U.S. DEPARTMENT OF EDUCATION

GreenRibbonSchools

School Nominee Presentation Form

ELIGIBILITY CERTIFICATIONS

School and District's Certifications

The signatures of the school principal and district superintendent (or equivalents) on the next page certify 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 their knowledge. *In no case is a private school required to make any certification with regard to the public school district in which it is located.*

1. The school has some configuration that includes grades early learning to 12.
2. The school has been evaluated and selected from among schools 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.
3. Neither the nominated public school nor its public school district is refusing 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. The Department of Defense Education Activity (DoDEA) is not subject to the jurisdiction of OCR. The nominated DoDEA schools, however, are subject to and in compliance with statutory and regulatory requirements to comply with Federal civil rights laws.
4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public 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.
5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
6. 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 public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

U.S. Department of Education Green Ribbon Schools

Name of Principal: **Mr. Carl Mucken**
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name: **Queen of Peace Catholic School**
(As it should appear on an award)

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

Carl Mucken Date: 2-7-22
Principal's Signature)

ame of Superintendent: Dr. Jeannie Ray Timoney
(Specify: Ms., Miss, Mrs., Dr., appear in official records)

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

Name of Superintendent: **Dr. Jeannie Rya Timoney**
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in official records)

District Name: Archdiocese of Portland in Oregon

U.S. DEPARTMENT OF EDUCATION
GreenRibbonSchools

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.

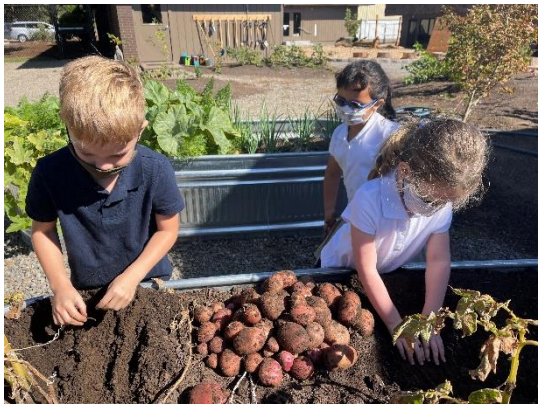
Name of Nominating Agency: **Oregon Department of Education**

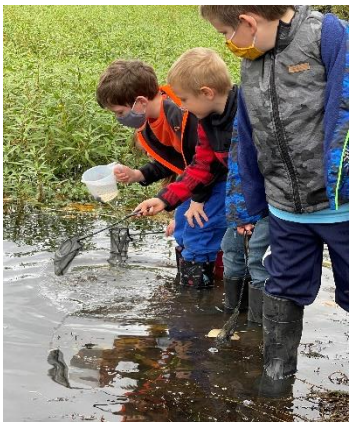
Name of Nominating Authority: Oregon Department of Education. Mr. Michael Lammers
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

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

Date: February 16, 2022 (Nominating Authority's)

Part II: Application Narrative





Queen of Peace Catholic School

An Oregon Department of Education Nominee to the U.S. Department of Education Green Ribbon Schools

U.S. DEPARTMENT OF EDUCATION
GreenRibbonSchools

STATE OF OREGON 1859

Established in 1964, Queen of Peace Catholic School opened the following year with 4 grades in 2 classrooms. One grade was added each succeeding year until 1968 when Queen of Peace became a full, eight-year elementary school. Today, Queen of Peace School offers a comprehensive, Catholic education for children, 4 years old through 5th grade. Our focus is on educating the whole child. We pride ourselves on working in cooperation with parents to help direct children toward the best version of themselves. The molding of tomorrow's best, self-directed, problem solvers, with hearts rooted in Christ, is our goal at Queen of Peace. Our curriculum is purposefully planned and developed to reach all children—spiritually, academically, physically, and socially. Play is also an important part of growing up at Queen of Peace. Our playgrounds and play spaces are designed to be inclusive and full of opportunities to explore. Children at Queen of Peace are taught to follow the Catholic tradition of service to others. Annually we participate in a variety of grade level appropriate service projects. Students volunteer for Marion-Polk Food Share, raise produce in our garden to donate and collect food for the food share's Table of Plenty distribution center on campus. Children collect gifts for Simonka Place, balls and bears for St. Ed's, and money for the children's orphanage in Pimpollo, Mexico are other regular opportunities. Giving to others and being thankful for our many gifts becomes second nature to a Queen of Peace graduates.

In Pillar I, QPS earned their Green School Flag certification through Eco-Schools USA. This pathway, Conducting the Energy Conservation led the staff and students to track how they consume energy. We are currently in the process of upgrading our building to an energy-efficient HAVC system to monitor our power consumption, separate from the church. Through donations, shareholders, and fundraisers, we now have a bus to transport students to field investigations. Our greatest achievement is that our energy action plan not only benefited our school but the students who brought home the learning and taught their families. Our energy

conservation goal reached a broader audience, thus reducing energy usage in the community. We have replaced 30% of our landscaping from turf that needed irrigation to native plants which reduced our water consumption. Our bathroom fixtures have delayed timers on the faucets, water bottle filling stations, and outside drip systems on timers that assisted with water conservation. Our waste reduction is continually expanding. Currently, our recycling center collects common items such as paper, cardboard, batteries, etc, and has for many years. This past year we have partnered with Marion County Solid Waste. Daily, students measure food waste and add their food scraps to the raised garden beds. In the month of January 2022, we placed 136 pounds of solid waste in the gardens adding much needed nutrients to the soil. We have expanded community recycling through TerraCycle. QPS has purchased a wood chipper in which members of the school will reach out to the community in need to chip wood debris in return for our school to use the chips for the gardens and grounds.

Within Pillar 2, wellness and fitness are strengths. Mr. Maza, our lead and IPM coordinator keeps a tight maintenance schedule that includes purchasing non-toxic cleaning solutions, storing chemicals safely, checking ventilation systems, and communicating with our committee. Our physical education program incorporates the Event-Based Play program which targets resourcefulness, creativity, team building, and sharing common space. Students have 30 minutes of physical education and 30 minutes of outdoor play daily. We have a hydroponic indoor garden that supplements student lunches. Our lunch provider is Fresh n' Local, focusing on our sustainability. QPS utilizes staff to collaborate in creating a healthy school environment where students are emotionally and physically ready to be learners. Our school is supported by our behavior specialist. We have adopted the Second Steps curriculum to support students' social and emotional learning with a focus on mindfulness, compassion, empathy, and resiliency practices.

Pillar 3 components have grown from a simple outdoor educational program to a spiraling of skills that include partnerships. All outdoor experiences (Pre-K-5) integrate No Trace principles and combine a STEM component that assists in problem-solving and exploratory learning. We have an environmental education team that constructs lessons to match teaching locations using the Oregon Environmental Literacy standards. As an example, in the third grade unit on salmon, students learn how to read a landscape, use technology to measure water quality, and understand how we have changed the environment for the Chinook salmon. Student discussion includes solutions to increase salmon runs in our state. Classroom teachers are a valuable asset to the program. As noted, all students are involved with STEM environmental projects and lessons, providing real-world applications to experience. Our students formed clubs to assist with this application from the Eco-Schools program. The overall goal is to get students outside with nature. We teach lessons on flower structure, plant reproduction, and insect behavior. Inquiry science will be introduced in this area so that students begin to generate beginning research questions such as what is a bee's favorite color flower? The long-range outcome will be to use sustainable methods to keep the gardens growing and thriving in an environmentally friendly manner. Our gardens provide experiential learning that helps students to build problem-solving, critical thinking, and decision-making skills.

We support national citizen science projects, reporting the pollinators that visit our garden. Lost Ladybug and iNaturalist are two organizations. Our pollinator garden is an all-encompassing STEM teaching tool for ecological and sustainability studies within our community. Our school has been transforming unused, manicured lawn areas into outdoor, natural learning spaces for students while supporting wildlife. We have recently expanded our native pollinator garden and an organic vegetable garden. These spaces are pesticide-free. This requires a substantial amount of service hours by our students, staff, parents, and community. Weeds and invasive plants are removed by hand and disposed of properly. The current enhancement to our pollinator garden included a birdfeeder, a water feature. and now thanks to our partnership with the Oregon Wildlife Foundation, the students are creating a Western Bluebird trail placing supplementary feeders and nesting boxes that will furnish a transitory habitat for feathered friends.

We are a certified Green School, Green Flag level. We have earned this honor through our partnerships with the Oregon Wildlife Foundation, the City of Salem, Marion County Soil and Water, Salem Area Catholic Schools, National Wildlife Foundation, Xerces Society, Whole Kids Foundation, Roots and Shoots Organization, Lettuce Grow Community, Marion County Solid Waste, Captain Planet, the Diack Foundation, Cornell Lab of Ornithology, Vernier Technologies, the National Forest Service at Crater Lake, and TerraCycle. We have two staff members participating in Notre Dame's three-year STEM internship program, Trusty Fellows. Our teachers have been trained by Vernier for research equipment used for classroom and in-field learning. This year we are hosting the VEX Robotics competition for our region in February. In the spring, we will once again open our school to an art and garden gathering for the community. These projects and partnerships provide students with real-world skills as they learn to solve problems as stewards of our planet.

Pillar 1: Reducing Environmental Impact and Costs

Element 1A: Reduced or Eliminated Greenhouse Gas Emissions

Describe the school's plan to manage and reduce energy use, such as an energy master plan, an energy conservation plan, an energy charter, an energy action plan, and/or energy conservation guidelines.

As a school, we decided to earn our pathways badge from Eco-Schools. We wanted our students to create and implement a reduction of the energy plan. The students researched the baseline kilowatt usage. Their goal was to see a reduction over time. They drew up an action plan that incorporated a Watt Watcher team to monitor the daily use of classroom lights. They presented their program to each classroom, then collected daily data for each classroom and common space. The energy team gave feedback to the students. The team decided that they wanted to make classroom accomplishments public. At the end of the month, the team announced classrooms that reached the goal of turning off lights and shutting down computers when not in use. They saw a reduction in kWh by calculating the energy the classrooms would use if they did not turn off equipment. The takeaway from this experience is that our energy action plan not only benefited our school but the students who took home the learning and taught their families. Our energy conservation goal reached a broader audience, thus reducing energy usage in the community.

Describe how, and to what degree, the school can demonstrate a reduction in energy use and/or in greenhouse gas (GHG) emissions from an initial baseline. ***Include data on baseline and current energy usage (kBTU/student/year and/or kBTU/sq.ft./year), percentage reductions, and years.***

We have a unique situation with calculating our energy usage. We share a common system of billing with the church located directly across from the school. It is impossible to distinguish how much energy is saved between buildings. However, Queen of Peace school replaced the lighting prior to 2018. The online information only goes back to 2018, so we do not have that baseline. However, we chose our current lighting system due to the reduction of energy and high efficiency rating. Replacing fluorescent lamps with LEDs saved energy and maintenance costs while increasing light levels in classrooms. We replaced the windows that open in our building during that period of time for efficiency as well as increasing ventilation.

Describe how the school tracks resource use in EPA ENERGY STAR Portfolio Manager or a similar tool and what the results of the tracking have shown. ***Include ENERGY STAR Rating if possible.***

QPS earned their Green School Flag certification through Eco-Schools USA. This pathway, Conducting the Energy Conservation led the staff and students to track how they consume energy. Classrooms take advantage of natural light as well as use outdoor spaces when the weather allows. We use energy-saving power strips. Smartboards replaced televisions in most classrooms. The exception is classrooms that have flat, LCD screens. Our inside hydroponic garden is on timers to regulate electrical usage. Our school uses the kitchen area in the church. The recent remodeling (2019) replaced appliances that are more energy efficient.

Describe how/whether the school's energy is obtained from on-site renewable energy generation, purchased renewable energy, or other renewable/green energy sources. ***Include specific energy sources and percentages if possible.***

Our energy provider is Portland General Electric. Their renewable energy is 9% from wind turbines and 14% from hydropower sources. We also noted that PGE's goal is to have net zero emissions by 2040.

Describe how/whether the school has constructed or renovated portions of the school building(s) in the past 10 years that meet "green" building standards or have focused on improved energy conservation.

QPS is currently in the process of moving our large maintenance storage building and kiln. We are reusing the siding on the covered area and are committed to recycling and repurposing as much as possible from all demolition. We will use the Minto Island facility instead of the landfill for concrete reuse. We are abating asbestos when we could choose to cover it due to hazardous materials concerns that could arise in the future.

Are there any other actions your school has taken (not covered above) to support Element 1A?

QPS is beginning an expansion of two new additional wings of classroom space. Currently, construction is scheduled to begin in late spring, 2022. We are considering all the green options available as we begin this new venture of expansion. We have decided to add a new HVAC system for the complete building. This system will help us to monitor our energy use in the future.

Element 1B: Improved Water Quality, Efficiency, and Conservation

Pillar 1: Reducing Environmental Impact and Costs

Describe how, and to what degree, the school can demonstrate a reduction in the total water consumption from an initial baseline. ***Include data on baseline and current water usage (gallons per occupant), percentage reductions, and years.***

Our calculations for water consumption are from our baseline data (Dec. 2020) is 12 units. Currently we consumed 33 units (Dec. 2021). Our unique situation is that our school and the church (including the grounds) are connected using the same meter. The irrigation systems are on timers, which does help with water conservation. Another variable we need to consider is the time during remote learning due to Covid. During this time school and church activities were done remotely, so the water usage dropped. The last variable we considered was the extreme heat our region faced during the summer of 2021. We had planted multiple native plants that required temporary irrigation. This of course showed a spike in our water consumption. Our tracking system is our utility bills from the City of Salem. Even though our figures show an increase, we know that our second grade Water Team at QPS reminds and teaches others how do conserve water on campus and at home. We have replaced 30% of our landscaping from turf that needed irrigation to native plants. We have funding for a new irrigation system for our garden that will be in place this summer.

Describe school's water-conserving efforts, including fixtures and appliances (e.g., waterless urinals, dual flush toilets, etc.)

QPS bathroom faucets have time delayed function. This water saver faucet automatically opens for 4-6 seconds. Then the system shuts off the flow, saving water. We remodeled our PreK and kindergarten room with new two new toilets that use less water. We have water bottle filling stations that will fill to the level of your container, then automatically shut off when the container is removed. These stations encourage the use of reusable containers removing plastic water bottles from our waste stream. Outside we conserve water by using drip systems on timers. Our drip irrigation systems are efficient, allowing plants to use the water applied, reducing runoff and evaporation.

Describe the school's efforts and results for developing water-efficient and/or regionally appropriate plant selection and landscaping and the use of alternative water sources (e.g., non-potable water) for any irrigation needs.

Our school has relandscaped many of our outdoor areas to reduce the use of water. This year we received a grant along with community resource providers to support a native pollinator garden. Due to the new plantings this spring (Ex: flowering currant, vine maple, evergreen huckleberry, snowy milkweed), we were required to keep these plants watered so that a good root system would form. These plants enticed our native pollinators while reducing water usage due to the small volume of water required during the summer months. Our latest purchase is two Madrone trees. In the spring the flowers will attract pollinators and birds will eat the berries. These trees will need no irrigation after they are established.

Describe the school's efforts and results in reducing storm water runoff from the school site and/or reducing impermeable surfaces on school grounds.

One of our pollinator gardens doubles as a rain garden in design. We have redirected the water from our main building to flow into our dry creek bed in the landscape. This feature helps redirect some stormwater runoff. Gravel walkways were purposely constructed to assist with water runoff. This increases permeability allowing rainwater to trickle between the gravel allowing soil seepage. We have mindfully planned to increase our urban tree canopy on campus. In the interior of our playground, we have planted ten maple trees to provide cooler spaces and protection from UV rays. This grove captures rainwater and reduces erosion on the playing field and the culvert below the field.

Describe how the school ensures that all school water sources are protected from potential contaminants including lead.

Each year we have mandatory water testing as required by the Oregon Department of Education. We have water bottle fill stations. The filter is certified to NSF 42 and 53 for lead, Class 1 particulate, chlorine, taste, and odor reduction. Our school grounds do not use herbicides or synthetic fertilizers that can disrupt groundwater systems.

Describe the school's planning and implementation to develop school grounds for ecologically beneficial uses such as rain gardens, wildlife and native plant habitat, and outdoor classrooms.
Include percentage of school grounds for school garden, xeriscaping, etc.

Our campus has at least 30% dedicated grounds that support ecological landscape practices. We secured a CLEAR grant from Marion County Soil and Water. Our school and stakeholders planted a native plant garden

Pillar 1: Reducing Environmental Impact and Costs
that provided nectar and pollen sources, improving the habitat for wildlife. This garden space has assisted with a reduction of stormwater runoff by directing our main building's roof water through one part of the garden. To suppress weeds and to use for fertilizer in the garden, we shred cardboard and paper from recycling bins. Mixing the paper products with compost sequestered water keeps the soil moist for a longer period of time. This reduced the amount of water needed in the summer months for plant survival. Whole Foods supported our effort to create an outdoor garden and learning space. All grades spent time monitoring, collecting crop data, and caring for the space, (composting. soil preparation, planting, watering, weeding, and pest management). Our overall goal is to get our students outside learning. Storytime and reading outdoors encouraged students to explore plant growth and wildlife. We have a water feature and a birdbath to encourage local wildlife to visit. We are a certified schoolyard habitat through the National Wildlife Federation. https://www.nwf.org/EcoSchoolsPortal/Home/Dashboard?schoolId=6659
Are there any other actions your school has taken (not covered above) to support Element 1B?
Element 1C: Reduced Waste Production
Describe how, and to what degree, the school implements a school-wide plan of waste reduction, recycling, and/or composting in order to divert significant solid waste from the landfill or incineration. *Include data on baseline and current recycling and composting rates (e.g., cubic yards per year, monthly waste generated per person, monthly recycling/composting rates), percentage reductions, and years.*
Queen of Peace School is in a unique partnership with the Queen of Peace Catholic Church. Reducing waste programs happen in both locations because we share our disposal services. Our data showed that we create two cubic yards of trash. We average one cubic yard of recycling and one cubic yard of yard debris weekly. We have a separate collection container for cardboard in which we generate one cubic yard weekly. From these figures, our school decided to incorporate new programs that reduced our solid waste. Every classroom has a small bin in which staff and students place food waste. Daily, students weigh the amount of compost collected from their classroom and log the amount on their classroom datasheet. Food waste is dug into their garden space, feeding the worms and adding nutrients to the soil. Just for the month of December 2021 our students and staff diverted 87 pounds of food waste from the incinerator. We received a waste reduction grant from Marion County. We have expanded our recycling center to collect materials from the community that would have ended in a landfill. Items such as plastic lids, old crayons, and used glue tubes are only a few items. Through this grant, we are able to reach out to the community to assist with fallen tree limbs. QPS will begin chipping community tree waste. We will use the wood chips for our multiple garden spaces. This new program will be up and running within the coming months.
Describe how, and to what degree, the school uses office/classroom paper content that is post-consumer material, fiber from forests certified as responsibly managed and/or chlorine-free.
Our printer paper is purchased through parents in our community. We encourage purchasing products that have post-consumer material and are forest certified for responsible management. Up and Up is printer paper is made from 100% post-consumer recycled fiber for sustainability. Another product is Pen Gear. This product is made from sustainable forestry initiative certified sourcing (www.sfiprogram.org). These products are the most commonly purchased by our community.
Describe the school's efforts in storing/maintaining an inventory of potentially hazardous materials used in various programs, if any (e.g., science, art, maintenance, cleaning, pest control, etc.).
Our potentially hazardous materials that are associated with cleaning are in a locked custodial room. Science materials were purchased kits in plastic tubs. The tubs are stored in a locked closet whereas supplies are only available to staff. Our art teacher's classroom is on a cart. Her supplies are located in an outside locked shed away from the building. Maintenance materials that would be classified as hazardous materials such as gasoline are store in an outdoor locked shed. Inside the shed we have a locking cabinet that is in compliance with Oregon State code for hazardous materials storage.
Describe how, and to what degree, the school has reduced/eliminated hazardous waste generation over a measureable baseline. *Include specific waste such as batteries and CFL light bulbs.*
One of our largest projects was to replace the fluorescent bulb ballasts throughout the school. These bulbs were considered hazardous materials. We have replaced the units with LED lighting. We have upgraded the flooring in the hallways and classrooms. The old flooring required the custodial staff to use a chemical stripper and wax. These chemicals were hazardous and required masks and gloves to assure safety. The new flooring requires

daily mopping with Cranberry Ice. All chemical substances in this product are included on or exempted from listing on the TSCA Inventory of Chemical Substances. Batteries are placed in our recycling area in plastic bags in a non-conductive storage container. They are stored away from extreme heat and flammable materials. The batteries are then placed in a special storage container in the maintenance office, then transported to D&O Garbage Service located a few miles from our building.

Describe the school's green cleaning custodial practices, including green cleaning products, services, advanced equipment, and/or policies.

Garbage and recycling are removed daily to avoid any overflow in the collection areas. Bathrooms are mopped and sanitized daily and more if needed. The routines follow Covid safety protocols by the CDC of when to clean and when to disinfect. The floors throughout the school are swept and mopped daily. Spills are immediately cleaned to avoid accidental falls. No pesticides are used on our school grounds. Weeds on the school grounds are pulled by hand. Weeds that cannot be pulled by hand are torched or a mixture of vinegar and soap used for control. Those methods are applied when students are not in session.

Describe how the school's purchasing practices specifically promote environmentally preferable purchasing/green purchasing, as applicable, for consumable products, furniture, and equipment for administration, instruction, and/or maintenance.

When purchasing educational toys or furniture, we avoid plastic when possible. For instance, we purchased metal pails for the water feature play area knowing that plastic would not hold up over an extended period of time. We purchased outdoor picnic tables that were made from recycled plastic. Our staff room has silverware available and plates to avoid plastic waste entering the landfill. We purchase organic disinfectants avoiding chemical cleaners like bleach. From our school supply list, we requested that parents purchase Ticonderoga pencils because they are produced with premium wood from certified sustainable wood sources, and Elmer's glue sticks are recycled after the removal of glue particles.

Are there any other actions your school has taken (not covered above) to support Element 1C?

Element 1D: Use of Alternative Transportation

Describe how/whether the school is reducing its transportation energy use through means such as encouraging a) walking or bicycling to and from school, b) expanded school bus use, or c) EV charging stations. *Include data and results of the efforts.*

We have purchased a bus so that multiple vehicles do not need to transport students on field trips or staff in-services. This year alone there have been 14 trips. Each trip would have needed at least five vehicles in past years. Now, we need one. This is an 80% reduction in CO2 emissions.

Describe the school's implementation of the following green transportation practices: a) efficient carpooling; b) no-idling loading areas; c) safe routes to school; and/or d) expanded bicycle storage.

Our E-STEM building provides investigative and research opportunities for our K-5 students that are off-campus. Each grade level is scheduled for four expeditions yearly. We have now secured our own bus that will transport the students instead of having five to seven vehicles drive to the location. Our parents have time cards to pick up students before and after school. If they choose to wait in the parking lot, they must secure their vehicle and walk to the front of the school to pick up their student. This ensures that vehicles are not idling. We encourage students that live close by to walk or ride their scooters or bicycles to school. These forms of transportation are parked outside under a covered walkway to keep them dry and secure.

Describe how/whether the school has implementation practices that focus on transportation efficiency, reduced environmental impact, or other creative ways of promoting alternative transportation. *Include data and summary results of the efforts.*

We are a private school that services students from various counties. This requires creative carpooling systems. We have approximately 12-15 families that share carpooling responsibilities. Our school provides a pickup location (bus stop) for students that attend our feeder school, Blanchet. We have 15-20 families participating in this program. A family who switches from 20-mile commuting alone by car to existing bus transportation can reduce their annual CO2 emissions by 20 pounds per day, or more than 48,000 pounds in a year. Our transportation services reduce fuel dependency and reduce traffic congestion in our city.

Are there any other actions your school has taken (not covered above) to support Element 1D?

Pillar 1: Reducing Environmental Impact and Costs

Pillar 2: Improving the Health and Wellness of Students and Staff

Element 2A: Integrated School Environmental Health Program

Describe the efforts in implementing the school's or the school division's Integrated Pest Management (IPM) plan in the school, including: year of implementation, program responsibility/oversight, pest monitoring process, record keeping, notification practices, and efforts to reduce pesticide use.

The lead maintenance personal, Angel Maza is our IPM coordinator for the school and church property. He has on-going IPM certification from Oregon State University. This certification satisfies the ORS 634.720 requirement for IPM coordinators. No pesticides are used at our school building. Sealing cracks and openings, fixing leaks, mopping floors, and emptying all trash and recycling bins are preventive measures for pest control. Mr. Maza shares that the best course of action if pests arrive is to use lower risk strategies to reduce or eliminate the issue. If an outbreak occurs, he is trained to use the appropriate chemicals and applications. Prior to any application, Mr. Maza reports to the leadership team to share any implications an application might have as far as health and safety. Mr. Maza keeps records of any reported concerns or applications.

Describe how, and to what degree, the school's efforts and practices have minimized/eliminated student and staff exposure to the potentially hazardous contaminants including: cigarette smoke, mercury, carbon monoxide, fuel burning combustion appliances, airborne contaminate sources, asbestos, radon, chromated copper arsenate, and lead.

Queen of Peace School has spaces tested yearly for exposed asbestos. When our spaces are renovated, we have opted to abate the asbestos present, rather than just covering it up. We had our water fountains tested for lead and other contaminants in 2020. We also provide bottled water in our staff room and in our early childhood spaces for staff and children. Cigarette smoking is not allowed anywhere on the school or parish property. Every classroom and workspace in the school building has also been outfitted with HEPA filters that cycle the air 4 times every hour, in our 1000sq ft classrooms (more in the smaller rooms).

Describe the plan and timetable for inspecting and maintaining the school's ventilation systems and all unit ventilators and for ensuring that the systems are clean and operating properly.

The school's HEPA filters are cleaned or changed three times a year. The filters where the heating system pulls fresh air from outside are changed yearly. The school maintenance staff is in charge of this cycle.

Describe how, and to what degree, the school ensures that all classrooms and other spaces are adequately ventilated with outside air, consistent with state or local codes, or national ventilation recommendations and standards.

Every classroom has fresh air intake when the heat is running. The air goes through filters before entering the classroom. Each room is also equipped with two fans in the windows. One fan brings fresh air in and another exhausts air. The fresh air fan, runs when the heat is not on. The exhaust fan runs whenever students are present.

Describe how the school has taken specific and comprehensive actions to prevent exposure to asthma triggers in and around the school.

A high standard of air quality is important for the health of everyone in our building. We have an air purification system placed in each classroom, the office, and the staff room to remove particles that may cause health concerns for some. The systems are monitored as per manufacture recommendations. Our building does not have perfumed air purifying plug-in systems. Our cleaning products do not contain scented chemicals. Floors are vacuumed, swept, and mopped daily or more often when necessary to reduce allergy triggering particles. Paper towels are used to dry hands instead of air blowing systems. We monitored outdoor air quality and adjust outside activities especially when we were surrounded by wildfire smoke this past year.

Describe how the school has taken specific steps to protect indoor environmental quality, such as implementing EPA "IAQ Tools for Schools" and/or conducting other periodic, comprehensive inspections of the school facility to: a) identify environmental health and safety issues; and b) take corrective actions.

Our school inspects and maintains the building's ventilation system and all unit ventilators to ensure they are clean and operating properly. We do preventive maintenance on the equipment every four months with our trained in-house HVAC team. Each piece of equipment has a task list, including checking, cleaning, lubing, and

Pillar 2: Improving the Health and Wellness of Students and Staff
filter changes. The maintenance staff ensures that all classrooms, including the HVAC portable building are adequately ventilated with outside air, consistent with state or local codes, or national ventilation standards. Our main building roof is fairly new but inspections and evidence of water leakage, stains, mold growth or odor are fixed or replaced promptly. We maintain documentation of the tasks and provide staff with easy communication process of work orders that are viewed daily.
Describe the school maintenance and implementation of an up-to-date plan and its careful enforcement in managing and controlling student and staff exposure to chemicals that are used in the school (e.g., pesticides, cleaning supplies, fuel, paint).
In our building, the majority of chemical cleaning is done while the staff and students are not in the building. Bathroom cleaning needs to be completed during the student contact day. To minimize chemical exposure, cleaning happens when most students and staff are in their classrooms. Dish soap and sanitizing and disinfecting bleach solutions are the only cleaning supplies utilized. All cleaners are located in a locked closet area. Hazardous materials such as gasoline, oil, and paint are placed in a locked cabinet in an outside locked shed away from the school structure. These procedures are reviewed by maintenance personnel, administrators, and staff members on an ongoing basis.
Describe the school's routine inspections and prompt action to: a) control moisture from leaks, condensation, and excess moisture; and b) clean up mold or remove moldy materials promptly when found.
Maintenance staff perform daily inspections on water faucets and toilets to ensure leaks are not causing damage to the building. QPS does not utilize specifically the Tools for Schools program, but does implement common strategies that align with this program. This ensures that a proper investigation can take place to allow every concern to be addressed. Our maintenance lead, Angel Maza is an accredited PRP Renovator (R-I-41R002-20-00986) for Lead Safety for renovation, repair, and painting. His certification brings expertise in renovation that promotes environmentally sound practices. Having this certification ensures that any concerns be evaluated quickly and any problem to be addressed promptly.
Are there any other actions your school has taken (not covered above) to support Element 2A?
Queen of Peace recently (October, 2021) replaced the glass panels of the windows in our entryway to allow advanced airflow. These windows are solar bronze, double pane, aluminum frames that open at the top to increase air circulation in our building.
Element 2B: Nutrition and Fitness
Describe the school's implementation of the following programs (or programs with similar intent) and results and outcomes related to the targeted efforts.
Nutrition and fitness recognition programs (such as USDA's HealthierUS School Challenge and the Governor's Nutrition and Physical Activity Awards Program)
Queen of Peace physical education program aims to meet all student learning abilities at age-appropriate levels. Our PreK students begin with physical skills exploration. This includes Event-Based Play program which targets resourcefulness, creativity, team building, and sharing common space. Our program includes investigations, problem-solving, and play building up to the context for learning by providing opportunities to connect knowledge and practice. This program scaffolds children's learning through recall experiences building on cultural and societal norms. From PreK through grade five, the physical education program is on skill-building. This begins with building knowledge as each student moves towards mastery of the skills being taught.
A "farm to school" program to use local, fresh food and/or a food purchasing programs identified as "environmentally preferable"
Our school lunch provider is Fresh n' Local. We chose this provider because they work with local farms, local producers and acquire locally sourced ingredients to make our meals. From the apples, pears, and blueberries made in Oregon and Washington to the milk and cheese produced in farms surrounding our counties, Fresh n' Local is committed to continually finding items made in the heart of our valley.
On-site garden that may supply food for students in the cafeteria or to the community
We have multiple gardens on campus. Inside, we have a hydroponic garden (Lettuce Grow) that supplements student lunches. Outside we have a pollinator garden and ten raised bed garden spaces. Next to the raised beds is an in-ground garden for raising squash and a side garden filled with raspberry plants. Our school also has multiple blueberry bushes and three fruit trees. These gardens provide food for student snacks. During the

Pillar 2: Improving the Health and Wellness of Students and Staff
summer months, our produce is harvested and donated to our food share pantry, the Table of Plenty. Last year we donated 283 pounds of produce to the community.
UV protection and skin health promotion, such as the EPA's "Sunwise" Program
The environmental education team uses components of the Sunwise program along with Leave No Trace principles to teach students about protecting their bodies from UV rays. Our students spend many hours each week outside. Both programs include student-friendly tips on how you prepare for any outings. Our environmental education team teaches researching skills to grade 5 students at Mt. Hood. By grade 5, the students know that snow/ice and altitude intensify the effects of UV rays.
Describe the school's practice related to physical education and whether they meet or exceed state guidelines and minimum requirements.
Queen of Peace follows the Archdiocesan curriculum standards for physical education. The National Association for Sport and Physical Education (NASPE) guidelines recommends at least 60 minutes daily of physical activity. Our school provides 30 minutes of physical education and 60 minutes of outdoor physical activity daily. Our physical education teacher, Mark Martinmaas teaches students using mind, body, and spirit. These learning domains cover a variety of learning modalities that students possess within themselves. For example, visual learners see the sport skills being performed by the teacher and other classmates. They start to figure out how they too can perform the skill, thus attaining skill acquisition. Explaining the skill keys required to complete a sport skill helps the who learn best through hearing (audible learners) how something works. Then there are the kinesthetic learners who use their bodies in movement to feel how the still keys help make the skill progress more smoothly by putting into motion the skill key applications into the skill they are performing. Through these examples, our students exceed the state guidelines for minimum daily requirements of daily physical activity.
Describe the type of outdoor education, exercise, and recreation activities available to students.
Our students have physical education classes each day for 30 minutes. They have three outdoor recess breaks daily for a total of 60 minutes daily. Each classroom has environmental education experiences that are held off-campus. The students experience outdoor off-campus learning three times each school year with experienced environmental educators. It is important to our community to involve families in outdoor experiences as well. We provide service hours to parents that guide and co-teach small groups of students during field studies. After-hours fitness and recreational activities encourage families to explore the outdoors together. Last year we created a program, One Hundred Hours Outdoors. This was a badging program in which students earned a digital badge for every ten hours they spent outside. The environmental education team created a set of interactive outdoor experiences that students were able to access during the lockdowns of Covid. Students were able to experience virtually the location. We encouraged families to take their children to these locations and involve them in the activities they viewed from home. This provided suggestions to take students with safety protocol in place. This fall we posted on social media about experiences that would take students outdoors on the weekend. One example is Owl Prowl at Minto-Brown Island Park. Students participated in an owl pellet dissection followed by a supervised walk in the full moonlight listening and watching for our resident owls, egov.cityofsalem.net/ParksRec/Activity.
Describe the school's efforts and progress to improve <u>staff</u> wellness in the areas of nutrition and increased physical activity.
We have a wellness coordinator where staff members keep track of their fitness goals and nutrition. For instance, one staff member has used incentives like a free Fitbit to monitor her activity levels. The program also has raffles and other prizes for completing challenges or programs. One example is a program called Transform for people who are at risk for diabetes. This staff member received a free Fitbit scale and free health coaching along with a variety of other training to improve her health. Fitness programs are suitable for the need of the person. Staff has access to the student lunches prepared by Fresh and Local. This choice provides a balanced, healthy meal choice.
Are there any other actions your school has taken (not covered above) to support Element 2B?
This spring Queen of Peace will hold its yearly auction. There is a category for funding, principal's pick, where the community assists with funding for a project. This year, our principal Carl Mucken has chosen to install a walking/running track around the perimeter of the fields. This will increase accessibility to staff that chooses to walk during their lunch break.
Element 2C: Coordinated School Health, Mental Health, School Climate, and Safety

Pillar 2: Improving the Health and Wellness of Students and Staff

Describe how the school is implementing a range of partnership programs with the local health department, businesses, postsecondary institutions, and other members of the community to improve students' and school staff members' nutrition, fitness, and safety.

We are partners with Multnomah ESD and with Blanchet School that provide support for health professional training and services for our students. We have a local nurse practitioner, Naomi Shantz that provides support for staff and students with medical concerns or needs. We have partnered with Whole Foods to increase student and staff nutrition through indoor and outdoor gardens.

Describe the school's use of a Coordinated School Health approach or other health-related initiatives to address overall school health issues. This could include comprehensive wellness policies and/or a health and wellness committee/team.

Queen of Peace school utilizes staff to collaborate in creating a healthy school environment where students are emotionally and physically ready to be learners. Our health program works on the premises that staff coordinates with decision-making to identify students and families who may need additional academic, social-emotional or health support. These services include identifying and preventing health problems or injuries to ensure needed care for students. Our health standards-based curriculum addresses and integrates health that includes a variety of physical, social, emotional, and other components focused on reducing health-risk behaviors and promoting healthy decision-making. Our health education curricula, Second Steps emphasize a skills-based approach to help students practice and advocate for their health needs, The topics include personal safety, safe touch, problem-solving, empathy, anger management, and preventing bullying at developmentally appropriate ages.

Describe how the school addresses school health professional services for student needs, including the presence of a full-time school nurse in the school and/or a school-based health center.

QPS has a school-based health center approach to health care for students. Our fifth-grade teacher is a certified first aid trainer. We currently have 24 staff members trained in CPR (first aid) and 14 staff members trained in medication administration. Our behavior support specialist supports referrals for health assessments. The immunization status reports are submitted to the State, Oregon Health Authority division each January. We are partners with Multnomah ESD for referral care for students with special needs.

Describe how the school addresses and implements comprehensive programs to support student mental health and positive school climate (e.g., anti-bullying programs, peer counseling, etc.).

Queen of Peace Catholic School has a comprehensive approach to developing the whole student and the school atmosphere. At Queen of Peace we value kindness, safety, respect and responsibility. Every class has a morning meeting which includes the students reciting a prayer for compassion for themselves and their classmates, a teacher check in and a daily schedule reminder.

At the beginning of the school year each class was visited by our Behavioral Support Coordinator Mrs. Jones. Mrs. Jones introduced our school-wide expectations for problem solving based in the Second Step and Choose Love SEL programs. Each classroom received a "Calm Kit" which includes calming and breathing techniques, sensory tools and writing/drawing tools. The students are encouraged to self-regulate their emotions and use problem solving by using their words to solve the problem, trying to move away or give space/time to process and finally, ask a teacher for help if the problem continues. At recess the students are encouraged to use the buddy bench if they need to work through a problem with a friend or to use a quiet bench if they need to take a break to process emotions.

As a whole school, Queen of Peace has begun using the Discipline of Virtue resource. The teachers use the cue cards in class while the school as a whole focus on a different virtue each month. Teachers and classmates will nominate a student in each class that has represented the virtue well during the month. This student gets to have lunch with the principal, Mr. Mucken along with the other students who have been nominated. Queen of Peace has come along other sister schools in the area to support and practice our catholic virtues by getting donations for teacher wish lists for classes in need, and for students who may need coats, blankets or books. Each week during Mass the students are encouraged to bring food donations for the Table of Plenty, which is a food share the church runs and supports.

Our Behavioral Support Coordinator, Mrs. Jones checks in with each classroom weekly to offer support to students and teachers. This includes, offering students individual or group support with topics such as, making friends, emotional regulation, impulse control and problem solving. Mrs. Jones teaches an SEL lesson to each

Pillar 2: Improving the Health and Wellness of Students and Staff

class monthly focusing on the virtue for the month while using methods and resources from the Choose Love SEL curriculum.

Overall, as a whole school the teachers and staff work to celebrate the good in each child and support them towards growing into positive problem solvers and individuals who have compassion for themselves and others.

Are there any other actions your school has taken (not covered above) to support Element IIC?

Jean Craig is our certified First Aide trainer. Her fifth grade students each spring earn a first aid card that includes CPR training. An example of one of our updated procedures of regular hand washing/ hand sanitizing implementation practices have shown fewer staff and student absenteeism from previous years. We are enrolled as a Laudato Si' School. Whereas Pope Francis calls for a new and universal commitment to "strengthen the conviction that we are one single human family." As such, his is an appeal for a global obligation to integral ecology and compelling responsibility for our home, the earth, and for each other. Our students and staff are following the nine lines of actions, https://laudatosiactionplatform.org/

Pillar 3: Providing Effective Environmental and Sustainability Education

Element 3A: Shared Responsibility for Environmental Learning

Describe the school's focus on environmental and sustainability literacy specifically reflected through schoolwide practices and programs, lesson planning, and/or school curriculum documents.

Students are outdoors. They have three recesses daily giving them opportunities to explore the Queen of Peace stream, the vegetable and fruit garden, birdwatching, imaginative and unstructured play. Our school is practicing E-STEM ideologies. We have two staff members that have been accepted into a three-year STEM integrated learning professional development program, Trustey Fellows out of Notre Dame. Our art and music curriculum integrate upon the environmental experiences of the students. We believe all our curriculum ties in with something the students have learned in the natural world. These are our sustainable practices. Each year, we introduce one new No Trace principle while practicing the previous year learning. All outdoor experiences (Pre-K-5) end integrating the No Trace principle of Trash the Trash, whereas students pick up litter, leaving the area better than it was when they arrived. All grade level outdoor education experiences combine a STEM component that assists in problem-solving and exploratory learning.

Pre-K	Environmental explorations happen on campus. Students explore plant growth, decomposition of natural materials, bird and insect observations, and explore stream flow. Leave No Trace principles of disposing of waste properly and picking up small pieces of food so that wildlife can stay safe are part of a daily routine.
Kindergarten	Kindergarteners explore the seasons through tree growth and change. They learn about the natural world through guided activities in their local parks. The focus tree is our protected White oak. Raccoons, squirrels, and Acorn woodpeckers are the wildlife students learn about. The students visit local ponds, streams, and the Willamette River as they compare bodies of water. Students practice the Leave No Trace principles of disposing of waste properly and be considerate of others.
First	Pond investigations and stream flow are included in three site locations. Students are introduced to pond habitats as they learn about the plants and animals that thrive in these locations. First graders work with Oregon Fish and Wildlife as they raise Rainbow trout in their classroom. They release their fry at Huddleston Park Pond after determining whether the habitat and water temperature is suitable for their fish to thrive. Their final destination, Silver Falls State Park, students construct rafts made from natural materials. They learn about velocity as they test their designs. The students practice Leave No Trace skills of respecting wildlife.
Second	How does water flow? What causes erosion? Second grade students investigate bodies of water. Grade 3 students learn the importance of forest as it pertains to water quality. They investigate forest habitats and how they connect to our watershed. In the fall, they will learn about mushrooms and their role within a forest. Their focus animals are the crayfish and beavers as students learn about their natural

Pillar 3: Providing Effective Environmental and Sustainability Education

	habitats. Second graders practice Leave No Trace skills by leaving behind what they find in nature for others to enjoy.
Third	Grade 3 students learn the importance of the forest as it pertains to water quality. Students follow the life history of the Chinook salmon. In the fall they observe salmon spawning ground and collect macroinvertebrate data. Students raise salmon in their classroom using the STEP program. They test water quality at the releasing site to determine if it's a suitable area to release their salmon. Students understand the factors in measuring water quality (temperature, pH, dissolved oxygen, turbidity and macroinvertebrates}. The students practice Leave No Trace skills of *Be Careful with Fire*, and how fire affects salmon habitat.
Fourth	Students focus on fresh water streams to the tidepools along the Oregon coast. Students will continue their third grade study of water quality and include salinity. At the tidepools, students measure diversity of the area along with eroding factors along the shoreline. Students study Grey whales and learn how to protect the ocean habitat. They partner with SOLVE beach cleanups. The students practice Leave No Trace skills of *Choose the Right Path.*
Fifth	Students at the fifth grade take on real research as they travel to Mt. Hood. The investigation begins with locating Whitebark pine trees, a threatened species while learning about the animals that need them for survival. Students learn about triangulation to understand how a Clark's nutcracker finds food in snowdrifts. On show shoes, they identify snowflake crystals and measure snow depth while using a probe. They dive deeper into snow layer data collection as they identify snow layer and accumulation. The driving question is, Does the amount of snowpack increase budburst of the mountain hemlock? Students are partnering with Crater Lake National Forest to compare results on this keystone tree. This year, we will partner with Laurel Zaima out of Columbia University to submit snow samples for microplastics. The students practice Leave No Trace skills of *Know Before You Go* as they prepare for all kinds of weather related events that could happen on Mt. Hood.

Describe how, and to what degree, the school has integrated environmental and sustainability concepts throughout its instructional program and across subject areas and grade levels.

Queen of Peace School integrates environmental education into all grade level science instruction. Our school is implementing a new curriculum this year called Amplify Science that is aligned with NGSS. It includes vigorous instruction and assessment in areas such as Needs of Plants and Animals (Kinder-including habitat preservation), Changing Landforms (2nd grade-erosion, responsible land management, and watershed), Environments and Survival (3rd grade), Energy Conversions (4th grade-including energy sources) and erosion topics, Earth Systems (5th grade, examining water shortage and the treatment of wastewater) and Ecosystem Restoration (5th grade-including animal and habitat conservation).

Each grade level has a key environmental word as their focus while accomplishing the pathways of the Eco-Schools program. Our school brainstormed ideas to capture and create a sustainable code that would follow students through the grades. Each grade level, K-5, was presented with a focus word. Then each classroom designed a representation for their grade, incorporating the Eco-Word with an environmental theme. For instance, the word *protect* is our 4th grade Eco-Code word. Fourth grade students are reminded of how the Eco-Code word can be included in the subject they are learning. Using the single word concept, student curriculum evolved through questioning such as,

How do we protect waterways from plastic waste?
How do we increase and protect our Western bluebird population?
How do we decrease of use of natural resources?
How might we model our garden space to mimic methods used by native people?
What data have you collected supports areas of spawning for Chinook salmon?
Name the geographical regions and waterways within our given exploration or research areas.

Pillar 3: Providing Effective Environmental and Sustainability Education

What occupations might interest you through your investigation?
These questions are addressed through grade level, year-long environmental experiences and investigations. Please view the attached grade level posters. These concepts are reviewed during field experiences as a reminder of the overall environmental theme for each particular grade level.
Eco- Schools https://www.nwf.org/EcoSchoolsPortal/Home/Dashboard?schoolId=6659

Describe how the school's assessment materials across subject areas and grade levels have clear expectations and target proficiency levels for environmental and sustainability concepts. *Include quantifiable measures, indicators, or benchmarks of progress toward environmental literacy and/or environmental proficiency.*

The environmental education team constructs lessons to match teaching locations using the Oregon Environmental Literacy standards,
https://oelp.oregonstate.edu/sites/oelp/files/GFF_Integration%20Booklet_final_paginated.pdf
For example, the third grade standard is for students to understand there are relationships between plants, animals, humans and their environment within their region, and are beginning to identify how these have changed over time. Through our third grade unit on salmon the students learn how to read a landscape, use technology to measure water quality, and to understand how we have changed the environment for the Chinook salmon. Student discussion includes solutions to increase salmon runs in our state. Queen of Peace School follows the Subject and Grade-level standards of the Archdiocese of Portland, which includes the standards from NGSS, NCTM and Common Core ELA. These standards are the focus of learning in all subject areas that include environmental education at each grade level and teachers use Backwards Design to create units of study so that the standards are kept at the forefront. We use Renaissance STAR assessments for reading, math and early literature in Kindergarten-5th Grade to assess Math and ELA standards. These assessments are given 4 times a year to determine student progress towards meeting grade-level standards. These assessments also pinpoint areas of needed growth for individual students and group deficiencies. Students are considered to be showing proficient progress when their SGP (Student Growth Percentile) is 60 or higher. I share these assessments with you because we have seen academic growth over the past years. Those gains coincide with the addition of environmental and sustainable outdoor education reinforcing classroom lessons. Science standards are assessed using Amplify Science Assessments in Kindergarten-5th Grade. Within the Amplify program, the environmental education teams weave field lessons that support student learning in a nonconventional teaching classroom. Assessments for all subject grade-level standards also include quizzes, class work, discussion, presentations and projects. Teachers measure this learning via authentic formative assessment though project-based learning (pollinator projects, Project Feederwatch, salmon and trout releases, and food share programs) and peer feedback in weekly class meetings.
Classroom teachers are shadowing the environmental education staff to assist with lesson design and assessment as students return from the field. During weekly meetings, staff reviews field experiences as well as sustainable practices (recycling, gardening, Watt Watchers to name a few).

Describe the school's emphasis on ensuring that professional development in environmental and sustainability education is offered to teachers.

Our principal, Carl Mucken ensures that professional development continues with our staff. Some examples are as follows.

1. Classroom teachers are shadowing the environmental education staff. This practice ensures that students will have smaller instructional groups during field experiences. This provides deeper understanding of the environmental topic focus.
2. Our staff has been trained with our STEM equipment from Vernier. We have the session recorded so that new or current staff can review procedures.
3. Our PreK teachers attended Supporting Young Scientists & Mathematicians workshop to support teachers on how to encourage young children through environmental STEM practices.

Green School updates. This happens during staff meetings, emails and newsletters. Principal Mucken provides opportunities to staff to support E-STEM programing during student hours and after school enrichment programs. This is a time when staff will give input on current programs or work on our school E-STEM blueprint goals.

Are there any other actions your school has taken (not covered above) to support Element 3A?

Our staff is fortunate with a supportive parent group. Parents enhance our environmental education program through their occupations. We have community partners with Josh Vlach, an entomologist program specialist

Pillar 3: Providing Effective Environmental and Sustainability Education

from the Department of Agriculture and Shavonne Sargent, forester, https://www.silvasaunterra.com/ that assist with our environmental education programs.

Element 3B: Use of the Environment and Sustainability to Develop STEM Content

For a secondary school: Describe how, and to what degree, the school makes available environment-related courses and measures (e.g., AP Environmental Science, International Baccalaureate Environmental Systems; and postsecondary dual enrollment courses, etc.). *Include student outcome measures and program enrollments as appropriate.*

N/A

Describe how the school uses sustainability and the environment as a context or theme for connecting/learning STEM thinking skills and content knowledge.

Our campus implements STEM environmental projects and lessons, providing real world applications for our students to experience. We have chosen an overarching theme of water to tie in environmental lessons and sustainability for grades PreK-5. Environmental lessons as noted in 3A connect learning to the STEM subjects using lessons from the natural world to expand knowledge learned in the classroom. We currently have two teachers enrolled in a three year STEM education program, the Trusty Fellowship at Notre Dame. Trained teachers are providing professional development and mentoring to the staff. Staff members have designed and implemented integrated, experiential units of study and research. We have designated garden area. Each grade is responsible for their garden plot. This enables classrooms an opportunity to work as a team, promoting greater pride and ownership of their accomplishments, measured through outcomes of problem solving scenarios that weave in STEM subjects

Describe the school use of sustainability and the environment as a context for connecting and learning green technologies and career pathways.

Our staff and students have been trained in using the Vernier equipment. Digital equipment is used in many 21st century skills. Using Vernier research equipment provide real-world data for students to graph and analyze. This technology continually allows our students to engage with scientific experiences that have deep meaning and purpose while supporting citizen science projects such as collecting data for projects Feederwatch and Globe. Our third graders have been involved with the Architects in Education program. This program aims to teach the possibilities of design with the end goal of creating lifelong learners and critical thinkers. AIE gives students an opportunity to explore the world or architecture, hydrology and soil science. Our school is involved with the Oregon Fish and Wildlife. Students not only rear salmon and trout but have opportunities to read about real life scientists (Rebecca Flitcroft is one of our partners) using free materials from National Inquirer, http://www.naturalinquirer.org/Meet-Dr.-Flitcroft-i-62.html Our students use these books to explore careers outdoors. Our partnership with National Park Service at Crater Lake involves students understanding technologies used for snow measurement that support their research. They learn the occupation of a ranger, a geologist and a forester.

After school clubs such a VEX and Exploravision give students outlets to explore and expand on new ideas of green technology. Introducing these concepts along with experts in the areas mentioned above provide avenues for students to create new technologies of the future.

Describe how the school's environmental and sustainability focus supports an age-appropriate understanding of natural systems.

Our school has created an Eco-Code (K: Growth, 1st Learn, 2nd Change, 3rd Community, 4th Protect, and 5th Stewards) that is interwoven with Leave No Trace principles, https://lnt.org/why/7-principles/. Students assist with creating anchor charts and how they would meet these concept goals as a classroom. In the following years, students review what has been taught. The goal is that our graduating students in fifth grade understand environmental and sustainable concepts as they become stewards of our planet.

Are there any other actions your school has taken (not covered above) to support Element 3B?

Provide response here.

Element 3C: Development and Application of Civic Knowledge and Skills

Describe the school's emphasis on outdoor learning as a tool to: a) teach an array of subjects in context; b) engage the broader community; and c) develop important civic skills.

Teaching an array of subjects in context:
We are part of the Eco-Schools USA program. As we continue through the Pathways, each grade level aligns with the Next Generation Science Standards, English Language Arts, as well as Mathematics Standards. We are

Pillar 3: Providing Effective Environmental and Sustainability Education

able to teach a wide range of subjects while students engage in the outdoors. Please view https://www.nwf.org/-/media/Documents/PDFs/Eco-Schools/Standards-Alignment/2nd-Grade-NGSS-CCSS.ashx?la=en&hash=C2A77AC30C49C0AC57255A234627494A352864CD
for second grade curriculum outline of the program.
Engaging the broader community:
We have a community pollinator garden in which the community has been invited to enjoy and observe. Within the pollinator garden are hummingbird feeders and a variety of feeders. Mason bee hotels support our native bee population. We invite our visitors to collect data on the pollinators they have viewed in the gardens by completing our data sheet. In partnership with Marion County Soil and Water, we are striving to increase pollinators in our county. We are adding some of our discoveries to citizen science projects such as iNaturalist and Bumble Bee Watch.
Develop Important Civic Skills:
We are in partnership with the Oregon Wildlife Foundation to support our Western Bluebird population. In the summer of 2021, we had a pair successful raise 3 fledglings. Students view the importance of assisting threatened species within their own community. Our students are enrolled in the Project Feederwatch program, https://feederwatch.org/category/schools/
They submit data of the birds that visit their feeders to the citizen science project.
Students and their families are involved with community programs (Ex: Reducing Solid Waste program, Marion County) as their engagement involves working to make a difference not only in our community but with national service programs where they build skills and knowledge to make a difference in our world.

Describe: a) how/whether, and to what degree, the school promotes and encourages students to conduct class or individual, age-appropriate, civic/community engagement projects; and b) the important outcomes that have been achieved (using data as appropriate).

We partnered with SOLVE for spring of 2021, toward the removal of litter and microplastics during our coastal lessons with grades 2-5. The data was sent to Marine Debris Tracker, a citizen science program. We removed over 6 pounds of litter, https://www.nwf.org/EcoSchoolsPortal/Home/Dashboard?schoolId=6659
Our students have at least three field experiences at each grade every academic year. Each grade level follows the seven principles of Leave No Trace, https://lnt.org/why/7-principles/
Students bring and pack out all items from their lunches, leaving their location cleaner than it was when they arrived.
The students are involved with the school's pollinator and produce gardens. We have planted native plants that bloom at various times of the year. This attracts our local pollinators while reducing water usage. Each grade level (PreK-5) is responsible for caring for a plot in the garden.
Our first and third grade students followed the STEP enhancement program raising salmon and trout in the classroom, then releasing in our waterways. Our students gathered knowledge of how important our watershed is to the plants, animals, and for us. These outings built a sense of stewardship for wild things in nature.

Describe the innovative practices and/or partnerships the school promotes and participates in to support environmental and sustainability education.

Our partnerships cover city, county, state, and the national level. We have examined the City of Salem's drinking water, testing the water of the North Santiam River. Locally, we are involved with testing the chloride levels in Pringle Creek, through the Isaac Walton Foundation, https://www.iwla.org/water/stream-monitoring/winter-salt-watch/findings
At the county level, we have partnered with Marion County Soil and Water (MCSW). This organization has sponsored our pollinator garden. Our garden now uses water that drains from our building into the dry creek bed filled with native plants. MCSW provided the materials for our second graders to build mason bee hotels. These hotels supported our fruit and vegetable gardens. In turn, that produce is donated to the Marion-Polk Food Share program, the Table of Plenty food share. We are actively bringing back our pollinators. Students planted native plants, pulled weeds instead of using chemicals, hung mason bee house and collected data on pollinator visitors. Data was submitted to Marion County Soil and Water.
The Oregon Department of Fish and Wildlife guided us through the Salmon and Trout Enhancement Program (STEP). Our school raised salmon and trout, then released them into our local waterways.
We have partnered with Crater Lake National Park Service. Queen of Peace fifth grade students have four trips to Mt. Hood to collect data on the budburst of the Mountain hemlock. Crater Lake researchers are using our data to look at climate change within the two ranges.

Pillar 3: Providing Effective Environmental and Sustainability Education

Queen of Peace hired three environmental educators that provide environmental education on and off campus for grades PrK-5. Classroom teachers job shadow the experience as they become proficient in teaching the lessons.

We are Roots and Shoots members, part of the Jane Goodall Institute. This organization provided support for the Mt. Hood research on Clark's nutcrackers.

Our partnership with the Oregon Wildlife Foundation (OWF)is ongoing data collection for our Western bluebird population. Students are involved with feeding and placing nesting boxes on campus. They will report to OWF with a number count each year.

Other partnerships are with Mt. Angel Abbey and Marion County Solid Waste. This alliance provides students an opportunity to reduce solid waste from the waste stream in their community.

Describe how, and to what degree, the district's environmental and sustainability education efforts have shown growth in academic achievement among students over time. *Include data as applicable.*

Our school has used digital environmental education portfolios to monitor academic achievement over time. We have seen growth in questioning, investigating, defining problems, analyzing, interpreting, reasoning, developing conclusions, and solving problems. Our environmental and sustainable education are teaching students how to think and not follow step-by-step procedures.

This year we have shifted to environmental notebooks whereas students will keep an ongoing collection of work that is at their fingertips. The goal is to show growth over time while students, families and the community are able to review student data without the use of a computer.

It is important to address the academic growth as well as the social/emotional growth of our students. We have noted that through outdoor learning our students are healthier, calmer, and intrinsically motivate while developing a keener interest in the subject matter that they are current studying. Our students are excited to attend school. Daily attendance rises with outdoor learning.

Students understand the need to reduce the use of natural resources. The Eco-Schools pathways lessons have taught students about reading kilowatts and the conservation of natural resources. The program has placed our students in leadership roles to complete the Eco-Schools program to the highest honor of Green Flag. https://www.nwf.org/EcoSchoolsPortal/Home/Dashboard?schoolId=6659

Are there any other actions your school has taken (not covered above) to support Element 3C?

We have created a successful school gardening program that is having a long-term impact on our students' attitudes and motivation to pursue the study of environmental science in as they move through the grades. We invite our students to return to continue their research started on Mt. Hood during their fifth-grade year. Our environmental program continues to draw in students into environmental programs at Blanchet (Caretakers of the Environment), our feeder school.

Supporting Visual Documentation

Applicants are encouraged to submit up to five (5) photos (with appropriate permissions) or up to five (5) minutes of video content. Attach photos/video in a zipped folder separate from this application document in the same email submission as the application. Visual documentation does not count toward the page limit.

Here is the link to our visual documentation on YouTube. Please let me know if you need permission to access the video. https://youtu.be/pUWkLvWX_cI