



U.S. DEPARTMENT OF EDUCATION

GreenRibbonSchools



Seeley Lake Elementary School

Montana Nominee to

U. S. Department of Education Green Ribbon Schools Sustainability

Award



2014-2015 District Nominee Presentation Form

PART I - ELIGIBILITY CERTIFICATION

District's Certifications

The signatures of the district superintendent (or equivalent) on the next 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 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 and sustainability 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 as a whole 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.



2014-2015 School Nominee Presentation Form

U.S. Department of Education Green Ribbon Schools 2014-2015

Charter Title I Magnet Private Independent

Name of Principal: Mr. Chris Stout

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

Official School Name: Seeley Lake Elementary

(As it should appear on an award)

Official School Name Mailing Address: 200 School Ln. Seeley Lake MT, 59868

(If address is P.O. Box, also include street address.)

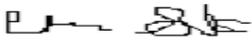
County: Missoula State School Code Number *: 34

Telephone: 406-677-2265 Fax: 406-677-2264

Web site/URL: www.sleonline.org E-mail: cstoutsle@blackfoot.net

**Private Schools: If the information requested is not applicable, write N/A in the space*

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

_____  _____ Date: 2/23/2015

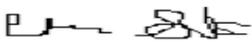
(Principal's Signature)

Name of Superintendent: Mr. Chris Stout

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

District Name: Seeley Lake Elementary

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

 _____ Date: 2/23/15

(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 school's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

1. The school has some configuration that includes grades Pre-K-12.
2. The school 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 and sustainability education.
3. The school 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: MT Office of Public Instruction

Name of Nominating Authority: Ms. Denise Juneau

(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: 2/23/15

(Nominating Authority's Signature)

SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent "snapshot" that describes how your school is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars and nine Elements. Then, include documentation and concrete examples for work in every Pillar and Element.

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 according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509

Expiration Date: February 28, 2015

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 and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

PART II – SUMMARY OF ACHIEVEMENTS

Seeley Lake Elementary School, Montana

Promoting the wellbeing of our community and environment through powerful learning and action

Seeley Lake Elementary School is set within the wilderness of the Swan Valley. Surrounding this community are the Swan and Mission mountains. This community has a profound relationship with the natural space the envelopes it. Incorporating sustainability programming provided a natural extension of the values contained within the community of Seeley Lake. In promoting both current and future levels of sustainability Seeley Lake Elementary School has been committed to programming for sustainability. The school has engaged in an ambitious and transformative sustainability initiative. It is an initiative that is holistic and student-centered. By situating programming decisions in terms of student learning this program focuses on providing meaningful sustainability programming and learning. By balancing programming activities with curriculum integration, sustainability is made meaningful and relevant to the students. Building a culture based on sustainability practices and values within a school ensures that not only the organization promotes current and future sustainability, but provides the basis for each student to lead a more sustainable life both now and in the future. By helping students to become aware of topics and issues related to sustainability and then empowering them to take action towards those issues within the school environment enabled student to become engaged and active citizen in the future. Through assuming different leadership roles within the school different classes of students have the opportunity to learn about and experience sustainable behaviors and practices. The school developed a unique partnership for IB programming with the High School which is in a separate district but located in the same town. Through this Middle Years Program partnership, these two schools have provided a very unique situation in that we have achieved a complete K-12 sustainability program integration. From Kindergarten to their Senior year students will be shaped by sustainability learning and action.

The school has aligned itself to the three pillars contained within the Green Ribbon Schools program. The first pillar of reducing environmental impacts and costs is occurring through a well-developed recycling and resource efficiency program. In reducing waste the school is using resources more efficiently and empowering student to experience what waste reduction looks like in action. Through their commitment to the Green Ribbon program the school has created the infrastructure and school culture to collect, monitor and effectively reduce their waste. Waste reduction is tantamount to reductions in consumption. As the school analyzes the data received from its energy audit it developed specific energy conservation practices. Through careful documentation of energy use and resource conservation the school demonstrates overtime its commitment to reducing environmental impacts and costs. Over the course of the year the school has gathered and collected data. In this first year of programming they have created a powerful baseline of data that will guide them in future programming and implementation. The culmination of our initial baseline analysis has been the establishment of our Energy Management Plan. The Energy Management Plan outlines hours of deliberative work and planning to further document, analyze and implement energy efficiency practices.

In addressing the second pillar of improving the health and wellness of student and staff the school has applied a multifaceted approach to wellness that includes incorporating strategic nutrition initiatives, improving student activity levels and developing emotional wellness programming. These activities served to benefit and improve the overall school wellness. Given the interdependent linkages shared between the three pillars this pillar focuses on provide for the needs of the individual's health and wellbeing. Through healthy eating options, creative exercise programming and the promotion of experiential learning in nature the school serves to provide a robust and vibrant health and wellness program. Given their location in the mountains of Montana this school has a strong culture of outdoor education, which provides the basis for sustainability curriculum and activity.

Curriculum integration has been ongoing and functions as a reflective practice within the sustainability program. Through achieving the third pillar, which consists of effective environmental and sustainability education, students have engaged in experiential and place-based learning activities which enabled them to incorporate sustainability topics into their lived experience. Sustainability programming was integrated through a Professional Learning Community Approach. Through a strategic partnership with the University of Montana's

department of Curriculum and Instruction our staff and faculty received a great deal of support and mentoring. Professional development was provided to help frame the program and integrate curriculum into the classrooms. Through careful attention to scaffolding and the developmental needs of students this program ensured that all students receive sustainability education that is meaningful, applied and ultimately transformative. Helping students to see how their actions impact both themselves and others was a primary goal of the program. In demonstrating the ways in which our behaviors shape our environment both now and in the future students have been changed through this sustainability program at Seeley-Lake elementary school.

Through partnerships with the University of Montana and various other community-based organizations our program has received the support it needs to succeed. We have documented and demonstrated the success of our program. Through a reflective and deliberative process the needs of our school community and the broader community are achieved through the ongoing sustainability programming.

PART III – DOCUMENTATION OF STATE EVALUATION OF DISTRICT NOMINEE

Pillar I: Reduce Environmental Impact and Costs

Element IA: Energy

The Energy/Facilities program is focused on increasing energy efficiency within Seeley Elementary School. Our primary energy consumption needs arise from using energy derived from electricity and gas. The approach taken by the Energy/Facilities Committee is to identify areas in our school that could become more energy efficient and program for that reduce in use. Increasing energy efficiency is reducing electricity usage, decreasing the school's contribution to climate change, and saving the school energy costs in the facilities budget.

The first step in developing the energy/facility program was to have an energy audit conducting by the Bonneville Power Administration (BPA). On September 24th the BPA conducted an extensive audit that in conjunction with our collected energy data created a baseline of data that will inform future practices to conserve energy use and reduce energy waste. By using recommendations from that extensive audit we are implementing energy conservation and waste reduction strategies.

Our school's Energy and Water conservation focus for this initial year was to create a baseline of data and build partnership with energy providers. Although it seems intangible in terms of hard data, the relationships we formed energy providers and regulators is essential for the long-term success of our sustainability programming. Over a period of several months between August and November of 2014 countless phone calls and follow-up calls emails were made for the purpose of requesting and gathering data. The significance of this is that these providers had never received request of this nature from schools.

Through our efforts we have built a lasting framework and partnership with schools and energy providers to program for sustainability. Now that we have the data we have taken steps to aggregate it and format it into data management systems. We are engaging in EnergyCap software analysis for the purpose of identify areas and strategies for conservation and efficiency gains. Through the EnergyCap analysis are gaining GHG data equivalents and those are being used to inform curriculum and behavioral changes within the school. Given the nature of establishing a baseline for data analysis and consumption we are working to integrate a very focused behavioral plan to reduce energy consumption and increase energy use efficiency. Through classroom integration we are actively changing the energy use culture of the school. Through this profound cultural change we will work to use the data we have gathered to inform school policy related to facilities, management and logistics.

We established that the current energy usage is 337,920 kBTU annually. With 211 students and a building space of 47,000 square feet we now have the tools to understand our energy use. Our data serves to indicate usage patterns and ways in which we can anticipate and make seasonal adjustments in future years. We drew

energy data from two sources. Given our rural location the school uses both electricity and propane to heat it. These energy sources and the data collected help us to frame our consumption amount and patterns.

The second step that we have taken in developing our energy/facilities program is examining existing classroom and school-wide practices regarding energy use and consumption. With this data we have developed strategies for minimizing energy use. This data in conjunction with an energy audit conducted by BPA served to guide the creation of our Energy Management Plan. The plan consists of practices and procedures that are currently being implemented on both the level of the classroom and across the school overall. Using the energy audit data we identified specific areas in which energy conservation could occur through feasible structural/facilities and behavioral changes. Specific classroom approaches to energy conservation have been identified by classroom teachers and entered into a school-wide data collection chart. This chart enables teachers to share in strategies and approaches that work for them in reducing energy consumption through the formation of our sustainability-based Professional Learning Communities.

The school reached out to the IT support to install energy-saving software and technology on all possible appliances and computer equipment. Another area of documenting and recording energy use that came directly from the energy audit is from the walk-in freezer and cooler. Through this program we are working to ensure that all computers, monitors, printers, copiers and other equipment is set to the highest degree of energy efficiency possible.

In addition to establishing awareness and having created an internal database of classroom practices focused on reducing energy consumption we conducted a professional development seminar with the support of The University of Montana department of Curriculum and Instruction, aimed at helping staff to become proficient in energy efficiency practices, strategies and curriculum integration approaches.

Curriculum integration continues to play a significant role in developing and implementing our energy conservation plan. Having students identify strategies for energy conservation is the first step in building a strong classroom culture of conservation. In addition to identifying and developing shared classroom practices students are also documenting and inventorying those practices.

Different curricular integration strategies have been identified, implemented and documented to ensure that programming aligns with learning practices. Ensuring a student-centered approach enables alignment of school practices with student learning. Each class either has or is creating a documentation chart that identifies how and when energy topics are engaged in by students.

In the month of March the challenge will be saving electricity. We will have each class track the turning off of lights when they leave the classroom and unplugging electronics at the end of day. Finally, will be promoting "let the sun shine in" afternoons where classrooms will use only natural light. Before every challenge starts we email all the staff and provide them with information to share with students based on challenge. For an example in March, we are providing facts and videos based on the amount of energy wasted by keeping lights on and having electronics plugged when they are not being used.

Specific energy conservation actions that have taken place are the following: upgrade of gym, multipurpose room and music room lights; upgrade of exterior lights and exit lights to LED; exterior lights set on a timer and sensor; and upgrade of exterior windows.

Another major area in which energy consumption occurs at the school is in terms of propane for heating. In addition to inventorying classroom practices regarding lightening the energy/facilities committee has inventoried heating practices and experiences within each classroom. From this data different classroom practices such as creating better circulation of warm air has been developed and is currently being monitored. In identifying the needs of each classroom in terms of thermostat usage which was a focus of the survey, the committee constructed specific targets for each classroom and is currently supporting each classroom in developing and implementing specific energy use practices and targets.

Monitoring changes in energy consumption both in terms of electricity and propane gas use plays a significant role in the programming to reduce energy consumption. By implementing specific classroom practices the school is reducing overall energy consumption and thus conserving resources and minimizing waste. The school

is excited to see evidence of this conserve in next years energy data, now that we have a baseline this is possible!

The total building area of our school is 47,000. A new gym, school wing was constructed in 1996. A new boiler was added at this point as well. Also the school had the roof remodeled in 2009. In 2009 new gym, lunchroom and music room lights were installed. In 2008 exterior windows were updated. In 2013 exterior lights and exit lights were up graded to LED. Plans for improving school wide efficiency include developing a new heating system in which the one non-functional boiler is replaced. Installing STaefa Controls and checking walk-in freezer and cooler for efficiency. We also plan to explore the implications of using more efficient heating for the lunch room and the music room. We will be examining the impacts of replacing classroom windows. All of these measures were made possible through our sustainability programming. We are directly changing both the school culture and the school facilities to become aligned within sustainable practices.

Element IB: Water and Grounds

One area of particular strength in our resource conservation programming is our water waste reduction efforts. After conducting our baseline data review we established that as a school we consume an annual amount of 434,460 gallons of water annually. This amounts to 2,059 gallons of water per student annually. A component of our energy management plan is water conservation. We are exploring rain catchment systems. Mainly our approach has been to create and implement water conservation strategies within the classroom and across the school in order to reduce our usage overall. Our bench mark target after conservation efforts is to have a consumption rate of 1,800 gallons per student annually. 80% of landscaping consists of native, water-efficient and/or regionally appropriate. As a result of this it does not require any additional irrigation. Drought resistant native plants on school sites and nature trails include pine and spruce trees and native grasses. Ensuring this commitment to maintaining native flora allows for outdoor learning to be integrated into the surrounding natural landscape. Water conservation is being achieved through data monitoring and behavioral change within the school.

Element IC: Reduced Waste Production

For years the school has tried to create a viable recycling program. Through our commitment to the Green Ribbon Schools this is now a reality. We have transformed how waste reduction occurs at our school and how our school community relates to this essential practice. The challenges we face as a small and rural school were strategically addressed through our adherence to the Green Ribbon School program. Below is our average data regarding recycling and waste reduce. For a school of our size this is significant.

Average of 12.37 cubic yards of dumpster per month

Average of 1.237 cubic yards of recycling per month

Recycling Rate = $(1.237 / 13.607) \times 100 = 9.09$ cubic yards

Monthly waste generated per person = $(12.37 / 209) = 0.059$ cubic yards

The second grade class has started a composting bin in the classroom as piloting project with the goal to establish compost bins in all the classrooms in the next year.

The school engineer, with the assistance of a student, built a large storage unit for the recycling. All the bins that fit in the storage unit are 30 gallon tubs. Every two weeks a green team member hauls the recycling to the local refuse. We have developed a documentation sheet that will be filled out by the green team when the recycling is taken. We indicate the fraction of the 30 gallon container filled when taken to the refuse. Monthly calculations are made and posted for staff to share with students.

Each classroom has two bins. One bin is for plastic, aluminum, and tin. The other is for paper, cardboard, newspaper and magazines. All the bins are labeled with recycling instructions and what materials can be recycled. Bins are also located in the office, computer lab and copy rooms. The school is recycling all the

materials that the local refuse takes with the future goal of students implementing recycling in their own house based on their experience at school.

Several emails were sent out about the recycling locations and recyclable materials. Documentation was given to all staff members when the bins were delivered to the classrooms. Once a week, a student, recommended by the recycling committee, will take a cart around with a teacher. They will collect the bins that are left out by classrooms or bins that are full.

In February our environmental challenge was no waste lunch. A parent volunteer came for pre-data for the project. Each classroom was given a folder with graph template per week. Every day at lunch a student from each class graphed the amount of classmates who ate all their lunch. Teachers have encouraging students daily to have more students have no waste lunch. Also, teachers have been encouraging students to keep appropriate food, such as a peanut butter and jelly sandwich, for afternoon snack compared having it go in the trash.

Element ID: Alternative Transportation

The school developed an effective parking plan that focuses on improving student safety and reducing idling cars. By reducing idling cars and having a more efficient system in place to pick-up and drop-off student emissions are being reduced, safety is improved and overall wellbeing is benefited. This very simple but effective task improved the health and wellbeing of the school community, while ensuring GHG reduction and improved energy efficiency in terms of gasoline expenditure.

In partnership with the High School, the school reached out to local organizations to ensure that all students had a bike helmet and safety equipment. The school partnered with local organizations and community members to conduct several bike safety meeting and distribute bike helmets at that meeting. Safe routes were developed and bike awareness events were held to support this effort.

Pillar II: Improve the Health and Wellness of Students and Staff

Element IIA: Environmental Health

The school works hard to ensure the environmental health and wellbeing its school community. The school utilizes support from local, regional and state entities. The school plan to use the IMP approach to pest management. In using this management approach the school will work to make effective decisions that minimize pests and reduce potential for reoccurrence of pests in the future. The school is in the process of evaluating the pesticide usage amount and will determine ways to minimize usage.

Safeguards are put in place to ensure that neither staff nor students have any potential risk exposure to cleaning products. In addition to all cleaning products being secured in a locked room, they are also clearly labeled and marked. The school purchasing practices seek to purchase environmentally safe and non-harmful products.

Air quality within school is a high priority. Each classroom's air quality is regulated and monitored to minimize potential asthma triggers. HVAC maintenance and filter changes occur at regular intervals. Moreover the HVAC systems is set to conduct a 24 hour system flush. In this way air movement and quality is ensured for the entire school community. Our school has local exhaust systems for major airborne contaminant sources.

Mold abatement is an important element for the school in ensuring a healthy school environment. When mold is identified the school immediately contact external mold abatement experts to check and conduct a mold abatement. Given the climate of Seeley Lake this is not a common problem but is addressed when necessary.

On a regular basis facilities personnel inspect the classroom dampers, heating ventilation filters and ventilation fans on to ensure optimal air quality. Healthy air quality is important to the school and efforts are made to ensure that quality.

Each classroom's air quality is regulated by a damper and fan. When the head is running a ratio of fresh air is taken in to ensure clear air quality. That damper opening is set and checked on a regular basis to ensure the correct amount fresh air intake.

The school plans to use the IAQ tools to follow the framework outlined by the EPA. Through careful **organization** the school will take steps to create a taskforce that addresses facility/health needs through the IAQ framework. These needs will be **communicated** in a manner that calls for appropriate personnel to **assess** the issues addressed within the school. In conjunction with the personnel the taskforce will **plan** appropriate strategies to **act** to address the issues. Finally both the taskforce and the appropriate personnel will **evaluate** the measures taken to solve the issues pertaining to HVAC, moisture and mold, integrated pest management, cleaning and maintenance, materials selection, source control and energy efficiency.

Element IIB: Nutrition and Fitness

[✓] Our school prohibits smoking on campus and in public school buses.

[✓] Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school.

[✓] Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO)

[✓] Our school does not have any fuel burning combustion appliances

[✓] Our school has tested all frequently occupied rooms at or below ground level for radon gas and has fixed and retested all rooms with levels that tested at or above 4 pCi/L OR our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L.

[✓] Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure.

Our school is committed to ensuring the health and wellbeing of all of our school community. Evidence of this occurred when we received a Bronze Award for Healthy School Lunch Challenge 2013-2014. A salad bar is available for 4-8th graders and is open to all staff. On Mondays, Wednesdays and Fridays healthy snacks are offered in afternoon. We use Mannix meat which is locally produced meat, for our school lunch. Our purchasing practices whenever possible strive to purchase food produced within a 100 mile radius, thus limiting energy and GHG expenditures.

Promoting health in our school occurs through engaging our students in outdoor education and exercise. Our students spent at least 120 minutes per week over the past year in school supervised physical education. Yoga classes to 7-8th grade students is offered before school on Fridays. Physical education courses is offered five days of the week for k-6th and every other week for 7-8th. There was a mountain biking class elective for 7-8th graders. All of these physical activities ensure that our students and staff are healthy and happy.

[✓] At least 50% of our students have participated in the EPA's Sunwise (or equivalent program).

Seeley Lake Elementary School has developed a holistic sustainability program both for adults and children focusing on nutrition, mental stability and activity. Our approach has been to teach students to live a well-balanced life by having active and engaged adult role models present at the school. Finally, we teach students healthy outdoor activities they can enjoy in Seeley Lake.

Plans are in place to have the 3rd graders walk to the high school to assist with the construction and maintenance of the greenhouse. Through our partnership with the High School the greenhouse serves in a central role in not only providing health food options for the school, but also in providing meaningful learning experiences for our students in growing and serving health food options. To promote curricular integration healthy cooking courses are offered that allow student to see how healthy eating practices translate to the home.

At least 50% of our students' annual physical education takes place outdoors. Seeley Lake Elementary (SLE) Outside, our Outdoor Education and Adventure program offers outdoor education to all students at least two days every month. Students and the staff enjoy the following:

- 7-8th grades: stream monitoring, watershed education, Montana Youth Wilderness Project, Adventure Club, Youth Field Days, Trumpeter Swan Release, Winter Ecology of the Swan Valley Project and Trail Running Club.
- K- 6th grades: Montana Youth Wilderness Project, Adventure Club, Winter Ecology Project, Outdoor Education (twice monthly), Montana Natural History visiting naturalist, Trail Running Club (4-8th).
- Nordic Skiing: we will offer a recreational ski league every Thursday to all students k-8th and a Nordic Ski Team three days per week grades 3-8th.
- We offer skis, snowshoes and mountain bikes to students and staff to borrow.

Beyond Outdoor Education our school offers free gym memberships to all staff members.

Building a culture of healthy living requires outreach to be conducted with the community of Seeley Lake. In order to achieve this outreach, the school works to provide healthy relationships training in which the community can participate in.

We offer Alta-Care services in our school. Alta-Care is mental health services for children and adolescents to receive services during the school day. We have two staff for middle school students and two staff for elementary students. Our school has utilized Owelus Bullying Prevention Program. We have weekly counseling two quarters of the year. Finally, our students are learning Strong Kids curriculum in a weekly health class.

Pillar III: Provide Effective Environmental and Sustainability Education

Element IIIA: Interdisciplinary Learning

We have created documents about recycling education that we gave to staff. This was done in order to provide curriculum integration of the recycling program. On each recycling bin there is a label indicating what can be recycled and the steps to recycling the item. This documentation indicates all items that will be recycled, where recycling bins are located and recycling procedures for our student sorter and collector. Providing visual cues and ongoing curriculum integration helps to develop and support the transformation of the school culture to more sustainable practices.

We want the recycling program to be successful and be sustainable. We want to start small and build a strong foundation. In the years that follow we will enter into recycling challenges. We plan to use the recycling program as the basis for important experiential education approaches and themes. We plan to weave this experiential learning process into the classroom by making explicit connections to math, science and writing. Having student's collect, measure and reflect on what and how they are recycling is a profound learning experience and it serves to build a school culture around minimizing waste and conserving resources. One of the most important resources for measuring the waste that is recycled is to create data over the course of the year that demonstrates the purpose of recycling. In observing changing quantities and amounts we hope to build a purpose and approach for recycling within the school.

In order to promote healthy choices and increase activity levels the school will engage students with place-based and experiential learning experiences. Place-based education will use the surrounding natural environment to help situate students in their environment and help to frame why there are engaging in sustainability practices and learning. Specific programming approaches that are planned for this year include a middle school project in which the students develop ways to reduce their carbon footprint. Every class will be charged with integrating and document specific learning standards associated with sustainability such as carbon foot print, recycling, renewable resources, etc. Geographic information systems will be employed to help both staff and students understand how systems are interconnected and interrelated.

Element IIIB: STEM Content, Knowledge, and Skills

As part of our sustainability programming we would like to support teachers in integrating sustainability topics and ideas into classroom learning. The following professional development seminar is intended to provide resources, ideas and time to develop a learning activity that promoted sustainability within your classroom. We have created resource folder for teacher on our server with lesson plans, videos, surveys and environmental

information. Also, we have created curriculum documentation folder for teachers to post lessons they have a done. There are templates and checklists provided for teachers for curriculum documentations.

We have developed a green team which focused on monthly environmental challenges and development of curriculum resources for teachers.

4th Grade Teacher Chantel Thornsberry, NBCT

October 2014- January 2015

We studied form and function pertaining to seed distribution. Then, after identifying specific noxious weeds in that area (playground and surrounding field), we studied noxious weeds. We learned how to identify them and specifics about them, such as seed distribution and factors influencing the difficulty of controlling them. Then, the students wrote a proposal for the School Board asking them to take action on the problem. They presented the issue to grades 2-8 and collected student signatures in support of their proposal.

2nd Grade Teacher Julie Little

October 2014- January 2015

Two high school students, as a service learning project, came to 2nd grade class from October through January and taught students how to compost. A composting bin is being maintained in the 2nd grade classroom. One of the community jobs in the 2nd grade classroom is gardener. As the gardener, the student is responsible for adding water and food scrapes to the bin weekly. The 2nd grade students learned how soil is made, the basic skill of recycling and will learn about the importance of native plants. With the service learning project coming to an end the teacher is going to reinforce and review the compost bin repeatedly with a more in-depth look at recycling.

2nd Grade Teacher Julie Little

December 2014

The middle school students presented *Cool the Earth* play and gave each student action coupons. Students could complete an action and bring a coupon back to school. All the action coupons were ways to reduce one's environmental impact on Earth. In 2nd grade we collectively did two of the action coupons.

The first action coupon was to write a letter to the United State of America stating why we are concerned about global warming. A lesson was taught in which the 2nd graders learned about interconnectedness. We watched domino falls. When one domino falls it causes all the other dominos to fall. It was related to the polar bears and other animals that are endangered or threatened. We then drew pictures of any animal or plant of our choice expressing our concern for them. We discussed how any of these species could be affected by the domino effect of global warming.

As follow up I brought in an image of a threatened prairie dog with an outline of missing prairie dogs showing all the species that would be affected by the absence of the prairie dog. The image is from Terry Tempest Williams's book *Find Beauty in a Broken World*.

The second action coupon completed by the 2nd grade class was a no waste lunch. We had a class discussion of how much food we throw away. Pictures were shown of people in other countries who do not get an enough food to eat. Options were given to students for keeping food from their lunch. Such as wrapping part of their peanut-butter and jelly sandwich in a napkin and saving it for afternoon snack, or opting out of milk if you don't finish your milk it makes your stomach too full to eat all the food on your plate.

3rd Grade

Teacher Kelsi Lunhow

October 2014

The high school student came in to my classroom and taught my students the elements of the food pyramid. The class discussed healthy eating choices and unhealthy eating choices. We also planted lettuce seeds in milk cartons that we had washed out from the lunch room. We kept the milk cartons in the classroom and watered them each day, observing how the lettuce was growing.

My class and I walked from the elementary school to the high school (about ¾ mile) and met up with the high school teacher who has developed a greenhouse program. We observed plants inside the completed, smaller greenhouse, and discussed why the plants were not growing so well (inadequate water, temperature). We then helped remove rocks from the soil and dig out pathways between the beds in the new greenhouse area.

Students also helped plant seeds (onion, lettuce, kale) in the beds. They made drawings of the beds in their journals so they could refer to them later.

We came back in November for another visit to the greenhouse. Unfortunately, the high school students were not able to put up the covering around the greenhouse in time, and the seeds did not survive. This was still a teachable moment and we were able to discuss reasons why the plants did not live. The high school student who was doing the service learning project taught the class about more healthy eating options.

7th-8th Grade Teacher Patti Bartlett October 2014-present

Patti does a bio-fuel project with her students, with hopes of making fuel using trees that have died from bark beetle kill.

Patti teaches, *Solving Inequalities: Carbon Emission*, a real world math problems workbook that focuses on resource issues. The workbook is used throughout the year.

Finally, students presented *Cool the Earth* project that focuses on action plans students can take assist the environment. Each student was given an action coupon book. Each time they completed sustainable action or made a commitment for sustainability the students got to fill in a coupon and bring it back to school. Our school displayed data of the action coupons collected.

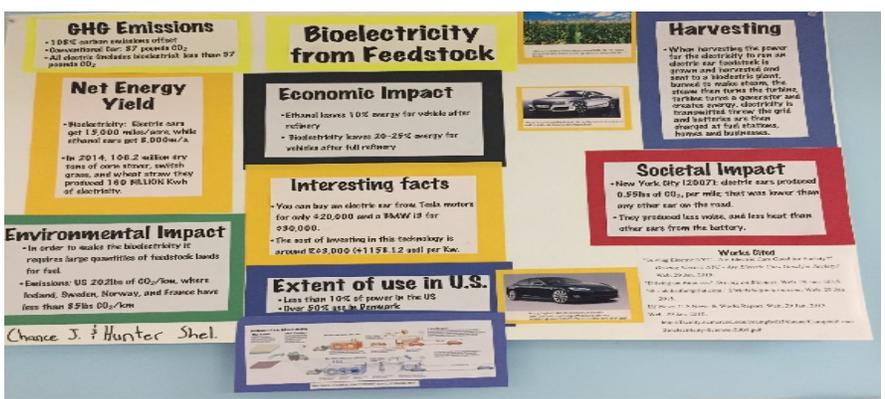
7th- 8th Grade Teacher Duane Schlabach January 2015

Student went to Northern Rockies Climate Change Lecture Series and Film Festival. The Presenter was Nicky Phear, Climate Change Studies and Program Coordinator at the University of Montana.

Her lecture was based on finding common ground between those who opposed to climate change and ways to engage and negotiate to alleviate climate change.



Students work at high school greenhouse.



One of several presentations posters by 8th graders based on bio-fuels.



Students working on projects at an outdoor education day.



Our Nordic Ski collection free for any student or staff member to use. Several are gone ski race.



A portion of our newly built main recycling center.

Element IIIC: Civic Knowledge and Skills

In order to foster a sustainable school culture we began our sustainability programming with a speech given to our students from Nobel Laureate Dr. Steve Running, how received it on the basis of his work to identify climate change. His presentation was followed by discussion, reflection and assessments. It served as a wonderful motivating and source of inspiration to engage our staff and students in supporting healthy lifestyle practices and engaging in sustainable behaviors.

Student leadership and collaboration have abounded within our Green Ribbon School programming. The school has formed lasting partnerships with the High School and community organizations. Our students worked with High School students in building a greenhouse and developing sustainability education programs. Our students through their engagement in sustainability demonstrate leadership and support.

Faculty and staff have developed professional learning communities pertaining to sustainability programming. In addition to this, the faculty has begun to promote sustainability within the school by offering guidance and instruction to their fellow teachers. There have been several occasions in which the school faculty have met to explore and understand the importance and applied meaning of sustainability programming. Learning is ongoing as new initiatives are taken on and documentation is conducted.

Evidence of Planning Process:

A. Action Steps

Action Steps (How will you get to where you want to be?)	Responsibility (Who will make it happen?)	Timeframe (When will it happen?)
Eliminate one dumpster at the school.	All the Staff	February 2014
Insure pick up and sorting of material	Duane Schlabach, Julie Little and Julie Haines	January 2014
Insure alternative transportation if necessary	All the staff	January 2014
Document the students who have assisted family recycling programs at school.	All Staff	January 2016

B. Resources

- Documentation sheet for students who assist families in developing a recycling program at home.
- Blue bag and bins for families who would like to recycle at home. Grants to purchase bins.

C. Progress Monitoring

Action Steps Accomplished	Date	What helped you accomplish this action?
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Go electronic for 6-8 grade for assignments
60% of the time September 2014 Sharon Teague, Duane Schlabach, Patti
Bartlett and Michelle Holmes

Stop selling bottled water at sporting events. September 2014 Chris Stout/ Concession Stands

Determine who will haul the recycling. October 2014 Will Bernstrauch

Place bins with labels throughout the school.
Recycling locations and what can be
recycled identified and articulated to all
staff. October 2014 Julie Little

Place bins with labels throughout the school. October 2014 Julie Little

Domain #2: [Energy Use/Facilities]

Group Members: John Devins, Chantel Thornsberry, Sally Johnson and Patty Dilldree

A. Rationale

Make the school an energy efficient building, lower our footprint and teach students about the school efforts to make a building energy efficient. Through schools work in creating an energy efficient building students will witness the impact and usage of energy. Students will become knowledge of energy consumptions and consider ways to reduce energy use in a house or building.

B. Action Steps

Action Steps <i>(How will you get to where you want to be?)</i>	Responsibility <i>(Who will make it happen?)</i>	Timeframe <i>(When will it happen?)</i>
Turning off the lights in empty classrooms or rooms	All the staff, email sent by Julie Little	January 2015
Only using half of the lights in the classroom	All the staff, email sent by Julie Little	January 2015
Energy Audit to check heaters in multi – purpose and music room and to explore more efficient options.	John Devins and Chris Stout	November 2014
Replace one non-functional boiler	John Devins and Chris Stout	September 2016
Sweater Day	Chris Stout and Julie Little	January 2015

C. Resources

- Power Company needs to do an energy audit on particular areas.
- Grants to assist in in new heating and boiler systems.
- Company to install the new appliances.

D. Progress Monitoring

Action Steps Accomplished	Date	What helped you accomplish this action?
Energy Audit	September 2014	John Devins and Ryder Delaloye
Upgraded exterior windows.	September 2008	John Devins and Christ Stout
Upgraded exterior lights and exit lights to LED.	October 2014	John Devins and Christ Stout
Upgraded gym, multipurpose room and music room lights.	September 2009	John Devins and Christ Stout

Domain #3: [Wellness]
 Group Members: Kelsi Luhnnow, Bridget Laird, Andrew Wyatt and Andy

Sieges

A. Rationale

Develop holistic self both for adults and children focusing on nutrition, mental stability and activity. Teach students to live a well-balanced life with adult role models present in the school. Finally, we will teach students healthy outdoor activities they can enjoy in Seeley Lake.

B. Action Steps

Action Steps (How will you get to where you want to be?)	Responsibility (Who will make it happen?)	Timeframe (When will it happen?)
Improve Healthy Hygiene Habits	Andy Sieges	
Trail Running Club	Bridget Laird and Chris Stout	October 2014
Bike Safety Instructions	Kelsi Luhnnow and Andrew Wyatt	

C. Resources

- Finances for healthy ingredients to use for cooking food. Possibly a grant for ingredients.
- Finances for free bike helmets for students who attend the bike safety meeting. A grant to purchase new bike helmets for students.

D. Progress Monitoring

Action Steps Accomplished	Date	What helped you accomplish this action?
Outdoor Education Program	September 2014	Bridget Laird and Chris Stout
PE for students five days of the week.	September 2008	Chris Stout and School Board approval
Gym memberships for all staff	September 2010	Chris Stout and Sally Johnson
Healthy snacks for K-6 grade	September 2014	Will Bernstrauch
Bronze award for Healthy School Lunch Challenge	March 2014	Will Bernstrauch and Chris Stout
Nordic Ski Team	December 2010	Bridget Laird and Chris Stout
Early-out ski and adventure club	Winter 2013	Bridget Laird and Chris Stout
Trail Running Club and Nutrition		Bridget Laird and Chris Stout

Domain #4: [Curriculum Integration]

Group Members: Patti Bartlett, Shelia Devins, Angela Good and Duane Schlabau ch

A. Rationale

Students need to become knowledgeable of carbon footprint, recycling, renewable resources and the ecosystem in which they live. Through hands-on class projects and inquiry driven class discussions, students will gain an environmental and sustainability awareness. They will understand current world problems, as well as, a relationship with their local ecosystem. From the curriculum integration students will have a balanced view and the ability to comprehend, analyze and become engaged citizens.

B. Action Steps

Action Steps <i>(How will you get to where you want to be?)</i>	Responsibility <i>(Who will make it happen?)</i>	Timeframe <i>(When will it happen?)</i>
<i>Junior High will develop a play for all students on reducing carbon footprint</i>	<i>Patti Barlett</i>	<i>October 2014</i>
<i>Every class will teach one of the following aspects (aligning with standards per grade): carbon foot print; recycling; renewable resources.</i>	<i>All staff</i>	<i>May 2015</i>
<i>In Outdoor Education students will develop an understanding for local ecosystem will be asked inquiry driven question about sustainability.</i>	<i>All staff</i>	<i>October 2014</i>
<i>Geographic Information Systems</i>	<i>Chris Stout and Patti Bartlett</i>	<i>September 2016</i>

C. Resources

- Cool the Earth Program
- Naturalist Program- continue grant
- Speakers working on sustainability an in local ecosystem
- Outdoor supplies in terms of more magnify glasses, updated stream monitoring equipment.

D. Progress Monitoring

Action Steps Accomplished	Date	What helped you accomplish this action?
<i>Naturalist Program for 4th Grade</i>	<i>September 2014</i>	<i>Chantel Thornsbery</i>
<i>Outdoor Education</i>	<i>September 2014</i>	<i>Bridget Laird and Chris Stout</i>
<i>Stream Monitoring</i>	<i>Month/Year</i>	<i>Patti Bartlett and Chris Stout</i>
<i>Reduce Reuse Recycle Unit in 2nd Grade</i>	<i>March 2014</i>	<i>Julie Little</i>
<i>Place-Based Education (All Grades)</i>	<i>September 2011</i>	<i>All Staff</i>