District Sustainability Award Nominee Presentation Form

CERTIFICATIONS

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 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 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.

7. The district has in place and is willing to provide a link to or copy of a non-discrimination policy, upon request. The U.S. Department of Education reserves the right to disqualify a nomination and/or rescind an award if unlawful discrimination is later discovered.

U.S. Department of Education Green Ribbon Schools District Sustainability Award

Name of Superintendent: Mrs. Gina M. Picard

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

District Name: Chariho Regional School District

(As it should appear on an award)

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

DocuSigned by:
Superintendent Gina Picard
E7D8480DA0324E0...
(Superintendent's Signature)

Date: 1/25/2024

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: Rhode Island Department of Education

Name of Nominating Authority: Lisa Odom-Villella

(Specify: Ms., 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.

DocuSigned by:
Lisa Odom-Villella
2C9D1C976B514D8...

Date: 1/30/2024

(Nominating Authority's Signature)

SUBMISSION

The nomination package, including the signed certifications, narrative summary, documentation of evaluation in the three Pillars, and photos should be submitted online according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509
Expiration Date: October 31, 2026

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.

Nominee Information

School, District, or Postsecondary Institution Name: Chariho Regional School District		
Category of Nomination (Early Learning Center, School, District, or Postsecondary): School District		
Address: 455A Switch Road		
City: Wood River Junction	State: RI	Zip: 02894
Twitter: @CharihoRegional	Facebook:	

Top Official (School=Principal; District=Superintendent; IHE= President):

Title (Mr./Ms./Mrs./Dr.): Mrs.	First Name: Gina	Last Name: Picard
Position/Role (Principal/ Superintendent/ President): Superintendent		
Email: gina.picard@chariho.k12.ri.us	Phone: 401-364-7575	

Lead Applicant (if different):

Title (Mr./Ms./Mrs./Dr.): Dr.	First Name: Katie	Last Name: Kirakosian
Position/Role (Teacher/ Sustainability Director/ Facilities Director): Development Officer		
Email: katie.kirakosian@chariho.k12.ri.us	Phone: 401-552-7277	

Check all that apply:

Early Learning	✔	Public	✔	Four Year	
Elementary	✔	Charter		Community College	
Middle	✔	Magnet		Urban	
High	✔	Non-Public		Rural	✔
Career and Technical	✔	Two Year		Suburban	

Provide Percentages, if any are relevant to your school, district or institution:

Pell Recipients:		Limited English Proficient:	.83	Attendance Rate:	94.8
Free and Reduced Price Lunch:	16.21	Special Education:	17.17		
Minority:	9.14	Graduation Rate:	94.3		

Provide the following, if relevant:

Total Enrolled:	3029	Number of Schools:	7	Buildings:	11	Campuses:	5

Documentation of Sustainability Achievement

Narrative for Pillar I: Your Efforts to Reduce Environmental Impact and Costs
Use 2-4 pages to describe how your early learning center, school, district, or postsecondary institution is reducing environmental impact and costs by reducing or eliminating greenhouse gas emissions; improving water quality, efficiency, and conservation; reducing waste production; and/or using alternative transportation. Identify your energy-efficient facilities and practices, your efforts to decarbonize and electrify your premises, ecologically and educationally beneficial uses of grounds, and/or methods of disposal for solid and hazardous wastes. Use supporting data and reference participation in pertinent benchmarking programs to demonstrate progress where possible.

Narrative for Pillar 2: Your Efforts to Improve the Health and Wellness of Students and Staff
Use 2-4 pages to describe how your early learning center, school, district, or postsecondary institution improves the health and wellness of students and staff by integrating a school environmental health program and promoting sound health and wellness practices. You should discuss indoor and outdoor environmental quality; cleaning and maintenance; mold and moisture; thermal and acoustical comfort; chemical and environmental contaminants; air quality and ventilation; pests and pesticide, as well as nutrition and outdoors physical activity. Other components you may include are health education, health services, counseling, psychological and social services, sun safety, staff health promotion, and/or family and community involvement. Incorporate metrics and include program participation where possible.

Narrative for Pillar 3: Your Efforts to Ensure Effective Environmental and Sustainability Education
Use 2-4 pages to describe how your early learning center, school, district, or postsecondary institution ensures effective environmental and sustainability education throughout the curriculum. Provide examples of interdisciplinary learning about the key relationships between dynamic environmental, energy, and human systems. Demonstrate how your institution uses the environment and sustainability to develop STEM content, knowledge, and thinking skills, and teach all subjects in context. You should discuss how your early learning center, school, district, or postsecondary institution develops and applies civic knowledge and skills to environmental and sustainability education. All STEM and civics work should be described as it relates to environmental and sustainability learning. Detail any environmental or sustainability literacy standards, show how these concepts are integrated into assessments, and describe environmental and sustainability literacy professional development. Include co-curricular opportunities such as field trips, study abroad, clubs, and service learning. This section should describe hands-on, place-, project-, and/or problem-based, authentic learning across the curriculum, not limited to one subject.

Summary Narrative: An Overview of Your Work Encompassing All Three Pillars
Use one substantive paragraph to provide an overview narrative describing your early learning center, school, district, or postsecondary institution's efforts to reduce environmental impact and costs; improve student and staff health and wellness; and provide effective environmental and sustainability education. This overarching summary should highlight the best of your work in every ED-GRS Pillar and Element. You can view examples of summary narratives in last year's Highlights Report. The summary that you submit should be what you would like to see appear in a future Highlights Report, if your institution is selected. It may be helpful to pull from your previous three narratives to write the summary.

Photos: Please submit 5-10 high resolution photographs with brief descriptions including who, what, when, and where. Photos should be candid action shots, and not posed or collaged. They should be recent (i.e. from within the last three years). By sending these photos, you are giving Rhode Island and the U.S. Department of Education permission to use them in our newsletter and social media.

End of Application

Pillar I: Chariho's Efforts to Reduce Environmental Impact and Costs

Reduced or Eliminated Greenhouse Gas Emissions

The Chariho Regional School District (Chariho) is deeply committed to the most efficient and safest physical plant possible. In this regard, specific initiatives in the area of fossil fuels, electricity consumption, air quality, and systems reliability have been articulated in a thoughtful 5-year capital plan. Examples of accomplishments in the past 3 years include replacement of hot water heating generation equipment at the middle school and high school, activation of solar power generation equipment to deliver roughly 66% of our electricity needs. We have also completed over $1M in lighting equipment replacement to move to an almost entirely LED-based lighting system.

The District began a multi-year broad based approach to energy and energy cost reduction as noted above. In FY19, selected as baseline as it predates boiler replacements, lighting retrofit and solar energy conversion efforts and COVID shutdown of FY '20. In FY '19 Chariho consumed roughly 22,657 MMBTU's of energy in electricity, oil, natural gas and propane. The three year average consumption for FY '21, '22 and '23 this consumption fell to 20,456 MMBTU's. This is over a 9% decrease. Furthermore nearly 80% of electricity was produced by solar power beginning in FY '22.

We have not used the EnergyStar tool yet, but have manually tracked energy consumption and cost. As all the data is readily available, we will need training/resources to use the Energy Star platform and related management resources. At present there is insufficient staff available in this area. We have both on-site renewable energy generation and purchased renewable energy. We have a solar farm in Westerly that we have an ownership agreement with and we have on-site generation that covers the needs of our administration building. We upgraded the high school and the middle school to a new LP gas hot water distribution system. We also went as high efficiency as possible with the two new oil-fired boilers in the middle school. The District also put in new windows at Hope Valley Elementary School and Ashaway Elementary School to improve operability and decrease heat loss.

We are developing our Stage II proposal to obtain bond funding and implement our 5-year plan. We have also weatherized our buildings and added window film to reduce solar gain. We have also implemented, where applicable, MERV-13 air filters to improve air quality. Every classroom and office space was also fitted with stand-alone HEPA air filtration units.

Improved Water Quality, Efficiency, and Conservation

Although we can not currently demonstrate a reduction in water consumption, we are beginning to collect data in this area as a baseline. Every building is on a well, except for Richmond Elementary School and Hope Valley Elementary School. We are currently collecting baseline data by reviewing our water bills and the water wheels at all buildings. We have developed a drinking water state revolving fund project list, which includes both efficiency and reliability improvements, including emergency generator support and water line reliability improvements.

Only our sports fields have irrigation, which is controlled by water timers. The fields are only watered as needed and this need is determined based on natural rainfall patterns. The irrigation system is non-potable water from a well. Our efforts to reduce stormwater runoff will be incorporated into the upcoming facilities planning efforts and our next Housing Aid application process (method to obtain state education authority funding) for construction. We actively test and survey all of our wells and related infrastructure. Repairs and projects are implemented as needed and we actively work with the Rhode Island Department of Health to ensure that all regulations are met or exceeded.

At Charlestown Elementary School, outdoor learning spaces were developed about eight years ago to provide students with ideal spaces for outdoor learning. Much funding was raised by the PTO to enhance the spaces and district funding was also used. A few years ago, the Charlestown PTO planted gardens out back with all plants that are native to Rhode Island. We worked with a local Environmentalist to help plan the garden and to oversee the planting by older students in our school. Additional current

components include flexible teaching spaces and seating, outdoor learning games (created as an Eagle Scout Project), bat boxes, areas for group cooperative games and conflict resolution and a nature trail. Richmond Elementary School has a greenhouse with interior and exterior gardens. They have an interior courtyard for an outdoor learning space and they have a storybook path. Through a recent Learning Inside Out grant, we are adding 12 pollinator pathways at all of our schools as well as 8 outdoor classrooms, including a frog and dragonfly pond.

We have added multiple water filling stations at all of our schools in the District, which reduces water waste and the need for plastic water bottles. We have added water treatment reverse osmosis and activated carbon at one school where there was elevated lead. We have also done well work at this school to improve water quality. We are also collecting baseline data on the usage of our water filling stations.

Reduced Waste Production

The District has been working to improve the recycling output with our waste hauler. The Chariho Regional School Committee also approved the Memorandum of Understanding on October 10th between the Chariho Regional School District and Clean Ocean Access, which covers the Lunchroom Composting Initiative, by introducing and establishing a lunchroom waste management program with grant funding and support towards compliance with Rhode Island State Law Ch 23-18.9-17 which requires composting of kitchen waste. Lunch fund proceeds will assist with the costs and costs will be assessed each year. The Chariho Regional School District uses both WB Mason (WBM-21200 paper) and TRU RED copy paper. The WB Mason paper lists that it is part of a "Sustainable Forestry Initiative" and has certified sourcing (www.sfiprogram.org).

Staff and building custodial supervisors keep the Material Safety Data Sheets (MSDS) books updated (i.e. chemical changes). This is kept in the main office of each building. This is available during fire marshal inspections. We do not have any hazardous pest control materials. The Science department does have a number of hazardous materials, and the Department Chair is in charge of maintaining an inventory and regular updates. The district approves a thorough inventory of all chemicals and we coordinate with a chemical disposal company and/or the DEM to remove any items that are unstable or unsafe, etc. Annually, the Department Chair updates the MSDS listings that are cross-filed and kept in the science supply closet, the main office and Science Department Chair's office. The fire marshal checks to make sure they are accessible during his annual inspections.

We transitioned to LED lights for a significant savings in both labor and waste. The estimated labor savings alone is over $10,000/annually, and combined with energy savings of over $120,000 per year results in significant electrical savings. Related, the solar farm production in FY22 exceeded overall district electrical consumption by over 6,000 KWH, making Chariho a net producer of green energy for electrical needs; approximately 2,400,000 KWH per realized credits for solar energy production. FY23 was nearly as successful with over 2,300,000 KWH produced.

The District has a standing practice of reduce-reuse-recycle and we frequently hold purchases pending a review of surplus items available in the region. An annual yard sale is conducted and first priority is given to towns, nonprofits and any schools to ensure any items are utilized to their full measure. This results in literally tons of repurposed furniture and e-waste each year. We do not use green cleaning products, due to increased cost and overall effectiveness at this time.

The District did a purge of paints and related chemicals within the last year. Also, being a 1:1 school helps us reduce our paper needs. The District printed the equivalent of 56 trees in '22 to 50 trees in '23. Our overall trend shows the number of printing jobs increasing but the number of sheets reducing. Comparing September '22 to September '23 we show a 10% reduction.

Use of Alternative Transportation

Given our rural location, walking and biking is not possible for most students and staff. We have encouraged the community to use school bus transportation and to carpool post-COVID, which has

happened as witnessed by a decrease in traffic during drop-off and pick-up. The use of solar car ports will be explored next fiscal year. We have implemented a parking pass program to reduce the number of cars coming to campus. Chariho also maintains no-idling signs on campus to reduce gas emissions.

Pillar 2: Chariho's Efforts to Improve the Health and Wellness of Students and Staff

Integrated School Environmental Health Program

Pest Management is sourced out to the appropriate licensed professionals, spraying for bugs and pests is a last resort, bait stations are used discretely for rodent applications. The Facilities Director works with the pest controller to implement these practices. Smoking and vaping are not allowed on or inside any of the District's buildings. This is school policy. The District works with the appropriate vendors to manage, test and report requirements set forth by the state Department of Health.

We have a planned maintenance schedule that includes an annual inspection as well as filter replacement schedule and cleaning, as required. Additionally, we utilize contracted services to perform required planned maintenance and necessary repairs, as needed. Maintenance staff perform semi-annual service (summer & winter) on exhaust hoods, HVAC, unit ventilators and RTU units, to include cleaning coils, vacuuming debris, filter change, and lubricating necessary moving components, inspect/replace belts. In addition staff routinely check all belts, motors monthly to ensure proper function. The Director also routinely checks the EMS for troubles in the system.

A comprehensive survey was conducted in the summer of 2020. These recommendations included ventilation and outside air considerations for both COVID-impacted operations and post-COVID operations. As a result, operating schedules have been modified for both pandemic response and now, in the post-pandemic environment. Additionally, a comprehensive 5-year capital plan, which includes HVAC improvements, with a focus on indoor air quality, are a primary consideration. Systems controls are set to follow local and ASHRAE specifications. We have also implemented, where applicable, MERV-13 air filters to improve air quality. Every classroom and office space was also fitted with stand-alone HEPA air filtration units.

Exposure to cleaning products is minimal. Students and staff are often removed from a room to handle things such as a sick clean up, heavy cleaning is performed after dismissal. Painting is performed after hours and vacation breaks, storage areas are kept locked at all times to prevent exposure to any of these sources. Pesticides are rarely used, and are applied by professionals during non school/practice hours. Custodial staff routinely clean and inspect all buildings and as part of this process, any leaks, mold evidence, or moisture issues are promptly reported to either their supervisor or the maintenance Department Director. These reports, combined with work order submissions, are used to ensure that any of these moisture-related conditions, and are addressed immediately and properly. In the case of emergency situations (i.e. roof leaks, flooding, roof membrane failure or plumbing failure), are immediately assessed, and if covered by insurance, responded to as an emergency, and if not, attended to by maintenance personnel immediately. Appropriate contractors are utilized for roof planned maintenance, and are on call for envelope penetration issues, as needed. Lastly, our capital plan includes facilities envelope investments in a comprehensive 5-year plan. As part of routine, maintenance areas that produce condensation are inspected for proper function, leaks from a roof or piping the appropriate vendor is sourced for repair. Moldy materials that can be cleaned are done so with the appropriate cleaner, items that are not cleanable for use are removed and disposed of.

Nutrition and Fitness

At the elementary school level we utilize FITNESSGRAM fitness testing components. Fitness is encouraged before school with BOKS and we support intramurals when possible after school. The Richmond PTO supports different sports and mental health collaborations for 4 weeks with EnRichmond. Nutrition is covered in grades 1-4. Richmond connects nutrition with our gardens, monthly food tastings with Farm Fresh RI and we are a part of RI Healthy Schools Coalition. All students in Health Education II (Juniors) engage in nutrition and physical fitness education which is embedded into the course. No specific awards or recognition programs have been implemented but the USDA is a common resource that is utilized by the health education instructors.

Our contracted food service program, Chartwells, follows all USDA guidelines for our school breakfast and lunch programs. We participate in the farm-to-school program at the state level. We also participate locally in the farm-to-school program. In November 2023, for example, we are utilizing local butternut squash, greens from Gotham Greens, potatoes, apples, beef from MEATWORKS, and local cheese from Narragansett Creamery. Richmond Elementary School also does "Discovery Kitchen" which uses local produce for monthly student tastings.

Richmond Elementary School has aquaponics systems that grow lettuce in their library. This lettuce is used in the cafeteria and also donated to a local food pantry, RICAN. Chariho Alternative Learning Academy has an aquaponics system in a science classroom. This lettuce and herbs are used for student and staff meals. Starting this year, they will be collaborating with our CTC Culinary program to use their produce in a collaborative effort. Our High School's Plant Science Program grows lettuce, tomatoes and a variety of herbs in greenhouses through traditional methods and hydroponics. These are used in the CTC culinary program or sold to staff members through a work based learning, school enterprise program.

The District has signed up for National Environmental Education Foundation's (NEEF) Sunwise Program Tool Kit, which are being shared with our teachers as well as Science and PE Department Chairs to consider for inclusion in our upcoming curricular revisions. The high school Health and Physical Education program is not associated with any specific programs in relation to UV protection but does specifically educate students on the importance of UV protection and skin health promotion within the curricula. Additionally, students are encouraged to wear sunscreen and/or protective clothing while engaging in outdoor physical education classes.

In elementary schools, students have health for 35 minutes per week and PE for 70 minutes per week. Chariho exceeds the state mandate of 100 minutes of combined time. We follow district curriculum to expose students to physical fitness components and also life long activities and skills. In addition to weekly health and PE classes, the Middle School PE Department has been creative this year. They have organized a Unified volleyball game. One of our CMS PE teachers arranged a student versus faculty flag football game on the real football field. All grades and all teams attended. Other student versus faculty games are being planned for December, February, and April. Richmond Elementary School is a health and wellness specialized school that offers a before school movement program called BOKS. The program is offered twice a week before school for one hour to students in all grade levels.

The Chariho High School Physical Education program exceeds the state guidelines and minimum guidelines set by the State of Rhode Island during the semester course. Students enrolled in a Physical Education semester course acquire an average of 225 minutes of organized fitness activities. These activities are aligned with the health-related fitness components of exercise. Middle and High school students engage in outdoor exercise and recreational activities during quarters 1 and 4. Cardiorespiratory endurance activities which include Fitness Walking / Running, Capture the Flag games and other games including Ultimate Frisbee and soccer. The recreational activities that are incorporated into all physical education classes include field games, frisbee games, bocce, disc golf and backyard recreational activities. Dynamic and Static flexibility training are also incorporated into the outdoor education activities.

Our Athletics Department provides numerous activities after school sports for students in grades 9-12 to be involved in throughout the entire school year. During the Fall season we offer Field Hockey, Girls Tennis, Football, Girls Soccer, Boys Soccer, Boys Cross Country, Girls Cross Country, Unified Volleyball, Girls Volleyball and Esports. During the Winter season we offer Boys Basketball, Girls Basketball, Wrestling, Girls Indoor Track, Boys Indoor Track, Esports, Girls Ice Hockey, Boys Ice Hockey, Gymnastics, Boys Swimming, and Girls Independent Swimming. During the Spring season we offer Baseball, Softball, Girls Lacrosse, Boys Lacrosse, Boys Volleyball, Golf, Boys Tennis, Esports and Unified Basketball. Furthermore, in grades 6-8 students are provided similar activities to engage in during after school hours. During the Fall season we offer Girls Soccer, Boys Soccer, Girls Cross Country and Boys Cross Country. During the Winter season we offer Boys Basketball, Girls Basketball, Wrestling and Cheerleading. During the Spring season we offer Baseball, Softball, Girls Outdoor Track & Field, Boys Outdoor Track & Field and Unified Basketball. These activities are designed to include all students at

various ability levels. There are approximately 800-1,000 students in grades 6-12 that engage in after school activities within the Athletic Department. These activities are designed to engage and support various aspects of the student athlete, including their physical, mental, emotional and social wellbeing.

The high school has a fitness center open after school to all staff and students. Various fitness activities, including group fitness and yoga, are also led by staff throughout the school year. Staff wellness is an area of growth and focus this year, which is outlined in the District's new Strategic Plan, a focus for District-level staff, and an element included in several of our current grants this year. Chariho also offers an Employee Assistance Program (EAP) to all staff.

A Chartwells Nutritionist works in our four Elementary Schools several times a month for special programming, such as the Mood Boost program, local food tastings, and apple crunch day. For the Mood Boost program, we bring in different mood characters, called "Moodies", to focus on with students. The Moodies are Confidence, Smart, Calm, Strong, Happy, and Alert. Moodie guests are paired with a tasting, such as a salad or a smoothie that includes ingredients shown to promote the mood theme. This is a science-based program that students certainly find delicious. We also include a share table at all cafeterias to ensure unused food is shared with students who may like more to eat (i.e. fruit, packaged snacks). We are also exploring ways in which Chartwells can support RICAN, a local food pantry. Richmond Elementary School also has a Composting club and is collaborating with a Richmond Senior who is doing her Gold Star Project.

Coordinated School Health, Mental Health, School Climate, and Safety

The Chariho District has a range of partnerships focused on school health, mental health, school climate, and safety. Although not an exhaustive list, many partnerships are summarized below:

- Charlestown and Richmond Police Departments: We partner with our local police departments, who support our schools with 2.5 Student Resource Officers (SROs).
- Rhode Island Department of Education: We are working with RIDE on a number of grants, including several focused specifically on student mental health and support services, which include Bradley Hospital and DCYF.
- The Rhode Island Healthy Schools Coalition: Their Executive Director, Karin Wetherill, actively participates in our Health and Wellness meetings. She provides guidance on our nutrition and wellness policies that meet the highest level of criteria. She coordinates our work with Chartwells to help us grow and expand our Farm Fresh and Farm to School opportunities as well.
- Rhode Island Center Assisting those in Need (RICAN): As mentioned above, some of our school gardens donate produce to
- RIDOH: We have clinics for Flu/COVID vaccinations for students, staff, and their families.
- RISAS: They support our work around vaping and drug abuse. They also provide our community with information to help with the home school connection.
- Stop the Bleed: We partner with this organization to ensure that our staff are able to recognize life-threatening bleeding and intervene.
- Washington County Coalition for Children: We partnered with them recently on a District-wide Chalk It Up to Kindness event, where they donated T-shirts and boxes of chalk so our students could write positive messages and messages against bullying at all of our schools.
- Effective School Solutions: We have partnered with this organization to get two more clinicians to support our students in elementary, middle, and high schools.
- Peer2Peer: We have active P2P groups in both our Middle School and High School. They lead peer-focused mental health campaigns to help destigmatize mental health needs.
- The National Council: We are partnering with the National Council to get 100% of our staff trained in Youth Mental Health First Aid.

- Maddie Potts Foundation: We partner with this local foundation, created to remember a fallen Chariho high school student. We do many sports-focused events and competitions with them and aneurysm awareness events. The Foundation built a memorial field house on our main campus.
- Chariho Rotary: The Chariho Rotary supports our school with small grants and donations. They also help with campus cleanups every year.
- Community 2000: This is a local nonprofit organization that supports our students with scholarships as well as our staff through small grants. The focus on some of these has certainly been around health and fitness (i.e., purchasing pedometers for a walking program).
- Rhode Island Blood Center: We host several blood drives annually through our local blood bank.
- Tri-County Community Action, who focused on a Health Equity Zone program.
- WB Mason: We have partnered with WB Mason and RIDE for wellness furniture in our schools.
- Wood River Health Services: They provide primary care and dental care for many of our families.
- We are also exploring a Vaping Sensor Pilot program.

We have a Health and Wellness team that focuses on our District's health-related initiatives. This team includes educators, students, school committee members, parents, and community members. We also have a Health and Wellness policy that was recently revised to include language surrounding mental health. Every school has a full-time nurse, except for the Chariho Alternative Learning Academy, which shares the Middle School and High School nurse, given its small size. As mentioned above, we use the following programs:

- Peer2Peer at both CMS and CHS supported by the Chris Collins Foundation (University of Michigan)
- Washington County Coalition for Children for our anti-bullying prevention work and spreading kindness initiatives
- Effective School Solutions: They support our District with clinicians and also support Trauma informed Teacher Champions at each school through coaching

In addition to the list above, we have the following additional support:

- The Superintendent Student Education Advisory Panel: their goals are around student wellness and mental health this year, as well as bullying prevention and kindness that promotes positivity.
- A District MTSS working group to strengthen our systems district-wide
- A CHILL Mentoring program for at-risk students in 5th-12th grade
- An after school club, Vocal Athletes Advocating for Substance Use Alternatives (VAASA)

Richmond Elementary School received a Kindness Club grant through Community 2000, a local nonprofit organization. Students will be meeting twice a month to promote kindness throughout the school and our community. This will improve our social and emotional well-being and our sense of community within our school. Members of the club would work with community members both within and outside the Chariho School District to promote kindness. A teacher at Charlestown Elementary School has held a running club for 13 years. Students run before school two mornings per week. Staff and parent volunteers track their laps and we hold medal ceremonies throughout the year. Some students run up to 100 miles during the year! Students can also choose to run more laps during recess.

Chariho Middle School has a Unified Basketball team, and Chariho High School has a Unified Basketball and Volleyball team. Unified sports make sports accessible and supportive for students with special needs, who play alongside their typical peers on a team. This promotes athleticism for all students and shows the District's commitment to mental health and a positive school climate as well. Hope Valley Elementary School is also introducing a therapy/compassion dog to their school full-time. The school's therapy/compassion dog, Hope, is undergoing extensive year-long training with her handler, the school's principal.

Pillar 3: Chariho's Efforts to Ensure Effective Environmental and Sustainability Education

Shared Responsibility for Environmental Learning

Agricultural Science: The plant pathway courses are based on knowledge of plant health and nutrition with a focus on agricultural sustainability. Specific topics include soil health, food sustainability and environmental literacy. For example, students not only use the greenhouse to explore alternative food production methods such as hydroponics, but the greenhouse is also used to produce native species plants that are used in an ongoing ecosystem restoration project with an outside partner, Save The Bay. Chariho High School also has an Agricultural Program.

Recycling Program: Chariho High School's ADL students, as part of their science class, work on collecting the recycling from the classrooms in the school. In class, we discuss the items that can and can not be recycled, and why items can't be recycled. We also investigate ways to reuse items that otherwise would be trash. Additionally, the class works to educate the students in the school about proper recycling by making posters that are hung in the classrooms.

Students at CALA will be gathering and measuring food waste at CALA lunches and compost the material using worm bins to create vermicast. They will then use the vermicast to sell locally and use in the germination and growth of various vegetables and plants in the courtyard at CALA and in the aquaponics system at CALA. The worms will also be added to the aquaponics system currently installed and running at CALA. The Aquaponics system is a blend of aquaculture and hydroponics that uses fish waste to grow flowers and vegetables and in turn, filters the water for the fish living in the system. Worms from the worm bin live in the grow beds and help to break down the fish waste and keep the filters clean and free of fish solids.

Richmond Elementary School's Composting Club: Students at RES in grade three last year were the first group of students to be part of our Composting Club led by a former RES student and current CHS Senior and a current RES teacher. Students in the entire grade level learned about composting from a presentation prepared by the CHS student and a small group of students applied and were appointed to the club. The club met weekly through the months of April and May and facilitated composting for grade three once a week during lunch. This year the former RES student has returned and did a second presentation for students in grade 3 and 4. This year we called the program Waste Warriors. Students who applied and were appointed to this club will meet monthly throughout the winter months to learn about recycling and composting. Once a week a team of Warriors will support recycling in grades 3 and 4 and in the spring they will continue composting.

Grade K has a Unit on Trees and Weather. Grade 1 has a Unit on Air and Weather and a Unit on Plants and Animals.Grade 2 has a Unit on Insects and Plants. Grade 3 has a Unit on Water and Climate. Grade 4 has a Unit on Environments. Grade 6 has the following Units connected to environmental and sustainability concepts:

Unit 1: Earth Science - What is Weather?

-Severe weather has the potential to cause death and destruction in the environment.

Unit 6: Life Science - Plant Reproduction and Growth

They investigate how the environmental factor of salinity affects germination and early growth of different food crops.

Unit 9: Earth Science - The Water Planet

In The Water Planet, students learn that the water cycle is complex and involves water everywhere in the global environment.

Through our Learning Inside Out grant, Chariho is participating in the "School as a Tool" Program through RIDE's SBA. The Electrical Technology program uses the existing solar panels powering the administration building as a learning tool.

Our outdoor spaces are also utilized for PE, recess and through our Athletic program. Our Agricultural Science students utilize the outdoors to look at our plant and tree life as well. We also have

outdoor classroom spaces at several schools, including Charlestown Elementary School, CHS, and CALA. The Electrical Technology program uses the outdoor space behind the classroom as a learning space for learning theory and installation of solar PV cells as well as Wind turbines.

As mentioned throughout our application, our students have gone on many environmental and sustainability-focused field trips, had guest presenters, and after school providers on these topics, including, but not limited to: EarthCare Farm, Wild Harmony, a local pig farm, The Audubon Society, Arethusa Farm in nearby Connecticut. With the Audubon Society, some of the NGSS standards that are being covered in the field trips are LS1.B Growth and Development of Organisms, LS2.C Ecosystem Dynamics, Functioning, and Resilience, LS2.D Social Interactions and Group Behavior, LS4.B Natural Selection, and LS4.C Adaptation for grade 3. In grade 2, ESS1.C, ESS2.A, ESS2.C, PS1, LS2.A, and LS4.D are covered. In grade 4, 4-ESS2-1, 4-LS1-1, and 4-LS1-2 are covered.

Our Graduation Portfolio is a major "assessment of our HS students". CHS' Portfolio Expectations include the following: #1 Problem Solving, #2 Literacy, #3 Technology, #4 Culture and Arts, #5 Self Directed Learner, #6 Career Development, #7 Global Citizenship, #8 Collaboration, #9 Personal Wellbeing, #10 Respect for Others. Chariho High School also offers the following courses:

- AGRICULTURE & RESOURCE DEVELOPMENT I & II (NR) 601 .5 credit (each)
- PLANT SCIENCE (NR) 604A .5 credit
- FORESTRY (NR) 606 .5 credit
- AQUAPONICS I (NR) 607A .5 credit
- AQUAPONICS II (NR) 608A .5 credit
- TURF MANAGEMENT (NR) 609A .5 credit
- ELECTRICAL TECHNOLOGY IV 799 2 credits

In the latter course, alternative and renewable energy technologies are introduced to prepare our students in up and coming green technologies.

The District does not offer any environmental/agricultural content related professional development. Our Agriculture teacher takes part in professional development offered through Save The Bay that is based on the Salt Marsh Restoration project that we have been partnering on. Other teachers have gone to Gems Net training at the URI Bay campus each year. Our Electrical teacher has taken a class at CCRI that was to train him to bring back a project/curriculum for teaching my students about the design of, building, and mechanical/electrical theory of generating electricity with wind turbines as well as the plans to build a wind tunnel to test the student-designed and built wind turbines to which we built the wind tunnel and used it for testing the students wind turbines. Several staff also attend the University of Rhode Island's Rhode Island Food System Summit every January.

Richmond Elementary School received a grant from Community 2000 to support a field trip series for RI General Law 16-22-35, where all public elementary and middle school students must learn about litter prevention, reducing and reusing materials. This also promotes RES' health and wellness initiative through teaching kids about nature and their impact on our environment. Finally, these field trips promote making healthy choices for ourselves and our community.

Use of the Environment and Sustainability to Develop STEM Content

Our Agricultural Science Pathway - specifically Animal Science Program & Plant Science Program includes environmental science studies as part of student coursework. Here, students take wildlife management, for example (see Program of Studies).

Our eighth graders create projects using Green Energy, such as solar-powered carnival rides, wind turbines, and hydroelectric cars. The seventh graders learn about transportation of the future exploring content such as hovercrafts and Magnetic Levitation to make bullet trains. A new proposed Middle School course that has yet to be approved is entitled *Environmental Pre-engineering*, which will introduce students to biomimicry, sustainability, habitat rehabilitation and alternative energy.

Our Career and Technical Center offers an Electrical and Renewable Energy Pathway (see Electrical and Renewable Energy Sources Program). Electrical Technology students learn theory and installation of Solar PV systems and wind turbines as well as Residential building energy codes as well as passive solar design of residential dwelling units. Students from multiple Chariho tech programs participate in the GreenPower USA F24 electric vehicle race sponsored by the RI Computer Museum where students design/engineer, build/fabricate, and race an electric powered race car. A newly proposed, but not yet approved Renewable Energy class will allow students to learn the principles and applications of a different form/source of renewable energy each quarter and complete a project or assignments based on each source.

Chariho's existing curricula focuses on age-appropriate understandings of natural systems in Health, Physical Education, Social Studies, and all STEM-related curricula, for example. In 7th grade, for example, our students learn about plant reproduction. Middle School science teachers also work with students to capture and tag butterflies for Monarch Watch. Our curriculum connects to NGSS standards, which focus on "K-12 science education should reflect the interconnected nature of science as it is practiced and experienced in the real world". GEMS Net foci are outlined below by grade:

- **Kindergarten**: Plants and animals (birds, worms)
- **1st grade**: Weather and seasons, Plants and animals (animals and young)
- **2nd grade**: Animal and plant habitats, Flowers and seeds, Insect life cycle
- **3rd grade**: Water, seasons, and droughts
- **4th grade**: Animal needs, ecosystems
- **5th grade**: Sunrise, sunset, seasons, food chains, butterfly nutrition, plant structure and growth, animal behavior, monarch migration
- **6th grade**: Weather and water, water conservation, flowers, seeds, and pollinators
- **7th grade**: Milkweed bugs, ecosystems, biomes, food webs, mini habitats, human impact

Related Chariho High School curricula include: Biotechnology, Earth & Space, Physical & Principles of Chemistry, Forestry, Plant Science.

A list of other actions related to these efforts, although not exhaustive, are summarized below:

- CHARIHOtech's Electric car race (see Westerly Sun article)
- The CHS Interact club works with the community to clean our courtyard and also local beaches.
- The CHS Earth Club cleans Switch Road through an Adopt-a-Spot program.

Development and Application of Civic Knowledge and Skills

The District emphasizes outdoor learning as a tool in the following ways:

- Teaching subjects in context: Examples have been discussed on this front throughout our application (i.e. Health, Physical Education, Social Studies, and STEM-related curricula).
- Engaging the community: The District engages the community in countless ways, as described above. We collaborate with other organizations, such as the Chariho Rotary with our bi-annual High School courtyard cleanup. CHARIHOtech recently collaborated with Habitat for Humanity to help build a home for a local family, with a second home planned this year. We also collaborate with the URI Master Gardener program to beautify and maintain our gardens and grounds. Our greenhouse and aquaponics systems at Richmond Elementary School have also been used by Chartwells for school lunch with other fruits and vegetables being donated to RICAN, our local food pantry.
- Developing civic skills: Our Learning Inside Out grant and subsequent District-wide Green Team work has exemplified many civic values, such as compromise, consideration, industry, initiative, integrity, moderation, perseverance, and philanthropy. More specifically, our work to ensure accessibility of our outdoor classrooms, our recent installation of communication boards on all of our playgrounds, and our partnership with

Habitat for Humanity shows Chariho's dedication to equality as well. We also foresee these could be spaces for hosting performing arts events and "Open Thrift" events.

The District encourages students to conduct class or individual, age-appropriate, civic/community engagement projects in many ways. Through our Learning Inside Out grant through RIDE, we are also working with students, staff, and community members to gather environmentally focused data on a variety of fronts (i.e. paper consumption, food waste, gas consumption, electricity usage).

Independent Studies: Students enrolled in the Independent Studies Program explore a subject of their choosing. As part of the program, students are required to complete a consultation with a professional in the community that has expertise and/or experience in their subject matter. Their work often includes the organization and completion of several projects that result in a presentable product. One example of the community outreach that is currently being done by students as a part of this program includes: A student working with a children's community theater in order to explore the connection between performing arts and mental development.

Students have been encouraged to utilize outdoor spaces to bring about awareness and appreciation for our green spaces. One example includes our spring and fall campus clean-ups, where the Chariho Interact Club partners with the Chariho Rotary Club. Together, members engage in a deep cleaning and weeding of various spaces. Then the group plants and maintains native flowers and shrubs. Another example includes our spring chorus concert is held in our courtyard at the high school. In preparation for this concert, the performing arts students pick up garbage and perform basic maintenance of the space to prepare for the event.

The Chariho Alternative Learning Academy (CALA) participates in an Earth Day Cleanup, has built and installed many bat boxes across the District, has a thriving worm farm, and a large Aquaponics system. The Chariho HS Earth Club sponsors events such as clothing drives and "free open thrift" to promote the sharing and reuse of clothing and accessories that might otherwise be sent to the landfill. Additionally, Earth Club members viewed the Netflix series *Kiss the Ground*, which exposes the various ways the soil has been contaminated through modern farming practices. The Earth Club has also sponsored guest speakers, such as a representative from the RI Resource Recovery Corporation to educate students about the recycling process. Our Middle Schools science classes also engage in hands-on learning related to salmon spawning and water testing as well as monarch butterfly tagging. CHARIHOtech's Electrical Technology & Carpentry programs have partnered with Habitat for Humanity as well as local contractors and have built a home for a local family that uses the most up to date energy efficient building technologies to meet or exceed the upcoming 2024 energy code.

For the past five years, the Agriculture program has partnered with Save The Bay (a local environmental advocate group) to promote awareness of our local salt marsh ecosystems. Through this partnership, students learn about our local watersheds, the role of salt marsh ecosystems in the environment as a whole, and utilize the greenhouse to grow a native species of grass that gets transplanted into targeted restoration sites along the coastline.

Chariho Middle School Science teacher, Dan Potts, began the "Kids Grow" garden over 20 years ago. Mr. Potts' middle school students start plants from seed, prepare the half-acre garden, plant the seedlings, tend and water the garden, and harvest the vegetables. Throughout the summer, students, teachers, and families from the community assist in maintaining the garden. Chariho High School teacher and Master Gardener, Betsy Charpentier, also assists in the garden along with her Earth Club students. The Kids Grow garden has been designated an official student garden with The URI Master Gardener Program. All vegetables grown and harvested are donated to the RICAN food pantry and the Chariho Career and Tech Culinary Program. Next year, two of our Middle School teachers and their students will be collaborating with the East Bay Educational Collaborative (EBEC) of Rhode Island, the Woods Hole Oceanographic Institute (WHOI), and Scoutlier to learn about the Ocean Twilight Zone.

Summary Narrative: An Overview of Chariho's Work Encompassing All Three Pillars

Chariho Regional School District is deeply committed to having efficient, healthy, and safe schools. Specific initiatives in the area of fossil fuels, electricity consumption, air quality, and systems reliability have been articulated in a thoughtful 5-year capital plan. Examples of accomplishments in the past 3 years include replacement of hot water heating generation equipment at the middle school and high school, activation of solar power generation equipment to deliver roughly 66% of our electricity needs. We have also completed over $1M in lighting equipment replacement to move to an almost entirely LED-based lighting system. We have both on-site renewable energy generation and purchased renewable energy. We have a nearby solar farm that we have an ownership agreement with and we have on-site generation that covers the needs of our administration building. We have also implemented, where applicable, MERV-13 air filters to improve air quality. Every classroom and office space was also fitted with stand-alone HEPA air filtration units. Chariho has a Health and Wellness team that focuses on our District's health-related initiatives. This team includes educators, students, school committee members, parents, and community members. We also have a Health and Wellness policy that was recently revised to include language surrounding mental health. Chariho High School's ADL students, as part of their science class, work on collecting the recycling from the classrooms in the school. The class works to educate the students in the school about proper recycling by making posters that are hung in the classrooms. This year, students at the Chariho Alternative Learning Academy will gather and measure food waste at CALA lunches and compost the material using worm bins to create vermicast. They then use the vermicast to sell locally and use in the germination and growth of various vegetables and plants in their courtyard and indoor aquaponics system. CHARIHOtech's plant pathway courses are based on knowledge of plant health and nutrition with a focus on agricultural sustainability. Specific topics include soil health, food sustainability and environmental literacy. Here students not only use the greenhouse to explore alternative food production methods such as hydroponics, but the greenhouse is also used to produce native species plants that are used in an ongoing ecosystem restoration project with an outside partner, Save The Bay. Next year, two of our Middle School teachers and their students will be collaborating with the East Bay Educational Collaborative (EBEC) of Rhode Island, the Woods Hole Oceanographic Institute (WHOI), and Scoutlier to learn about the Ocean Twilight Zone (OTZ). Our Career and Technical Center also offers an Electrical and Renewable Energy Pathway. Electrical Technology students learn theory and installation of Solar PV systems and wind turbines as well as Residential building energy codes as well as passive solar design of residential dwelling units. Students from multiple Chariho tech programs participate in the GreenPower USA F24 electric vehicle race sponsored by the RI Computer Museum where students design/engineer, build/fabricate, and race an electric powered race car. Through a recent Learning Inside Out grant, we are adding 12 pollinator pathways at all of our schools as well as 8 outdoor classrooms, including a frog and dragonfly pond.

Photos: Please submit 5-10 high resolution photographs with brief descriptions including who, what, when, and where.

Ashaway Elementary School's 2022 local Oyster Farm field trip LINK
Charlestown Elementary School teacher Ms. Louzon in the outdoor classroom in 2023 LINK
Hope Valley Elementary 2023 Earth Day Cleanup LINK
Richmond Elementary School's 2023 Color Run LINK
Chariho Alternative Learning Academy students building their outdoor classroom in 2023 LINK
Chariho Alternative Learning Academy harvesting lettuce on their Aquaponics System in 2023 LINK
Chariho Alternative Learning Academy Ashaway students' monthly 2023 Audubon field trip LINK
Chariho Regional Middle School's Kids Grow Garden donation to local food pantry in 2021 LINK
Chariho High School Earth Club's 2022 courtyard cleanup LINK
CHARIHOtech's 2023 GreenPower USA F24 electric vehicle race LINK