Eco-Action Examples from YES! Team Projects

WATER

Picked up trash during a shoreline cleanup Monitored a lake for aquatic invasive species Collected data about water quality with MPCA, RiverWatch, local watershed district, or other organizations Conducted a biodiversity index in local streams and lakes Helped a watershed district create charts and graphs of water quality from previous years Installed a green roof on part of the school Created a rain garden at school Installed rain barrels to collect rainwater and used it for watering flower beds Made a device to collect rain/snow from their greenhouse roof to use for watering plants to save money Replaced pavement with permeable surface Installed low-flow showerheads, hose attachments and faucets Replaced school toilets and dishwashers with low-flow, energy star devices. Installed faucets with automatic shut-off Constructed a boardwalk to protect a wetland Installed a greywater reuse system in the school to collect water from sinks, showers, etc. for use in toilet flushing or irrigation Tested drinking-water quality Restored shoreline habitat Raised trout for release through Trout in the Classroom Cleaned out storm drains in community Stenciled storm drains in their city with "No Dumping - Drains to Waterway" Installed pet-waste baggy dispensers in parks Created and maintained a collection site for people to drop off used motor oil Partnered with the city to switch all public facilities to using phosphate-free soaps and detergents Learned how to teach water conservation to younger students in the school and provided tips on how to conserve water at school and at home Developed a water quality curriculum they will use to teach younger students

ENERGY

Created an energy scavenger hunt for students to do at home

Installed a wind turbine at school

Learned about solar science and assembled a Solar Suitcase to bring electricity to a refugee camp in Africa

Partnered with contractor to plan construction and installation of solar thermal collectors on their school, presenting plans to school board for approval Explored the feasibility of solar (both photo voltaic and solar thermal) for their school

Met with school board to promote solar panels for the school Installed solar panels at school (Solar on Schools) Started and promoted a community solar garden Refurbished solar lights and installed them around school sidewalks Replaced flourescent lights in school and the parking lot with LEDs Distributed Energy Efficient CFL Light Bulbs at a local parade; each light bulb had a postcard attached, highlighting energy reduction suggestions Removed and recycled old light bulbs on community's holiday lights, replacing them with LEDs Installed Compact Fluorescent Light Bulbs in local low-income housing To gather data on their school's electrical usage during the school day, they distributed a survey to all staff members and compiled the results along with the data from an electrical energy usage audit they did to help them understand their school's energy habits and how they might change them Created a website to display data from the school's energy monitoring system Updated solar panel energy display at school to be more interactive for public viewing Completed B3 Benchmarking assessment of the school's energy performance, identifying opportunities for saving energy Completed an energy audit by analyzing every exterior door in their school with a laser thermometer to see where heat was leaking and which doors needed weather stripping Monitored the staff appliances in the school district using Kill-o-Watt meters to determine a fair cost per appliance based on energy use Educated staff and administration about energy consumption of various appliances Performed an energy audit at home Acquired energy-efficient automatic hand dryers and water faucets for their school Installed automatic light switches at school Installed reminders to turn off lights when not in use Converted school exit signs to LEDs Installed a Vending Miser to save energy used for a drink vending machine in their school cafeteria Investigated motion-detector lighting for various areas of their school to help their school become more energy-efficient Purchased a Pedal-A-Watt system to be used in their school Built an e-bike and electric go-kart Built and demonstrated a solar car Built a supermileage vehicle for the annual MTEEA Supermileage Challenge Built a solar boat and competed in the annual MRES Solar Boat Regatta Designed and built a solar-powered trailer to haul their solar boat and/or electric vehicle to events Designed and built portable 120 volt solar chargers for students and staff to use in and out of school Built a tiny home Built solar pop can heaters Designed and built trombe walls, which will be used to offset heating costs on days when there is a large fluctuation in temperature from day to night

Researched and began to implement green roofing technologies on their school's annex building

Initiated a Lending Library of energy monitoring devices in partnership with their local library to promote energy-use awareness and conservation in their community Went to the State Capitol with a community member to discuss how legislators are important to the energy efficiency and renewable energy fields

Provided education using an energy trailer from Get Into Energy for Earth Day

Promoted electric vehicles

Installed an electric vehicle charging station

Informed their community of how using hybrids, full electric and high efficiency gasoline powered vehicles can reduce consumption of non-renewable fuel sources Educated 4th graders on bike safety to encourage them to bike to school more often and thereby lesson their pollution

Installed more bike racks at school

Helped build a solar-powered mini golf course to be used at community events

WASTE REDUCTION

Collected, weighed, and kept data on the amount of lunch waste produced by the student body Did a waste sort to determine how much of what's thrown away at school could be recycled instead of sent to a landfill Worked to reduce food waste in their school by meeting with the school nutritionist for new meal taste testing Worked with school administration to replace stryofoam bowls and trays in the lunch line with reusable ones Helped school cafeteria transition from single-use plastics to reusable or compostable plates and silverware Made a video to train peers on what can and cannot be recycled in their lunchroom Redesigned the lunch room to make it easier for students to use the correct bins for organics recycling Worked with the art department to paint large murals on the cafeteria wall depicting which waste should go in each container Established a 'share' table at lunch where unwanted fruits like apples, bananas, grapes, and oranges can serve another purpose Built a compost tumbler Installed compost bins to recycle organic waste from school cafeteria Made worm-composting bins to recycle food waste Collected organic lunch waste and sent to a farmer for use as hog or chicken feed (School to Farm) Implemented a composting program involving local community farmers. In return for food waste, the farms provided the school garden with organic fertilizer Made a composting education video for area elementary schools Designed and conducted a four-week composting education program with the 5th and 6th grade classes Campaigned to reduce dependence upon single-use plastics Researched the most efficient way to compost bathroom paper towels rather than throw them away Installed bulk milk dispensers in school cafeteria to elimate cartons Explored ways to recycle milk cartons in cafeteria Evaluated and redefined recycling at the high school, including determining weaknesses of the current program and setting goals for the future Researched recycling categories to implement a common recycling station along with an informative slideshow

Increased the number of recycling containers at school and created signs to identify waste baskets and recycling bins Identified which classrooms needed bigger recycling bins and secured larger bins for each Designed lessons on waste reduction and taught them to younger students Collected old cell phones for recycling Worked with the PC's for People program to recycle or reuse old computers Recycled holiday lights **Recycled used markers** Collected and recycled plastic grocery bags Collected used printer cartridges and batteries for recycling Utilized TerraCycle to recycle items that aren't accepted in current recycling system Collected shoes, t-shirts, blue jeans, or other clothing to donate to a community closet or another organization (like WorldWear) Collected school supplies at locker clean out day that can be reused Held "Biggest Loser" locker-emptying challenges with the goal of recycling as much as possible Conducted tire pressure checks on teachers' cars and left a note indicating the environmental impact and gas wasted from improperly inflated tires Installed a bike repair station Encouraged teachers to cancel duplicate catalogs they receive at school and make 2-sided photocopies to reduce extra paper waste Intalled a hydration station at school and monitored the number of fills to determine amount of waste prevented Distributed reusable water bottles to students and staff to encourage them to the hydration stations team installed at school Made posters and a video to promote the use of the hydration station Created a disc golf course using recycled parts for targets Upcycled plastic bags, weaving them into bracelets to sell and "plarn" sleeping mats for homeless people Made a sculpture to illustrate how much plasticware gets thrown out each week in the cafeteria Created 3-D sculptures of all of the juice and milk cartons that get thrown away in a typical day in their school cafeteria to encourage proper recycling Strung together all plastic containers placed in recycling bins at school over a three day period and calculated the impact of students' recycling habits Picked up trash and recyclables after homecoming parade. Students walked behind the parade with signs advertising their club and their World Wear shoe collection Cleaned up stadium after homecoming football game Creating a recycling depot where community members can recycle plastic bags, aluminum cans, and more Created a used oil, oil filter, and antifreeze recycling station in the community Brought permanent recycling bins to their downtown area, involving local organizations and artists in the development and design of these unique bins Created a display to increase awareness of the recycled plastic composite material used to build the community playground Administered a survey to students to gauge how sustainably their peers are living, awarding points based on behaviors

LAND

Planted a prairie-pollinator garden at school or on community property Collected prairie seeds and made seed bombs with younger students Created a garden and shared the harvest through a community food shelf Sponsored a community garden where the YES! students helped elementary students grow their own produce Visited elementary classes and read a book about gardening Utilized hydroponics and aquaponics set-ups to grow tomatoes, radishes, lettuce, cabbage, kohlrabi, peppers, and herbs Grew food in a greenhouse or aquaponics system Designed and constructed a hoop garden and a water system which uses rainwater runoff Promoted permaculture Built planter boxes or raised gardens Designed and built vertical gardens Ran and maintained a Deep Winter Greenhouse Students constructed the frame for a 30' by 48' greenhouse, selected the plants to be grown, and prepared the greenhouse for plants Installed a passive solar greenhouse and with a vertical axis wind turbine Promoted their greenhouse by handing out fresh greens at sporting events Harvested grapes and made grape jelly to use in educational events about the value of local foods Planted a food forest or orchard Planted raspberry bushes and apple trees donated from the community Planted native trees for conservation Planted trees and shrubs for their city through a grant from MN DOT Removed buckthorn or other invasive species from a wooded area Conducted river shoreline plantings in partnership with community members Grew plants in milk cartons to give away on Earth Day Made bee houses Built and installed bat boxes Built and installed bluebird houses and bird feeders Constructed and maintained an outdoor classroom Constructed a teaching platform, benches or shelter for outdoor education Built a bridge to access acres of land of the opposite side of a stream in their school forest Created natural playscapes at a local nature center Created educational signs for their community about how climate change is impacting animal populations Developed signs for the forest behind school with information regarding different species and vegetation types Developed interpretive signs for native habitat or other conservation projects

EVENTS

Planned and hosted a youth climate convening for the community with Climate Generation Led an Environmental Week at school Led Energy Conservation Week at school Coordinated a Blackout Day at school to promote energy conservation Developed a "Dark Lunch" at their school to encourage awareness of energy use and the need for energy conservation Hosted a Waste-Free Lunch Hosted a used-clothing exchange Hosted a Green Transportation Week at school Taught about water quality and soil heath at an education station at community event Organized a Community Green Day Hosted Household Hazardous Waste Collection Day in conjunction with county household hazardous waste facility Planned and implemented a Renewable Energy Workshop for all local 5th graders—highlighting the school greenhouse, solar ovens, and more Put together a Clean Energy and Energy Efficiency Workshop 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 Hosted an e-waste recycling drive Hosted a Green Your Holidays event Co-sponsored a screening of the movie Fresh as well as a community discussion about local foods Organized a booth at their school's Ag Day to educate students on the importance of pollinator plants Coordinated an Earth Day Celebration Led educational games with prizes at a lunch table for Earth Day to educate fellow students while having fun Hosted a week-long event around Earth Day, including a blackout day/hour, a 'Kahoot' interactive guiz game on recycling, educational posters and presentations, and a trash audit. They also had themed dress-up days designed to spark conversations about various topics related to sustainability Designed and implemented an Earth Day Education event for K-4th graders with 30 minute educational workshops for each grade level on topics such as solar and wind energy, recycling, and seed germination Organized Earth Week activities for their middle school which included earth trivia cards, an Earth Day coloring contest, a Lights Out Day and green/blue day on Earth Day. Hosted a YES! week with activities, games, trivia, learning opportunities, and dress-up days Worked with their mayor to provide their school and community with an Eco-Fair Coordinated an Eco-Art Competition Hosted a YES! Run in late April. The route showcased previous projects, educating participants on the influence the team has had in the community. Registration fees were donated to water.org to raise money for communities to have access to safe water 6

Taught a session for younger students at Science and Nature Conference Implemented a mini advertising campaign about an issue like water quality on YouTube, social media, posters, handouts, radio interviews, etc. Marched in a community parade to promote a particular eco solution Organized a Local Foods Celebration for the community where they served a local foods lunch and created a farmers market at their school Held a community meeting where they lead a discussion with area youth on the topic of re-localization and sustainability pertaining to energy, food, and economics Participated in Lobby Day at the state capitol to present the need for funding environmental clubs and the environment in general Prepared a booth on recycling and answered questions by attendees at the annual STEAM Expo Tabled at the St. Cloud State University Earth Day Expo Exhibited and showcased renewable energy and waste reduction projects at the MN School Board Association Conference and CERTs Conference Entered the annual MN Renewable Energy Society Solar Boat Regatta Held a late spring star-gazing event Hosted a Family Fun Night for school outreach, education, and fun! Created a Water Week with activities to promote the hydration stations in their schools Organized a clean water fundraiser that included a silent auction and brunch. Proceeds were donated to Clean Water Action Taught Outdoor Science to students in grades 1-3, which included energy conservation, clean energy production, sustainable growing and local foods, and habitat/species diversity and protection, all embedded in the MN science standards Hosted a Family Fun Ag Day and educated adults and children about where their food comes from Participated in a Community Cleanup Went on a trip to the Water Park of America to learn about water conservation and usage (and played around in the water, of course!) Toured Valley Fair in order to learn about their recycling and waste reduction program Took an Alternative Energy and Transportation tour of Minnesota which included a biomass plant, a solar panel plant, wind energy, hydro power, an ethanol plant, ships, turbines, dams and a historic gas station

POTENTIAL FUNDRAISERS

Sold LED light bulbs provided by their local utility for a Watts and Drops Fundraiser. Students used this opportunity to educate their community about energy savings and used the money generated to increase the number of school garbage stations and purchase smart power strips for teachers

Picked their school apples and grapes, canned sauce and jam, and baked cookies with local ingredients, which they sold at the bake sale and the local shopping mall to promote local foods

Up-cycled old lights and bottles into planters

Collected and donate shoes for WorldWear fundraiser

Sold hot chocolate and seed bombs

Sold dirt cups and solar-power made popcorn for Earth Day

Sold hot chocolate, cider, and treats at the local Lights in Motion event and helped the organization set up

Rented school garden plots of 10'x20' to the community with remaining area tended by YES! Team. Produce was used in school lunches and sold through farmers markets

Developed a brochure which they displayed and handed out at a "Green Marketplace" and plant sale they hosted to raise money for their projects

Collected scrap metal from a construction project to sell for recycling

Sold apples, cider, vinegar, honey, and flour from their 6-acre school orchard

Designed and sold reusable water bottles as well as using them as incentives in an Earth Week photo contest

Built two different hydroponic growth chambers which they used to grow basil and mint plants. Sold cuttings from these plants to faculty and staff at their school Collected aluminum cans from the community to recycle (for cash)

Ran a paper recycling fundraiser at school during spring to help fund future energy action projects in their schools and communities

Reached out to local business to support YES! through the East Side Oil 5 cent program

Helped fund their projects through a community-based recycling initiative that resulted in 10,000 pounds of waste scrap metal being recycled and raised \$4,700 for their team

Grew enough greens for their school lunch program and sold 5 CSA shares to local families to raise money in order to maintain operations and make the program sustainable

Made and sold organic granola with local rolled oats

Raised money for a hydration station in their school by selling re-useable YES! team water bottles and hosting a dance

During their school's Earth Week they ran a contest for the best graphic designs for the reusable water bottles that they plan to sell as a fundraiser for their team and to promote better hydration and health

Partnered with Minnesota Power to sell LED bulbs and encourage families to audit the energy use of their homes, thus earning funds for their school

Hosted their second annual smoothie fundraiser for a local senior center

Sold reusable grocery bags with the YES! logo on them

Made and sold solar LED jars

Made and sold recycled plastic-bottle bird-feeders

Turned donated t-shirts into reusable bags

Made and sold solar battery chargers

Sold produce from their greenhouse at a home/farm show at their school

Collected heirloom seeds for distribution at a spring garden sale

Collaborated with their school's Entrepreneurship Class to promote and sell reusable water bottles

Developed a prototype solar cell phone charger and worked to make it more compact and affordable so that they can sell them to their fellow students

Sold some of the produce they raised at their local farmer's market

Students presented their plan for the green roof to local businesses in order to secure support, both financial and otherwise

Made beeswax food wraps and lip balms for pollinator and waste reduction awareness and sold them as a fundraiser