



## District Nominee Presentation Form

### CERTIFICATIONS

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#### District's Certifications

The signatures of the district superintendent on the next page certify that each of the statements below concerning the district's eligibility and compliance with the following requirements is true and correct to the best of the superintendent's knowledge.

1. The district has been evaluated and selected from among districts within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental education.
2. The district is providing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.
3. OCR has not issued a violation letter of findings to the school district concluding that the nominated school district has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
4. The U.S. Department of Justice does not have a pending suit alleging that the school district has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
5. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the school district in question; or if there are such findings, the state or school district has corrected, or agreed to correct, the findings.
6. The district meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

### U.S. Department of Education Green Ribbon Schools District 2015-2018

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Name of Superintendent: **Dr. Thomas Wiatr**

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

District Name: **Washburn School District**

(As it should appear on an award)

Address: **P.O. Box 730, Washburn, WI 54891**

Telephone: **(715) 373-6188 ext 101** Fax: **(715) 373-5877**

Web site/URL: <http://www.washburn.k12.wi.us/>

E-mail: [twiatr@washburn.k12.wi.us](mailto:twiatr@washburn.k12.wi.us)

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

A handwritten signature in black ink, appearing to read "Thomas Wiatr". The signature is written over a horizontal line.

Date: **January 20, 2017**

(Superintendent's Signature)



**Nominating Authority’s Certifications**

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the district’s eligibility and compliance with the following requirements is true and correct to the best of the Authority’s knowledge.

- 1. The district is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental education.
- 2. The district meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: Wisconsin Department of Public Instruction

Name of Nominating Authority: Dr. Tony Evers  
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.

 Date: **January 23, 2017**  
(Nominating Authority’s Signature)

**SUMMARY AND DOCUMENTATION OF NOMINEE’S ACHIEVEMENTS**

Provide a coherent summary that describes how your district is representative of your jurisdiction’s highest achieving green school efforts. Summarize your strengths and accomplishments, being sure to cover equally all three Pillars. Then, include concrete examples for work in every Pillar and Element. Only districts that document progress in every Pillar and Element can be considered for this award.

**SUBMISSION**

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to [green.ribbon.schools@ed.gov](mailto:green.ribbon.schools@ed.gov) according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509  
Expiration Date: March 31, 2018

**Public Burden Statement**

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email [ICDocketMgr@ed.gov](mailto:ICDocketMgr@ed.gov) and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

**U.S. Department of Education Green Ribbon Schools  
Summary of Achievements  
for  
Washburn School District**

Environmental responsibility, sustainability education, and health and wellness initiatives are part of our community culture around the Chequamegon Bay of Lake Superior. In 2005, the City of Washburn became one of the first eco-municipalities in the United States, part of a grass-roots initiative growing in this part of northern Wisconsin. Washburn School District (WSD) has embraced this initiative and made sustainability an integral part of the school culture and curriculum, with all schools being recognized as Green and Healthy by 2009. In 2016 we had the honor of being invited to help plant and harvest the White House garden with the First Lady due to our ongoing school garden initiatives.

Our school board has developed strategic goals, including embracing the Green and Healthy culture. One of the exemplary practices at WSD is the creation of a Green and Healthy School Coordinator position to propel major district sustainability initiatives forward. This includes oversight of all district environmental projects, review of district curriculum, integration of our school gardens with the district food service program, and professional development for all staff.

The district serves 587 students, 43% from economically disadvantaged households, in grades 4K-12, with 94 staff in two buildings. In addition, we have an Early Learning Center in the elementary school for children 8 weeks old to school age which serves another 40 children with 8 staff. Located on Lake Superior in Washburn, Wisconsin, our rural public school district has documented significant achievement in all three pillars of U.S. Department of Education Green Ribbon Schools.

**Pillar I: Reduced Environmental Impact**

In order to reduce our environmental impact and lower costs, the district has implemented a variety of energy-saving initiatives such as upgrading lighting, switching from electric to natural gas hot water heaters, district-wide recycling, and composting of garden waste. A team of students also created and participate in a community outreach recycling program where they collect shiny paper from the school and businesses and bring it to a recycling center. To reduce transportation emissions, classrooms take walking field trips instead of using buses whenever possible. Students in our Ecology Club choose an environmental topic each year and educate their peers with ongoing projects, culminating with an expert guest speaker during an all school assembly on Earth Day.

**Pillar II: Improved Health & Wellness**

Health and sustainability go hand-in-hand, and this is very apparent in Washburn. The district has partnered with community organizations, including the Alliance for Sustainability, UW Extension for Nutrition Education services and Agriculture agents, and a variety of local farms who provide local produce and milk, apples, and blueberries in the cafeteria. WSD was one of the first school districts in the state to adopt the AmeriCorps Farm to School program which provides an innovative approach to improving childhood nutrition and decreasing obesity by creating healthy eating habits and increasing access to local foods. Through this program our students plant, harvest, and cook from the school garden every year, and have planted fruit trees which will provide apples in the near future.

In the elementary/middle school, students and staff alike enjoy the annual *All School Walk Around the Block* as part of Week of the Young Child and Walk-a-thon which is our main PTO fundraiser. Thirty minutes of daily outdoor recess is provided for elementary and middle school students and “Brain Breaks” get the students moving for an additional 20-30 minutes per day. Our district also has a Portrait of a Graduate, which focuses on creating physically, socially, and emotionally healthy students.

**Pillar III: Effective Environmental and Sustainability Education**

WSD removed old asphalt and replaced it with a bioswale, pollinator garden, high tunnel greenhouse, outdoor lunch area, compost area, aquaponics lab, and Monarch Oasis. We also have a forested 40-acre Environmental Learning

Site. We have an amazing school playground that includes a 6,400 square foot vegetable garden and orchard, a steep sledding hill, a forested area for interpretive play, a US Fish and Wildlife habitat restoration site, a pond, and an outdoor classroom that overlooks Lake Superior. These spaces are within walking distance for students of all ages.

WSD aims to cultivate environmental stewardship, foster human health, and develop ecological sustainability, through place-based education for the students of WSD and community. In all grades our Green and Healthy standards are imbedded into our core curriculum and listed on our 4K-5 standards-based report cards. The school gardens provide hands-on opportunities for teachers to enhance their curriculum outdoors; especially in environmental and cultural topics, while also building relationships with students. Examples include our Agripreneur Program, aquaponics lab, monarch butterfly study, and the addition of several sustainability-based classes. We are also using innovative invasive species removal techniques in our US Fish and Wildlife Habitat prairie restoration project including using goats to eat invasive vegetation.

#### **About the Summary and Scoring:**

The complete state application is too long to include in this nomination submission, so the applicant's information has been summarized in the following pages, aligned with the pillars and elements. Each application was ranked by teams of external reviewers and internal reviewers, each with different areas of expertise, using a common ranking tool. In addition, the slate of nominees was forwarded to related state and federal agencies to ensure there were no compliance or regulatory issues.

The summary of the nominee's achievements as reported in their application is presented in each pillar and element below. The focus area is in reference to Wisconsin's application structure.

### **Pillar I: Reduced Environmental Impact**

#### **Element 1A: reduced or eliminated green house gas (GHG) emissions**

##### *Focus Area: Energy*

WSD began working with an Environmental, Health, and Safety Consultant from CESA 10 in 2005 and received EPA ENERGY STAR for K-12 School Districts certification in 2006. Facilities personnel completed advanced training and certifications to help the facility operate efficiently including Building Operator Certification in 2006 and Practical Energy Management in 2007. The district has completed several energy audits including Focus on Energy: 2015 Energy Benchmarking report; Local Provider: Unesco report; and classroom audits. WSD has a 10-year plan for continued progress in energy use reduction.

WSD implements energy efficiency practices and policies or has installed/upgraded energy-saving equipment, including:

- Computer power management settings
- Thermostat temperature setpoints that setback 10 degrees cooler at night
- Hot water temperature setpoints
- Optimized programming of occupancy sensors
- Monitors energy usage by tracking monthly energy consumption and costs
- Follows a schedule for regular maintenance of HVAC equipment
- Energy efficient lighting: 2016
- Occupancy sensors: 2016
- Carpeting/flooring: 2015
- Roofing: 2015-2016
- Windows: 2015 Aquaponics Lab Solarium
- Equipment: new heating system in the Aquaponics lab 2016, new sinks in science labs in 2014, replaced televisions with overhead projectors 2015
- Insulation: replaced all insulation on two roofs in 2014-2016
- Energy efficient Heating, Ventilation and Air Conditioning (HVAC): 2015 and 2016
- Variable Frequency Drive on circulation pumps for hot water heat: 2009
- Eliminated computer labs and moved to providing personal student computers
- Annually replace worn weather stripping on doors
- The restrooms, locker rooms, and some hallways in our high school have motion sensors.

- The gym, cafeteria, and most classrooms have natural light.
- At the high school, maple trees were planted along the South and East the building to provide shade on sunny days and to cool the brick building. This will help avoid air conditioning in the future.

Students help identify and/or implement behavioral changes to reduce energy consumption in the following ways: Teachers and their students have initiated a number of energy-saving efforts. They work to monitor room lights to be sure these are turned off. High School students also sit on the Long Range Planning Committee and help make decisions pertaining to energy and large purchases for the district. The Ecology Club sold high efficiency light bulbs and Christmas lights as a fundraiser. In schoolyear 2016-2017 the Club has an energy reduction challenge to reduce energy by 10% by June, 2017.

Staff help identify and/or implement behavioral changes to reduce energy consumption in the following ways: All staff had a Delivering Energy Efficiency Together in-service led by CESA 10 to learn about how to conserve energy in fall 2016. Teachers encourage students to conserve energy by monitoring their electronic devices. Students and staff helped identify and implement some behavioral changes and/or use of energy saving devices to try and reduce energy consumption. We keep our gymnasium at a comfortable 63 degrees during the day and do not turn on the heat in our buildings until usually late November. The students and staff dress accordingly in these cooler areas.

Energy education is taught in the curriculum in the following ways:

**Technical Education:**

*Energy: Grades 9-12*

1. Identified areas to relamp with low-watt florescent bulbs (cafeterias, halls and some classrooms).
2. Researched the energy use of electric hot water booster heaters and recommended replacement with natural gas heaters in two kitchens.
3. Identified areas to install motion sensors for lights.
4. Gathered data to make recommendations to the district on LED lighting.
5. Toured the local power plant which is 15 miles from our school.
6. Collaborated with the Ecology class to collaborate on planning how to conserve energy related to heat preservation and recycling.
7. Manages a solar photovoltaic panel.

**Family and Consumer Sciences:**

*Grades 9-12:* We received a grant to upgrade a major appliance to an Energy Star Appliance. This collaboration has allowed students to learn about home energy savings in the classroom using up-to-date equipment.

**Science Department:**

*Ecology: Grades 9-12:* Students are taught about energy conservation, renewable energy, various energy sources, fossil fuels and multiple energy generation options.

*Physics: Grades 9-12:* Students learn about nuclear energy, coal, hydro to make electricity, light bulb efficiency, and fiber optics vs. copper for communications.

*Food, Science, and the Environment: Grades 9-12:* Students are participating in a UW Extension Specialty Crop Block Grant Program called Optimizing Deep Winter Salad Greens Production in High Tunnel Greenhouses. This spinach trial project is measuring the effects of heat and LED light on spinach production over the winter. Students are collecting data, monitoring the plant growth, and learning about the added heat and LED lights to the spinach beds.

*Social Studies: Grades 9-12:* Social Studies courses read articles in Economics and Government classes about new types of renewable energy and the effects it can have on legislation and the economy as well as current events. The Chequamegon Bay Studies class talks about self-sufficient towns in which many small towns have transitioned to using solar energy or energy reduction equipment to save costs.

**Elementary/Middle grades:** Energy reduction is taught as part of Earth Day/environmental awareness celebrations each spring. In addition, middle school students learn about renewable energy (hydro, biomass, wind, geothermal, and solar) and study appliance efficiency and home energy conservation.

## Element 1B: Improved water quality, efficiency, and conservation

### *Focus Area: Water*

Washburn School District uses municipal water supply from groundwater source. Water is conserved and water quality protected in the following ways:

- Our school meters water use and documents water use to identify substantial changes in water use.
- Our school conducts annual audits of the facility and irrigation systems to ensure they are free of water leaks and to identify opportunities for savings.
- Faucets with properly timed automatic shut-off
- Air conditioning equipment does not utilize water.
- There are low volume aerators in restroom faucets.
- Taps, faucets, and fountains at our school are cleaned at least twice annually to reduce contamination and screens and aerators are cleaned at least annually to remove particulate lead deposits.
- Our school has a program to control lead in drinking water
- Our school has a medication disposal policy.
- Our school has a chemical disposal policy that helps ensure water quality.
- Our school has a grease trap or oil/water separator for the kitchen sanitary waste line.
- Our school inspects and cleans the school septic system per state requirements (as applicable)
- We have administrative guidelines for each of the policies mentioned above
- We have booster heaters located near our appliances that use a lot of hot water. Our water pipes are insulated.

Students are actively involved in planning and implementing water conservation and/or protection activities:

*Ecology Club:* Annually participates in the Adopt -a-Beach program.

*Community Service Day:* Each year our entire High School spends an afternoon doing a wide variety of community service projects. Invasive species removal, litter clean-up, and beach clean-up are always integrated into the project list.

Students have identified some water conservation and health practices and implemented those practices at the school to include low volume faucet nozzles in the kitchens and low volume shower nozzles locker rooms.

Staff are actively involved in identifying and implementing water conservation and/or protection activities:

Staff conducts regularly scheduled maintenance on water fixtures and plumbing. All fixtures are replaced when seals are not functioning properly. Drips are addressed promptly.

A small team of educators taught ourselves how to design and install a large bioswale garden to transform our schoolyard and to improve the habitat and water quality runoff from our student parking lot. Our staff is learning to use the new space to enhance their teaching and as a tool for further water education.

Water education is taught in the curriculum in the following ways:

*Ecology: Grades 11-12:* Water conservation, water cycle, local watershed, and school water supply and discharge are taught. We plan to use our bioswale to test the water quality before and after the rainwater leaves the garden.

*Food, Science, and the Environment: Grades 9-12:* Students manage the Aquaponics lab and our school High Tunnel. Students manage the irrigation systems and monitor the water quality in the Aquaponics tanks on a weekly basis. Water quality and sustainability are central to the focus of the class. Students monitor the water quality in the Aquaponics lab on a weekly basis. They also inspect the irrigation system in the high tunnel to find leaks and see that it is evenly watering the plants. They also only water as needed based on the weather.

*Physical Education:* teacher teaches part of the recreational use of Lake Superior along with the DNR (fishing), North Coast Sailing (sailing), and offers a stand-up paddleboard day for students.

The high school received two separate grants for school year 2015-2016 to send small groups of students kayaking in the Apostle Islands to explore the ecosystem and water dynamics with experienced guides. One group was selected from our student population based on need (undeserved), and interest for a four-day trip camping on the islands with Wilderness Inquiry. Another group of students was selected out of the leaders in our Ecology Club who have demonstrated the most commitment, leadership, and community service throughout the year. This group went on a day-trip to the mainland sea caves to explore the unique rock formations and water dynamics. We believe that these types of positive experiences outdoors can inspire students to become future leaders and stewards of the environment.

*Elementary/Middle grades:* Wisconsin Watersheds are taught in grade 4, paving the way for work and study in the aquaponics lab beginning in grade 5. Students in grade 5 and above have an extensive Lake Superior Studies curriculum which includes the local geology, fish and invertebrate species, recreation, and commerce in addition to learning about the Lake itself. Activities include water sampling, invertebrate identification, and visits to the Duluth Aquarium, local fish hatcheries, and Lake Superior beaches.

Staff have participated in professional development related to water and/or water education:

In January 2007 some staff participated in a development program for water education over the summer through Earth Partnership for Schools. Staff sought professional development opportunities to train themselves to manage the Aquaponics Lab and the High Tunnel.

## Element 1B: Improved water quality, efficiency, and conservation

### *Focus Area: Water*

WSD has the following runoff or stormwater management practices:

- Rain garden
- Downspouts directed to vegetated areas
- Mowing, leaf collection, and snow removal managed to keep removed materials off impermeable surfaces
- Use of leakproof lids on dumpsters or other outdoor waste collection bins
- Downspouts on our building in the school forest Environmental Learning site

WSD has the following landscaping practices:

- use of alternative water sources (grey water, rainwater) for irrigation
- use of mulch and native plants to reduce watering needs
- landscaping designed to be water-efficient and/or regionally appropriate
- use of broom or blower to clean driveways and walkways
- we don't use fertilizers and we do not have irrigation systems

Our school has the following deicing practices that help protect water resources:

- Snow & ice are removed with shovels, plows, or snow blowers before salt is applied
- Salt applicator is not paid by volume of salt applied
- Salt equipment is calibrated
- Salt is pre-wetted before use
- Salt is only applied when temperature is above 15 degrees F

In the winter we mostly use sand instead of salt and have bought a sander to take care of the ice. We occasionally have to close the parking lot in the winter to allow the sun to melt the ice. This helps us improve plowing to make the hillside parking lot safer.

WSD has a habitat (13,440 ft<sup>2</sup>), a food garden (960 ft<sup>2</sup>), a bioswale, 40 acre school forest registered with the Department of Natural Resources, and uses the existing site, lawns, parking areas, playgrounds, etc. for outdoor teaching.



We mow the lawn as needed to 4 ½ inches. The grass clippings are left on the lawn and fall leaves are mulched in. The football field is watered only during a couple months per year and only as needed (not more than once per week, except for rare cases of extreme heat and dryness).

## Element 1C: Reduced waste production

### *Focus Area: Recycling & Waste Management*

Washburn High School conducted a waste audit in 2016.

Recycling bins are labeled and placed next to a trash can in all locations:

- Hallways
- Classrooms
- Lunch Room
- Staff Lounge
- Student Lounge
- Main Office

The district diverts 16% of total waste in tons and recycles the following materials:

- Paper
- Glass
- Metals
- Plastic Containers
- Ink Cartridges
- Batteries

Our high school Family and Consumer Sciences classes compost the food waste from cooking classes and from the Universal Breakfast Program. We also compost the materials in our high tunnel greenhouse, bioswale rain garden, Monarch Oasis, and pollinator garden. The lawn clippings are left on the lawn as mulch. Food scraps from the cafeteria are collected in a 5 gal. bucket and given to the iguana, bunny, and birds in the Biology classroom. 4K students tend their own vermicomposting classroom bin.

Our school or district has a policy on the proper storage, transportation, and disposal of regulated wastes that is actively enforced and followed at our facility. Hazardous waste is collected twice per year through Northwest Regional Planning Commission, located in Spooner, Wisconsin. Our custodial staff delivers hazardous chemicals to the municipal Clean Sweep during once the summer each year. Our high school generates about one cubic yard of hazardous chemicals per year. We also use a lamp recycling company to dispose of our light bulbs, computer components, batteries, and electronics. We dispose about 600 lamps, 400 lbs. of computer components, and about 75 pounds of batteries per year. CESA 10 is our safety consultant to help us make connections with vendors to dispose of waste responsibly. Our school disposes of unwanted computer and electronic products through an approved recycling facility or E-cycle Wisconsin program.

Waste reduction, reuse, recycling, and management are taught through all grade levels. Kindergarten students learn about reduce, reuse, recycle throughout the year. They read stories about environmental heroes, brainstorm and implement ways we can reduce/recycle, and participate in projects that help us take action and share knowledge. Waste reduction and recycling are part of the 6th grade health class curriculum. In the art classes of all grades, conservation of materials is very important. In higher grades, students make some art projects out of recycled materials. High school Government and US History courses cover the environmental movement and how new legislation is created, including recycling & waste reduction laws.



## Element 1C: Use of alternative transportation

### *Focus Area: Transportation*

Our school is located in a residential neighborhood. Since we are a small town, many students to walk and bike to school. Our maintenance department does an excellent job keeping the sidewalks clear and plowed during the winter. We have student pedestrian traffic-guards, clear signs indicating pick-up/drop-off zones, an annual bus safety day for Elementary/ Middle students, and Bicycle Safety in the physical education class rotation.

Washburn High School conducted an internal transportation audit in 2008 which revealed that 60% of students walk to schools with another 25% who arrive by carpool. High School Algebra students conducted another audit December 2016 to update the results and are currently analyzing the data. The high school added a Cycling Club as a co-curricular in 2016-2017. Also a K-12 committee has been formed to promote biking throughout the PE curriculum.

WSD encourages efficient transportation and reduces environmental impact, including air quality by:

- Reducing the number of fleet vehicles and purchasing newer vehicles that are more energy efficient.
- Coordinating bus schedules so field trips leave shortly after the bus drops students off at school in the morning so that it saves a trip.
- Annually reviewing bus routes to make the routes most efficient and optimize passenger/miles driven ratios
- Providing bike racks, showers, lockers, and/or other bike amenities.
- Implementing a plan or program to encourage walking
- Offering subsidized transit passes
- Has a team working on safer routes to school since 2007
- Providing consistent, clear communications to families regarding transportation options and policies.
- Ensuring vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows.

Students help identify and/or implement behavioral changes to encourage sustainable transportation practices:

In Ecology and Health the curriculum includes transportation-related topics covering health, safety, and environmental impacts of transportation choices as part of the curriculum. Some of our students use the Bay Area Rural Transit bus as transportation.

Staff help identify and/or implement behavioral changes to encourage sustainable transportation practices:

We share buses with area schools so that not every local school takes a bus to local events. Staff lead walking field trips to nearby locations in our city. Walking to a field trip location saves money and is good for both students and staff; it promotes sustainable transportation, increased physical activity, and local community engagement! For younger students, they learn to walk safely through town to get to stores, the library, etc. without having to go by car.

Transportation issues, including correlations to outdoor air quality, are taught in the curriculum:

Students in grades 9-12 who take Social Studies classes discuss air pollution and the effects of air pollution, along with laws and agencies to reduce pollution.

In U.S. History, students look at the effects of pollution and the environmental movement in the 1970s, including the passage of the Clean Air and Clean Water Acts. One concept that is discussed is the effect air pollution has had on the environment and attempts to reduce air pollution. In Government, we occasionally discuss global warming and the effect carbon and other pollutant emissions have on the environment as a current event topic; students debate the issue and discuss it. In Law, students discuss health and safety regulations businesses must follow and how OSHA is responsible for monitoring some of those regulations.

The Health classes teach students about pedestrian safety and bike safety in the Lifetime fitness. All students are required to take physical education to talk about healthy lifestyles and all take health class. In Ecology we talk heavily about the environmental impacts of personal transportation verses public, and the

risks of pollution based on transportation types (fossil fuels, solar, wind, human powered, animal powered). The Tech. Ed. department teaches various methods of fuel economy, emissions, automobile maintenance and alternate fuel options.

Elementary/Middle students begin learning about transportation choices in kindergarten. Sixth grade students have an environmental health unit that discusses safety, carpooling, combining trips to save fuel, and air quality concerns related to automotive exhaust. Eighth graders study factory emissions and acid rain.

## **Pillar II: Improved Health & Wellness**

### **Element 2A: Integrated school environmental health program**

#### *Focus Area: Environmental Health*

WSD employs many practices and policies to ensure quality environmental health:

- Our school has a comprehensive indoor air quality management program that is consistent with EPA's Indoor Air Quality (IAQ) Tools for Schools
- Our School has taken actions to prevent exposure to asthma triggers such as mold, dust, and pet dander
- Our school has installed one or more energy recovery ventilation systems to bring in fresh air for use in the HVAC system.
- Our school meets ASHRAE Standard 62.1-2010 (Ventilation for acceptable indoor air quality)
- Our school has installed local exhaust systems for major airborne contaminant sources
- Our staff visually inspects all our school's structures on a monthly basis to ensure they are free of mold, moisture, and water leakage
- Our school's indoor relative humidity is maintained below 60%
- Our school has moisture resistant materials/ protective systems installed (i.e. flooring, tub/shower, backing, and piping)
- There are no wood structures on school grounds that contain chromate copper arsenate
- Our school has a plan to maintain or improve safe, healthy, environmentally sound facilities and grounds.
- Schedules and standards for cleaning facilities are established and followed. Each employee has a well-defined job description and weekly audits are performed by supervision.
- Our indoor air quality is monitored annually to ensure the proper introduction of fresh outside air.
- Prior to purchasing chemicals for any purpose, less hazardous alternatives are considered.
- Fume hoods and personal protective equipment are used when necessary.
- In December of 2015 we replaced the exhaust fan for the range hood in the High School kitchen.

Radon testing is not a requirement in Wisconsin schools. According to the Wisconsin Department of Health Services, Washburn has an average radon level of 3.02 pCi/l.

The WSD chemical management program includes proper storage, labeling, training, handling, disposal, hazard communication, and spill clean-up. All of our custodial rooms are locked. The cabinets in the science room are also always locked. Students in all lab classes are required to pass a lab safety test at the beginning of the year with at least a 90%, and a portion of that test deals with chemical safety. In Ecology we discuss the effects of chemicals on the environment as well as on our personal health.

Due to the small size of our school district, a licensed applicator is hired when needed to apply pesticides to individual insect problems. The contractor uses IPM practices. Our school provides pest control policies and methods of application to parents and school employees and meets posting requirements.

WSD does not use pesticides or herbicides on the lawns. We request the company to physically knock down bee hives instead of using pesticides. We have organic fruit and vegetable gardens and bee habitat houses that we do not want to contaminate. We have used a team of goats and sheep to attempt to eradicate our invasive species in an open prairie area.

The 6th grade health class addresses outdoor air pollution, and investigates IAQ with concerns over CO poisoning and the potential linkages to wood fires, stoves, etc. They also address issues related to allergies students may have, and explain how these allergies can be minimized based upon student life experience. In 6th grade science, they do an anti-smoking unit and cover second-hand smoke.

The problems with mercury in the environment are taught as a part of the Environmental Health unit in sixth grade. They show a video called Alex in Wonderland about mercury poisoning in Wisconsin lakes, and learn how larger fish are more likely to be contaminated at higher levels - and to limit consumption such fish. More is taught in the upper grades (7-12).

## **Element 2B: Nutrition & Fitness**

Focus Area: Health & Wellness

WSD encourages healthy lifestyles in the following ways:

- has implemented the Nutritious, Delicious Wisconsin curriculum.
- is a Team Nutrition School.
- integrates health measures into assessments.
- offers opportunities for students to be physically active outside of physical education classes (e.g., recess, open gym, before/after school programs, classroom activity breaks).
- promotes or supports walking and bicycling to school.
- promotes hand washing for staff and students.
- has Physical Education curriculum based on state standards and grade-level outcomes for physical education.
- PE students spend about 20% or more of their annual time outdoors.
- participates in the National School Breakfast Program.
- participates in the National School Lunch Program.
- has a salad bar.
- All foods and beverages sold during the school day meet the USDA's Smart Snacks in School nutrition standards.
- participates in Farm to School activities, including local food procurement (since 2008)
- has a garden that supplies food for our students in the cafeteria, a cooking or garden class or to the community. (established 2014)
- purchases food locally sourced or certified as "environmentally preferable"
- Our school nurse works to ensure that 100% of our students are immunized.

Washburn High School remodeled and expanded the weight room in summer of 2013. Teachers and community members are encouraged to use the weight room, which is open 5 days per week, or more. All students are encouraged to participate in sports and clubs, and Middle School students also come to the high school weight room to work out, including in summer.

We have built a new outdoor eating patio next to our cafeteria so that students and staff can eat outdoors. Students take a break outside when needed, go outside for recess, work in the school garden, and take walking field trips throughout the community. Teachers offer students "brain breaks" where students do 10 minutes or less of physical activity in the middle of a stationary activity. This increased blood flow and improves executive functioning.

Fourth grade students are exposed to gardening, hiking, exploring, tree climbing, yoga, and environmental journaling. Our Guidance Counselor integrates mindfulness, yoga, and meditation into her curriculum to help students with stress and emotional wellbeing. Nature Walk is a reading theme for an elementary class. Second grade has a Community theme in which the walk to the school forest monthly, walks to the local nursing home, and in the spring they walk to important community centers, such as the library. Elementary school also has extra recess times outside on the playground, snowshoeing twice a year, ice skating once a year, and walking the school forest trails six times per year. Students take "Brain Breaks" daily. The Elementary school partners with the community to offer

several youth sports options including baseball, T-ball, softball, football, soccer, basketball, volleyball, and Sea Scouts.

One of the most important aspects and keys to success is our emphasis on the importance of building relationships with students. There is a palpable sense of caring and respect that reverberates through the schools. The Washburn School environment is, and always has been, very safe, positive, and supportive. There is mutual respect between students, staff, and administration, which by design, is an atmosphere which allows individuals to take risks, have fun, and work hard toward a common goal. This shows by our students' high achievements, even though they face obstacles such as poverty. Students confer with one another and frequently share their successes and challenges, supporting social growth and communication. Being creative and sharing personal feelings and ideas takes courage, and students continually show emotional growth in this way.

Our district has a part-time nurse and a full-time health room assistant EMT/CMT that serves the elementary, middle and high school. A school guidance counselor and psychologist are available for students. All students are part of a HELP group throughout their entire high school experience. This group meets with a HELP adviser once a week to assist students with academic and wellness concerns. The Middle School has a daily advisory period.

The district has an Employee Assistance Program available to all staff. In 2012-2013 we formed a district Wellness Committee including at least one staff member from each building in the district. Our initial focus is to provide programming for staff on a quarterly basis. In 2012-2013 we held a program called "Caught in the Act...of Doing Something Great" in which staff wrote on a board in the staff lounge what they saw someone doing that was great. For example, "Mrs. Anderson helped me move 40 chairs for a presentation yesterday. Thank You!" Then Mrs. Anderson would be entered in a prize drawing at the end of the quarter. During school year 2013-2014, we created gratitude boards to display what we're grateful for.

Washburn is a community active in the outdoors and invested in being stewards of our environment. Our physical education courses are unique in that they take our students outside all year round. This ensures that students learn how to be healthy, active individuals both indoors and out. Our Physical Education outdoor recreation lessons include fishing, ice-fishing, camping, snowshoeing, downhill and cross country skiing, stand-up paddle boarding, orienteering in the school forest, sledding, broom ball, biking, snowshoeing, softball, soccer, and outdoor jogging for Workout Wednesday, weather permitting.

All students are welcome to participate in the Ecology Club all-day canoe trip down the Brule River. The school district has a school forest that has a hiking trail throughout. The Ashwabay Outdoor Education Foundation transports students after school twice a week to areas where they can enjoy outdoor activities. This is an opportunity for students to learn in an environment outside the school walls.

Students help identify and/or implement behavioral changes to improve health and wellness:

Students have access to a high quality lunch and salad bar every day in school. Since the installation of our high tunnel in 2014 the salad bar often contains fresh spinach grown by our students in our high tunnel. Students are provided with a free breakfast and they have water-bottle friendly fountains available between classes to re-fill. We don't have any vending machines available to students to decrease the availability of processed snacks and sugary drinks.

Staff help identify and/or implement behavioral changes to improve health and wellness:

Our Food Service Director and Green and Healthy Coordinator have leadership roles in our school. Students are encouraged to try new foods through the Harvest of the Month program, in which local produce is featured in a new recipe. We provide educational flyers about the harvest item in the lunch line for students to read while waiting. Sometimes the produce is purchased from a local farm, and sometimes it is grown by students in the school garden or high tunnel. We also partner with a local dairy farm for our milk, a local bakery, and a local orchard for apples and berries, all used in our food service program.

Also, the Food Service Department enhances learning by showcasing foods from around the world during our International Week. During this week, our exchange students give a presentation on their country and culture to our whole high school. We then eat a lunch with their cultural traditions and food created and cooked by our food service department and planned by our exchange students.

Our food service program is also enrolled in the Smarter Lunchrooms Sub-grant, which allowed staff to be trained in the Smarter Lunchroom design model that helps students make better food choices. It also gave us the funds to purchase appealing linens, baskets for fruit, and a living-room-style seating area in the cafeteria to make the dining experience more home-like.

Teachers teach outdoors when it's nice out and have open gym during the lunch period. Our Human Growth and Development council includes community members including parents, teachers, school administrators, pupils, health care professionals, members of the clergy, and other residents of the school district.

Health, nutrition, wellness, and physical activity are taught in the curriculum:

We have a Portrait of a Graduate in which one component is a healthy individual. This is part of our graduation criteria. Health is a required course, and all students learn about the basics of physical activity and nutrition. In Family and Consumer Sciences classes, students experiment with recipes that could improve our lunch program, and could utilize more locally grown, or on-campus-grown produce.

Washburn Elementary school's approach to teaching about nutrition has been experiential and project-based through our garden program. Each grade is involved in the school garden and healthy taste testing in the spring and fall. Students tend their grades' garden and once they graduate 4th grade, students have been taught how to grow, cook, and eat at least eight nutritious fruits or vegetables. The extra produce goes straight to the cafeteria to be served at lunch for the rest of the district to enjoy. 4K grows watermelon. Kindergarten grows roots: potatoes, carrots, and beets. 1st grade grows kale and broccoli. 2nd grade grows cucumbers and flowers to learn about pollination. 3rd grade grows salsa and pizza ingredients: tomatoes, peppers, garlic, and herbs. 4th grade grows squash, corn, and beans to learn about Native American history. 5th grade grow lettuce and fish in their home-made indoor aquaponics lab. Further, the district provides a universal breakfast program at no cost to all students every day.

In 2016 we hosted a tour of WSD gardens with State Representative Beth Meyers, U.S. Senator Tammy Baldwin, State Senator Janet Bewley, Ashland School District Administration, Washburn School Administration, and Midwest Farm to School Regional Lead Jenna Segal. A UW Extension staff member organized and hosted the event saying "Our hope is that everyone goes away with a sense of where Farm to School is in our region and where we hope to go and see what happens after that."

Wellness is part of the guidance programming. Wellness concepts are used throughout the year as part of the classroom culture. The WSD wellness policy includes minimizing "the use of foods of low nutritional value used as learning or behavior incentives." Our PTO has moved away from junk food fundraisers to a Walk-a-thon and local donations.

Staff have participated in professional development related to health and wellness:

Our beginning of the year training includes employee safety training. We have an Employee Assistance Program. We offer an annual Flu Vaccine Clinic. Staff members can get reimbursed a portion of their gym membership costs, up to \$20 per month for using the membership at least 12 times per month through our health insurance consortium.

In school year 2012-2013 we participated in a district-wide *Walk Across Wisconsin* program which motivated many staff to become more active. We have offered wellness exams to staff through our health insurance policy. Staff receive a bloodborne pathogen training. The staff Wellness Committee has periodically offered healthy opportunities to staff such as yoga, and intramural sports. In school year 2015-2016 staff had a wellness coaching and motivation service through our school nurse and PE teacher with cash incentives.

Our Student Government received an AODA mini-grant for \$500 in 2012-2013 which students chose to spend on boosting school morale and emotional health. They implemented a Random Acts of Kindness Week and funded a whole-school trip to the movie theater, both of which we continue. 46 of our High School students were trained in the Peer Helper program with an AODA consortium grant through CESA 12.

### **Pillar III: Effective Environmental and Sustainability Education**

#### **Element 3A: Interdisciplinary learning about the key relationships between dynamic environmental, energy, and human systems**

*Focus Area: Environmental & Sustainability Education*

WSD has a 4K-12 scope and sequence that integrates environmental and/or sustainability education as part of the regular coursework at all grade levels and has an environmental literacy requirement. Our environmental education framework is based on “*Linking Food, Culture, Health, and the Environment: A New Alignment with Academic Standards*” (Center for Ecoliteracy & National Geographic, 2014) and integrated into the regular curriculum. In school year 2016-2017, teachers in Professional Learning Community teams are digging into the standards and integrating them into their regular instruction and assessments. This is being done with the help of our Green and Healthy coordinator during our required professional development in-service hours.

*Elementary/Middle grades:* Our instructional staff understands the value of outdoor learning and experiential learning for environmental literacy. That is why our staff take the time to let children play outdoors in our "Lost City," find tadpoles in the pond, explore the school forest, and observe the weather at our weather station. As students get into middle grades they are involved in project-based science projects, many of which are from the Earth Partnership for Schools activities. It is especially important for Elementary teachers to model good environmental practices such as recycling, turning off devices and lights when not in use, turning off faucets all the way, reusing scrap paper etc. because the early years are foundational. Further, the elementary school teaches students how to dress for the weather and model this behavior by taking students outside in most types of conditions.

*Science:* In Physics students learn about wise use of natural resources, especially energy. The Physical Science class studies energy resources and how that has an effect on global warming. Ecology class focuses on wise use of natural resources throughout the curriculum. One of the innovative activities of the Ecology class is updating the school restrooms to become more sustainable and hygienic. The proximity of the gardens allows their use as an outdoor lab. The students learn a concept in class, walk out to the gardens, do observation about that concept and return to the classroom to share their observations all in the span of one class period. Staff plans for students to collect base-line data on the wildlife and plant species in the gardens and create a database over the years. This will give students the opportunity to do directed observation and ongoing data collection and interpretation to determine the change of species in the gardens over time. Classes will be testing soil and water quality of the various gardens twice a year over a number of years. The gardens provide an environment where the phenology of our region can be easily observed. As students determine soil, sun and moisture conditions in the gardens, they can learn about appropriate species for optimal growth. Through the development of lessons that use the gardens, the curriculum will be enriched and the gardens will become integral to the educational experiences our students.

The science department provides learning activities such as guest speakers from the Forest Service, Park Service, Green House business owner, fisheries and aquaponics specialists, and electricity energy and sustainability educators from the community.

*Social Studies:* In Current Events students learn about many environmental topics. One recent topic was Afghani farmers growing opium and the lack of water for irrigation and infrastructure if the farmers wanted to grow something else. In Geography students learn about water levels, watersheds, precipitation, etc. In Social Studies students learn about government agencies that protect the environment. In World History students look at how geography affects the culture of people.

*Visual Art:* Students use the school garden as a starting point for a sculptural project for 3D Art. Students study plant species in the garden and create 3D models of them to be displayed in the garden. The garden is an excellent resource to the visual arts program, providing a space to observe and study the natural environment to use as inspiration for original artworks, drawing studies and photography shoots. Engaging students in the artistic process in the outdoors will give them a richer sensory experience than available within the walls of a classroom.

*Family and Consumer Sciences:* Family and Consumer Science classes have a learning targets that be able to identify environmental trends and issues affecting families and future generations. This is taught by using the

schoolyard gardens such as the High Tunnel, the orchard, the pollinator garden, bioswale, and The Monarch Lab. Insects and pollinators are an essential foundation of our ecosystem and as the ecosystem changes, society's ability to raise food also changes. Another objective is for students to be able to recognize and use systems in school and in the community that protect and enhance personal, environmental health and safety. Through experiencing the gardens, students will be able to recognize that the schoolyard design enhances the wellbeing of students, the community, and the environment.

*Mathematics:* The garden allows easy access for geometry classes to do some real world problems using area and space. They are involved in planning and mapping the space for planting as well as long-term projects involving re-configuring and irrigation. Student activities can be used to help understand area and dispersion for planting as well as for design and construction/expansion of the site.

Northland College, with its environmental focus, is located in our neighboring city, and many of our high school students take Youth Options classes there. We also have students who opt to attend a semester at Conserve School. When students attend these schools and return to our district they are often very motivated to make positive environmental changes in our school, making a very positive impact on the culture in our district. A large percentage of our teaching staff are trained at Northland College. Education graduates leave Northland with a sense of environmental stewardship. This has more than a ripple effect on the students we teach and the expanding community. For example, our science teacher said "as a part of my degree at Northland College we had an Introduction to Outdoor Education class that was a great starting point for learning how to get kids outdoors and interacting with the natural world." Our Math teacher said "I owned a bicycle shop for 15 years. I taught mountain biking courses at Northland College and bicycle safety courses for camps and city outdoor programs."

School grounds, school forests, and outdoor teaching sites are used to develop environmental literacy. These include the previously mentioned bioswale, pollinator garden, high tunnel, Monarch Oasis, garden, compost area, and at the 40-acre school forest less than 1 mile away. We have had the forest since 1993 and it is part of a sustainable management plan. It has trails, a fire pit, a skills course, teaching stations, rest rooms, a service road, and a cabin-style classroom building. The trails are open to the public. Each May we have a Community Service Day in which the entire high school is broken into groups of 10-12 and works on taking care of the various gardens, forest, trails, and school site.

Students interact with and support the garden in many ways. A local native plant specialist taught Ecology Club members about native species, how to start seeds, and how to plant the initial installation of the Monarch Oasis. EEN students started seeds and designed and cast steppingstones for the garden. Art and science students worked collaboratively to create educational signage about the lifecycle of the monarch butterfly and native plant species. To raise money for the garden, students cleaned seeds, created compacted seed bombs, and sold them.

Students grow tall milkweed and common milkweed to sell to people in the community who want to start their own butterfly gardens. Annually, the club does the Adopt a Beach program for four beaches and promote this work online. For the last ten years, they have done an Adopt a Highway program and pick up trash each spring/fall over a three-mile stretch. We promote a monthly movie night and provide students opportunities to watch environmentally-themed videos. They also promote outdoor recreation activities, including hiking, snowshoeing, biking, cross country skiing, and canoeing.

As participants in the September 2013 Monarch Watch program, Ecology Club members tagged and released monarch butterflies before they migrated to Mexico. Second-grade students visit the high school to see our monarch collection. In Ecology club 2016 students are taking on Energy Education as their annual initiative. They created a bulletin board about student energy reduction tips in the main student hallway for everyone to see. They plan to invite a guest speaker on energy for their annual environmental lecture lyceum topic. In 2015 the Environmental Lyceum topic was Global Climate Change.

Students are able to participate in many outdoor learning experiences:

*Physical Education and sports teams:* We do not have an athletic complex or even a track. Despite this fact, our students succeed in track and cross country running events in the state. Our students in PE and in sports teams use the environment around the school to train. The cross country team has been known to periodically run down to the shore of Lake Superior to run the beaches, or run in the icy water! Students



use our school forest, Lake Superior, and the forests and trails surrounding our city in Lifetime Fitness course.

*Family and Consumer Science (FCS):* Students in FCS use the food gardens and high tunnel on an ongoing basis for teaching students about food miles, seasonal eating, and to increase students' interest in fresh fruits and vegetables.

*Science:* Monarch butterfly tagging and release in the high school butterfly garden. Biology classes do an annual leaf identification project each fall and an insect collection in the spring. The Ecology class does water quality testing, habitat analysis, population densities, using the school forest, the Elementary schoolyard, and the beaches and water in Lake Superior. The Ecology class also takes field trips to the UW Stevens Point Aquaculture facility and ponds.

Teachers and student are encouraged to use school grounds, school forests, and outdoor teaching sites:

Principals and administrators encourage teachers to let students outside as often as possible. We expect that students come prepared and dress for all types of weather. Our administration support teachers and students to take field trips and to get out into the community beyond school walls as much as possible. Teachers are often encouraged to push our boundaries and to get creative with teaching our students. Our staff has an outdoor classroom kit including a set of Crazy Creek chairs and clip boards to allow classes to go outside and conduct class. This kit allows classes like English and Spanish to conduct class outdoors when they wouldn't normally need to go outdoors to teach their content.

Staff have participated in professional development to promote use of outdoor teaching sites:

Our staff chooses professional development training which are offered in-house for an extra hour once per month. The Green and Healthy Coordinator offers ongoing professional development during that time period for teachers. We are currently working on 4K-12 standards alignment with our Green and Healthy goals and meet with teachers on a one on one basis, as well as in small group meetings. The Green & Healthy Schools Coordinator also writes grants for teaching materials and extra supervision for projects going on in the sites. We have hosted the a school garden educator from Community Groundworks to meet with our teachers in 2015. Also, in 2014 a focus group went to on a high tunnel farm tour to learn about how to run high tunnels.

Staff have also participated in professional development workshops and courses from Earth Partnership for Schools, Green & Healthy Schools, LEAF (WI K-12 Forestry Education Program), various universities, WI Association for Environmental Education, and WI Center for Environmental Education.

Staff help identify and/or implement behavioral changes to increase environmental literacy:

Each year the staff sets goals related to each area of our districts' strategic planning goals. One is to embrace the Green and Healthy model and culture, so each staff member reflects on what they would like to do each year to improve our Green and Healthy model. All staff members participate in discussion on how to integrate the environmental education components into our curriculum, and develop systems for effectively using the school site. Teachers model responsible environmental practices by using the recycling bins and reusing paper. Many classrooms are starting to transition to paperless classrooms using Google Classroom as a platform for assignment and reading.

### **Element 3B: Use of the environment and sustainability to develop STEM content, knowledge, and thinking skills**

Focus Area: Environmental & Sustainability Education

The science department has transitioned to using Next Generation Science standards. The science department integrates research projects, classroom experiments, and individual research using STEM components such as chemistry, biology, physics, physical science, ecology, forensic science, and industrial education courses. The Physics course covers nuclear physics and environmental technologies. Our Aquaponics Lab and our High Tunnel offer the greatest Environmental Education related to STEM. In the Food, Science, and the Environment course we are collecting data on winter spinach trials science experiment through UW Extension.

Students take a field trip to the Bayfield County Annex which implements all kinds of sustainability initiatives. For example they demonstrate renewable energy, have chosen electrical cars, they use compressed natural gas, water management, to reaching peak efficiency in their building through heating, and windows, and lighting.

Our partnership with Wisconsin Indianhead Technical College has allowed students in our Technical Education program to go to WITC and take courses in their junior and senior year; this allows them to leave high school with a college certificate and 21st century job skills.

### Element 3C: Development and application of civic knowledge and skills

#### Focus Area: Community Involvement

The community is another integral part that makes Washburn High School so successful. There have been many successful partnerships created with the community that enhance the education of our students. We have partnerships with the three local colleges, which include a community college, a technical college, and a 4 year college. We also have connections with the UW-Stevens Point Northern Aquaculture Research Center, UW-Extension, and the Bayfield Regional Farmer Cooperative. We are partnered with community organizations including the Alliance for Sustainability and UW Extension for Nutrition Education services and Agriculture agents.

#### **School Site and Environmental and Sustainability Education:**

Our school district is advantageously located by the Chequamegon-Nicolet National Forest and the shores of Lake Superior. Partnerships established between students and the school district with local businesses, local government, and state and federal agencies provide the necessary expertise needed for the successful development of the Washburn school gardens. The relationships built with these agencies and community will help students to connect experiences gained in the gardens to the issues facing the surrounding environment, from the impacts of climate change on our region to studying endangered species. The mission of the gardens and our Green & Healthy program is to cultivate environmental stewardship, foster human health and develop ecological sustainability, through place-based education for district students and community of Washburn.

The rain garden design demonstrates the importance of water conservation through the retention of rainwater and the use of native plants that help to manage and filter contaminants. The fruit orchard provides students fresh fruits to be used in the school lunch program as well as the Family and Consumer Sciences cooking-based classes. In collaboration with local businesses, organizations, and philanthropic foundations we were able to demonstrate the features of this garden and integrate it into our curriculum on our high school site. Bayfield and Ashland County Master Gardener Volunteers, and the Bayfield County Land and Water Management Department contributed to the design. The wood chips were donated, and the compost was purchased from a local dairy farm. A local landscaping company donated the skid steer equipment and labor, and the Washburn Community Education foundation provided the funding for the plants. We purchased native plants from local vendors whenever possible.

We have a butterfly garden at our high school called the Monarch Oasis. From the outset, community members donated time, expertise, and materials to the project. A local dairy farm cleared the 520 square foot plot and delivered rich, black soil. A local native plant nursery taught high school students about germination and care of native species plants and directed the initial planting. Local business support came through donations of sign materials, woodchips, and native species plants. The Washburn Community Education Foundation provided grants to buy shrubs and a monarch migration sign. Community members visit and appreciate the Monarch Oasis. The Monarch Oasis project will continue to provide hands-on opportunities for students and community members to make a positive impact on our environment.

The Forest Service and the Northern Great Lakes Visitor Center have been collecting seeds from our native plants in the butterfly garden. It is also registered on the National Monarch Registry. During the monarch release the younger grades from the Elementary School walk down to watch the High School students tag and release the butterflies. In fall 2015 we included the Bayfield County Journal and invited parents to attend. Community members assist

students and staff to identify species of plants and insects in the garden and to make recommendations to improve the biodiversity of the garden.

Members of local, state and federal agencies have been essential in dealing with challenges and improvements to our outdoor sites. Identifying host plants for various local butterfly species, planning the collection and germination of seeds for planting in the oasis, advising on proper development of the overflow ditch from the bioswale, recommending native plant species to improve the biodiversity of the garden are all roles our community partners have filled. Our "Lost City" natural play area is maintained through volunteer work. We unfortunately have a lot of invasive buckthorn growing and a local tree care company has been helping us manage it.

**High Tunnel:** Our onsite high tunnel greenhouse is a collaborative project between UW Extension, the Bayfield Regional Farmers Cooperative, five area schools, and the Farm to School program. The Bayfield Regional Farmers Cooperative received a national Farm to School grant to install a 48ft x 20ft high tunnel greenhouse at each school to extend the growing season to "Beat the Challenge of Winter." To learn more visit this link to a video about the project. <http://bit.ly/1QsMe1Z>

Our UW Extension Agriculture Agent has coordinated the following group for this project: the 4-H Youth Development Educator, the AmeriCorps Farm to School program members, the Bayfield Food Producers Cooperative, and a greenhouse growers group under the leadership of a local greenhouse owner.

During the summer we have an Agripreneur Apprenticeship program in which each school hires two high school students to raise crops in the high tunnel, learn to grow, advertise, market, and sell their products. The Agripreneurs are immersed in a summer education program that takes them to many community organizations and businesses including local farms, a renewable energy greenhouse, to meet local-food entrepreneurs and business owners, and last, but not least, to participate in some fun bonding activities such as sailing on a tall ship. They learn together to plan, prune and can tomatoes safely. Here is a link to a story about the Agripreneur project. <http://bit.ly/1QsMe1Z> and <http://www.northlandsnewscenter.com/news/High-tunnels-extend-growing-season-for-Wisconsinhigh-schools-273418911.html?vid=a>

**Aquaponics Lab:** The Aquaponics Lab has been possible through a partnership with the UWSP Northern Aquaculture Demonstration Facility. Their experts have come to many of the planning meetings, given us tools, fish, and ongoing support to provide high school students an Aquaponics class. They have even come to the end-of-the year fish fry to demonstrate how to fillet a fish in the Cooking and Nutrition class. UW Extension offers food preservation classes in the Washburn High School which are open to the broader community.

**Environmental and Sustainability Education:** We are fortunate have access to a wide variety of resources from Northland College including guest speakers, such as Professor Tom Fitz, who spoke to our entire High School on Earth Day about a Geologic Perspective on Climate Change. Another way we use this resource is through field trips and promoting Northland College's public educational opportunities, such as the Climate Change Paris Summit presentation to our students.

The Northern Great Lakes Visitor Center provides the 3rd grade students transportation grants so that they can participate in environmental education experiences at their center at least twice yearly. The US Fish and Wildlife Service has awarded us a grant for schoolyard restoration. Community members are involved in establishing our school garden, assisting with field trips to our school forest, and giving individual talks to classrooms on environmental topics (a volunteer brought in a red-tailed hawk to the kindergarten, and a member of the Living Forest Cooperative brought 4th graders out to see a horse logging operation and learn about sustainable forestry techniques). The 1st grade students received funding from the Washburn Community Education Foundation to purchase materials to construct bluebird houses. The birdhouses were mounted on the city lakeshore walking trail and in all of the parks. In 2016 we partnered with the US Forest Service for a "BioBlitz" program taking all 4<sup>th</sup> and 5<sup>th</sup> grade students to the National Forest to learn about biodiversity with biologists.

**Health and Wellness:** Our school participates in the AmeriCorps Farm to School program which provides us with support for our nutrition, garden, and local food education programming. The AmeriCorps Nutrition Educator support the gardening and nutrition projects in our school, and the Community Outreach member connects our

school with a variety of local farmers to buy more food locally, as well as organizations such as the Washburn Community Seed Bank, and helps facilitate using food grown in our gardens in the cafeteria lunch program.

In 2014-2015 our school was awarded Local Food Technical Assistance funding for a chef to design new local food menus for our school lunch program. This partnership between a professional chef, Wisconsin Department of Agriculture, Trade & Consumer Protection, and our food service department resulted in 10 new cafeteria-tested recipes based on available local foods in our region, thus contributing to the health and wellness of our students, local economy, and environment.

We worked with Fuel Up to Play 60 and the Wisconsin Dairy Council to provide garden taste tests and promotional materials to market healthy foods to students. Another significant event that we do in our school is hosting two blood drives each year.

**Community Involvement:** The Washburn Community Education Foundation contributes a significant amount of money each year to both students and school staff that funds unique educational opportunities for students. The board must include a member of the Washburn administration. Many community-based field trips, school projects, and student explorations would not be possible with these monetary grants.

All students are required to volunteer 10 hours per year in high school as a graduation requirement. Students design their own projects, plan, implement, and reflect upon their projects, and then present to their peers. Below is a list of community projects students have done.

- The members of the volleyball team work together to put on a youth volleyball camp for younger students and also they go to the nursing home once a month and do activities with the residents to make crafts, visit and read to the elderly.
- Our boys' basketball team put on a pancake breakfast for a teammate's family whose 9-year-old son died of cancer which help the family pay for medical and funeral costs.
- A few boys' basketball players put on a free youth basketball camp for elementary students.
- Several students volunteer at local animal shelters and the Northern Garden of Life Community Garden.
- Several students volunteer as part of CanSki every Saturday during the winter months to teach Youth Skiing.
- Several student volunteer to be Summer School tutors for younger students.
- Several students volunteer for the annual Northern Great Lakes Visitor Centers' Kids Fishing Day.
- Many students volunteer at the Book Across the Bay Ski Race, Whistle Stop Marathon, and Red Cross Blood Drive.
- A few students are creating "Little Mobil Libraries" for youth to have books to read that will rotate throughout the community.
- Several students bought food and cooked meals for families that may not be able to afford them during the holidays.
- Several students collected items for the women's shelter.
- One student's project was to collect and distribute needed toiletry items to homeless teens.
- Students also participate in a Community Service Day each spring. The entire high school celebrates community service by taking three hours of our day to do many outdoor environmental service projects in the community including invasive species removal, Adopt-a-Beach, city campground clean-up, Elementary and High School gardens site clean-up and bed prep with the Farm to School program, and planting trees with our Mayor for our National Tree City designation.

School staff act as advisors for the community projects that students are involved in each year. Also, within the regular classroom setting teachers strive to include field trips, guest speakers, and civic participation projects in their curriculum to bring the content to life. Each content-area teacher incorporates the community into their curriculum in a variety of ways. Here are some examples.

*Physical Education:* Our school has a cross country team that partners with a regional program called Canski, a partnership between Ashland and Bayfield County 4H, Ashland, Washburn and Bayfield school districts, and the Ashwabay Outdoor Education Foundation. They also partner with Bay Area Regional Transportation to provide rides to practices and competitions. Its mission is to promote fun, fitness, excellence, and safety in the lifelong sport of cross-country skiing.

*Technical Education:* Energy class tours the Bailey's Greenhouse owned by William (Bill) Bailey which has a variety of renewable energy projects on site.

*Family and Consumer Sciences:* In our Human Development class students observe a wide range of community care facilities from child care centers, to Judith Peyton's Natural Branches of Learning (an outdoor play center for young children), to the nursing home. In our Global Foods class students take field trips to local restaurants and get to sample some of the cultural foods that are offered.

*Science:* Science teachers and students worked directly with the University of Kansas studying the migratory patterns of monarch butterflies. Science students also worked on a fish growth project with the Ohio State University.

*Social Studies:* The Social Studies Department also focuses on civic responsibility and citizenship. Throughout the year our students are active in several programs directly related to those responsibilities. Students have the opportunity to be part of Teen Court, in which they act as jurors for juvenile first-time offenders. The recidivism rate for those offenders has dropped dramatically since this program was put into place. With the UW-Extension, students participate in Superior Days, a program in which they actively take issues of importance in our region directly to government officials in Madison. An important part of helping to educate our student body belongs to the Student Government, which hosted a mock accident during the fall to emphasize the tragic outcome of texting and driving. This project was enhanced by local, county, regional, and state agencies that made the event heartbreakingly real to our students. They also host an annual week and lock-in focused on a substance-free lifestyle and positive peer relationships.

*Foreign Language:* WHS provides opportunities for language and cultural immersion for all students by extending an invitation to attend Concordia College's International Language Immersion Weekends and the Festival of Nations. We have an eclectic, accepting atmosphere where differences are appreciated. Our upper level foreign language students go to the elementary school to help teach the younger students Spanish basics. This program has helped advance foreign language in our school and allowed a positive learning experience for both our elementary and our high school students.

*Visual Arts:* Part of what makes us special in Washburn is our community culture, which includes a large number of local artists. These artists are invited into the classroom to share their skills, ideas, and career paths with our students. We are within walking distance of the Washburn Cultural Center art gallery which brings monthly art shows to our community and gives our students access to new and inspiring artwork. Each year we put on an all-school art show at the Washburn Cultural Center, highlighting the varied and talented students in our district. StageNorth, a local theater, partners with the school to provide opportunities for students in the arts, including direction, sound, props, and acting.

Further, our staff is strongly encouraged by the administration to personally get involved in community projects that we are passionate about. For example, several staff are members of the Lion's Club which does a road clean-up project every year.