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 Pre-K-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 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 2015-2018

☐ Public ☐ Charter ☐ Title I ☐ Magnet ☒ Private ☐ Independent ☐ Rural

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

Official School Name: Portland Waldorf School
(As it should appear on an award)

Official School Name Mailing Address: 2300 SE Harrison St. Milwaukie, OR 97222
(If address is P.O. Box, also include street address.)

County: Clackamas County State School Code Number *: N/A

Telephone: 503-654-2200 Fax: 503-652-5162

Web site/URL: www.portlandwaldorf.org E-mail: wendy.rea@portlandwaldorf.org

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

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

Wendy Rea

Date: January 31, 2017

(Principal's Signature)

Name of Superintendent: N/A – Private School not associated with a school district.

U.S. DEPARTMENT OF EDUCATION

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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: Mr. Michael Wiltfong

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

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

Date: January 31, 2017

(Nominating Authority's Signature)

SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

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

SUBMISSION

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

OMB Control Number: 1860-0509

Expiration Date: March 31, 2018

Public Burden Statement

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

The Portland Waldorf School is an alternative private school in Milwaukie, Oregon, that serves early childhood through high school students. PWS provides a holistic education based on age-appropriate teaching practices that recognize students as individuals on a unique learning journey, academically, socially and emotionally. In order to provide a well-rounded education that nourishes these three aspects, our academic curriculum is enhanced by experiential learning opportunities including music, movement, theater, foreign language, art, craft and outdoor education. Our unique environmental education program assures that sustainability projects are woven into the curriculum and extra-curricular subjects for all ages, as we believe that more authentic learning occurs with knowledge that has been integrated into meaningful, real-life experience. As a result, students are confident, creative and motivated to make the needed changes in the world, and are equipped with the capacity and ingenuity necessary to be responsive to current climate-related issues.

Two years ago, the Portland Waldorf School community committed to funding and staffing an innovative environmental education program called the LivingLAB. More than just a garden program, the LivingLAB actively engages the students with a wide variety of sustainability-related projects that are integrated into a long-term site design that is being implemented by students in conjunction with their academic subjects. Our intentional work with harvesting the natural water flow on campus, remediating run-off water from our parking lots, promoting biking and public transit, recycling, gardening, composting, and encouraging best practices around minimal waste & energy use qualified us as an Oregon Green School in 2016. The LivingLAB oversees the work of continuous improvement in both environmental and social sustainability practices, which align with the core values of the school and permeate the experience of attending the Portland Waldorf School.

Daily food compost chores, tending to gardens with various themes (dye plants, food forests, wetland plants, native plants, medicinals, pollinator-attractants, edible landscaping) and regular use of a wood-fired oven for a variety of subject lessons, all engage the students directly with on-going activities that model regenerative practices and develop healthy habits.

The students are involved in the design and implementation of our sustainability curriculum, from building a bike shelter, designing infrastructure for greater efficiency, and lowering our resource consumption, to taking action in protecting our local watershed and displaying informational signs for the broader community that highlight best practices for conservation. In weaving our academic curriculum within these efforts, conservation is not just *what* the students are learning, but also *how* they are learning it. Our science curriculum teaches students to ask questions and to become explorers of ideas, not just learners of information. The LivingLAB gives the students the responsibility of applying their discoveries into a design of how they can be incorporated on campus, both in the form of long-term visions (such as a complete renewable energy plan that we work toward over the years) and in small-scale, immediately tangible installations that the students construct and interact with directly (such as a rainwater catchment play area in the early childhood playground, and xeriscaping with native, drought-tolerant plants).

Social health is highly valued at PWS and is a foundational step toward understanding global environmental impact. Students are explicitly taught compassionate communication skills and witness the effect that their actions have on others and their immediate surroundings. As they grow and are taught critical thinking skills based on understanding systems, they develop a true awareness of the interconnectedness of everything on our planet.

In this vein, community service is an on-going practice at the Portland Waldorf School. We focus regular attention on the natural features in our neighborhood and bioregion by volunteering with the local watersheds doing native habitat restoration. PWS was recently awarded the Riffle Award from the Johnson Creek Watershed. Classes regularly volunteer with charitable organizations such as Habitat for Humanity, the Re-Building Center (re-sale of used construction materials), Annie Ross House (emergency shelter), St. Francis dining hall (feeding the homeless), and the Oregon food bank. 9th grade students spend a week volunteering at local, organic farms in Oregon. We also donate money and items to local, national and international charities and last year's 3rd grade class was recognized by Heifer International for their donated funds. Bridging international with local efforts, one teacher involves her class with her work as a Cultural Navigator through the Catholic Charities refugee resettlement program, and the LivingLAB director actively forges relationships with leaders of international sustainability non-profits in order to integrate lessons from these global efforts with the school curriculum.

All of the environmental volunteer work is mirrored in the work that the students engage with on our own campus. This work is guided by the ethics of the LivingLAB which is based on the principles of permaculture as well as the ideals of biodynamic gardening, meaning that the students are not only aware of the tangible considerations of our local climate and soil, but also the constant interplay with the cosmos. In learning about the natural world, the patterns they observe can then be applied to understanding and designing other types of infrastructure and social constructs. Each natural installation on campus serves multiple functions, directly supporting curriculum content through food, fiber and/or medicinal qualities.

The Portland area is an area that lacks the racial diversity of many other metropolitan areas in the US. PWS is actively seeking ways to continue to be equitable and accessible to all. Though we generously offer scholarships for low-income families, we recognize that accessibility does not just involve finances. We run diversity trainings for the faculty and staff at the school to further our creation of an inclusive environment, and we have established a successful foreign exchange program in our high school that is staffed with faculty that support both the academic and social success of these ESL students. Care groups meet regularly to discuss students with special needs and circumstances, and all subject teachers, therapists and specialists are involved with guiding each student toward success. At PWS, success doesn't just equate to performing well on tests, but rather on a holistic demonstration of a well-rounded understanding of content. Letter grades are not assigned until later in middle school and a personalized community approach based on communication and relationships is at the heart of assessing a student's level of understanding.

In summary, PWS is a leader in the realm of education reform away from standardization and toward sustainability - both as an environmental awareness practice as well as a pedagogical methodology. In this type of respectful learning environment, each student can fully realize their potential. The resulting confidence can guide inspiration to levels that we need for stabilizing an uncertain future - in ways that can more fully serve the whole since the individual was given the opportunity to thrive and to understand the effects of their actions and the interconnectedness of all systems.

Portland Waldorf School is addressing the "three pillars" in the following ways.

1. Reduced Environmental Impact and Costs

Portland Waldorf School became a certified green school in the state of Oregon in 2016. The following are practices that were already in place, are now in place, or are in process as a result of the OR Green School audits used to assess our environmental impacts.

- Changing all lights to LED
- Encourage alternative transportation including bike challenges, improved and expanded bike parking, and highlighting our location along major public transportation routes
- Minimal use of electronics and appliances as a part of our value system
- Energy efficient double-paned glass windows
- Design and implementation of a curriculum-related renewable energy plan
    - Students are working on designing renewable energy projects that relate with each element (earth, air, fire, water) to be constructed during elective and LivingLAB class time in upcoming school years in conjunction with the scientific study of these projects during academic class time
- Informational signs & projects highlighting best practices for energy, waste and water conservation
    - A new rainwater catchment play area is one such example. The rainwater is being harvested from a small shed roof and turned into a play area for early childhood classes so that the youngest members of our community can interact in a hands-on way, developing an inherent understanding of reusing resources even before these concepts are incorporated into academics. 8th grade students not only build the system based on their physics studies this year, but also did calculations in math class after measuring all of the roof surfaces on campus and figuring how much rainwater we can catch each year based on annual rainfall. A large-scale rainwater catchment system is now being designed by high school students in science class, incorporating a plan to flush our toilets with rainwater when completed.
- Student-constructed gravity-powered water pumps to irrigate gardens from on-site (non-city) water sources
    - We have a spring on-site and therefore do not need to use city water to irrigate our vegetable garden. Students built a ram pump so that the water can be transported uphill without using electricity. An archimedes pump will deliver water to buckets (for hand-watering the gardens) uphill from the water source.
- Bathroom sink knobs automatically shut off thereby saving significant amounts of water from faucets being left on while children are soaping their hands
- Water bottle filling stations in each building promote drinking water as well as increase efficiency from water fountains
- Bioswales filter street and parking lot run-off
    - This area of campus is studied by middle school and high school students that use mycology and other bioremediation techniques to filter oil and other toxic chemicals before the water reaches the nearby Willamette River.
- “Xeriscaping” landscaping design that requires little to no watering by using native and other drought-tolerant plants that can withstand dry Oregon summers without requiring additional watering
- Majority of the school’s 41 toilets comply with modern Federal Plumbing Standards and use only 1.6 gallons of water per flush, which is much lower than older toilets which use between 3.5 and 7 gallons/flush
- Actively encourage waste-free lunches as a reduction practice and to promote healthy, homemade meals

    - Middle school students conduct a waste audit each year and draw the community's attention to the types of food packaging that they find in most abundance in the trash cans.
    - Classes that prepare hot lunches for sale at school are now asking students and teachers to bring their own dishware from home, eliminating the use of disposable products. Paper napkins are now able to be burned in our new wood-fired oven instead of put into the garbage.
- Installation of a Bokashi (anaerobic) compost system for all food scraps (including meat and dairy)
    - We were awarded a waste reduction grant from Clackamas County for this project. Since students will not need to separate their food scraps, there is a greater likelihood that less compostable food scraps will end up in the trash.
- Integration of compost/recycling/trash duties into daily activities of students in order to develop healthy habits and a sense of responsibility
- Installation of a wood-fired oven that reduces paper and cardboard waste as burnables
    - This not only reduces our school's waste, but also provides the students the opportunity to directly interact with the element of fire.
    - Allows students to understand concepts like convection, combustion, etc.. which can be applied to alternative energy planning and design.
- Clearly labeled and effective recycling system
    - Our waste audit revealed that we have a very successful recycling program. One of our goals is to set up a system for recycling additional materials that are not picked up curbside.

2. Improved Health and Wellness

The following are ways that Portland Waldorf School students and community are engaged with information and activities that improve health and wellness.

- All students responsible for tending to gardens on campus, thereby learning about pollinators, organic food, native food sources, and other topics of sustainability related to food production
- Focusing on healthy food options when serving hot lunches, including adding an organic salad option to pizza day (and using seasonal toppings from our gardens)
- Daily movement classes for all ages that teach spatial awareness, teamwork, and provide daily exercise for all students
    - Regular movement is foundational for healthy brain development, successful classroom management and successful information integration/retention
- Healthful eating habits encouraged by teachers through their garden classes, cooking classes (using the oven), class food culture, & healthy treats served during school-day events
- Parent education about health, wellness and nutrition
- Request that parents monitor media exposure for their children, prioritizing movement and creativity over screen time.
    - Our classrooms and hallways are media and cell phone-free in order to reduce distractions.
- Recurring lead monitoring and remediation
- Natural cleaning products used in all classrooms and often made by the students with natural products grown and processed on campus
- Construction and structural improvements planned consciously to bring a sense of care, beauty and wellness into the indoor spaces
    - We prioritize hiring environmentally friendly contractors and using local and environmentally friendly products
- Hand-weeded landscaping and playgrounds so that no chemicals are sprayed on campus

- Encourage hand-made crafting, natural materials & products (including arts and crafts products) which are available through our school store
    - The children develop an implicit feeling for environmentally friendly, chemical and plastic-free products from developing a baseline experience of using products that do not off-gas or have chemical perfumes/odors
- Nutritious cooking activities integrated into classes for all ages
- Relationship with a local holistic doctor that advises alternative and natural remedies for illnesses, ailments and learning challenges
- Employ movement therapists, tutors and dyslexia specialist who work with active student care groups in order to best serve a diversity of children with learning differences
- Personal enrichment trainings provided for staff multiple times each year
- 50 min/wk of individual high school advisory to address personal concerns, 40 min/wk of high school class meetings to address social/group dynamics
- Family involvement is a part of the school culture
    - Regularly scheduled events support this involvement, including adult education classes/speakers/workshops, monthly parent meetings, parent-driven festivals & fundraising events, parent council, volunteer days

3. Effective Environmental and Sustainability Education

Green School Certification
Portland Waldorf School is now an officially recognized Green School in the state of Oregon. We wanted to become a green school because it is an ongoing process that will continue to engage and benefit the students in a hands-on way by generating awareness of the impact that our own community has on the environment and setting goals to make our impact a net positive.

LivingLAB Program
The LivingLAB program was developed in the spring of 2014 and has been successfully integrated into the curriculum and daily school life of all ages at the school (preK-grade 12). The LivingLAB is an interdisciplinary program that engages the students with our 7 acre campus and 2 school buildings in ways that increase the sustainability of our campus and school life experience. Using whole systems design, the LivingLAB brings students into direct relationship with the elements (earth, air, fire, water) on campus in ways that are relevant to the daily operations of the school as well as to larger contexts such as neighborhood and global issues, making the link between environmental issues and issues of social justice.

Our math, science and engineering curriculums develop ethics-based critical thinking skills *before* students engage directly with technology at school, so that they can do so responsibly and with a direct understanding of how human systems can support natural systems. Biomimicry, permaculture and biodynamics provide important frameworks for the students to understand topics such as appropriate technology, science and nutrition with greater complexity. The LivingLAB also provides opportunities for kinesthetic learners to engage directly through activities that demonstrate the concepts they are learning about in classes.

Community Service
Students participate in community service by first developing place-based knowledge through relationship-based studies of local geography, ecology and economy. There are multiple occasions every year when the entire student and teacher bodies give service hours to either social or environmental local efforts. High school students receive required credits for community service on an annual basis. Through this local service, the students develop experience that is transferable to understanding broader systems.

Students realize that the conservation work we do on campus affects our neighbors and our watershed, and motivates the students to understand more about the needs around us in order to design our presence in the community to be serving the whole.

Our school is also reclaiming the celebration of seasonal festivals and welcomes the broader community for these joyous occasions.

Demographics and Achievement Gap

Demographics

Though an equity audit is not currently a requirement by the state of Oregon for Green School certification, we added one to our application since we understand that diversity is a crucial aspect of sustainability.

69% of our students and faculty identify as white/caucasian, and 14% opted out of identifying their race. The other 17% of our student and teacher population includes people of hispanic, asian, african, native american and middle eastern descent. Over 30% of our families qualify for tuition assistance. Students set the following goals for our school community as an acknowledgement that we have more work to do in order to achieve a more racially and culturally balanced community:

1. Gather more accurate data about families upon enrollment
2. Initiate trainings and conversations about diversity, equity, privilege and inclusion
3. Invite caucus work in order to generate ideas for action steps we can take to become a more racially diverse community

Achievement Gap:

Though increasing diversity is something that we have as a goal at our school, achievement gaps at PWS are more reflective of individual learning differences than they are based on race, class or gender. This is in part because we are individualizing and refining our perception of the word “achievement”. Lower school teachers stay with their class from grades 1-8 in order to most deeply understand each student’s needs. Lessons are designed and delivered in ways that meet each specific class constellation. Students do not receive letter grades for work until middle school, and do not receive semester grades until high school. The faculty works carefully with parents and therapists, in care groups and faculty meetings to effectively understand and communicate how to best serve each student, both socially and academically, so that learning differences are honored and supported.

Our school provides 180-225 minutes of ESL classes each week (depending on grade level) for our ESL students with a goal of successful social integration. The myriad opportunities for students to receive specialized 1:1 attention in support of their needs has resulted in a successful model of honoring a diversity of contributions that can be termed “achievement”.


Photo by student Ying Shi

These junior and senior students chose the gardening option in their LivingLAB elective class. This particular garden is called a food forest, and is a perennial garden modeled after a forest. The students designed this space in memory of alumni that died in 2015. In their design process, they asked the question “how does a forest garden” so that it regenerates itself resourcefully? They chose a myriad of food-producing native plants that will survive the mirco-climate in this area on campus.

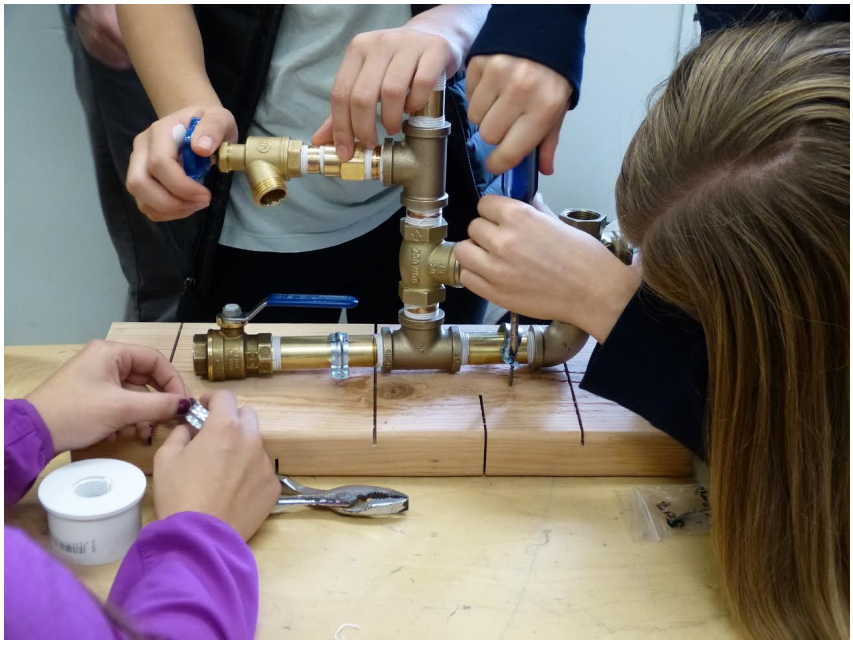
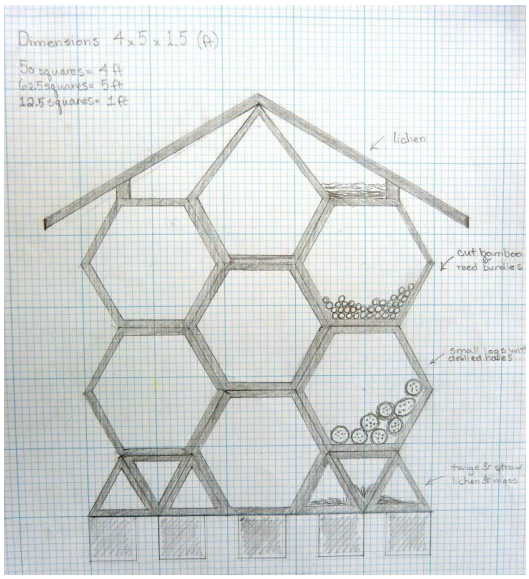


Photo by student Shannon Hardy

These 10th grade students built a ram pump as part of their Ancient History class. Since irrigation greatly changed the course of human history, their applied learning project was to help design a gravity powered irrigation system that moves water from a creek on our campus uphill to our food forest and dye garden.

These 4th grade students are pounding mushroom plug spawn into logs. This process is called inoculation. After covering the plugs and ends of the logs with beeswax, the logs sit in our mushroom garden until the mycelial network spreads throughout the log. The edible mushrooms will be the “fruit” of this process. This process is studied in science classes for both grade school and high school students.



One of our goals is to increase pollinator habitat on campus. 11th grade students designed “pollinator hotels” in their Geometrical Thinking class. The structure was then built, assembled and is now home to ladybugs, bumblebees, carpenter bees, mason bees, lacewings and many more helpful little critters. We also have an indoor observation beehive in our school library. Whether we need wax for our mushroom plug spawn or honey for roasted apples in our oven, we can now source that from our own campus. And did you

know that bees can teach algebra? By studying their “waggle dance” and doing some corresponding calculations (such as “line of best fit”), you can make educated guesses as to how far the bees are traveling for their food. Turns out our pollinator gardens are serving the bees well on campus!

This 3rd grade class is lighting a fire in our wood-fired barrel oven in order to bake honey apples that we harvested from the orchard on campus. Baking is so much more educational now that we do so in our outdoor hearth area. The barrel oven is a source of study for many reasons - from science to history. Did you know that Roman soldiers ate chestnuts before battle? Our juniors roasted chestnuts in our barrel oven last fall in order to taste that hearty food for themselves.