli-Kae S. Foster

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www.prairiewoodselc.org

FUNDING SOURCE: Environment and Natural Resources Trust Fund LEGAL CITATION: M.L. 2011, First Special Session, Chp. 2, Art.3, Sec. 2,

Subd. 08a

**APPROPRIATION AMOUNT: \$246,000** 

## **Overall Project Outcome and Results**

The Youth Energy Summit (YES!) project was designed to mobilize teams of youth to address critical environmental issues and emerging opportunities related to climate change and renewable energy in Greater Minnesota. The YES! program impacts includes:

- 38 YES! Teams completed over 300 youth-led energy conservation and renewable energy projects during July 1, 2011- June 30, 2014.
- 1,134 students in grades 7-12 worked with local community leaders, businesses, schools, public utilities, waste haulers, and other partners.
- Over 44,380 students and 48,376 community members engaged in efforts to decrease waste and increase energy efficiency.

YES! teams leveraged over \$625,000 in local support of projects which included: installing over 40 hydration stations, building three solar powered cold-weather greenhouses, installing waste oil recycling stations, designing and building solar boats and vehicles, improving recycling systems, reducing school energy bills, increasing recycling rates, implementing composting of school waste, promoting environmental stewardship through educational events, and more (please see <a href="https://www.youthenergysummit.org">www.youthenergysummit.org</a> for project specifics).

YES! teams were guided by local coaches & mentors as well as regional YES! Coordinators who conducted 3 annual fall summits, 15 winter workshops tailored to meet the needs and interests of teams, and annual spring judging events. YES! Coordinators and team coaches helped students to organize more than 70 events such as "Green Week" and "Energy Expos" promoting sustainable practices in their communities.

The YES! project demonstrates that young people in Minnesota are ready, willing, and able to assume leadership roles and take action to address environmental issues and opportunities affecting our state and the world. YES! is a program of Prairie Woods Environmental Learning Center in partnership with Southwest Initiative Foundation and many local and regional supporters. The YES! program will be expanded to 40 teams

during 2014-2016 in partnership with Laurentian Environmental Center and other regional partners.

## Project Results Use and Dissemination

Information on YES! projects are regularly highlighted through the YES! website (<a href="www.youthenergysummit.org">www.youthenergysummit.org</a>), blog posts, and Facebook updates. The YES! website received well over 45,000 page views from July 1, 2012 to June 30, 2014, with 65 % of these viewers being new to the site. Local media frequently print stories on YES! team accomplishments; the Warbler, a PWELC newsletter reaching 1,400 people, goes out 3 times a year and commits a page of each publication to YES!; furthermore, the YES! enewsletter goes out 4 times a year.

Several communications and outreach activities have been done in relation to this Youth-Led project including three (3) Community Meetings, which brought together stakeholders to celebrate the team's successes and to evaluate the program for future improvements. These meetings served to both raise awareness of YES! teams in local communities and to highlight their good work. The program's funding partners are regularly updated on projects and show their support through continued funding and volunteer time. Coordinators submit Press Releases to local and regional outlets for Spring Award winners and other important stories.

YES! staff have presented at MN S.T.E.M. Network (2013), CERTs (2012), and Minnesota Association of Environmental Educators (2013) conferences. During YES! events, techniques such as S.M.A.R.T. goals have been developed and shared with the students and students have taken that information back to their Team to successfully plan and implement projects. Other types of techniques developed for use by Teams include; "How to Connect with Community Leaders," "Energy and You," "Benchmarking Your Projects," and Effective Meeting Strategies."

Of special note, YES! won the 2013 Minnesota Environmental Initiative Award and the Royalton YES! team won the state-wide 2014 "Red Wagon" award from the Minnesota Alliance with Youth!

# Environment and Natural Resources Trust Fund (ENRTF) M.L. 2011 Work Plan Final Report

**Date of Report:** 8/13/2014

**Final Report** 

**Date of Work Plan Approval:** 6/23/2011

Project Completion Date: 6/30/2014 Is this an amendment request? NO

Project Title: Youth-Led Renewable Energy & Energy Conservation in West &

Southwest MN

Project Manager: Shelli-Kae S. Foster\_

**Affiliation:** Prairie Woods Environmental Learning Center

Address: 12718 Tenth St NE

City: Spicer State: MN Zip code: 56288

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Web Address: <a href="http://www.prairiewoodselc.org">http://www.prairiewoodselc.org</a>

Location:

**Counties Impacted:** Statewide

Ecological Section Impacted: Lake Agassiz Aspen Parklands (223N), Minnesota and Northeast Iowa Morainal (222M), North Central Glaciated Plains (251B), Northern Minnesota and Ontario Peatlands (212M), Northern Minnesota Drift and lake Plains (212N), Northern Superior Uplands (212L), Paleozoic Plateau (222L), Red River Valley (251A), Southern Superior Uplands (212J), Western Superior Uplands (212K)

Total ENRTF Project Budget: ENRTF Appropriation \$: 246,000

**Amount Spent \$:** 245,870.94

**Balance \$:** 129.06

Legal Citation: M.L. 2011, 1st Special Session, Ch. 2, Art. 3, Sec. 2, Subd. 08a

## **Appropriation Language:**

\$123,000 the first year and \$123,000 the second year are from the trust fund to the commissioner of natural resources for an agreement with Prairie Woods Environmental Learning Center to initiate youth-led renewable energy and conservation projects in over thirty communities in west central and southwest Minnesota.

Youth-Led Renewable Energy & Energy Conservation in West & Southwest MN

I. PROJECT TITLE: YES! Youth-Led Renewable Energy and Energy Conservation in West and Southwest Minnesota

#### **II. PROJECT SUMMARY:**

**WHY:** In response to urgent concern regarding climate change, energy costs and strained budgets, Youth Energy Summit (YES!) teams coordinated by Prairie Woods Environmental Learning Center and Prairie Ecology Bus Center in partnership with Southwest Initiative Foundation have produced dramatic returns on investment in west central and southwestern Minnesota.

With LCCMR support of \$246,000 over two years, YES! Teams will initiate youth-led renewable energy and energy conservation projects in over 30 communities in west central and southwestern Minnesota and offer the YES! program as a strong regional model which multiplies the impact of other public and private sector renewable energy and conservation programs.

Over the past three years, YES! Teams have accomplished ambitious renewable energy and energy conservation projects and have demonstrated an impact in the greater community beyond school walls. The New London - Spicer YES! team mobilized a \$45,000+ energy efficiency upgrade of a community theater; including an innovative solar heating system which has inspired at least three other solar heating projects to date. Other YES! teams achieved equally impressive outcomes including: a winter community greenhouse heated by solar and biomass; solar electric installations for schools; community-wide electronics recycling days; composting and waste-reduction programs in schools; and many more. YES! projects have created spin-off opportunities for local contractors and raised public awareness of renewable energy and energy conservation through dozens of media articles (print, radio, and internet).

**GOALS:** To inspire widespread adoption of renewable energy technology and energy conservation practices which contribute to the environmental and economic health of rural Minnesota communities.

#### Specific goals for YES! 2011-2013 are:

- ➤ Implement 30+ renewable energy and energy conservation projects in west central and southwestern Minnesota and engage 15,000 school students, 45,000 community members, and 300 businesses and organizations (based on YES! 2010 results).
- ➤ Build upon the successful YES! model by adding an additional 10 to 14 teams in a broader geographic region for a total of 30-34 teams by 2013, and to prepare for statewide replication.
- > Develop self-sustaining community based funding for future YES! teams from energy savings resulting from energy efficiency and conservation projects.

**HOW:** Expand the existing YES! network to include up to 450 high school students and up to 40 coaches/adult advisors in 30+ YES! teams throughout west central and southwestern Minnesota. YES! staff works intensively with teams to: assess community assets and needs; identify and involve community partners; create action-plans; link with funding resources; and implement solar, wind, biomass, recycling and composting projects which match the students' passion with a real need and opportunity in their community. YES! staff goes directly into the schools and work with teams and their coaches throughout the year, which compliments efforts from other public and private programs which provide grant funds and technical expertise such as energy audits. The project and its outcomes will be reported to Minnesota's statewide environmental education community through updates to environmental learning centers and a presentation at the MAEE Conference.

## **III. PROJECT STATUS UPDATES:**

Project Status as of January 31, 2012 (must be 250 words or less)

The project is off to a great start, building upon the successful model of the past.

Youth-Led Renewable Energy & Energy Conservation in West & Southwest MN **Recruitment and Retention**: Due to delay of the funding contract until October, important opportunities for team recruitment early in the school year were lost. Even so, 7 new teams were

recruited and important contacts were made toward meeting recruitment goals for the 2012-2013 school -year." Twenty-two (22) teams throughout the identified regions are actively developing energy related projects and working with their communities to devise innovative projects.

**Workshops and Events:** A dynamic Fall Summit captivated 128 students at Gustavus Adolphus College on November 9, 2011. Rotating through four break-out sessions, students witnessed what makes experienced YES! teams successful; learned how to take energy efficiency to the next level; tapped into their entrepreneurial spirit; and tried their hand at maximizing their use of resources through an interactive game. These sessions were specifically designed to students with valuable information and resources to use towards their own projects.

**Complete 30 Projects** (Team Support and Project Management): YES! Coordinators provide weekly updates and support to their respective teams. Monthly coordinator visits facilitate development of project plans and goals, inspire participation and promote community interaction. The YES! website provides relevant resources and project highlights (<a href="www.youthenergysmmit.com">www.youthenergysmmit.com</a>).

Of special interest is how the YES! model has inspired southeastern Minnesota to start 7 YES! teams with funding from the Southern Minnesota Initiative Foundation (SMIF) and staff support from the Southwest Initiative Foundation. This enables YES! to reach another 100 Minnesota high school students.

## Project Status as of June 30, 2012

## **Amendment Request 1 (10.09.2012)**

PWELC is requesting to move dollars from Budget Item "Travel Expenses in MN" in the following manner: \$ 2,000 from Activity 1 (Recruitment & Retention) to Activity 3 (Team Action Projects).

Justification: Coordinators utilize internet and phone to recruit and retain teams, minimizing the amount of time spent travelling. The dollars shifted into Team Action Projects will enable coordinators to offer more team support through face to face opportunities, moving projects along more efficiently and with more impact in their school and community.

#### **Amendment Request 2 (10.09.2012)**

PWELC is requesting to change the language in Budget item Other: District/organization expense allowance from (30 teams x \$ 500/team x 2 years) to Year 1, 30 teams spent a total of \$ 3,440 leaving a balance of \$ 26,560. The new balance of \$ 21,560 / 30 teams = av. of \$ 718 per team for 1 year. Amount spent not to exceed \$ 21,560.

#### Justification:

Coaches were recently polled on the best use of the available dollars. The majority of the responses commented that the amount proposed (\$ 500 for coach allowance and \$ 1,000 for team projects) would work well for the teams this season. However, many responded that with the increase in transportation costs, more dollars towards coach allowance expenses would be appreciated and helpful in attending the Fall Summit and Winter Workshop. Therefore, PWELC proposes the addition of \$ 200 per team toward coach allowances.

In addition, last year YES! teams spent approx. \$ 570 for coach expenses. The increase will allow for teams travelling greater distances due to the addition of teams in the expansion area and due to the increase in gas prices.

#### **Amendment Request 3 (10.09.2012)**

Youth-Led Renewable Energy & Energy Conservation in West & Southwest MN PWELC is requesting to move \$ 5,000 dollars from "Other: District/organization expense allowance" to "Other: Team Seed Funds" expenses. PWELC requests changing the language from (30 teams x avg. \$500/team x 2 years) to Year 1, 30 teams spent \$ 3,467 leaving a balance of \$ 26,533. The new balance of \$ 31,533/30 teams = av. of \$ 1,051 per team for 1 year. Amount spent not to exceed \$ 31.533.

#### Justification:

- 1) Teams did not spend as much of the available dollars in the first year because they were hesitant to plan for project dollars prior to knowing the amount available to spend. Many teams began projects in school year 2011-12 before PWELC could identify the amount available to teams due to the delay in the project start date (due to government shutdown). This year the teams are ready to take on projects and are confident in their funding source.
- 2) History shows new teams tend to implement "low hanging fruit" projects that will be successful, however which may not require as much funding, therefore the amount of need was not as great last year for the project dollars; and
- 3) With anywhere from 1 to 5 years of experience, many teams are looking to implement projects requiring more dollars this next year such as the Litchfield YES! team who applied and was awarded \$ 3,500 from Clean Energy Resource Teams (CERTS website, 2012, Oct. 2) for a solar project. We find as teams become more familiar with the program, they also become more adept at leveraging dollars from community and other state resources. In fact, last year (2011-12) many YES! teams leveraged over \$ 5,000 in additional resources. We expect history will repeat itself this year and teams will again leverage the ENRTF dollars to move their energy action projects forward and with significantly more impact.

Litchfield High School Youth Energy Summit Team – Solar Panel Installation and Education Litchfield, MN The Solar Panel Installation Project at Litchfield High School will install solar electric panels on the school building, hoping to generate between 500-800 kWh/month. Additionally, the YES! Team is requiring that the contractor for the project be available for energy education and information regarding the panels. Hoping to engage both the student body and the local community, the YES! Team plans to pursue media coverage, offer open houses, and provide energy education opportunities for students and the public. (Education, Solar Electric: Renewable Energy; \$3,500)

(Source: Clean Energy Resource Teams (2012, Oct. 2). CERTS Announces Seed Grant Recipients for Energy and Renewable Projects in MN. Retrieved from http://www.cleanenergyresourceteams.org/blog/certs-announces-seed-grant-recipients-energy-efficiency-and-renewable-energy-projects-mn

## Amendment Request 4 (10.09.2012)

PWELC is requesting to change the Budget Item "Equipment/Tools/Supplies" (\$ 1,000) from solar pathfinders and request: 2 Solar Ovens (\$ 300 sub-total), 2 Renewable Energy Kits (\$ 400 sub-total), and Replacement parts for Kid Wind kits (\$ 100 sub-total), 6 Solar car kits (\$ 100 sub-total), and 2 sun angle kits (\$ 100 sub-total). The numbers are approx. to make allowance for shipping.

Justification: Coordinators believe that the number of solar pathfinders already available is sufficient. Through research and input from teams, we believe the suggested items will be of value and use to the teams this year and into the future. The kits will provide hands-on opportunities for students and coaches to learn about the power of the sun and wind.

Amendment Requests 1, 2, 3 and 4 Approved by LCCMR: [October 29, 2012]

## Amendment Request 1 (7.30.2012)

PWELC is requesting to eliminate Anne Dybsetter as the Project Manager due to the fact she is no longer working at PWELC. PWELC asks to please add Shelli-Kae S. Foster as the Project Manager and to change relevant contact information to indicate this change.

## Amendment Request 2 (7.30.2012)

PWELC is requesting a redistribution of

- 1) \$ 4,000 from Personnel: Activity 3: Team Action Projects to Personnel: Activity 2: Workshops & Events, and
- 2) \$ 4,000 from Professional/Technical contracts: Activity 3: Team Action Projects to Professional/Technical contracts: Activity 2: Workshops & Events.

The Work Plan outcomes remain the same however we found the staffing time required for the Fall Summit and Winter Workshop to be higher than previously budgeted. Events and workshops provide valuable resources and hands-on experiences relative to team projects, enabling teams to more (June 30, 2012 Project Status Summary continued...)

effectively and efficiently complete their projects. The redistribution of dollars will allow coordinators to allocate time towards creating and implementing relevant and informative workshops for the 2012-13 season.

## Amendment Requests 1 and 2 (7.30.2012) Approved: [September 28, 2012]

#### **Recruitment and Retention:**

Twenty-Two (22) teams participated as YES! teams along with another 7 from southeastern Minnesota (funded by the Southern Minnesota Initiative). Retention looks promising for the next school year with eight (8) written commitments received from schools this spring. Other teams have given a verbal commitment to participate in 2012-13.

The goal is to recruit up to 8 new teams for 2012-13. Nine (9) teams have been specifically contacted in regards to hosting a YES! team next season: Marshall, Hutchinson, Glencoe, BOLD, St.Cloud Apollo, St. Cloud Tech, Albany, Sartell and Sauk Rapids.

#### **Workshops and Events:**

Winter Workshop: Creatively connecting things – either literally duct-taping them together or more figuratively connecting issues with opportunities – was the theme to the YES! Winter Workshops held at St. John's University (Collegeville) and Faith Lutheran Church (Hutchinson). Over 150 students were encouraged to be creative and curious as they participated in activities that were tailored to their energy action projects.

To see the impact creativity is already having on our energy systems, students had the opportunity to see a variety of businesses and organizations. From tours of organic farms, recycling centers, solar arrays and more, students were able to experience a variety of solutions our communities are already putting in place to reduce or sustainability produce our energy.

A total of seven (7) teams participated in Alexandria's Community Eco Fair and Prairie Woods Environmental Learning Center's Earth Day celebration. YES! team members were instrumental as; volunteers, award recipients, exhibitors and presenters. Four (4) teams in the Southwest area cohort were publicly presented with their awards in their communities.

#### Complete 30 Projects (Team Support and Project Management):

Many teams completed multiple renewable energy and energy conservation projects, therefore YES! is pleased to state the program has exceeded this year's goal of completing 30 or more Energy Action projects. Team projects ranged from designing a solar boat, building an electronic vehicle to growing

Youth-Led Renewable Energy & Energy Conservation in West & Southwest MN produce for the local school. Team projects are highlighted in the attached document (2011-2012 Team Accomplishments) and on the youthenergysummit.org website.

## Project Status as of January 31, 2013

## Amendment Request 1 (4/12/2013):

PWELC requests the final Project Completion Date of June 30, 2013 to change to June 30, 2014. Due to the government shut down in July of 2011 our program did not start until mid- October of 2011. The delayed start compromised the program's ability to get projects started in the beginning of school year 2011. Therefore we feel program dollars can be of great value to support existing YES! team projects in the categories of District Expenses, Project Seed Funds and Travel in school year 2013 - 14.

## Amendment Approved: [April 17, 2013]

#### **Recruitment and Retention:**

The project met and exceeded its goal to recruit and retain thirty (30) teams by fall 2012 for the 2012-13 school year. A total of Thirty – two (32) teams are actively engaged within the designated boundaries and a grand total of thirty – eight (38) YES! teams in greater Minnesota.

#### **Workshops and Events:**

Fall Summit, 2012; Over 150 students gathered in Redwood Falls to learn about Energy Solutions, Community Connections and Measuring Success. The sixth annual Youth Energy Summit provided a variety of energy-related experiences around the theme, *One You, Many Connections*. Students connected with resource experts and information to position them for success as they prepare to engage in team-based projects that not only lead to dramatic demonstrations of renewable energy technology and conservation practices, but also build student skills like problem-solving, communication, team work and project management.

Preparations are underway to create educational workshops including tours of local businesses and organizations. These workshops will help teams build connections while developing skills to complete their own renewable energy and conservation projects.

#### Complete 30 Projects (Team Support and Project Management):

YES! teams are completing community inventories, mini-energy audits and evaluating which projects will be most beneficial to their school and community for the 2012-13 season. Teams are focusing on energy reduction, clean energy, waste reduction, recycling systems, composting and local foods. For example: Royalton is working on a Motor oil recycling program for community and school; Lac qui Parle Valley is building a passive solar greenhouse; and Glencoe-Silver Lake is designing and building a Super mileage car.

#### Project Status as of June 30, 2013:

#### Amendment Request 1 (June 20, 2013)

PWELC requests to move a total of \$ 16,000 from Other: District Allowance (\$ 8,000) and from Other: Project Seed Funds (\$8,000) to Personnel.:

- 1) Shift \$ 8,000 from Other: District Allowances to Personnel: Activity 3: Team Action Projects
- 2) Shift \$8,000 from Other: Project Seed Funds to Personnel: Activity 3: Team Action Projects

Justification: The request will help towards providing staff positions to support the 30 existing YES! teams in greater MN for the 2013-14 season as the program continues to work towards a sustainable business model. Note, YES! has secured \$ 97,000 with an additional \$ 87,000 pending towards next years season. The shift of dollars will be valuable in effectively making use of the remaining balance in Project Seed Funds and District Allowance.

- 1) Remaining Balance after amendment for District Allowance = \$6,292.45
- 2) Remaining Balance after amendment for Project Seed Funds = \$5,876.72

The remaining balance after the amendment provides approx. \$ 500 for up to 11 teams for both District Allowance and Project Seed Funds for the 2013-14 season. These dollars have proven valuable towards allowing teams to participate in YES! workshops and tours and the Project Seed Funds enable students to get projects implemented and to secure matching funds. In the last 2 years of the grant, YES! teams secured and matched over \$ 277,000 towards their projects!

#### Further justification:

From past experience it is easier to get matching dollars for project seed funds than for personnel, therefore the shift of dollars would assist towards staffing for the next season.

Please note: The unspent dollars in District Expenses and Project Seed Funds is a consequence of the late start of the program in 2011 due to the government shutdown. Teams were uncertain of funding

and therefore did not want to incur expenses. Recruitment was also hindered due to the late start of the coordinator for the area resulting in fewer teams than projected joining the program the first year. However, in the 2012-13 season we reached our goal of 30 YES! teams and well over a 70 projects!

## Amendment Approved: [June 28, 2013]

## Summary.....

We wrapped up the 2013-14 with a bang! The Youth Energy Summit (YES!) program was awarded the 2013 Minnesota Environmental Initiative (MEI) award for Environmental Education! The MEI awards are an annual celebration of the individuals, organizations, businesses, and communities who have worked together to create a better environment for all Minnesotans. YES! was nominated by our DNR Project Manager, Jason Tidemann. Ten students and coaches, 3 YES! coordinators and Cheryl Glaser from the Southwest Initiative Foundation attended.

#### **Recruitment and Retention**

The project met and exceeded its goal to recruit and retain thirty (30) teams. A total of Thirty – two (32) teams are actively engaged within the designated boundaries and a grand total of thirty – eight (38) YES! teams in greater Minnesota participated over the 2 year grant period.

## **Workshops and Events**

More than 220 students and teachers from 20 YES! teams participated in the specially tailored Winter Workshop tours offered this year to YES! teams in greater Minnesota With 32 YES! teams this year, we embraced the diversity of their projects and put on six different Winter Workshops. The workshops took place in Glencoe, The College of St. Benedict, Mankato, Kennedy Community School in St. Joseph, Alexandria, and Milan.

#### Complete 30 Projects (Team Support and Project Management):

The 32 YES! teams each completed approx. 2 to 3 energy projects varying from building a passive solar greenhouse to improving recycling systems and engineering a super mileage car for a total of over 80 projects. See Team Project section for highlights from each team.

## PROJECT STATUS AS OF JANUARY 31, 2014

## **Recruitment and Retention**

Youth-Led Renewable Energy & Energy Conservation in West & Southwest MN Currently we have 22 active YES! teams through out the state. This is due to the fact we did not actively recruit new teams due to a shortage in funding for this year. However, we do plan to expand into the Northeast region next season. With secured funding for next season, the YES! Staff plan to bring the each cohorts back up to 10 teams per cohort.

## **Workshops and Events**

YES! held 2 workshops to date one at Glenco - Silver Lake High School on building a super mileage car. This event was attended by 2 YES! teams (30 students and 2 coaches). The Variety Tour in Mankato was held on January 29, 2014 with 3 teams attending (35 students and 2 coaches). Four more are scheduled in the next few months.

## **Complete 30 Projects (Team Support and Project Management)**

YES! teams are working on their projects and will be implementing them this spring. Of special note, New London - Spicer YES! Team has begun recycling its milk cartons which is providing a model for other schools and will be a focus of an upcoming Winter Workshop tour.

## **FINAL PROJECT STATEMENT (Abstract)**

## **Overall Project Outcome and Results**

The Youth Energy Summit (YES!) project was designed to mobilize teams of youth to address critical environmental issues and emerging opportunities related to climate change and renewable energy in Greater Minnesota. The YES! program impacts includes:

- 38 YES! Teams completed over 300 youth-led energy conservation and renewable energy projects during July 1, 2011- June 30, 2014.
- 1,134 students in grades 7-12 worked with local community leaders, businesses, schools, public utilities, waste haulers, and other partners.
- Over 44,380 students and 48,376 community members engaged in efforts to decrease waste and increase energy efficiency.

YES! teams leveraged over \$625,000 in local support of projects which included: installing over 40 hydration stations, building three solar powered cold-weather greenhouses, installing waste oil recycling stations, designing and building solar boats and vehicles, improving recycling systems, reducing school energy bills, increasing recycling rates, implementing composting of school waste, promoting environmental stewardship through educational events, and more (please see <a href="https://www.youthenergysummit.org">www.youthenergysummit.org</a> for project specifics).

YES! teams were guided by local coaches & mentors as well as regional YES! Coordinators who conducted 3 annual fall summits, 15 winter workshops tailored to meet the needs and interests of teams, and annual spring judging events. YES! Coordinators and team coaches helped students to organize more than 70 events such as "Green Week" and "Energy Expos" promoting sustainable practices in their communities.

The YES! project demonstrates that young people in Minnesota are ready, willing, and able to assume leadership roles and take action to address environmental issues and opportunities affecting our state and the world. YES! is a program of Prairie Woods Environmental Learning Center in partnership with Southwest Initiative Foundation and many local and regional supporters. The YES! program will be expanded to 40 teams during 2014-2016 in partnership with Laurentian Environmental Center and other regional partners.

#### IV. PROJECT ACTIVITIES AND OUTCOMES:

ACTIVITY 1: Recruitment and Retention: Secured 30 YES! Teams for 2011-2013

## **Description:**

Recruit 10-14 additional YES! teams with coaches/adult advisors, and confirm participation of previous teams and coaches/adult advisors for a total of 30 teams by October 2012. "Coaches" are typically teachers or similarly trained professionals serving in an active advisory role with teams of youth. YES! Coordinators will recruit new teams as well as contact existing teams to confirm participation for 2011-2012 (target of 8-11 teams per geographical unit).

Summary Budget Information for Activity 1:	ENRTF Budget:	\$ 10,000
	Amount Spent:	\$ 9,965.90
	Balance:	\$34.10

**Activity Completion Date:** 

Outcome	Completion Date	Budget
Up to 450 youth and 35-45 local coaches/adult advisors recruited by YES! coordinators to participate in up to 30 YES! teams.	Oct. 30, 2012	\$12,000
(Budget includes approximately 5% of total staff time and 16% of total travel expenses, necessary to inform and engage school and community leaders, potential coaches/adult advisors, and potential youth participants in a wide geographic area.)	Outcome accomplished	

#### Activity Status as of January 31, 2012 – detailed description

#### **Activity 1 Recruitment and Retention:**

Anne Dybsetter, Youth Energy Summit (YES!) coordinator conducted research in the west and central regions for potential schools interested in the YES! program. Dybsetter contacted principals and superintendents to actively recruit new coaches and students. Dybsetter communicated with 25 schools and met in person with 9 schools. Dybsetter was instrumental in contacting existing YES! teams and successfully retained 6 schools.

Shelli-Kae Foster joined Dybsetter's recruitment efforts in late October in the north-central region. Once Interested coaches, mostly teachers, were identified, on-going contact through e-mail, follow-up phone conversations and in person meetings resulted in students forming YES! Teams. Dybsetter and Foster engaged in outreach to community groups such as the St. Cloud Sustainability group and as presenters at Science Rocks at State Cloud State University. Dybsetter presented with the Eden Valley Watkins YES! team at the Minnesota School Boards Association (MSBA). For more information: Shttp://www.mnmsba.org/Public/PublicationShow.cfm?PublicationsID=2014

Becca Bell, YES! coordinator for the southwest region was instrumental in updating public announcements, creating materials regarding recruitment, reviewing applications and confirming teams re-enlisting in YES! from last season. Bell contacted numerous schools for recruitment including Sleepy Eye, Pipestone, Luverne, Echo Charter School, Worthington, Jackson, St. Peter, and Russel-Tyler-Ruthton.

Youth-Led Renewable Energy & Energy Conservation in West & Southwest MN Outcome Summary:

- Dybsetter recruited 2 new schools; Minnewaska and Dassel-Cokato. Dybsetter retained 6
  existing schools in her region including; Eden Valley Watkins, Lacqui Parle Valley, Litchfield,
  ACGC, Willmar and New London Spicer
- Foster recruited 4 new schools; Foley, Parkers Prairie, Rothsay & Royalton. Foster retained 1 school; Alexandria (from Dybsetter last year)
- Bell recruited 1 new school; Sleepy Eye. Bell retained 8 schools including; Hutchinson, Putting Green, Redwood Falls, Westbrook Walnut Grove, Windom, Springfield, Gibbon-Fairfax-Winthrop & Cedar Mountain
- Total YES! Teams to date: 22
   Note: SMIF has additional 7 teams working in collaboration with the 22 LCCMR teams

## Activity Status as of June 30, 2012

## **Activity 1: Recruitment and Retention**

Twenty-Two (22) teams participated as YES! teams along with another 7 from southern Minnesota (funded by the Southern Minnesota Initiative Foundation). The goal is to have up to 30 YES! ENRTF funded teams for the 2012-13 school year.

**Central area** cohort consists of the following eight (8) schools: Atwater-Cosmos-Grove City (ACGC), Dassel-Cokato, Eden Valley-Watkins, Lac qui Parle Valley, Litchfield, Minnewaska Area High School, New London-Spicer and Willmar.

## **Activity 1: Recruitment and Retention**

**North-central area** cohort consists of the following five (5) schools: Foley, Parkers Prairie, Royalton, Alexandria/ Jefferson and Rothsay.

**Southwest area** cohort consists of the following seven (7) schools: Cedar Mountain, Gibbon-Fairfax-Winthrop, Redwood Falls, Springfield, Westbrook Walnut Grove, Sleepy Eye and Windom.

**Southern Minnesota area** cohort consists of seven (7) with two (2) in the ENRTF area; Mankato East and West.

Active recruiting for the 2011 YES! season ended after the Winter Workshops on February 1, 2012. Recruitment efforts for the 2012 YES! season began in May for next season. Retention looks promising for the next school year with over ten (10) written commitments received from schools this spring. All existing teams are expected to return next year.

## Highlights:

- Dybsetter and Bell presented at the MN Science Teachers Conference,
- 3 Coordinators attended the Minnesota Green Schools Alliance meeting to connect YES! with this new network, April 8, 2012
- 2 Coordinators attended the YEA MN event with Will Steger Foundation, Youth Environmental Network, and CERTs representatives present
- Laid out plans for recruiting in specific, key communities to host YES! teams next season
- Foster exhibited at the Sustainability Expo in St. Cloud, MN on April 22, 2012
- Foster attended Partners in Sustainability meeting in St. Cloud on June 20, 2012.
- Updates made to website and program handouts in preparation for 2012-13 recruitment

## Activity Status as of January 31, 2013

## **Activity 1: Recruitment and Retention**

The project goal to recruit and retain thirty (30) teams by fall 2012 for the 2012-13 school year within the grant boundaries was accomplished and exceeded by 2 teams for a total of Thirty – two (32) teams. The total number of active YES! teams in greater MN during the LCCMR grant period (2 years) is thirty-eight (38).

#### YES! teams include:

**West-Central area** cohort consists of the following nine (9) schools: Atwater-Cosmos-Grove City (ACGC), Dassel-Cokato, Eden Valley-Watkins, Lac qui Parle Valley, Litchfield, New London-Spicer, Redwood Valley, Willmar & Yellow Medicine East.

**North-central area** cohort consists of the following twelve (12) schools: Alexandria, Albany, Apollo/St. Cloud, Brooten-Belgrade-Elrosa, Kennedy Community/St. Joseph, Foley, Minnewaska Area, New York Mills, Parkers Prairie, Rocori, Royalton, and Rothsay.

**Southwest area** cohort consists of the following eleven (11) schools: Cedar Mountain, Gibbon-Fairfax-Winthrop, Glencoe Silver Lake, Mankato East, Mankato West, New Ulm/Putting Green, Redwood Falls, Springfield, Westbrook Walnut Grove, Sleepy Eye and Windom.

**South-eastern Minnesota area** cohort (project grants funded by the Southern Minnesota Initiative Foundation) consists of the following six (6) schools: Austin, Chatfield, Northfield, Pine Island, Rochester-Mayo and Winona.

#### **ACTIVITY STATUS AS OF JUNE 30, 2013**

The YES! program has thirty-two (32) Youth-led teams including:

- North-Central: Ten (10) YES! teams including; Parkers Prairie, Royalton, Foley, Minnewaska, Brooten-Belgrade-Elrosa, Albany, Kennedy Community, Rocori, St. Cloud - Apollo and New York Mills.
- West-Central: Nine (9) YES! teams including; Redwood Valley High School, Lac qui Parle Valley, New London Spicer, ACGC, Willmar, Dassel-Cokato, Eden Valley-Watkins, Yellow Medicine East High School and Litchfield.
- Southwest: Eight (8) YES! teams including; Cedar Mountain, Gibbon-Fairfax-Winthrop (GFW), Glencoe-Silver Lake, Hutchinson, Mankato West, Sleepy Eye, Springfield, and Westbrook-Walnut Grove (WWG).
- Outreach schools: Five (5) YES Teams including; Austin, Chatfield, Northfield, Pine Island and Rochester-Mayo. These teams have access to the YES! website and can attend workshops and events by paying a cost per student due to the fact they are outside of the designated area of the grant.

Review (2011-12 season)

- Total of 22 YES! teams funded by ENRT and 27 total teams
- Central area cohort has 8 active YES! teams
- · North-central area cohort has 4 active YES! teams

- Southwest Minnesota area cohort has 7 active YES! teams
- Southeast Minnesota area cohort has 2 active YES! teams funded by ENRTF and 6 additional YES! teams funded by Southern Minnesota Initiative Foundation

## **ACTIVITY STATUS AS OF JANUARY 31, 2014**

The YES! program has twenty-two (22) Youth-led teams this season including:

North-Central: Seven (7) YES! teams including; Parkers Prairie, Royalton, Brooten-Belgrade-Elrosa, Kennedy Community, Rocori, St. Cloud Apollo and New York Mills

Central: Seven (7) YES! teams including; Redwood Valley High School, Lac qui Parle Valley, New London-Spicer, ACGC, Eden Valley-Watkins, Yellow Medicine East High School and Litchfield

Southwest: Nine (8) Austin, Gibbon-Fairfax-Winthrop (GFW), Glencoe-Silver Lake, Mankato West, Pine Island, Sleepy Eye, Springfield, Westbrook-Walnut Grove (WWG)

## FINAL REPORT SUMMARY (Recruitment and retention)

The goal of the 2011 M.L. Youth-Led Renewable Energy & Energy Conservation in West and Southwest MN was to recruit and retain thirty (30) YES! teams in greater Minnesota. We are pleased to announce thirty-eight (38) YES! teams were active during the grant period of 2011-2014. Teams, with assistance from YES! Coordinators leveraged over \$ 625,000 to support youth in grades 7 to 12 to complete over 300 renewable energy, waste reduction and energy efficiency projects. Location of teams were equally distributed throughout West-Central, Southwest, Southeast and Central Minnesota.

Teams in greater Minnesota included; Albany, Alexandria, Atwater-Cosmos -Grove City, Austin, Brooten-Belgrade-Elrosa, Cedar Mountain, Chatfield, Dassel-Cokato, Eden Valley-Watkins, Foley, Gibbon-Fairfax-Winthrop, Glencoe-Silver Lake, Hutchinson, Kennedy Community, Lac qui Parle Valley,

Litchfield, Minnewaska, New London-Spicer, New Ulm/Putting Green, New York Mills, Northfield, Mankato West, Mankato East, Parkers Prairie, Pine Island, Redwood Valley, Rochester-Mayo, Rocori, Rothsay, Royalton, Sleepy Eye, Springfield, St. Cloud Apollo, Willmar, Winona, Windom, Westbrook-Walnut Grove and Yellow Medicine East.

The YES! project demonstrates that the young people of Minnesota are ready, willing and able to assume leadership roles and take action to address environmental issues and opportunities affecting our state and the world. The YES! program will be expanded to 40 active teams during 2014-2015 in partnership with Laurentian Environmental Learning Center and other regional partners.

## ACTIVITY 2: Organize three training and networking events each year: Fall Summit, Winter Workshop, & Spring Celebration

**Description:** (1) Annual Fall Summit/Kickoff Event: Teams gather for orientation, networking, education, goal-setting, and action-planning. Event has been held at SMSU past two years in conjunction with the Career Expo. Locations for 2012 and 2013 to be determined. (2) Annual Winter Workshop: hands-on skills training and site tours customized depending upon team interests and projects. Workshops typically held at Prairie Woods ELC plus one location in south/southwestern unit. (3) Annual Spring Celebration: public recognition of team project outcomes and awards, plus wrap-up activities. Locations to be determined.

Summary Budget Information for Activity 2:	ENRTF Budget:	\$28,000
	Amount Spent:	\$27,985.06
	Balance:	\$14.94

**Activity Completion Date:** 

Outcome	Completion Date	Budget
250 youth and approximately 35 coaches/adult advisors participate in summits, workshops and spring events. YES! teams network directly with 75+ businesses, organizations, and entrepreneurs through event activities. During events, students gain skills in renewable energy (hands-on workshops); awareness of sites (tours) and topics(expert presenters)  (Budget includes approximately 10% of total staff time and 16% of total travel expenses.)	May 2013	
Fall Summit 2011 - completed	November 2011	\$3,450
Winter Workshop 2012 - completed	February 2012	\$4,250
Spring Celebration 2012 - completed	May 2012	\$2,300
Fall Summit 2012 - completed	November 2012	\$3,450
Winter Workshop 2013 - completed	February 2013	\$4,250
Spring Celebration 2013 - completed	May 2013	\$2,300

## **ACTIVITY STATUS AS OF JANUARY 31, 2012:**

#### Activity 2 Events: Fall Summit, Winter Workshop & Earth Day Celebration

Twenty –three (23) YES! Teams gathered for the YES! Fall Summit held at Gustavus Adolphus College in St. Peter, MN. The event offered students the opportunity to network and learn from students from across the state. One hundred- twenty – eight (128) students and their coaches participated in the 'World Café' where they sat down with one of 26 Minnesota business and organization leaders. Business professionals shared details about their businesses and explored questions "that matter" in energy conservation and sustainability.

The Rothsay YES! Team presented with Ottertail Power Company's Jana Emery on how to engage community partners in community-wide energy reduction and awareness events. Rothsay students offered their insight into how to implement a community energy challenge by collecting pledges from homeowners. Evidence of impact was witnessed when in mid December a YES! Team from Gibbon-Fairfax-Winthrop engaged its community in a similar energy challenge modeled after the Rothsay YES! team. Students also learned about models for finding and tracking baseline data, working with utilities, and motivating energy-saving behaviors.

The Springfield YES! Team entertained the audience with a skit on "how not to" conduct a YES! Meeting with a "gong-show" approach called "Habits of Excellent YES! Teams." Students then demonstrated "how to" run an effective and fun meeting.

Thomas Byrne, owner of Algaedyne, Inc. shared his experience as an entrepreneur in developing algae as a source of biofuel as students learned of the innovation that will be needed for the future of energy and our environment. Other activities included WOW Technologies, Social Norming, and relevant resources were distributed.

Teams left filled with energy, inspiration and resources as they begin to tackle their energy action projects during this school year. Business leaders responded positively to the event with comments such as,

"I really enjoyed my short visit with the kids. I was very impressed with their willingness to engage in a meaningful and thought provoking conversation. I also thought the leadership and speaking part of the exercise was perfect. What a great way to build competent leaders."

When asked for feedback from students one group wrote, "You have the power of choice, you can do something...you can make a difference."

## Outcome Summary:

- Successful organization and implementation of the YES! Fall Energy Summit/Kick Off event at Gustavus Adolphus College, St. Peter, MN on November 9, 2011 with 128 students plus coaches in attendance.
- Planning for Winter Workshops are in process; St. John's/St.Ben's on February 1 for the north central region and on February 9 in Hutchinson for the southwest area.

#### **ACTIVITY STATUS AS OF JUNE 30, 2012:**

#### Winter Workshop

(Excerpt from press release regarding the Winter Workshops):

"Creatively connecting things – either literally duct-taping them together or more figuratively connecting issues with opportunities – was the theme to the YES! Winter Workshops held at St. John's University (Collegeville) and Faith Lutheran Church (Hutchinson). Over 150 students and coaches attended this year's events. Teams participating were from Alexandria, ACGC, Eden Valley-Watkins, Dassel-Cokato, Foley, Lac qui Parle Valley, Litchfield, Minnetonka Area, New London-Spicer, Royalton, Parkers Prairie Mankato East, Mankato West and Willmar.

Students were reminded that "creativity is just connecting things," a quote from the late innovator and entrepreneur, Steve Jobs. To illustrate this point, students were challenged to create something useful from everyday objects that would reduce energy consumption or produce energy sustainably. The results ranged from solar powered watering systems to pet toys as energy generators. Clearly the activity was successful at charging our creative minds! This season, the energy action projects include a diverse selection of energy conservation and renewable energy ideas. Examples include constructing a green roof, installing an energy

monitoring system, educating peers about reducing energy consumption, and planting a school garden. With such a wide array of projects, teams in attendance were able to learn not only from the events and activities but also from each other.

To see the impact creativity is already having on our energy systems, students also had the opportunity to visit a variety of businesses and organizations. From tours of organic farms, recycling centers, solar arrays and more, students were able to experience a variety of solutions

Youth-Led Renewable Energy & Energy Conservation in West & Southwest MN our communities are already putting in place to reduce or sustainability produce our energy.

Among the many highlights of the Workshop at St. John's was the interaction with the University's own student-led sustainability group and a tour of a nearby farm, Dancing Bears Company. In Hutchinson, a tour of the local recycling center taught all participants the wonder of being able to recycle ALL types of plastic!

No matter which Workshop they attended, students left filled with excitement and enthusiasm to tackle the energy action projects they have started in their communities. When asked to reflect on the day, one participant said "I loved the tour, and I loved how simple changes made to my daily life can impact so much of our environment!" As the many smiling faces and eye-opening experiences will confirm – the 2012 YES! Winter Workshops were a great success!

Students brought back ideas to their schools from the winter workshop as was evident through projects that reflected knowledge gained at the Workshop through the innovation activity and inspiring video clips."

## **Spring Celebration and Awards**

Community Eco Fair, Alexandria, MN

- JHS/Alexandria YES! team participated by having a YES! student exhibit booth
- JHS/Alexandria YES! team presented Energy Fun Facts to an audience and handed out prizes
- JHS/Alexandria YES! team assisted exhibitors with loading in, handing out brochures and delivering meals to exhibitors
- Coordinator assisted with event day planning as it related to student engagement and YES!
   team participation

## Prairie Woods ELC Earth Day Celebration

- Coordinator assisted with planning as it pertained to YES! team participation
- · Judges gathered to review team applications and winners determined
- · Awards presented to teams
- Certificates created for all YES! award winners

## 6 YES! teams from central Minnesota exhibited Community Celebrations

- Southwest and Northwest cohorts presented awards during community and/or school events, lifting up the YES teams to their peers and community members.
- GFW YES! team was presented with award at local Kiwanis meeting
- Springfield YES! team received their 3<sup>rd</sup> place award at their High School award ceremony
- · Community supporters attended the WWG YES! class award celebration in their classroom
- Sleepy Eye team and community supporters met at community center to celebrate their Grand Prize award for their work this season

#### (Excerpt from press release regarding Spring Celebrations and Awards):

"YES! Announces Award Winners: Think Global, Act Local YES! 2011-2012."YES! awards were presented within each cohort. Unless otherwise indicated, Grand Prize winners received \$1,500; Second Place winners received \$1,000; Third Place winners received \$750; and all Category Award winners received \$500 each. See what each team accomplished by reading more on the <a href="Teams page">Teams page</a> on the Youth Energy Summit website.

Note: Award dollars were generously provided by the Southwest Initiative Foundation, Center for Energy and the Environment, Kandiyohi Power Cooperative, AgStar Financial Services, Southern Minnesota Initiative Foundation and the Initiative Foundation, Little Falls.

#### Fall Summit 2012

Youth-Led Renewable Energy & Energy Conservation in West & Southwest MN Coordinators are starting preparations for the Fall Summit 2012.

Review:

Fall Summit 2011: actions completed Winter Workshop 2012: actions completed Spring Awards 2012: actions completed Fall Summit 2012: actions completed

## **ACTIVITY STATUS AS OF JANUARY 31, 2013:**

## The Fall Summit was held on October 31, 2012.

Over 150 students gathered in Redwood Falls to learn about Energy Solutions, Community Connections and Measuring Success. The sixth annual Youth Energy Summit provided a variety of energy-related experiences around the theme, *One You, Many Connections*. Students connected with resource experts and information to position them for success as they prepare to engage in teambased projects that not only lead to dramatic demonstrations of renewable energy technology and conservation practices, but also build student skills like problem-solving, communication, team work and project management.

Rotating through three morning breakout sessions, students participated in a skit demonstrating the best practices for connecting with community resources and explored connections in their communities; learned about energy-related careers available in Minnesota and gained knowledge of energy facts through interactive games; and learned how to measure the success of their projects accounting for the real difference that they are making. The State of Minnesota B3 was featured as a way to measure and report results.

All participants engaged in the final session of the day, the "World Café" connecting the diverse perspectives of over 20 Minnesota energy-related business and organizational leaders. Students learned about the work of these leaders, their industries, and opportunities for the future. This intergenerational activity also allowed for meaningful conversations around the concepts of biomimicry, small energy reduction acts, waste collection, and large scale clean energy.

Teams left filled with energy, inspiration, and ideas and connections to tackle their school and community projects this school year! (Press Release, November 2012)

To read more about the Fall Summit, please go to <a href="http://www.youthenergysummit.org/sixth-annual-fall-summit-emphasizes-one-you-many-connections-theme/">http://www.youthenergysummit.org/sixth-annual-fall-summit-emphasizes-one-you-many-connections-theme/</a>

#### Winter Workshop/Tours

Preparations are underway to create educational workshops including tours of local businesses and organizations. These workshops will help teams build connections while developing skills to complete their own renewable energy and conservation projects. Tours and workshops are planned for the following dates:

- Exploring the Ethanol Industry and Automotive Design Practices in Glencoe: Jan 16th
- Composting and Recycling at the College of St. Benedict: Jan 30th
- Energy Reduction and Green Building in Mankato: Feb 6th

- · Tour Kennedy Community in St. Joseph: February 6th
- Greenhouse and Local Foods Tour in Milan: Feb 13th
- Turning Waste into Energy, Recycling Systems, Solar Skies& ATCC Tour in Alexandria: Feb. 13

## Highlights:

- Coordinators meet weekly to share ideas/resources for teams and plan for team activities/projects
- · Coordinators met for in-person Fall Summit meeting in Hutchinson
- Created Community Connections work sheet emphasizing importance of working with community members
- Created worksheet for Measuring Your Success activities
- · Coordinated World Café session with over 30 businesses
- · Researched facts and jobs for the career and energy education session
- · Coordinated 7 Resource Experts for Community Connections session
- Coordinated 6 Resource Experts for Measuring Your Success session
- Coordinated Team registration and other details for a successful event
- Provide on-going information to teams on relevant workshops and events in their area
- Researched, evaluated, inventoried existing kits and ordered energy resource kits for teams to check out

## **ACTIVITY STATUS AS OF JUNE 30, 2013:**

## Winter Workshop/tours 2013 update:

More than 220 students and teachers from 20 YES! teams participated in the specially tailored Winter Workshop tours offered this year to YES! teams in greater Minnesota. Read below for an overview. View <a href="https://www.youthenergysummit">www.youthenergysummit</a> and check out the blog page for more details on each tour.

2012 YES! Winter Workshop Compendium (Excerpts from Warble article by Jonathan Morales.)

"I hear and I forget. I see and I remember. I do and I understand." This famous quote by Confucius sums up the nature of experiential learning and why it is so integral to the Youth Energy Summit (YES!) program. One does not have to look far to see that the partnership between Prairie Woods ELC and the Southwest Initiative Foundation to create the YES! program has fostered the opportunity for thousands of kids to benefit from experiential education.

With 32 YES! teams this year, we embraced the diversity of their projects and put on six different Winter Workshops. The workshops took place in Glencoe, The College of St. Benedict, Mankato, Kennedy Community School in St. Joseph, Alexandria, and Milan. The series of workshops started in Glencoe on January 16th where the Glencoe YES! team focused on building a car for the Supermileage Competition. Students were able to meet with leaders from the ethanol and automotive industries to help them develop their Super-mileage Car and really get things rolling!

The next workshop was held at the College of St. Benedict on January 30<sup>th</sup>. This workshop was developed for teams focusing their efforts on composting and recycling at their schools. While touring the campus, students visited the green student housing residence where the YES! teams found out what it takes to be green on a college campus. Students saw the connections within their projects as

they got the chance to talk with local compost and recycling experts. No tour is complete without some free food! So we wrapped up the day with a demonstration from the St. Ben's waste-to-hog program and a delicious lunch at the Gorecki Dining Center.

After St. Ben's, we moved out to Mankato on February 6th where teams were able to look at the next level of energy reduction. This provided the Mankato West YES! team a valuable opportunity to show off the impressive energy-monitoring system they installed at their school as their YES! energy action

Youth-Led Renewable Energy & Energy Conservation in West & Southwest MN project last year. Teams learned a lot through some fun hands-on activities demonstrating the physics of energy, and discussion with a LEED (Leadership in Energy and Environmental Design) architect. To better understand the diversity of energy efficiency projects, teams also toured Gustavus Adolphus College and Rosa Parks Elementary School, a LEED Gold certified school. Students left this inspiring day with new energy for projects at their own schools.

While the Mankato Workshop was in process on February 6<sup>th</sup>, there was another YES! Winter Workshop going on at Kennedy Community School in St. Joseph. There, teams toured an energy efficient school and learned about the power of solar from a hands-on demonstration with the Solar Oven Society. Kennedy Community School is one of the first U.S. Department of Education's Green Ribbon Schools and is also a LEED Gold certified building. The green technology in these buildings is avant-garde to say the least. From the solar panels on the roof to the ultra quiet VOC-free tiling in the library, it was plain to see these students were proud of every inch of their school.

We had another busy day with two workshops on February 13<sup>th</sup>. One took place in Alexandria, and another in Milan. The Alexandria workshop included a tour of Solar Skies, LLC, a solar thermal collector manufacturer. Teams also stopped at the Pope/Douglas Solid Waste to Energy Facility to witness how steam from garbage is turned into energy for the local 3M plant, hospital and Alexandria Technical and Community College (ATCC). After that, teams had the opportunity to visit the Alexandria Technical and Community College and take a tour of their energy efficiency measures.

Over in Milan, teams focusing on local food projects met with Chuck Waibel, a local leader when it comes to growing greens in the harsh Minnesota winters. The day started off with a stop at Chuck's personal passive solar greenhouse where he pioneered his passive solar system. The simplicity of the system is one of its most attractive features; its efficiency using the little sunlight available during the Minnesota winter, has allowed this system to flourish. Other people in the area saw the value in this system and opened their own passive solar greenhouses. Thankfully, they also saw the value of educating the next generation of growers and in turn opened their doors to YES!. With YES! teams committed to building their own greenhouses, it was important for them to appreciate the big picture so we also stopped out to Moonstone Farm where Audrey Arner helped students wrap their heads around the real value of locally grown, healthy foods.

Throughout each of these Winter Workshops, YES! students had the opportunity to gain further understanding of the best practices in their communities. The key is to keep these students engaged in meaningful action. With many eager minds comes the responsibility to cultivate in them a world ethic that allows them to find a path that leads to a healthy, productive and sustainable future for everyone. Many thanks to all the people that make YES! possible and join in the journey to a brighter future.

## **Spring Celebrations/Judging**

Each team within each cohort participated in a judging opportunity. A panel of judges reviewed a final report and power-point created by each team. The judges met in each cohort location while team members were asked questions by the judges via Skype. Below is the list of winners: YES! awards were presented within each cohort. Unless otherwise noted, Grand Prize winners received \$1,000; Second Place winners received \$750; Third Place winners received \$500; and all Category Award winners received \$250 each. See what each team accomplished by reading more on the Teams page.

#### **Grand Prize**

- · Westbrook-Walnut Grove
- Atwater-Cosmos-Grove City

Royalton

#### 2nd Place

- New London-Spicer
- Tie: St. Cloud Apollo/Rocori (\$625 each)

#### 3rd Place

- Mankato West
- Litchfield

Category Awards: Energy Efficiency & Conservation: For achieving great energy-related outcomes this season, and outlining the energy saved or to be saved in the future due to their work:

- Mankato West
- Lac qui Parle Valley
- Kennedy Community (St. Joseph)

Creativity & Innovation: For showing a new way of addressing challenges or using a new innovative technology or process to achieve their project goals:

- Glencoe-Silver Lake
- Lac qui Parle Valley
- New York Mills

Community Involvement: Demonstrated a high level of community outreach and involvement in their work:

- Westbrook-Walnut Grove
- Litchfield
- Rocori

Big Bang: Team with the most dramatic and effective impact in their community with a quick, highhitting community involvement event or project:

- · Sleepy Eye
- · Eden Valley-Watkins
- Royalton

Review:

Fall Summits: Actions completed for 2011 & 2012 events Winter Workshops: Actions completed for 2012 & 2013 tours Spring Celebrations: Actions completed for 2011 & 2013

#### **ACTIVITY STATUS AS OF JANUARY 31, 2014**

YES! Held the first of 6 Winter Workshops at Glencoe Silver Lake.

#### **Learning About Automotive Engineering and Biofuels**

Article posted on YES! Blog by Aleta Kolan on December 27, 2013

What do a 3-D printer, ethanol, fund-raising, and automotive engineering have in common? They are all things that 20 YES! students from Glenco-Silver Lake High School and Belgrade-Brooten-Elrosa

Youth-Led Renewable Energy & Energy Conservation in West & Southwest MN High School learned about at the recent Exploring the Ethanol Industry and Automotive Design Practices Winter Workshop in Glencoe. Both teams have hopes of completing a vehicle for the MTEE Supermileage Challenge, which takes place annually at the Brainerd International Raceway in May.

The GSL team produced a vehicle last year that achieved 164 mpg during the competition (it had achieved higher mpg during test runs but there was some equipment malfunction during the competition). They are aiming to better that statistic this year by modifying last year's vehicle and competing in the E-85 division and entering a separate vehicle in the modified division. BBE is considering entering a vehicle in next school year's competition, but wanted to learn more about it now.

The students were excited about the day and about participating the Supermileage Challenge. When asked why they wanted to be a part of the competition, which includes building a high-mileage vehicle, students gave responses such as "I want to go into engineering", "I like engines and I wanted to learn more about them", "I have enjoyed gaining skills, like how to work in a team", "Racing runs in my blood", and "I want to learn more about how to get better gas mileage".

The speakers for the day harnessed the energy and enthusiasm of these students. Tim Rudnicki, Executive Director of the MN Bio-Fuels Association, spoke to the students about the importance of thinking about what goes into their fuel. It was an engaging presentation that covered the history of fuel, Minnesota's role in the bio-fuels industry, and lots of important information about ethanol. He encouraged the students to take a tour of a local ethanol plant, which they will plan to do this spring.

Overall it was an educational and inspirational day, thanks to the wonderful presentations by our speakers and the great questions from the YES! students.

## **Planned 2014 Winter Workshop/Tours:**

- Renewable Energy@ SJU February 12, 2014
- Variety Tour in Mankato-January 29, 2014
- Eat Healthy, Eat Local in the Milan area-February 19, 2014
- School Lunch Waste at New London-Spicer-TBA
- The Business of Solar/Building Solar in Southern MN-TBA

#### FINAL REPORT SUMMARY:

YES! teams are guided by local coaches and mentors as well as regional YES! Coordinators who conducted 3 annual Fall Summits, 12 Winter Workshops and 3 Annual Spring Award events. YES! Coordinators and Team Coaches helped students to organize \_\_\_\_ events such as "Green Week" and "Energy Expos" to promote sustainable best practices in their communities. YES! staff tailored the Winter Workshops to specifically meet the needs of the Team's projects. For example, 3 Teams were interested in building an Electronic Vehicle (EV) so YES! staff gathered experts to teach the teams about this topic and to jump start their EV projects. The Spring Awards celebrated and rewarded the good work the students accomplished as they demonstrated "best practices" for conserving Minnesota's valuable resources.

Renewable Energy YES! Winter Workshop at St. John's University

(Excerpt from the Warbler, Spring edition):

## YES! Students Learn about Renewable Energy at St. John's University

Over 40 students met at St. John's University for the Youth Energy Summit (YES!) Renewable Energy Winter Workshop on February 12, 2014. The students are part of network of 22 teams throughout Minnesota who are engaged in learning about caring for the earth and most importantly, doing something about it! The day started with a warm welcome from Alex Chocholousek from the Office of Sustainability at the College of St. Benedict and concluded by building solar ovens out of pizza boxes.

Dan Backes from Blattner Energy Inc. gave an excellent explanation of how wind turbines are produced, installed and expressed the importance of transmission lines. Dan got the students to think about real work applications of wind by explaining costs and how important placement and height of the turbine play in its efficiency. Next, Joel Haskard from Clean Energy Resource Teams (CERTs) presented to students about Community Solar Gardens. Joel encouraged teams to be the "change they want to see in their world" by starting a Solar Garden in their community, one solar panel at a time. He explained that MN has the same solar capacity as Texas. Sarah Gaines from St. John's Outdoor University led a tour of the St. John's Solar Array farm - which wowed students with its size and contributions to producing energy for the campus. Sarah told the students the Solar Farm produces about 3% of the energy needs of the campus in the winter and 20% in the summer.

A special part of the day included meeting in small groups with the SJU/CSB Sustainability Alliance Club. Club members took students through the process of visioning and creating a strategy for implementing their projects. As one student commented "I'm glad we got to figure out how to carry out our plans" and another commented "the college students were cool."

#### Go Local - New York Mills YES! Team visits local CSA:

YES! students from New York Mills recently toured <u>Lida Farm</u> in Pelican Rapids where they learned about organic farming, wind turbine maintenance and how to mix really great soil. Tour guides Ryan and Maree Pesch, CSA (Community Supported Agriculture) owners and organic farmers, had the kids mix up blood meal, bone meal, and other nutrients into a soil mixture Ryan uses throughout the farm. Students also planted lettuce seed to take with them back to New York Mills school to try their luck at growing produce. The YES! team plans to plant a school garden again this year.

Next stop was Perham Middle School to see their apple orchard and school garden, tended by students in Wayne Werner's class. Mr. Werner's class started out growing pumpkins and now they have a wide array of flowers and produce. Tom Meinhover from <u>Grass Roots Garden</u> provided a wealth of information about different varieties of apple trees, giving examples of which ones are the hardiest in Minnesota and tips on pruning and overall care of apple trees. Tom's advice to the students when starting an apple orchid or a school is garden is to "automate the watering system." Tom felt this is the only way to ensure a successful growing season. Marilyn Hofland, U of M Extension Educator also joined the tour to provide on-going support for the team as they begin to grow their own local foods.

Thanks to all of our presenters for a fabulous look at growing apples and produce. The students who participated definitely learned a lot and look forward to incorporating what they learned at their school.

This was a fabulous finale to our Winter/Spring Workshops this school year!

## **COMPLETED 2014 Winter Workshop/Tours:**

- Renewable Energy@ SJU January 29
- Variety Tour in Mankato-January 29th
- Eat Healthy, Eat Local in the Milan area-February 19th
- School Lunch Waste at New London-Spicer- March 12
- Go Local with Lida Farms CSA in Pelican Rapids April 25

## **Spring Celebrations/Judging 2014**

#### YES! Awards 2013-2014

YES! teams all did great work this season! We recently concluded the YES! judging for the 2013-2014 season. YES! awards were presented within each cohort. Unless otherwise noted, Grand Prize winners received \$1,000; Second Place winners received \$750; Third Place winners received \$500. See what each team accomplished by reading more on the <u>Teams page</u>.

## **Grand Prize (\$ 1,000)**

- 1 Westbrook-Walnut Grove
- 2 New London-Spicer
- 3 Royalton

## 2nd Place (\$ 750)

- 1 Mankato West
- 2 Lac qui Parle Valley
- 3 Kennedy Community School

## 3rd Place (\$ 500)

- 1 Tie: Sleepy Eye and Springfield
- 2 Atwater-Cosmos-Grove City
- 3 St. Cloud Apollo

Please note: 2014 prize awards were supported by the Southwest Initiative Foundation.

## ACTIVITY 3: COMPLETE 30+ RENEWABLE ENERGY AND ENERGY CONSERVATION PROJECTS

#### **DESCRIPTION:**

YES! staff provides ongoing guidance, resources, information, networking and other assistance as teams carry out action plans. YES! provides support and information to coaches/adult advisors, team leaders (youth) and assists with identifying organizations and businesses that share an interest in energy efficiency, conservation and renewable energy. YES! coordinators maintain a website, blog, facebook, and frequent e-mail contact to help teams stay informed and in contact with each other.

ENRTF funds provide support for YES! staff time, in-state travel, specified program-related school district/organization expenses, and project seed funds. The school district/organization expense

Youth-Led Renewable Energy & Energy Conservation in West & Southwest MN reimbursement allowance is intended to offset expenses incurred by school districts and/or community organizations that sponsor a YES! team. This support allows them to participate in YES! in a cost-effective manner. Eligible reimbursable expenses may include: 1. compensation YES! team coaches/

adult advisors (typically professional educators or other similarly-trained professionals serving as advisors/facilitators for YES! youth and YES! teams activities); 2. 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; 3. Transportation expenses for buses or vans for students and coaches/adult advisors to travel to YES! events. The combination of these three items will not exceed reimbursement in excess of \$500 for any one district/organization sponsoring a YES! team.

YES! project seed funds will be used for projects that will be brainstormed and initiated by youth on YES! teams. Projects will vary depending upon school/community needs and student interest. YES! coordinators will have a good understanding of team projects around December/January of the YES! season. Eligible expenses may include:

- 1. Energy saving devices for installation in public buildings such as schools, city buildings, or county buildings.
- 2. Materials and supplies to construct energy-saving or energy-generating installations, for use in public spaces or as demonstration projects made available to the public.
- 3. Materials for energy education activities.
- 4. Energy conservation kits for community distribution.
- 5. Equipment for tracking/measuring energy consumption and savings, to be made available for or directly related to public use.
- 6. Professional or technical services with qualified individuals for consultation or labor relating to teams' energy action projects.
- 7. Materials and supplies for reducing and mitigating solid waste generated in schools and communities.
- 8. Materials and supplies for increasing consumption of locally-produced foods in school cafeterias and communities.

For specific examples of purchases, see the "Eligible Expenses for Project Seed Funds" attachment.

SUMMARY BUDGET INFORMATION FOR ACTIVITY 3:	ENRTF BUDGET:	\$208,000
	AMOUNT SPENT:	\$207,920
	BALANCE:	\$80.00

#### **ACTIVITY COMPLETION DATE:**

OUTCOME	COMPLETION DATE	BUDGET
30+ Energy Action Projects completed, such as: solar heating, photovoltaics, composting, recycling, energy efficiency upgrades, and community education initiatives regarding energy conservation and renewable energy.	End of school year: June 2013	\$136,650
(Budget includes approximately 50% of total staff time, 60% of coach allowance, 25% of total travel, project seed funds, and solar pathfinders)		

3)		
Partnerships between 30 teams and 250 allies including: businesses and utilities, numerous community organizations, school administration teams, etc.	March 2013	\$53,500
(Budget includes approximately 25% of total staff time, 30% of coach allowance, and 18% of total travel)		
Energy Action Project Outcomes are reported in written reports, presentations, & displays. Accomplishments are publicly recognized.	June 2012, June 2013 and June 2014	\$23,850
(Budget includes approximately 10% of total staff time, 10% of coach allowance, and 25% of total travel. Travel includes visiting teams for season-end presentations.)		

## **COMPLETE 30+ RENEWABLE ENERGY AND ENERGY CONSERVATION PROJECTS (**PROJECT MANAGEMENT AND TEAM SUPPORT)

#### **ACTIVITY STATUS AS OF JANUARY 31, 2012:**

Coordinators assisted teams early in the process to more efficiently identify energy related projects. Coordinators offered support for establishing goals and engaging the school and local community. The YES! web site is continually updated with information and resources to assist teams as they pursue their projects. In addition, coordinators reach out to teams with specific information and help them connect with area experts to provide guidance to their work. Teams have begun pursuing projects such as school lunch composting, solar lighting, school gardens or greenhouses, blackout days, elementary education events, energy reduction campaigns, hydration stations, recycling programs, small wind, and more.

Coordinators offer on-going guidance to YES! Teams including creation of the necessary system for reimbursement to schools with documents: (1) 2011-2012 Eligible and Non-eligible Expenses list and (2) YES! Expense Report; developing a reporting process to the DNR for reimbursement for personnel, contract work, mileage and travel expenses; participating in weekly coordinator meetings including four (4) state-wide coordinators and partners; organizing holiday light recycling events; answering e-mails and phone calls regarding action plans and expense allowances; updating YES! Website and blog; weekly e-mail updates to coaches along with research enabling coordinators to keep up to date on latest energy efficient practices and renewable energy initiatives.

Coordinators work closely with coaches and teams to actively facilitate team by visiting teams in person once per month and following up with teams via e-mail or Skype to offer customized resources and guidance.

Note: To date, teams have not submitted for payment to PWELC. We anticipate most teams submitting for payment for the first season during the next status reporting period.

#### Outcome Summary:

- Coordinators are providing guidance, resources, information & networking
- The 3 YES! coordinators collaborate with the Southeast Minnesota YES! coordinator to leverage expertise and resources
- Weekly updates provided to teams through e-mail
- Providing assistance to new teams as they prepare to begin season and work on their projects
- Participation in NEEF webinar on Green Schools to gather resources/information for teams

- Collection and distribution of Holiday Light Bins to participating schools
- Research information on green roof for Gibbon-Fairfax-Winthrop
- Meeting with Xcel Energy to gather thoughts on connections for teams/support for YES
- A fact sheet has been created for coaches to provide education/awareness related to key energy facts and additional resources to teams.
- Updating and formatting of Coach Binder for 2011-2012 season
- Facilitate Earth Tub program to selected teams

## **ACTIVITY STATUS AS OF JUNE 30, 2012:**

Many teams completed several renewable energy and energy conservation projects, therefore YES! is pleased to state the program has exceeded this year's goal of completing 30 or more Energy Action projects. Team accomplishments are listed below by team. Please visit youthenergysummit.org/teams/meet-the-yes-teams, and click on individual teams names to view power-point presentations completed by teams for more in-depth covering of their accomplishments

#### **Team accomplishments**

#### Alexandria

- Participated in a Recycling Recovery activity facilitated by Pope Douglas Solid Waste facility Radio show guests on Open Line to promote Community Eco Fair and the YES! Team
- Ran an effective energy reduction campaign to students to staff encouraging them to "pull the shades, shut off lights and other electrical devises
- · Volunteered and participated at the Alexandria Community Eco Fair Alexandria

## **Atwater-Cosmos-Grove City (ACGC)**

- Hosted Elementary Education Event. Planning and teaching activities on wind, solar, biomass, and composting
- Reduced amount of waste reaching the waste stream by promoting blue jean, tennis shoe, holiday light and print cartridge recycling throughout the year
- · Purchased and placed 16 solar-powered spot lights in their community

## **Cedar Mountain**

- Initiated a composting program in their school, partnering with local farmer to compost on their property
- Weighed food waste at Harvestland Elevator with each collection and documented data Comparing amount of food waste to school lunch menu to help make recommendations for future meals

#### **Dassel-Cokato**

 Established their group in the school and community in their first year Starting recycling program in the high school

#### **Eden Valley-Watkins**

 Exhibited school's solar panel installation in Show & Tell at MN School Board Association Conference

- · Found containers and locations for recycling
- Made a video to introduce the recycling project to the school

## **Foley**

Plans to participate in an educational tour focusing on clean/alternative energy including an ethanol plant, hydro dam, wind farm and a biomass plant

## **Gibbon-Fairfax-Winthrop**

- Installed two hydration stations in their high school and one in the middle school
- · Filmed informative video on their work as a team

## GFW (Con't)

- Continue to compost school lunch waste
- Started monitoring solar panel energy production data

## Lac qui Parle Valley

- Hosted a recycling competition between junior high and senior high to promote newly established recycling stations in their school
- Volunteered at the DNR education booth at Parent Expo
- Purchased and installed hydration station, winning a second from the Elkay company for their great work

#### Litchfield

- Hosted e-waste recycling drive and a Green Your Holidays event Participating in the One Vegetable, One Community program
- Growing plants in their greenhouse to start community garden plot Installed two hydration stations in their high school and one in their middle school

#### Mankato East

- Designed and developed 6 original inventions to solve real-world problems
- Designed, built, and tested several prototypes of their inventions, utilizing recyclable materials in their processes
- Legally documented their invention process so as to be able to pursue a patent if desired

#### **Mankato West**

- Researched and implemented a real-time energy-monitoring system for the electrical consumption of their high school
- · Taught their fellow students through lunchtime energy quiz bowl, complete with prizes

#### Minnewaska

- · Used kilowatt meters to measure the energy saved during their Blackout day
- Calculated a cost savings of \$30
- Made weekly rounds to classrooms to recycling, bolstering the effectiveness of their recycling program Initiating composting in their school by starting with worm bins

## **New London-Spicer**

- · Growing plants in their hoop garden for the school
- Researched solar-powered lights for their parking lot, but opted for installing two hydration stations in their school instead
- Revitalizing the traditional Elementary Outdoor Science curriculum with activities on local foods, composting and alternative energy

#### **Parkers Prairie**

- Researched and prepared a presentation for school administration on retrofitting water fountains with hydration stations
- · Increased community awareness through an initiative focused on environmentally friendly habits by putting together "eco-baskets" that included: information on their group; helpful websites;

## Parkers Prairie (Con't)

resources for home owners (energy audit, junk mail reduction etc...); a reusable grocery bag; a LED or CFL light bulb; a 100% recycled notepad; and a reusable water bottle.

## **Redwood Valley**

- Bolstered their composting program
- Installed Vending Misers on their school's vending machines

## Royalton

- Worked with city council and mayor to plan for the city's needs in both green energies and new technologies and incorporating students in that process. They also met with city councils from surrounding communities and U.S. Senator Franken to highlight their work thus far.
- Students helped design and build an electric vehicle that will be driven on the Brainerd
  International raceway on May 15th. The car will continue to be used in the future to demonstrate
  to their greater community the opportunities for sustainable energy
- Updated their school's recycling by placing consistently labeled recycling bins throughout the building, making announcements and sending information to teachers about the program, and setting up a collection schedule

#### Sleepy Eye

- Kicked off the year with a Grassroots Gathering event, establishing their presence in the community
- Collected 557 pounds of holiday lights to be recycling
- Installed over 800 CFL's in local low-income housing—saving a calculated 36,800 kw, about \$3,312 annually based on state formula from the PUC
- Promoted other efforts such as a Blackout Day, Save it for Side 2, and energy reminders in their schools

#### **Springfield**

- Presented their work at the State Fair through InCommons
- Received funding and made plans to build greenhouse in partnership with local restaurant and FFA—also installing Earth Tub donated by Carleton College
- Partnered with high school Ecology class to present energy education to elementary students

#### **Westbrook-Walnut Grove**

- Conducted Energy Audits in their school's classrooms—both during the day and at night—to gather data on where and when the most energy was used in their school
- Initiated a Lending Library of energy monitoring devices in partnership with their local library to promote energy-use awareness and conservation in their community
- Purchased and installing both a Pedal-A-Watt system and wind turbine to be used in their school

#### Willmar

- Formalized relationship with Willmar Public Schools to employ a manager for the Community Greenhouse Upgraded heating system to improve efficiency and address maintenance issues
- Planned and implemented a Renewable Energy Workshop for all Willmar 5th graders highlighting the Greenhouse, solar ovens, and more!
- · Started monitoring solar panel energy production data

#### Windom

- Promoted water conservation by distributing shower logs to their peers and awarding a prize to who conserved the most
- Making plans for community garden on site with the installation of their vertical access wind turbine to help power water pumps

#### Outcome Summary:

- · Coordinators are providing on-going guidance, resources, information and networking
- Projects showcased at Community Eco Fair and Earth Day Celebration and at PWELC.

## **ACTIVITY STATUS AS OF JANUARY 31, 2013:**

YES! teams are completing community inventories, mini-energy audits and evaluating which projects will be most beneficial to their school and community for the 2012-13 season. Teams are focusing on energy reduction, clean energy, waste reduction, recycling systems, composting and local foods.

#### Team Project Highlights for 2012-13 Season (in-process):

Albany: Composting and improved recycling systems

**Atwater-Cosmos-Grove City**: Recycling raffle, composting and impressive recycling system

**Austin**: Installing solar panels on roof of high school, on-going paper, plastic & can recycling and are looking into replacing Styrofoam cups and trays in school cafeteria

**Brooten-Belgrade-Elrosa:** Composting and energy efficiency

Cedar Mountain: Research and development of largest impact projects

**Chatfield**: Working with FFA to provide education on food and nutrition to community; developing school garden program

**Dassel-Cokato**: Working to start a composting program in conjunction with a school garden. Developing a portable solar powered cell phone charger

Youth-Led Renewable Energy & Energy Conservation in West & Southwest MN **Eden Valley-Watkins:** Installing hydration stations and building a recycling program

**Foley**: Organized and participated in the Alternative Energy and Transportation tour including; ships, turbines, dams and a historical gas station. Students are producing a documentary on the tour.

**Gibbon-Fairfax-Winthrop**: Updating school's composting program; creating educational program on energy related initiatives

Glencoe-Silver Lake: Designing and building a Supermileage car

**Hutchinson:** Working with AgriScience Program greenhouse to support district's lunch program; working to improve and expand recycling program

Lac qui Parle Valley: Building a passive solar greenhouse

**Litchfield**: Installing a stationary solar array; working with B3 to measure results **Mankato West**: Working to rid the school of Styrofoam trays; measuring and displaying school's energy consumption to create awareness

Minnewaska: Collected 150 pounds of holiday lights for recycling!

New London-Spicer: Installation of hydration stations, composting and recycling of milk cartons

**New York Mills**: Composting; replacing paper towel dispensers with automatic hand-dryers; organizing a Black Out day; improving school's "Random Recycling" program

**Northfield:** Installing recycling bins downtown Northfield that the students designed and welded themselves!

**Pine Island**: Researching best option for new waste/recycling vendor; collected holiday lights for recycling, purchased and installed 3 hydration stations in the school; creating school announcements "Did you know...Environmental Facts"; hosting Earth Hour event with activities to involve all grades

Parkers Prairie: Energy Awareness campaign in community

Redwood Falls: Improving compost program

Rocori: Improving recycling systems; continued recycling collection by students

Royalton: Motor oil recycling program for community and school

**Sleepy Eye**: Blue jean, milk carton recycling and educational outreach programs; collected 664.5 pounds of holiday lights

**Springfield:** Holiday lights, green sneakers recycling; hydration station installation options; improving school recycling; installing a pedal-a-watt bicycle in weight room; hosting a black out day; education to elementary students on composting & installing energy efficient hand dryers

**St.Cloud Apollo**: Recycling collection in school and community; energy efficiency improvements in their old school building & composting

**Kennedy Community/St. Joseph**: Prairie flora coding project allowing students and community to scan a bar code to identify native grasses and plants in their native gardens

**Westbrook-Walnut Grove**: Installing and demonstrating ways to increase water and energy savings in communities in the region; recycling old t-shirts into cloth diapers; installed a wind turbine at their school

Willmar: Milk carton recycling system and collected 100 pounds of holiday light collection

Yellow Medicine East: Building passive solar greenhouse

## **ACTIVITY STATUS AS OF JUNE 30, 2013:** Albany

- Built recycling bins that they then placed around their football field and gym
- Collected 150 pounds of holiday lights for recycling.
- Cut their school's lunch waste in half by recycling milk cartons, napkins and plastic containers

## **Atwater-Cosmos-Grove City (ACGC)**

- Developed an impressive recycling program including e-waste, tennis shoes, milk cartons, and pop bottle recycling at some sporting events
- Receiving a \$2,500 Captain Planet Foundation grant to place 300 stackable recycling bins in their classrooms to encourage more recycling
- Planned an hosted an Elementary Event to educate the ACGC elementary about recycling and energy
- Continued to work with their school garden and sold some produce at the farmer's market

#### Austin

- Researched various solar panels and are in the process of ordering panels to be installed on their school roof. This research included talking with local experts about incentive programs, funding opportunities, installation, building permits and city regulations, and testing for the best place to install solar panels
- Are selling CFLs that were donated to them by Austin Utilities to raise money to install these solar panels.
- · Continue to coordinate their school's paper, plastic, and aluminum can recycling
- Went to the State Capitol with a community member to dinsuss how legislators are important to the energy efficiency and renewable energy fields

#### **Belgrade-Brooten-Elrosa** (BBE)

- Working on projects related to composting and energy efficiency Cedar Mountain
- Collected and composted over 4,000 pounds of food waste from their school cafeteria this year
- Educated their fellow students about composting food waste Chatfield
- Continue to work through the FFA Program to provide education about food and nutrition for their community
- Are in the process of developing their school garden program
- Hosted their second annual Family Fun Ag Day

#### **Dassel-Cokato**

- Developed a prototype solar cell phone charger. They are working to make it more compact and affordable so they can sell them to their fellow students
- Collected data on the amount of food waste produced by their school and are pursuing a schoolrun composting program. They'd use the compost in their school garden, maintained by their school's FFA chapter. In order to inform the public about composting they made brochures about their composting project and what community members could do to compost at home. They are in the process of constructing their first composting bin.

- Purchased a hydration station that will be installed this summer
- Eden Valley-Watkins
- Installed 3 hydration stations in high traffic areas of their school
- Placed new recycling stations around the school. They have been checking the use of the recycling bins on a weekly basis
- Are working to implement an oil, oil filter, and antifreeze recycling station in their town with First Fuel Bank

#### **Foley**

- Completed their well-planned Alternative Energy and Transportation tour of Minnesota which included a biomass plant, a solar panel plant, wind energy, hydro power, an ethanol plant, ships, turbined, dams, and a historic gas station
- They developed and edited a video detailing their tour

## **Gibbin-Fairfax-Winthrop** (GFW)

- Made improvements to their school's composting program to make it more effective (which
  included changes to the school lunch waste sorting system). So far this year they have
  composted over 800 pounds of lunch waste and plan to use the compost in their school garden
- Are working to expand their school garden with the foal of providing more locally-grown produce for their school lunch program next year
- Installed another hydration station in their district (bringing the total up to 3) and continue to educate their fellow students about the benefits of hydration stations
- Collected over 100 pounds of holiday lights for recycling,
- Hosted an Earth Week that included activities for students in all three of their school buildings

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

 Built a fuel-efficient vehicle for the MN Supermileage Competition. Their goal is for their vehicle to achieve 500 miles per gallon. Competed at the Supermileage Competition May 14<sup>th</sup> and 15<sup>th</sup> at Brainerd International Raceway!

#### Hutchinson

- Constructed a 30' by 48' greenhouse. Students were an integral part of this entire process by constructing the frame, selecting the plants to be grown, and preparing the greenhouse for plants after construction
- Students took plants home for their own gardens, sold plants to community members, and school staff, and donated plants to the community garden for the McLeod County Food Shelf.
- Herbs from this project will be incorporated into the school's lunch program next year

#### Lac qui Parle Valley

- In the process of building a 20' by 40' passive solar greenhouse, Two solar panels will be installed on the roof to power the greenhouse fans
- The greenhouse will be completed this spring and plants will be grown over the summer to be harvested during the next school year. They are growing several varieties of salad greens and other produce to supply to local school district with fresh, organic food for students and staff
- Worked at two elementary schools educating students and developing interest in what they are doing with their greenhouse
- Provided electronic-waste disposal at a reduced cost for area residents

#### Litchfield

• Received a CERTs grant to install a stationary solar array. They are working with the B3 program to measure the success of their efficiency measures and renewable technologies

- Grow over 1,000 pepper plants as part of the One Vegetable, One Community project. The
  project aims to bring community members together around food and will involve giving away these
  pepper plants to community members
- Co-sponsored a screening of the movie Fresh as well as a community discussion about local foods
- Participated in the construction of the Litchfield Community Build Playground. In addition to helping with the build, they will create a display to increase awareness of the recycled plastic composite material used to build the playground

#### **Mankato West**

 Researched and prepared their school cafeteria for a change from disposable Styrofoam lunch trays to permanent, washable trays and flatware, saving 129,000 trays annually from being thrown away and will save their school over \$600 a year! This took a lot of time and effort on the part of these students. As one of the students explained, "at first our school wasn't on board with changing the trays, but we met with people and got their input first and listened to their concerns. This helped them get on board"

#### **Mankato West**

- Carried on their work from last year by installing a second energy-monitoring meter to allow them to measure the electrical consumption of their entire school in real-time. They are working to get this information out to students and staff
- They did an energy audit of the lighting in their school's theater and are in the process of using this information to acquire more energy-efficient lighting for their school

#### Minnewaska

- Minnewaska collected 150 pounds of holiday lights for recycling!
- Researched, purchased and installed a hydration station

## **New London-Spicer**

- Coordinated the recycling of milk cartons in all grade levels in their district
- Installed two hydration stations and partnered with their school's art classes to create an art piece to promote their use
- Hosted a Black Out Day
- In order to promote local foods, they harvested grapes and made grape jelly to use at educational events to show the value of local foods
- Worked on vermi-composting in their school all year
- Working to build a small passive solar greenhouse and a composting program to go along with vermi-composting
- Hosted an outdoor science program for 1-3 graders about the value of reducing, reusing, recycling and refusing and local foods

## **New York Mills**

- Hosted a Black Out Day at their schoo
- Are planning a student-run compost pile, located on school grounds
- Are in the process of acquiring energy-efficient automatic hand dryers for their school
- They plan to start a student-run garden this summer which will provide their school with fresh fruits and vegetables. They also plan to sell some of the produce at their local farmer's market

#### Northfield

 Designed, welded, and installed nearly 30 recycling/trash receptacles in the downtown Northfield area

#### Pine Island

- After helping their school research and decide which vendor they should use for waste/recycling, they are now able to comingle their recyclables, which has boosted their school's recycling rate
- Purchased and installed 3 hydration stations for their school.
- Produced "did you know...Environmental Facts" that ran during their school announcements
- Hosted an Earth Hour event with activities that involved all grades at their school. This included a Black Out Day and an energy-reduction photo contest

#### **Parkers Prairie**

• worked on developing a recycling program at their school. The students have plans to install recycling containers in their school (currently the school only has 2 recycling bins)

#### **Redwood Falls**

- Working on making their composting program better and more use friendly
- They are looking into heating some of their shop rooms using solar thermal panels
- They have also been working on making their school recycling program better

#### Rocori

- Through distributing more recycling containers and experimenting with different types of containers, they have increased recycling in their school from 2 to 3 barrels of plastic per week and from 1 to 2 barrels of aluminum per week. Paper recycling has increased as well. YES! students collect recycling in each classroom every Friday!
- Participated in the Green Sneakers Eco Challenge as a fundraiser to upgrade and promote recycling in their building, collecting over 150 pairs of tennis shoes to be used/recycled
- Promoted recycling awareness and encouraged participation in YES! at the Rocori Coaches Association Kids Carnival.
- Participated in the Earth Day Expo at St. Cloud State University

#### Royalton

 Where does our used motor oil go? This is the question Royaliton YES! students asked their city council. The response was "we're not sure." The students quickly identified a way to make a difference in their community. The YES! team presented the First Fuel Motor Oil Collection station

#### Royalton (Con't)

to the school board and it was approved. They have selected a site and scheduled a installation date for the oil collection station. It will soon be open to the public!

• Increase the effectiveness of their school's recycling program through new bins and signs, they were able to decrease the amount of contamination in their recycling bins from 70% to 5%!

## Sleepy Eye

- After installing 800 CFLs between January and March 2012 (and saving 36,800 watts of energy)
  this spring the YES! team distributed educational fliers in those same apartment complexes to
  educate residents about how to properly dispose of their CFLs
- Collected 665 pounds of holiday lights through door-to-door collection in their community and are promoting a collection drive for 1000 pairs of work out blue jeans to be recycled into LEEDcertified insulation, enough to insulate two average Habitat for Humanity homes
- Hosted a tow-hour Black Out event at their school, resulting in energy savings of nearly \$60
- Presented at several community events including Party in the Park, a Sleepy Eye Woman's Club meeting, and at the Renewable Energy Markets Association
- Installed 3 outdoor recycling bins at city parks in their community

- Continued energy-saving measures in their school's including their "Save it for Side 2" program to reduce paper waste
- Held "Biggest Loser" locker emptying challenges with the goal of recycling as much as possible

## **Springfield**

- Designed and conducted a four-week composting education program with the 5th and 6th grade classes in the Springfield Elementary School in preparation for the school composting program, which will start in the Fall of 2013
- Purchased and installed a hydration stsation as well as water bottles with the YES! logo on them
  to encourage use of reusable water bottles
- Worked on various recycling projects in their community, including collecting 640 pounds of holiday lights for recycling, collected blue jeans and improved their school recycling program

## St. Cloud Apollo

- Worked to increase the amount of school-wide recycling by putting a recycling bin by every trash
  can and educating faculty and students about what can and cannot be recycled
- Their efforts allowed them to remove a garbage dumpster and add a recycling dumpster to their school for pick up!
- Installed 2 hydration stations in their school in order to decrease their plastic bottle waste
- Partnered with the MN Zoo to implement a cell phone recycling drive to fund rain forest preservation efforts
- Member Kim Colgan spoke about the Apollo YES! team's projects at the St. Cloud Green Forum and made the acceptance speech at the MEI 2013 award

### Kennedy Community - St. Joseph

- Successfully asked their PTA for a grant to install a retro-fit hydration station in their lunch room.
   It has been installed and has been a huge hit. They plan to retro-fit another hydration station in their school next year
- Created and administered a survey for fellow students about their attitues on recycling. They are taking that data and developing a plan of action to increase Kennedy's recycling efforts. This will include building lessons about recycling at Kennedy
- Held a Black Out Day at their school

#### Westbrook-Walnut Grove

 Partnered with Southwest Minnesota Housing Partnership to install and demonstrated ways to increase water and energy savings in communities throughout the region, educating over 950 community members at home shows in Luverrne, Windom and Pipestone

#### WillImar

- Implemented milk carton recycling at their Junior High and recycled over 48,000 milk cartons in just two months!
- Installed a hydration station
- In order to cut down on paper towel waste, YES! members demonstrated "how to use a paper towel correctly" (similar to this TED talk). Five hundred-thirty (530) students pledged to "shake and fold" and thus decrease their paper towel waste!

## **Yellow Medicine East**

- Building a self-sustaining passive solar greenhouse this summer to be used next school year to grow food for school lunches
- Sponsoring a community garden wehre the YES! students help elementary students grow their own produce

# Youth-Led Renewable Energy & Energy Conservation in West & Southwest MN ACTIVITY STATUS AS OF JANUARY 31, 2014:

Coordinators are meeting with teams individually to access needs and opportunities in their school and community, setting goals and offering support and resources to coaches and teams. Teams are actively pursuing their projects with support from local businesses. Project highlights for the 2013-14 season will be included in the Final Report.

#### FINAL REPORT SUMMARY:

The Youth Energy Summit (YES!) project was designed to mobilize teams of youth to address critical environmental issues and emerging opportunities related to climate change and renewable energy in Greater Minnesota. During the grant period, the YES! program met and exceeded the original goals of the program:

- 38 YES! Teams completed over 300 youth-led energy conservation and renewable energy projects during July 1, 2011- June 30, 2014.
- 1,134 students in grades 7-12 worked with local community leaders, businesses, schools, public utilities, waste haulers and other partners
- Over 44,380 students and 48,376 community members engaged in efforts to decrease waste and increase energy efficiency.

YES! Teams completed well over 300 projects. Projects ranged from installing over 40 hydration stations, building 3 solar powered greenhouses, designing and building solar boats, solar trailers and super-mileage cars to improving recycling systems in schools, piloting milk carton recycling and successfully implementing organic composting of school lunch waste. A high point was when the Royalton YES! team won the state-wide "Red Wagon" award from the Minnesota Alliance for Youth! Please see the list of completed projects by 2013 - 14 below:

# **Atwater-Cosmos-Grove City (ACGC)**

- Hosted an all-day energy expo that included energy-related businesses and organizations, recycling
  of cell phones, ink cartridges, holiday lights, tennis shoes, and paper, children's activities, and lunch.
  They focused on "providing environmental education to their community members and initiative green
  thinking for a more eco-friendly future" and had nearly 200 people attend!
- Throughout the year, team collected 6.13 tons of paper, 250 pounds of holiday lights, 200 pounds of tennis shows, and 723 ink cartridges and cell phones to be recycled.
- · Composted using two compost tumblers.
- Several members of the YES! Team traveled to their local elementary school to read to 125 younger students about gardening.
- installed two hydration stations: one at the high school and one at the elementary school.

#### **Austin High School**

- Are working hard to bring solar to their school. So far they have raised over \$8,000 for solar panels
  that will be installed at their school. They need \$4,000 more to install the system that they have
  decided will be the best for their school. They have come up with creative fundraisers to acquire the
  funds they need including selling efficient light-bulbs and attempting a crowd-sourced funding
  campaign.
- Continue to recycle bottles, cans, paper, and cell phones. The students collect these recyclables every Wednesday morning.

#### Brooten-Belgrade-Elrosa

- Collected used sneakers for reuse/recycling through the Green Sneakers Program.
- Installed 2 hydration stations
- Have designed and plan to build a Supermileage vehicle.
- Are in the process of exploring creating a community garden and solar panels for their school.
- Tried out vermicomposting (worm composting).

#### **Eden Valley-Watkins (EVW)**

- Worked this year to accomplish tasks that directly impact their school culture and buildings.
- Expanded their hydration station program by promoting the stations, installing additional stations, and gaining support from the student body and administration.
- Initiated a food recycling program in their cafeteria to cut down on food waste.
- In the process of updating and rebooting their <u>solar panel energy display</u> to be more interactive for public viewing.
- School Gardening will be offered through community education this summer. This will involve members of the community in growing the produce, maintaining the garden, and improving production.
- Continue to monitor data from past projects including their hydration stations and solar panels.

#### **Gibbon-Fairfax-Winthrop (GFW)**

- · Collected 65 pounds of holiday lights for recycling.
- Increased their compost production by working in teams to sort and compost school lunch waste.
- Working in collaboration with their Plant Science Class, the School Garden project will be offered through community education this summer. This will involve members of the community in growing the produce, maintaining the garden, and improving production.
- Continue to monitor data from past projects including their hydration stations and solar panels.

#### Glencoe-Silver Lake (GSL)

- Built two vehicles to compete in the <u>MTEEA Supermileage Challenge</u>. They improved the vehicle they entered last year and increased their MPG from 164 to 425, exceeding their goal of 300 MPG.
- They also built a new E-85 vehicle which achieved 249 MPG.
- · Check out their team website.

#### Lac qui Parle Valley (LQPV)

• After more than 2 years of planning, they built a 20'x40' passive solar greenhouse and are planting and harvesting food for their school cafeteria.

#### Lac Qui Parle (con't)

- They have also sold their produce at a home/farm show at their school and promote their greenhouse by handing out fresh greens at sporting events.
- They grew over 30 kinds of greens as well as several types of vegetables.
- Continue to maintain the used oil collection site in Madison.

#### Litchfield

- Investigated bringing milk carton recycling to their school.
- Looked into a composting program at their Elementary School and have one worm-composting bin set up to compost all the food waste generated in their Family and Consumer Science room.
- Implemented battery recycling by organizing collection sites for used batteries.
- For the 3rd year, are participating in the One Vegetable, One Community program where they started kale plants and then gave them to 1st graders to take home and grow.
- Planted raspberry bushes and apple trees donated from the community.

#### **Mankato West**

- Partnered with <u>Full Circle Organics</u> to bring organics recycling to their high school as well as others in the district. So far they have diverted more than 125,000 tons of organics away from the landfill and to the Full Circle Organics composting facility in Good Thunder.
- Partnered with student council to bring hydration stations to their school. Hot-wired some of the water fountains in their school to track their usage to try to determine which locations will make the most impact.

#### **New London-Spicer (NLS)**

- This year they have installed a passive solar greenhouse and tied in a vertical axis wind turbine. They are growing greens and studying the dynamics of the greenhouse.
- They are also working to get rid of milk carton waste in their school by switching to milk dispensers.
- Harvested and sold apples from the NL-S Orchard.
- Implemented Operation Bees, including obtaining beeswax from a local bee owner, made organic lip gloss and hand cream, sold items at the Kandi Mall to raise awareness for protecting pollinators from pesticides.
- Created a Water Week with activities to promote the hydration stations in their schools.
- Collect heirloom seeds for distribution at a spring garden sale.
- Continue to work on worm composting.
- Collect holiday lights for recycling.

#### **Parkers Prairie**

- Revamped recycling system for public areas and classrooms in their Middle School. They are training for their peers at their school-wide Monday Morning Meeting before places them in the school.
- Are working to start recycling milk cartons
- Researching composting to reduce food waste
- Are beginning to collect items for TerraCycle

#### Parkers Prairie (Cont')

- · Working to keep Lake Adley clean and free of zebra mussels
- · Are researching making their greenhouse self-sustaining with solar power

#### Pine Island

· Brought oil-recycling site to their community!

#### Redwood Falls

- Promoted recycling in their school.
- Learning about solar with YES! kits and activities.

#### Rocori

- Installed a hydration station. Will collect data to determine if they will install a second station.
- Students made posters and a video to promote the use of the hydration station.
- Collaboratied with their school's Entrepreneurship Class to promote and sell reusable water bottles.
- Are exploring options for school lunch waste reduction.
- They collect school-wide recycling weekly and are gathering data to see if their hydration station has reduced the amount of plastic in their school's recycling.
- Participated in Green Sneakers for the 3rd year!

#### Royalton

- Built a solar-powered trailer to haul their solar boat and/or electric vehicle to events. This trailer is powered using 3 240-watt panels.
- Using SMART goals, the team plans to reduce school lunch waste by recycling milk cartons and separating lunch waste so it is easier for a local hog farmer to feed it to his hogs.
- Continue to promote and maintain the used motor oil collection site in their town.
- designed and built a solar boat.
- Installed hydration stations at their school.
- Interested in pursuing a Community Solar Garden
- Organized and built an outdoor classroom in memory of a teacher

#### **Sleepy Eye**

- Worked on water conservation in their school and community
- Made reusable YES! bags and sold them at parent-teacher conferences to raise awareness of the team's projects
- Collected over 914 pounds of holiday lights for recycling!
- Educate their peers and their community about recycling and composting
- Collected data on energy misers and hydration stations
- Hosted "biggest loser" locker clean-outs to collect recyclables and paper
- Presented to various community groups
- Collected and weighed recycling paper, aluminum, and plastic
- · Continued to research and hope to implement milk carton recycling
- Continued to educate their community about CFL recycling

# St. Cloud Apollo

- Increased their school's rate of milk carton recycling by 75%
- Installed 4 hydration stations

#### Apollo (Con't)

- Worked to improve their school's recycling program by adding recycling bins to hallways, adding and improving the signs on the containers, and educating staff on their recycling efforts and goals.
- Worked with Stearns County Soil and Water Conservation District and the U.S. Fish and Wildlife Service to make a plan to restore the shoreline of Lake Apollo to reduce fertilizer runoff.
- Plan to do a prairie burn around Lake Apollo.

## St.Cloud Apollo

- Researched school composting and possible compost containers.
- Met with building engineers, administrators, and district personnel in order to successfully advocate for replacement of all of their inefficient hand dryers with more efficient ones.
- Changed 20 faucets to automatics sensor faucets to save water.

#### St. Joseph (Kennedy Community School)

- This winter they collected 38 pounds of holiday lights that were then recycled.
- launched organics recycling in early March. They plan to be instrumental in helping the school understand more about recycling in general as well as organics recycling.
- Organized Green Week around Earth Day. Each day of the Green Week had a different theme.

## Westbrook-Walnut Grove (WWG)

- <u>Collected used cell phones</u> for recycling. They surpassed their goal of 100 phones and collected 112 in part by trading hot dog meals for cell phones at the local grocery store.
- Continue to maintain their oil recycling site and jump-started a campaign to promote it by
  offering 6 free oil changes (4 of which were donated by local businesses) and information in
  local and regional papers. This resulted in an increase of 300% in usage of the site!
- Are collecting plastic bags for recycling from their school and community with the goal of collecting 10,000 bags.
- Continue to oversee the recycling bins in their school and donate the proceeds to the local volunteer fire department.
- Installed a passive solar scoreboard.
- Collected 123 pounds of holiday lights for recycling.
- Are exploring the opportunities of green roofs, renovating their old auditorium for solar, and other neat ideas!

#### **Yellow Medicine East (YME)**

- Started the year off with a clean-up of the Crow River event where the team paddles 5 miles of the river looking for garbage.
- Are in the process of researching cold climate greenhouses and are going to be building their own winter greenhouse this spring.

#### V. DISSEMINATION:

**Description:** Information, updates and reports will be made available via website (<a href="www.youthenergysummit.org">www.youthenergysummit.org</a>) on an ongoing basis, local media, and annual presentations at the Minnesota Association for Environmental Education and CERTs conferences, Prairie Woods ELC newsletters and Southwest Initiative Foundation communications.

#### Status as of January 31, 2012

The Prairie Woods *Warbler* featured an article by Anne Dybsetter entitled *YES! Summit 2011Stands Out.* In addition the Warbler introduced the new YES! LCCMR Grant Project Leader .The Warbler reaches 1,400 people. A News Release was issued by Southwest Initiative Foundation on the YES! Fall Summit entitled *Fifth Annual YES! Fall Summit Sparks Excitement in Local Youth that reached the locals newspapers tied to teams in 18 counties of southwest and west-central Minnesota.* YES! website (<a href="www.youthenergysummit.org">www.youthenergysummit.org</a>) features current and relevant news on team projects in addition to resources (forms, links and documents) and information on YES! kits for loan. The News tab features the YES! blog offering current and in-depth coverage of student projects. The Teams tab includes a current team map, prospective team information and team accomplishments. YES! is also on Face Book and Twitter.

Southwestern Initiative had from 7/1/11 - 12/31/11 five e-newsletters in which YES! was mentioned in an article. The e-newsletters were sent to 544 people. Two YES! newsletters have been created and sent out to 332 contacts.

A fact sheet has been created for coaches to provide education/awareness related to key energy facts and additional resources to teams.

Anne Dybsetter was an exhibitor along with the Eden Valley Watkins YES! team at the MN School Board Association Leadership conference in January, 2012. Dybsetter and Foster also presented at Science Rocks at St. Cloud State University on January 5, 2012. SWIF staff spoke about YES! at the annual meeting of the Minnesota Rural Electric Management Association and the West Central Area Banker's Association.

#### Status as of June 30, 2012:

#### **Exhibiting**

- Minnesota Association of Environmental Educators (MAEE) conference, Itasca State Park. Foster exhibited at the event in order to promote the Youth Energy Summit to educators and to information MAEE the Youth Energy Summit program.
- YES! team, Cheryl Glaser (SWIF) and Bell presented to the Rural Electric Cooperative Managers on June 21,2012
- Premiered YES! informational video to help promote the program and its mission (SWIF funded)
- Dybsetter facilitated Clean Energy Resource Teams (CERTS) networking event at Prairie Woods Environmental Learning Center (PWELC), February 14, 2012. Bell and Foster attended.

#### **Newsletters**

- The Prairie Woods *Warbler*, summer, 2012 (reaching 1,400 people) featured an article by Anne Dybsetter and Shelli-Kae Foster entitled *YES! Winter Workshop Emphasizes Creativity in Youth.*
- · YES! Quarterly Newsletter
  - o 3<sup>rd</sup> edition: 3/15/2012 (327 sent)
  - o 4<sup>th</sup> edition: 6/15/2012 (326 sent)
- SWIF e-newsletters
  - January Ambassador: 1/20/2012 (57 sent)
  - o Growing Home Circle February Update: 2/24/2012 (83 sent)
  - March Ambassador:3/26/2012 (56 sent)

- Growing Home Circle April Update: 4/20/2012 (85 sent)
- May Ambassador:5/25/2012 (57 sent)

#### **Newspapers**

- 1. March 7<sup>th</sup>, 2012. Appleton Press YES! Team proposes hydration station for school
- 2. March 15<sup>th</sup>, 2012, Litchfield Independent Review School Board plans for district wide improvements
- 3. March 29<sup>th</sup>, 2012, Litchfield Independent Review *Drinking in the benefits of hydration stations*
- 4. April 1st, 2012 West Central Tribune Toon' into Earth Day at PWELC
- May 2<sup>nd</sup>, 2012 Morgan Messenger Cedar Mountain School News: What's Happening at Cedar Mountain
- 6. April 22<sup>nd</sup>, 2012 West Central Tribune Celebrate Earth Day today at Prairie Woods
- 7. Morrison County Recorder Royalton "YES" group works with community and school district to make wise energy efficient and green choice
- 8. June 6<sup>th</sup>, 2012 Winthrop News YES team receives grant
- 9. Press releases were sent out on behalf of each team to their area newspaper. A total of 12 were distributed: Redwood Falls, Sleepy Eye, ACGC, Litchfield, Lac qui Parle Valley, Minnewaska, Springfield, Westbrook-Walnut Grove, New London-Spicer, Willmar, Cedar Mountain, and GFW.

YES! website (<a href="www.youthenergysummit.org">www.youthenergysummit.org</a>) features current and relevant news on team projects in addition to resources (forms, links and documents) and information on YES! kits for loan. The News tab features the YES! blog offering current and in-depth coverage of student projects. The Teams tab includes a current team map, prospective team information and team accomplishments. YES! is also on Face Book and Twitter. YES! features a new video on the website – check it out!

#### Status as of January 31, 2013

The Prairie Woods *Warbler* featured an article introducing new YES! coordinator Jonathan Morales. (See Attachment). The Warbler reaches 1,400 people. A News Release was issued by Southwest Initiative Foundation on the YES! Fall Summit entitled *Sixth Annual YES! Fall Summit Emphasizes* "One You, Many Connections" Theme for Area Youth that reached the locals newspapers tied to teams in 18 counties of southwest and west-central Minnesota.

YES! website (<a href="www.youthenergysummit.org">www.youthenergysummit.org</a>) features current and relevant news on team projects in addition to resources (forms, links and documents) and information on YES! kits for loan. The News tab features the YES! blog offering current and in-depth coverage of student projects. The Teams tab includes a current team map, prospective team information and team accomplishments. YES! is also on Face Book and Twitter.

The Fall YES! e-newsletter was sent out on September 24, 2012 to 361 people. The Winter e-newsletter was sent on December 18, 2012 to 408 people. Click here to view Winter YES! newsletter; http://www.youthenergysummit.org/winter-edition-of-yes-e-newsletter/

YES! video shared with teams and available on website, please visit www.youthenergysummit

YES! was mentioned in the Rural Minnesota Journal: Youth in Rural Minnesota, Volume 6, 2011. This annual publication by the Center for Rural Policy and Development written to provide policy makers with an unbiased evaluation of issues from a rural perspective. The journal can be viewed online at

http://www.ruralmn.org/rmj/rmjarchives/rmj2011/. The article refers to the Windom YES! team as they tried to find innovative ways to teach about alternative energy in Windom Area Schools. We were unable to locate statistics regarding reach; however this publication is widely distributed through Minnesota.

YES! was highlighted in several publications of the Southwest Initiative Foundation such as:

- Youth-Led Renewable Energy & Energy Conservation in West & Southwest MN
- Blog post referencing the Litchfield team: <a href="http://news.swifoundation.org/community-on-the-move-litchfield-board-meeting-recap/">http://news.swifoundation.org/community-on-the-move-litchfield-board-meeting-recap/</a>
- Articles in the SWIF Connect Newsletter, a bi-annual publication that reaches over 10,000 constituents of SWIF

#### Status as of June 30, 2013

#### Dissemination:

#### YES! E-Newsletter

- The spring edition sent out March 19th to 403 people
- The summer edition sent out June 20 to 390 people

#### Print Media:

- Prairie Woods Environmental Newsletter "Warbler" featured an article on YES! Winter Workshop specialized regional tours – reaching 1,400 people
- Southwest Initiative Foundation reports 22 clips on YES from January 1 to June 30, 2013
- Mankato Free article on Rep. Walz's visit to Mankato West High School here: <a href="http://mankatofreepress.com/local/x2055657060/Walz-talks-energy-politics-at-West-classroom">http://mankatofreepress.com/local/x2055657060/Walz-talks-energy-politics-at-West-classroom</a>

#### Television:

- News story on Mankato West team. Hear what Rep. Walz has to say about the Mankato West YES! team here:
- http://www.keyc.tv/story/21874834/tim-walz-visits-mankato-west-high-school

#### S.T.E.M Conference - Foster and Kolan presented

#### **ACTIVITY STATUS AS OF JANUARY 31, 2014:**

Coordinators continue to support teams by updating materials and look to new funding and development strategies to continue the good work of the YES! program into the future. The YES! Blog and team highlights website pages are updated regularly at <a href="https://www.youthenergysummit.org">www.youthenergysummit.org</a>. Press releases are created and sent to local media reporting on YES! Winter Workshops and tours.

• The Prairie Woods "Warbler" Newsletter featured an article, "YES! Recognized as Outstanding Environmental Education Initiative for 2013" in the summer edition

#### FINAL REPORT SUMMARY for Project Results Use and Dissemination

Information on YES! projects are regularly highlighted through the YES! website (<a href="www.youthenergysummit.org">www.youthenergysummit.org</a>), blog posts, and Facebook updates. The YES! website received well over 45,000 page views from July 1, 2012 to June 30, 2014, with 65 % of these viewers being new to the site. Local media frequently print stories on YES! team accomplishments; the Warbler, a PWELC newsletter reaching 1,400 people, goes out 3 times a year and commits a page of each publication to YES!; furthermore, the YES! e-newsletter goes out 4 times a year.

Several communications and outreach activities have been done in relation to this Youth-Led project including three (3) Community Meetings, which brought together stakeholders to celebrate the team's successes and to evaluate the program for future improvements. These meetings served to both raise awareness of YES! teams in local communities and to highlight their good work. The program's funding partners are regularly updated on projects and show their support through continued funding and

Youth-Led Renewable Energy & Energy Conservation in West & Southwest MN volunteer time. Coordinators submit Press Releases to local and regional outlets for Spring Award winners and other important stories.

YES! staff have presented at MN S.T.E.M. Network (2013), CERTs (2012), and Minnesota Association of Environmental Educators (2013) conferences. During YES! events, techniques such as S.M.A.R.T. goals have been developed and shared with the students and students have taken that information back to their Team to successfully plan and implement projects. Other types of techniques developed for use by Teams include; "How to Connect with Community Leaders," "Energy and You," "Benchmarking Your Projects," and Effective Meeting Strategies."

Of special note, YES! won the 2013 Minnesota Environmental Initiative Award and the Royalton YES! team won the state-wide 2014 "Red Wagon" award from the Minnesota Alliance with Youth!

## News Stories by team for year 2013-14

#### Sleepy Eye

Stories in the Sleepy Eye Herald Dispatch, Sleepy Eye On-Line, KNUJ/SAM Radio, Sleepy Eye Public School Eye On-Line, St. Mary's Schools and Sleepy Eye Public's website:

- http://sleepyeyeonline.com/enews/2013/11/y-e-s-team-holiday-light-collection-set-for-dec-3rd/
- http://sleepyeyeonline.com/enews/2013/12/yes-team-holiday-light-collection-continuesuntil-jan-10th/
- http://sleepyeyeonline.com/enews/2013/05/yes-team-receives-awards/
- <u>http://www.cleanenergyresourceteams.org/use-certs-connect-education-mnscu-yes-teams</u>

#### **Mankato West**

Stories in the Mankato Free Press and the Mankato West Blog:

- http://mankatowest.blogspot.com/2013/09/new-organics-recycling-program-makes.html
- http://www.mankatofreepress.com/local/x746466831/Making-an-idea-into-reality

#### Pine Island

Article in the Zumbrota News Record:

http://www.zumbrota.com/articles/2014/01/29/pis-winter-fest-february-8

#### Austin

Articles in the Rochester Post Bulletin, Austin Post Bulletin, and in the CERTs newsletter. An example:

http://www.postbulletin.com/life/lifestyles/greenspace-solar-power-project-ready-to-rise-and-shine-in/article 1be9ea76-3a80-5d93-9cd9-5e7d4916e2ea.html

#### **Springfield**

Several articles in the Springfield Advance-Press and posted information about various projects as well as photos on Twitter and the Springfield Disc Golf Course Facebook page.

#### Glencoe-Silver Lake

Articles in the Glencoe School Newsletter and Glencoe Talks-KGLB Radio.

## **Westbrook-Walnut Grove**

Stories in the Marshall Independent and the Worthington Daily Globe.

#### **New London-Spicer**

Articles in the Lakes Area Review and on the NL-S Facebook page as well as the Willmar Regional Access Channel.

#### **LQPV**

Articles in the West Central Tribune, the Appleton Press, the Western Guard and a video about their work: <a href="http://www.wctrib.com/content/lqp-valley-greenhouse-going-help-near-far-video">http://www.wctrib.com/content/lqp-valley-greenhouse-going-help-near-far-video</a>

#### **Eden Valley-Watkins**

Article in their student newspaper, the "Eagle's Cry"

#### Litchfield

They were involved with the One Vegetable One Community program which had articles in the Litchfield Independent Review.

#### **YME**

Article in the Granite Falls News

http://www.granitefallsnews.com/article/20140421/NEWS/140429974/10057

#### **ACGC**

Article in the West Central Tribune

#### Royalton

Article in the Morrison County Record

#### Kennedy

Articles in the St. Joseph Newsleaders

 http://www.thenewsleaders.net/2014/04/17/students-start-new-organics-recyclingprogram/

#### Rocori

Articles in the ROCORI High School Newsletter and the Rocori District Newsletter.

The Following twelve (12) articles about YES! were in various local newspapers:

http://images.burrellesluce.com/image/19738/19738\_2336 http://images.burrellesluce.com/image/19738/19738\_2318 http://images.burrellesluce.com/image/19738/19738\_2263

http://images.burrellesluce.com/image/19738/19738\_2264 http://images.burrellesluce.com/image/19738/19738\_2254

http://images.burrellesluce.com/image/19738/19738\_2148

http://images.burrellesluce.com/image/19738/19738\_2099

http://images.burrellesluce.com/image/19738/19738\_2088

http://images.burrellesluce.com/image/19738/19738\_2089

http://images.burrellesluce.com/image/19738/19738\_2090

http://images.burrellesluce.com/image/19738/19738\_2099

# VI. PROJECT BUDGET SUMMARY:

#### A. ENRTF Budget:

Budget Category	\$ Amount	Explanation
Personnel:	\$124,800	1.0 FTE Project Leader & Central unit coordinator, Salary 75%, Benefits 25% 0.5 FTE Coordinator for North unit 75% salary, 25% Benefits. All positions 24 months.
Professional/Technical Contracts:	\$41,600	0.5FTE Coordinator for South unit 75% salary, 25% Benefits, to be contracted through Southwest Initiative Foundation (SWIF) to cover southwestern Minnesota region. All positions 24 months.
Equipment/Tools/Supplies:	\$1,000	2 Solar Ovens (\$ 300 Sub-total), 2 Renewable Energy Kits (\$ 400 sub-total), and Replacement parts for Kid Wind kits (\$ 100 sub-total), 6 Solar car kits (\$ 100 sub-total), and 2 sun angle kits (\$ 100 sub-total). The numbers are approx. to make allowance for shipping.
Travel Expenses in MN:	\$18,600	Project Leader and unit coordinator's travel-1500 miles per month for three sites combined for approximate total of 36,000 x \$.50/mile over two years (required for serving widely dispersed rural communities). \$600 meal allowance (\$100 per coordinator per season). All travel expense reimbursements as per Minnesota State Commissioner plan. Additional requirements to be covered by non-ENRTF funds.

		tergy conservation in viest & southwest will				
Other:	\$ 25,000	Year 1, 30 teams spent a total of \$ 3,440 leaving a				
		balance of \$ 26,560. The new balance of \$ 21,560 /				
		30 teams = av. of \$ 718 per team for 1 year.				
		Amount spent not to exceed \$ 21,560.				
		Allowance of up to \$718 per team is intended to				
		offset expenses incurred by the districts thereby				
		allowing them to participate in YES! in a cost-				
		effective manner. Eligible reimbursable expenses				
		may include: 1. compensation YES! team				
		coaches/adult advisors (typically professional				
		educators or other similarly-trained professionals				
		serving as advisors/facilitators for YES! youth and				
		YES! teams activities); 2. reimbursement to offset				
		the cost of hiring a substitute teacher in order to				
		allow the YES! coach/adult advisor to attend YES!				
		events during the school day; 3. Transportation				
		expenses for buses or vans for students and				
		1 •				
Othor	¢ 25 000	coach/adult advisor to travel to YES! events.				
Other:	\$ 35,000	YES! project seed funds: Year 1, 30 teams spent a total of \$ 3,440 leaving a balance of \$ 26,560. The				
		new balance of \$ 21,560 / 30 teams = av. of \$ 718				
		per team for 1 year. Amount spent not to exceed				
		\$ 21,560.				
		See "Eligible Expenses for Project Seed Funds"				
		attachment for guidelines. If fewer teams are				
		recruited in year one, funds will be apportioned to				
TOTAL ENRTF BUDGET	\$246,000	participating teams based on their project need.				
TOTAL ENKIR BUDGET	.φ240,000					

Explanation of Use of Classified Staff: n/a

Explanation of Capital Expenditures Greater Than \$3,500: n/a

# Number of Full-time Equivalent (FTE) funded with this ENRTF appropriation:

Total of 2.0 FTE for the project.

1 FTE Project Leader & Central Unit Coordinator and (2).5FTE Coordinators for North and South Units

Youth-Led Renewable Energy & Energy Conservation in West & Southwest	MN

# B. Other Funds:

	\$ Amount	\$ Amount (actual)	
Source of Funds	Proposed	Received/donated	Use of Other Funds

	Table Ellergy a	Literay Conscivation	II III VVESI & Southwest IVIIN
Other Funds: 1a)SWIF Total for 2011-2014	\$ 91,500	\$ 229,869	1 a) SWIF: Staffing; \$ 146,846 Travel/Mileage; \$ 4,949 Team Project Funds; \$ 41,120 Spring Awards: \$ 16,030 Events: \$ 8,194 Website/Marketing: \$ 3,539 Eval/Planning; \$ 9,190
1. The McKnight Foundation 2. Southern MN Initiative Foundation 3. UofM SW Regional Sustainable Partnership 4. AgStar Financial Services 5. Initiative Foundation 6. Central Regional Sustainable Partnership 7. Center for Energy and the Environment 8. Kandiyohi Power Coop 9. Great River Energy 10. Basin Electric 11. Excel Energy 12. Federated Rural Electric 1c )Other funds for expenses:: \$ 250 (2011-12),	\$10,000 \$18,000	\$) 96,420 \$ 24,800	b) Support for Team Awards, Project Funds, Staffing, Evaluation; 1. \$30,000 2. \$30,000 3. \$20,000 1. \$ 7,500 5. \$ 5,000 6. \$ 4,000 7. \$ 1,500 8. \$ 750 9. \$ 500 10. \$ 500 11. \$ 420 12. \$ 250 c) Teams fees help cover event
\$ 300 (22012-13) and \$ 350 (2013-14) team fee collected from each team	\$119,500		food, t-shirts and other expenses
Sub-Total/Other funds:	9119,300	\$351,089	

	ible chergy & c	nergy Conserva	ation in West & Southwest MN
Additional sources of funds			
Matching fund/support from			
local community towards			
team projects for 2011-12			
YES! season:			
	¢.	245	4) Managan Jawasan
1) Cedar Mountain	\$	315	1)Morgan Jaycees
2) Gibbon Fairfax Winthrop	\$	300	2)Carl Perkins grant
3) Springfield	\$	20,500	3)\$20,000 (Monsanto), \$ 500
			(InCommons)
4) ACGC	\$	2,230	4) \$1200 (Meeker Coop), \$905
	ľ	,	(DonorsChoose.org), \$125 (First
			State Bank of Grove City)
5) Dassel-Cokato	¢	244	5)Perkins Fund
1 '	\$		,
6) Eden Valley-Watkins	\$ \$	500	6) Recycling container donation
7) Litchfield	\$	250	7)SHIP grant
8) Willmar	\$	2,500	8) Clean Energy Resource Teams
			(CERTS) grant
9) Alexandria	\$	300	9)\$ 150 (Runestone Electric
	ľ		Association), \$ 150 (Alex Light &
			Power)
10) Parkers Prairie	¢.	150	10)Otter Tail Power Company
11) Austin	\$ \$		
,		1,000	11) Bachman's store
12) Mankato West	\$	250	12)Mankato West Tech Committee
			donated computer & monitor
13)Rochester Mayo	\$	1,500	13)Wind Turbine materials donation
		•	
Sub-Total for 2011-12	\$	30,039	
Marching funds/support from			
local community towards			
team projects for 2012-13			
YES! Season:	\$	500	1) Beauding him from Tri County
	P	300	1) Recycling bins from Tri-County
1) St. Cloud Apollo -		4-0	Solid Waste
2) Parkers Prairie	\$	150	2) Otter Tail Power
3) Rocori	\$	1,000	3) 6 Rubbermaid Half Glutton, 10
			plastic paper bins & 40 signs from
			Tri-County Solid Waste
	\$	800	4) \$ 400 for concrete and \$ 400 for
4) Royalton	Ψ	000	labor
i, ite janen	¢	150	
E)Codor Mountain	\$	150	5)Morgan Jaycees
5)Cedar Mountain	\$	215	Cedar Mt. FFA
	\$	500	6) Stevens Seminary Grant
6) Glencoe	\$	50	Midwest Machinery
	\$	1,000	GSL Booster Assoc.
		1,056.02	Glencoe Silver School District
	\$		School District - transportation
	Ψ	101	Consol Blother transportation
7) Westbrook-Walnut-Grove	¢.	550	Turbing pola/placement City of
/ / VVCStb100K-VValidut-G10VE	\$		Turbine pole/placement - City of
	\$ \$	100	Westbrook
		100	Lightbulbs, WB Power & Light
	\$	50	Insulation - WB home center
			Insulation - Center Point Energy
8) Pine Island	\$	130	8) Student dues
i l			

TOURITECA NOTICE	Table Ellergy & E	norgy conservation	in West & Southwest Min
9) Hutchinson 10) Mankato - West	\$ \$ \$ \$ \$	2,400.00 10,000.00 15,615.00 26,202.00	9) MAELC Agstar Burich Foundation Private donation  10) School district Dishwasher purchase Dishwasher install by School district
11) Sleepy Eye	9 9999	25.00 300.00	11) Women's Club Sleepy Eye Public Utilities Schanus - labor & mileage Haala Industries
Sub-Total for 2012-13	\$	82,391.92	
Marching funds/support from local community towards team projects for <b>2013-14</b> YES! Season:			
1) Austin 2) ACGC	\$\$		1)Online crowd sourced fundraising 2) ACGC schools (\$4,156.540, Kandiyohi Power (\$500), McLeod County (\$338.50)
3) Glencoe-Silver Lake 4) Lac qui Parle Valley 5) Litchfield 6) Mankato West 7) Royalton 8) St. Cloud Apollo 9) St. Joseph Kennedy Community 10) Parkers Prairie 11) Westbrook-Walnut Grove	99999999999999999999999999999999999999	2,800.00 1,640.00 2,052.37 1,765.93 8,000.00 100.00	3) Stevens Seminary (\$1,000), GSL Activities (\$4,482), Donations (\$100) 4) Kids Garden Grant (\$2,000), Selling greens to school lunch (\$800) 5) Litchfield Schools 6) Mankato Schools 7) Royalton Schools 8) St. Cloud Apollo High School 9) Kennedy Community School 10) Student Council 11) Westbrook-Walnut Grove Schools
Sub-Total for 2013-14	\$	28,035.34	
TOTAL Community Contributions (Additional sources of funds from 2011-2014	\$	140,466.26	

Youth-Led Renewable Energy & Energy Conservation in West & Southwest MN							
In-Kind Services During	\$90,000						
Project Period							
-							
1 a)SWIF: Administrative, office & meeting space		1) \$ 40,881	1 a) Staff time to process grants (other than ENRTF funds), payments to schools, human resources for the contract work, communications staff helping with web/media, printing & meeting space.				
b) Donated consultant time for team projects-based on average of previous years \$2-3000 per team x 30 teams =\$60-90,000;			b) Donated consultant and mentor time provides technical expertise and support for YES! Projects.				
2) In-kind travel donated \$4000;		2) \$ 5,000	2) In-kind donation of travel funds and time provided by 22 resource experts at YES! Fall Summit, 2012.				
3)In-Kind services provided as reported by schools per season:		3) \$ 32,815 (TOTAL)	3)Submitted by schools in their Final Reports				
a. 2011-12 b. 2012-13 c. 2013-14		a. \$ 15,338 b. \$ 14,056 c. \$ 3,421					
4) Other volunteer and student time additional.			4) Donation of time from 20 resource experts at YES! Fall Summit, 2012 and 2 in 2013.				
5) University of MN Morris - Green Corps workers		\$ 1,089.5 x 10 hrs =	5)a. 2011 - 12: 5 Green Corps members presented and assisted with Earth Day, 2012 at PWELC				
		5b) 10x \$ 21.79/hr= \$ 217.90	5)b. 2012-13: Paige Scarborough, Green Corps Member/U of M Morris served as resource expert at YES! Fall Summit, 2012.				
6) Prairie Woods Environmental Learning Center, Spicer, MN		6) \$ 1,450/mo x 36 = \$ 52,200 total	6) Office space for 2 coordinators including computer, printer, printing, internet service, accounting support & executive management				

			n in West & Southwest MN
State Past state funds have included CERTs grants and support from WC Sustainable Development Partnership awarded to YES!			Jeff Vetsch (CERTS) created and presented at 2011 Fall Summit and served as Resource Expert at 2012 Fall Summit.
teams and Schools Cutting Carbon grants awards to YES! projects (pending-no amount listed at this time).			
Sub-Total: In-Kind Services	,	\$ 136,702.6	
Total: Current Other funds	•	\$ 491,555.26	
Funding History: 1)Southwest Initiative Foundation 2007-2011			1) In years 2007-2011: \$105,000 in personnel, \$9,000 in travel; \$33,500 in team project grants/awards; \$25,000 for event-related costs; \$3,000 in office/other supplies; \$2,000 for phone; \$2,500 communications/marketing
2)Mn Renewable Energy Marketplace – WIRED grant 2009-2010		<b>2)</b> \$202,000	2) In 2009-2010: \$128,800 in personnel and travel; \$52,000 in team project grants/awards; \$13,000 for event-related costs; \$3,000 in office/other supplies; \$1,500 for phone; \$3,700 for communications/marketing
3) Other Supporters – 2010- 2011			3) 2010-2011: \$75,000 - McKnight Foundation for YES! Strategic Planning/Evaluation project; \$10,000 Southern MN Initiative Foundation for team projects and partial personnel for southern unit; \$10,000 AgStar for team projects/awards; \$5,000 misc other supporters
4) In-kind from other supporters 2007-2011		4) \$ 150,000	4) In-kind by businesses and other supporters in travel, consultant time, etc. from 2007-2011
TOTAL OTHER FUNDS for grant period 7/01/2011 to 6/30/2014:	\$209,500	\$ 628,257.86	(includes in-kind)

# **VII. PROJECT STRATEGY:**

Youth-Led Renewable Energy & Energy Conservation in West & Southwest MN A. Project Partners: Southwest Initiative Foundation (SWIF), Prairie Woods Environmental Learning Center and 38 YES! communities in west central and southwestern Minnesota received funding from this project. Southwest Initiative Foundation contact: Cheryl Glaeser, Program Officer, SWIF, 15 Third Ave NW, Hutchinson, MN 55350, ph. 1-800-594-9480. Contact information for all participating teams will be provided upon confirmation of intent to participate in the 2011-2012 project year. SWIF received funding for a 0.5 FTE unit coordinator for 201--12 and 2012-13. Each team (sponsored by a school district or community organization) was eligible for reimbursement of up to \$500 per year in eligible project-related expenses and up to \$500 per year for program participation expenses such as transportation, substitute teacher costs and coach/adult advisor compensation. Due to other funding, most teams were eligible and used \$ 1,000 in project seed fund dollars for 2011-12, 2012-13 and 2013-14.

**B. Project Impact and Long-term Strategy:** This project did expand a successful model of youth-led renewable energy and energy conservation projects in over 38 communities in west central and southwestern Minnesota. The project mobilized public and private partnerships to raise awareness of issues and opportunities related to renewable energy for rural Minnesota; and produced lasting economic benefits for schools, businesses and communities through energy conservation and efficiency. Students participating in YES! gained valuable hands-on learning experiences and exposed them to employment and training opportunities throughout Minnesota and encouraged them to contribute to the environmental and economic health of their state.

Over the past three (3) years YES! staff and participating organizations identified regional allies in the private, public and non-profit sectors who have a shared interest in supporting the continuation and expansion of YES! Teams. In fact, three (3) Community meetings were held to gather stakeholder input on how to best engage local businesses and organizations in the success of YES! into the future. Findings from the meetings along with an on-line survey will be written into a report and shared with YES! staff. Findings from this report, facilitated by SWIF, will help guide the YES! program towards a more sustainable funding future.

YES! staff will continue to pursue garnering a percentage of energy savings derived from YES! projects to support future YES! projects. YES! staff will pursue this again in the coming 2 years. YES! encourages schools to benchmark their projects and report their findings on the YES! final report. However, collecting the data has been a struggle for schools. YES! staff have been working with East Side Oil Company and they will give YES! 5 cents per gallon of waste oil collected at sites developed by YES!. Other funding options are being pursued to ensure the future success of the program.

## C. Spending History:

Funding Source	M.L. 2005	M.L. 2007	M.L. 2008	M.L. 2009	M.L. 2010
	or	or	or	or	or
	FY 2006-07	FY 2008	FY 2009	FY 2010	FY 2011
No prior ENRTF funding					
Southwest Initiative Foundation		\$ 30,000	\$50,000	\$ 40,000	\$ 60,000
Minnesota Renewable Energy			\$66,500	\$135,500	
Marketplace					
McKnight Foundation					\$ 75,000
Southern MN Initiative				\$ 5,000	\$ 10,000
Foundation					

Other Supporters	\$5,000	\$10,000	\$ 15,000	\$ 11,500

VIII. ACQUISITION/RESTORATION LIST: N/A

IX. MAP(S): N/A

X. RESEARCH ADDENDUM: N/A

**XI. REPORTING REQUIREMENTS:** 

Periodic work plan status update reports will be submitted not later than January 31, 2012, June 30, 2012, January 31, 2013, June 30, 2013, January 31, 2014 and the final report and associated products will be submitted between June 30 and August 15, 2014 as requested by the LCCMR.

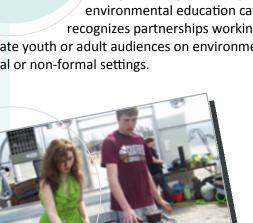
Attachment A: Budget Detail for M.L. 2011 (FY 2012-13) Environment and Natural Resources Trust Fund Projects									
Project Title: Youth-led Renewable Energy and Energy Conservation in West and Southwest Minnesota									
Legal Citation: M.L.2011, First Special Session, Chp. 2, Art, Sec. 2, Subd. 08a									
Project Managers: Dave Pederson and Shelli-Kae Foster									
M.L. 2011 (FY 2012-13) ENRTF Appropriation: \$246,000									
Project Length and Completion Date: 2 years, July 2011-June 2013 June, 2014									
June 30, 2014 FINAL REPORT									

ENVIRONMENT AND NATURAL RESOURCES TRUST	Activity 1 Budget as of	Total Amount Spent as of June 30,		Activity 2 Budget as of	Total Amount Spent as of June 30,		Activity 3 Revised Budget as of	Total Amount Spent as of June 30,		TOTAL	TOTAL BUDGET
FUND BUDGET	04/31/13	2014	Balance	04/31/13	2014	Balance	07/01/13	2014	Balance	BUDGET	REMAINING
BUDGET ITEM				Workshops and Events							
Personnel (Wages and Benefits)	6,750	6749	1	16,750	16,750	o	117,300	117,300	0	140,800	1
1.0 FTE Project Leader & Central Unit Coordinator, 75% Salary, 25% Benefits, 2 years (\$83,200)			0						0	0	0
0.5 FTE Coordinator for North unit 75%Salary, 25%Benefits for 2 year period (\$41,600)			0						0	0	0
Professional/Technical contracts: Southwest Initiative Foundation will provide 0.5 FTE YES! unit coordinator to service 9-12 teams in the south and southwest unit. 75%Salary, 25%Benefits for 2 year period (\$41,600)	2,250	2223	27	8,250	8,249	1	31,100	31,095	5	41,600	33
EquipmentTools/Supplies: 2 Solar Ovens (\$300 sub- total), 2 Renewable Energy Kits (\$400 sub-total), and Replacement parts for Kid Wind kits (\$100 sub-total), 6 Solar car kits (\$100 sub-total), 2 Sun angle kits (\$100 sub- total). The numbers are approx. to make allowance for shipping.			0				1,000	927	73	1,000	73
Travel expenses in Minnesota: Project Leader and Unit Coordinator's Travel-1500 miles per month for three sites combined for approx total of 36,000 x \$.50/mile over two years (required for serving widely dispersed rural comunities). \$600 meal allowance-no overnight travel expected.	1,000	994	6	3,000	2,986	14	14,600	14,600	0	18,600	20
Other: District/Organization Expense Allowance: Year 1, 30 teams spent a total of \$3,440 leaving a balance of \$26560. The new balance of \$21560/30 teams = awo, of \$718 per team for 1 year. Amount spent not to exceed \$21560. May include: 1. YES! team coaches/adult advisors compensation; 2. substitute teacher expenses 3. Transportation expenses for YES! events.			0				17,000	16,998	2	17,000	2
Other: YES! Team Project Seed Funds: Year 1, 30 teams spent \$3467 leaving a balance of \$26533. The new balance of \$31533/30 teams=av of \$1051 per team for 1 year. Amount spent not to exceed \$31533. See "Project Seed Funds Eligible Expenses" sheet.			0				27,000	27,000	0	27,000	0
COLUMN TOTAL	\$10,000	9966	34	\$28,000	\$27,985	\$15	\$208,000	\$207,920	\$80	\$246,000	\$129

YES! Receives **MEI Award** 

YES! received a Minnesota Environmental Initiative Award (MEI) for the second time. winning in 2010 and again in 2013. The awards annually honor innovative projects that have achieved extraordinary environmental results by harnessing the power of partnership. YES! won in the environmental education category which recognizes partnerships working to actively

educate youth or adult audiences on environmental issues, in formal or non-formal settings.



## **Local Foods!**

YES! students are cultivating knowledge and eating it, too! Many YES! teams have found that they are passionate about local foods and school gardens. This past school year 4 YES! teams built or maintained greenhouses at their schools and 13 YES! teams worked on projects related to school gardens and composting.



# Recycling

70,000 milk cartons 2,335 plastic bags 2,000 lbs. of holiday lights 1,000 pairs of blue jeans 700 lbs of tennis shoes

# Renewable Energy!

3 YES! teams pursued solar energy and 1 team small scale wind as part of their projects. Austin researched and raised funds for panels on their school roof. Lac qui Parle Valley resurrected older solar panels to power their greenhouse fans. Litchfield installed a stationary solar array expected to produce 500-800 kWh/month. Westbrook-Walnut Grove installed a small scale wind turbine (pictured on the right) estimated to save their school \$530/year in energy costs.



#### **Waste Reduction!**

19 YES! teams worked on recycling projects, 10 YES! teams worked on composting projects, and 3 YES! teams worked on other wastereduction measures. The impact of these measures was huge! Mankato West is saving 129,000 Styrofoam trays from being thrown away each year. Albany cut their school's lunch waste in half by recycling milk cartons, napkins and plastic containers and Royalton decreased their school recycling contamination rates from 70% to 5%. This year YES! teams also installed 17 hydration stations to decrease plastic bottle waste.

1. YES! Staff and students accept MEI Award. 2. Chatfield YES! student work in greenhouse. 3. Gibbon-Fairfax-Winthrop student by their composting project. 4. Westbrook-Walnut Grove coach and students install wind turbine. 5. New York Mills students and their coach learn how garbage is turned into valuable energy at Pope Douglas Solid Waste facility at YES! Winter Workshop.



YES! is supported in part by the Minnesota Environment and Natural Resources Trust Fund as recommended by the Legislative-Citizen Commission on Natural Resources.





This means that since its inception in 2007, YES! has supported more than 1,500 students in working with 1,390 local businesses, organizations and community members to impact an additional 83,630 community members and 39,848 students.

local businesses to impact an additional 30,000 students.

One You... Many Connections!

2012-2013

"You have the power of choice,

you can make a difference!"

The number of students who participated as YES! team members



of their work!

in 2012-2013





YES! empowers youth to partner with their community to create economic and environmental vitality through hands-on learning and team-based projects.

www.youthenergysummit.org





It is exciting to think of the growth of YES! since

•3 times as many community members impacted

•6 times as many additional students reached

•5 times as many students engaged

•13 times more businesses involved

•4 times as many teams/schools involved

its first season in 2007-2008. There are currently:

YES! has truly grown into a powerful and impactful

many acts of permanent good for our environment

and communities. Read some of the highlights here

and celebrate with the teams as we lift up the impact

network of young people in our state who accomplish

# 2012-2013 YES!

# **Award-Winning Teams**

(in alphabetical order)

# **Atwater-Cosmos-Grove City**

**Grand Prize Award** 

Developed an impressive recycling program including 300 stackable bins in classrooms as well as programs to recycle e-waste, tennis shoes, milk cartons, and pop bottles. Hosted an event to educate elementary students about recycling and energy. Continued to work with their school garden and sold produce at the farmer's market.

# **Eden Valley—Watkins**

Big Bang Award

Installed 3 hydration stations in hightraffic areas of their school. Placed new recycling stations around the schools and recorded their use weekly. Continued to record the energy produced by solar panels installed in a previous season of YES!.

## Glencoe-Silver Lake

Successfully built a vehicle that achieved 160 mpg during the 25th annual Supermileage Competition. Their coach commented. "of all the teams I have taken over the past 22 years, these kids were by far the most goal oriented, organized, best-behaved and focused of any I have worked with."



30.000 Number of additional students impacted

"YES! champions the ideas of students while

equipping them to create meaningful change!

# Kennedy Community

Energy Efficiency & Conservation Installed a hydration station in their lunch room. Created and administered a survey for their fellow students about their attitudes on recycling. Hosted a Black Out Day at their school.

## Lac qui Parle Valley

Energy Efficiency & Conservation & Creativity & Innovation

Built a 20' by 40' passive solar greenhouse with two solar panels that power the fans. Grew varieties of salad greens and produce to supply the local schools with fresh, organic food. Educated elementary students to develop interest in the greenhouse. Provided electronic waste disposal at a reduced cost for area residents.

#### Litchfield

Third Place & Community Involvement

Received a CERTs grant to install a stationary solar array. Grew and gave away 1,000 pepper plants as part of the One Vegetable, One Community project, which

> aims to bring community together around food. Co-sponsored a community discussion about local foods.

# Mankato West

Third Place and Energy Efficiency/

Researched and prepared their school cafeteria for a change from Styrofoam lunch trays to washable trays and flatware, saving their school an

estimated \$600/year and 129,000 trays from the landfill. Installed an energymonitoring meter to better measure their school's electrical consumption.

# **New London-Spicer**

Second Place

Worked toward building a passive solar greenhouse and establishing a composting program. Also installed two hydration stations and hosted an outdoor science program for elementary students about the value of reduce, reuse, recycle and local foods.

#### **New York Mills**

Creativity & Innovation

Planned a student-run garden and composting project to provide their school with fresh fruits and vegetables. They plan to sell some of the

1. Lac qui Parle Valley YES! students educate elementary students in Milan. 2. St. Cloud Apollo YES! team gives a thumbs up for their season accomplishments. 3. ACGC students plant seeds in their community garden. 4. Mankato West students display their marketing strategy for getting rid of Styrofoam trays 5. Royalton students with their Electric vehicle. 6. Lac qui Parle Valley students learn about greenhouses at Garden Goddess in Milan 7. St. Cloud Apollo student by 1 of 2 hydration stations they installed.





produce at the local farmer's market. Also hosted a Black Out Day and researched electric hand dryers for their school.

#### Rocori

Second Place & Community Involvement

Doubled the amount of plastic and aluminum recycled in their school and collected over 150 pairs of shoes for the GreenSneakers EcoChallenge. Promoted recycling at the local Coach Kids Fair and participated in St. Cloud State University Earth Day Expo.

# Royalton

Grand Prize and Big Bang

Installed an oil, oil filter and antifreeze recycling station for their community with the help of First Fuel Banks and East Side Oil Company. Decreased the

efficient vehicle for the Supermileage Competition. learned how to deal with other's ideas, work together, and communicate!"





**GSL Student** 

St. Cloud Apollo

8. New London-Spicer student harvests grapes on school

grounds 9. Westbrook-Walnut Grove begins a partnership with First Fuel Banks and Ease Side Oil to recycle used oil.

10. Glencoe-Silver Lake YES! students prepare their fuel-

Second Place Award

By placing recycling containers next to existing garbage containers, recycling at events, and education staff and students, their school replaced one garbage dumpster with one recycling dumpster! They also installed 2 hydration stations, presented at the St. Cloud Green Forum and collected used cellphones to raise funds for rainforest preservation.

#### Westbrook-Walnut Grove

**Grand Prize &** 

Community Involvement

In addition to putting up a small scale wind turbine (saving their school an

estimated \$530 a year in energy costs), this team partnered with the Southwest Minnesota Housing Partnership to hold demonstrations on energy and water conservation strategies for over 950 community members in

several communities in southwest

Minnesota.

Community members impacted this year. "We surprised the

17.247

community with our knowledge and people really did listen to us!"





Second Place & Big Bang

Taught residents proper disposal methods after installing over 800 CFLs in an apartment complex. Collected over 500 pairs of jeans to be recycled into LEED-certified insulation, installed recycling bins at city parks, and presented at several events.

contamination of recycling at their

school from 70% to 5% through

improved signage and activities.

(Continued from page 3)

# Sleepy Eye

Grand Prize Award, Creativity & Innovation, Community

Collected 557 lbs of holiday lights for recycling. Installed over 800 CFL's in local low-income housing—saving a calculated 36,800 kw, about \$3,312 annually. Promoted other energy-saving habits by promoting a Blackout Day, Save it for Side 2, and energy reminders in their schools.

# **Springfield**

Furthered plans on new greenhouse in partnership with local restaurant and FFA, including an Earth Tub composting system donated by Carleton College. Presented energy education to elementary students by partnering with High School ecology class.

#### Westbrook-Walnut Grove

2nd Place Award, Economic Potential

Conducted energy audits in their school classrooms during both peak and off-peak hours. Compiled a Lending Library of energy monitoring devices at their local library to promote energy-use awareness and conservation in their community. Purchased and installed both a Pedal-A-Watt bike system and wind turbine at their school.

#### Willmar

3rd Place Award, Economic Potential

Formalized relationship with Willmar Public Schools to employ a former YES! student as a manager for the Community Greenhouse. Planned and implemented a Renewable Energy Workshop for all Willmar 5th graders, with a Greenhouse tour and baking with solar ovens!

Largely inspired by a Winter Workshop visit to the College of St Benedict's, YES! teams were inspired by the positive impact they could make on their waste stream by installing 'hydration stations' in their schools.

These stations are water fountain retrofits that encourage use of reusable water bottles by making them fast and easy to fill on the go.

Number of **Hydration Stations** installed by five YES! teams this season.

Digital counters on each 'station' at one school along recorded over 12,000 fills. Coordinating the stations' installations with sales of reusable water bottles, a majority of these YES! teams hope to keep plastic bottles out of their waste stream entirely!

GFW (pictured at left), Lac qui Parle Valley, Litchfield, New London-Spicer, and Parkers Prairie were the five teams who installed stations.

lkay and the Standard Gazette.

A number of YES! teams developed and led a variety of educational events this season. The ACGC team hosted over 300 students at their "Elementary Energy Education Event" at both local elementary schools.

Taking on a new project this year, the Willmar YES! team hosted fullday workshops for all 5th graders in their district—including a tour of their greenhouse and baking with solar ovens.

Members of the Mankato West team quizzed their student body on energy facts during lunch and Springfield reached out to their elementary classes by leading renewable energy activities.

Additional number of students impacted by the teams' work this season



ES! is supported in part by the Environment and Natural Resources Trust Fund (ENRTF) as recommended by the Legislative-Citizen Commission on Natural Resources.



# 2011-2012 **Season Accomplishments**

e kicked off the 2011-2012 season with an expansion into 48 counties. Growing from 17 YES! teams to nearly 30, YES! blossomed in new regions of the state.

This growth was possible in part due to funding from the | for our environment and communities. **Environment and Natural Resources Trust Fund (ENRTF)** as recommended by the Legislative Citizen Commission. We were also able to grow in the southeast region of the state, through partnerships with Southern Minnesota Initiative Foundation and Eagle Bluff

With greater geographic area, the YES! network not only grew but was also strengthened, knitting together a powerful and impactful network of young people in our state who accomplished many acts of permanent good

Read some of the highlights here and celebrate with the teams as they are awarded prizes for their hard work this season!











YES! empowers youth to partner with their community to create economic and environmental vitality through hands-on learning and team-based projects.

www.youthenergysummit.org

# YES! Award Winning Teams

(in alphabetical order)



#### **Atwater-Cosmos-Grove City**

2nd Place Award, Skills & Career Awareness

Hosted an Elementary Education Event that featured activities on wind, solar, and more. Collected blue jeans, tennis shoes, holiday lights and print cartridges in greenhouse for the High School food for recycling. Purchased 16 solarpowered spot lights to install in their community, saving the school \$1,000 annually.

## **Austin**

Energy Efficiency & Conservation

Researched and presented on a green roof plan for their school's annex building. Installed 300 square feet of sedum plants on the roof this spring.

#### **Cedar Mountain**

Goal-Setting & Teamwork

Initiated a composting program in their compost on his land. Documented a total of 4,055 pounds of food waste composted this year.

#### Chatfield

3rd Place Award, Economic Potential

> 2,449.9 lbs. Amount of holiday lights collected by teams for the "Recycle 'our Lights" campaign.

Grand Prize Award, Commu-

Hosted e-waste recycling drive, where they colof e-waste, and a Green Your Holidays event. In-

"Take the time to think about where things come from,

over 300 Family Fun Ag Day participants about the origins of our food. Grew vegetables stations in

service program, installing hydroponics and aquaponics systems.

Educated

# Gibbon-Fairfax-Winthrop

**Energy Efficiency & Conservation** 

Installed two *hydration stations* in their high school and one in the middle school, diverting 12,000 plastic water bottles from the landfill. Filmed informative video on their work as a team.

# Lac qui Parle Valley

Goal-Setting & Teamwork

Hosted a recycling competition between newly established recycling stations in their school. By doing so, reduced school's waste by one dumpster per week. Purchased and installed a hydration station, and won a second station from Elkay company.

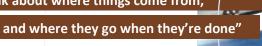
#### Litchfield

\nity Involvement

stalled two

1. Over 125 students and 26 business representatives gathered at Gustavus Adophus

College for the fifth annual YES! Fall Summit. 2. Springfield tours Carleton Campus composting systems, before moving it to their community 3. YES! students tour the Olmsted Waste-to-Energy Facility in Rochester 4. Alexandria students host a booth at their community's Eco-Fair that attracted over1,000 visitors



school and one in their middle school. Began participating in the One Vegetable, One Community program, by starting a community garden plot.

hydration

their high

# **Mankato East**

Creativity & Innovation

Designed and

developed six original inventions to solve "real-world problems", including a LED fish house lighting system.

#### **Mankato West**

Grand Prize Award, Skills & Career *Awareness* 

Researched and implemented a realtime energy-monitoring system for the electrical consumption of their high school. Taught peers energy facts through lunchtime energy quiz bowl.

#### Minnewaska

Energy Efficiency & Conservation

Saved \$30 in energy costs by hosting a lected over 12,000 pounds Blackout Day at their school. Collected recycling from classrooms weekly. Initiated composting in their school by starting with worm bins.

with plans to construct the bins this summer. Hosted a community meeting for Northfield youth on the topic of re-localization and

Designed recycling bins for their city,

**New London-Spicer** 

Creativity & Innovation

Installed two hydration

stations in their school after

researching and opting out

of, solar-powered lights for

Science curriculum with ac-

tivities on local foods, com-

the Elementary Outdoor

posting and alternative

Community Involvement

energy.

Northfield

their parking lot. Revitalized

sustainability pertaining to energy, food, and economics.



5. Willmar Community Greenhouse in bloom 6. ACGC YES! team hosts their now annual Elementary Energy Education Event 7. Students get a taste of locally grown salad greens at the YES! Winter Workshop 8. WWG demonstrate their PowerPedal electric generator 9. Royalton showcases their electric vehicle

# **Redwood Valley**

Skills & Career Awareness

Installed *vending misers* on

1.225

Number of CFLs installed and distributed by two YES! teams.

vending machines in the school. Continued to monitor and improve their composting program in both the Senior High and Middle School. Presented plans for construction and installation of solar thermal collectors on the school to the school board.

# **Rochester Mayo**

Energy Efficiency & Conservation

Raised enough funds to install a wind turbine which will power a large monitor and lights around

their school.



# **Royalton High** School

Grand Prize Winner

Assisted with designing and building an electric vehicle. Updated school's recycling by placing labeled bins around the building and setting up a collection schedule.

# Pine Island

Grand Prize Award, Goal-Setting & Teamwork

Promoted a *Blackout Day* in their school with a photo contest and prizes. Distributed over 425 CFL's in their community. Improved their outdoor classroom by removing buckthorn, constructing bluebird houses and bird feeders, and making plans for a rain garden.



(Continued on page 4)