

# **District Sustainability Award Nominee Presentation Form**

### CERTIFICATIONS

### **District's Certifications**

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

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

## U.S. Department of Education Green Ribbon Schools District Sustainability Award 2019-2021

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

District Name: Lopez Island School District (As it should appear on an award) Address: 86 School Road, Lopez Island, WA 98261 Telephone: 360-468-2219 x2250 Fax: N/A Web site/URL: www.lopezislanschool.org E-mail: bauckland@lopezislandschool.org

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

Quan Anghland

ED-GRS (2019-2021)

Date: 2/12/2019



(Superintendent's Signature)

### Nominating Authority's Certifications

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

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

Name of Nominating Agency: Office of the Superintendent of Public Instruction/Learning and Teaching/Science, Environment, and Sustainability Programs

Name of Nominating Authority: Dr. Ellen Ebert

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

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

Date: 2/14/2019

Ellen K. Sleef

(Nominating Authority's Signature)

### SUBMISSION

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

OMB Control Number: 1860-0509 Expiration Date: March 31, 2021

### **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.

ED-GRS (2019-2021)

# Lopez Island School District 2019 US Green Ribbon Schools Application

#### **Summary Narrative**

Through partnerships with organizations and the greater Lopez Island community, our district has successfully built one of the few articulated K-12 Farm to School programs in the state, if not the country. We believe that every student needs a balanced nutritious meal and the kind of understanding about the environment that only a place-based education can provide. We serve more than 70% of our meals here on campus or on the island, offer a Garden enrichment course for students grade K-5, and offer Career and Technical Education (CTE) approved courses "Sustainable Agricultural Practices" and "Culinary" to secondary students.

The District made the choice to move toward this model almost a decade ago when the board approved a wellness policy. At the time, it was highly contentious with one parent arguing that the school was forcing a philosophy down on families as well as judgement. The superintendent at the time stated, "We know cigarettes are bad for students and don't allow those for our students, so why would we permit junk food?"

These efforts do not happen in a vacuum and our Lopez Island Farm Education (LIFE) program is founded and pillared with the support of local farmers, the Lopez Island Land Trust, the Lopez Island Family Resource Center, the Lopez Island Gleaners, our students, and the Lopez Island Locovores. We also have partnered with Kwiáht, a local environmental non-profit providing work experiences for students. We have established an advanced science lab that features equipment valued at over \$600,000. The Bureau of Land Management and the school have coordinated a "Hands on the Land" after school club for grades 3-5 in which students do research at one of the island's ponds. Between all these activities, students graduate with an awareness and appreciation of their role and place in the environment and day-to-day activities that influence, not only their personal health, but the health of the world.

The school has two gardeners who maintain and keep our production garden active all year long. Our school cook works tirelessly alongside them in planning the planting schedule so that it aligns with what is served in the kitchen. There, students are provided breakfast, a nutrition break, and lunch. Many of the meals are made from scratch, and it is not uncommon to have community members join us for lunch. Our monthly menus often have a "LIFE Lunch" feature, which are meals entirely grown from the island. The Culinary class will often produce some of the menu items the day before using food harvested from our gardens. This helps students develop a full circle understanding of where their food comes from. We also host a San Juan County Food and Farms tour where we can showcase our program and its place in supporting local farmers.

Our support staff and teachers dedicate many hours to enhance the offerings and program. At this time, administration staff is highly involved in sustainability education with Institutes of Higher Education (IHEs) with the NextGen working group, and with the UW Marine Science laboratory.

Our Physical Education (PE) teacher maintains semester logs of student weight, height, and aerobic

metabolism and consistently for the last six years we have a rate for Body Mass Index near nil. Most of our students are engaged in extracurricular sports, which is significant since they are away so much from classes due to the ferry schedule, and still maintain a C- or better grade point average (GPA).

The district has committed itself to paying for half of the program while the rest is fundraised or given through private donations. The district's plan in the next three years is to further embed the curricular aspects into its classes and reach out to other schools and districts who are seeking to establish or enhance their own Farm to School programs. We are also expanding to publicize the program by spearheading our "Lopez Lunches" where everything served for one month is sourced within a 50-mile radius of the island.

Our work around this program exemplifies what is best about our island and our school: pride in our rural roots, an appreciation of the environment, and holistic applicable education to individual lives. In addition to our LIFE program and wellness efforts, our school has invested time and energy to improve energy efficiency, water conservation, waste reduction, and alternative transit at the school. In 2016, the community passed a bond measure dedicating \$9.6 million to modernize and increase energy efficiency at our buildings. In partnership with the Bonneville Foundation, the school district installed 9.9 kilowatts of solar panels, adding renewable energy to our electrical power mix. To conserve water, our district installed low-flow water fixtures, drip irrigation, landscaped with native plants, and reduced irrigation of athletic fields. As an island community, students and faculty are extremely aware of the solid waste that we produce. We compost our food scraps, donate left over meals, and recycle extensively. In an innovative project, students designed a process that creates 3-D printer filament from recycled milk jugs. The district participates in the Safe Routes to School program. The district is just two buses short of completely replacing its yellow school bus fleet with new, lower-emitting buses. The district has a well-publicized idle-reduction policy that applies to all vehicles. The district offers electric power stations for drivers of electric vehicles to use free of charge.

The Lopez Island School District ensures that environmental and sustainability education are woven into core curricular topics and daily routines throughout the school year. In addition to our LIFE program, we emphasize careers in environmental and sustainability fields through two CTE courses–Marine Biology and Sustainable Agriculture. Our Career Paths course requires that senior projects include a local or environmental component. The district also mandates 20 hours of community service, ensuring civic engagement of our students.

In addition to our LIFE program, our district has policies in place that support student health and wellness. The district has an Indoor Air Quality Management Plan and Asthma Management Plan in place and works to limit students' exposure to chemicals that can trigger asthma attacks. District buildings were built to reduce exposure to radon. The District also has chemical management and green cleaning programs in place.

#### Awards

Award	Awarded to	Awarded by	Year Received
STEM Lighthouse	Lopez Island SD	OSPI	2017
San Juan Stewardship	Lorri Swanson	San Juan Island Trust	2016

### PILLAR 1: Reduce Environmental Impact and Cost

#### **Element 1A: Energy Conservation**

In the last three years our district finished a \$9.6-million bond renovation that has increased our energy efficiency throughout the buildings. Many of the features and improvements through the bond were environmentally sourced within the region. Lighting, and heating were modernized, and new windows were installed where needed. Painting was also done to retain heat and remain true to our island personality. During the renovation, we contracted with Sage Building to pinpoint areas for further energy conservation as our Green Building advisor.

This process resulted in our decision to replace incandescent and compact fluorescent lightbulbs with light emitting diodes (LEDs). Legislative funds will allow us to launch another renovation that will bring LED usage to over 80%. We anticipate an energy savings when this renovation is complete. The district's Facilities Manager tracks energy use by examining utility bills.

We also recently finished an energy awareness competition with the other island schools, Orcas, San Juan, and Shaw. The district came in second place but found the event successful as it overall reduced energy use and raised awareness among students, staff, and local families.

In partnership with Bonneville Environmental Foundation, we installed solar panels that supply 9.9 kW of electricity.

By sourcing most of our food here on the island, we eliminate the high carbon footprint that would exist if we were buying food from other locations.

#### **Element 1B: Water Conservation**

Due to living on an island, we are aware of the scarcity and importance of potable water and conservation around that resource. Therefore, we have a water use reduction plan in place. We water our fields only for short periods before the athletic season begins and feature a drip system for our garden beds. In the recent modernization, low flow toilets, sinks, and showers were installed throughout the school system. Thanks to a Healthy Kids Grant in 2016, we installed water bottle filling stations in both the Elementary and Secondary buildings. Our landscaping is minimized to native species and a portion of the school grounds are dedicated to the endangered marbled butterfly.

We currently run school district water operations from an old well, which we sample in accordance with our local authorities. We have taken steps to share a new well with Orcas Power & Light Cooperative, and with the Friends of the Lopez Island Pool (FLIP). This partnership will establish a water reduction plan for all three entities. A third party analyzes district water intake and discharge. Those results are available upon request.

Our elementary school has teamed up with the San Juan National Monument to create a Hands on the Land after school club called "Muddy Boots". Students head to Chadwick Marsh and study the ecology and precious resource that is the only freshwater spring on the island. This real-world study of freshwater as a limited resource helps cultivate mindfulness about water quality and conservation back in the school setting.

#### **Element 1C: Waste Reduction**

Our school is uniquely aware of waste management, as everything on our island, unless created here, was sourced elsewhere. Therefore, we follow environmentally preferred procurement requirements. We only purchase paper that is 50% or more post-consumer material. We have reduced hazardous and dangerous product use. We have worked with our custodial staff to use green cleaning products that are non-toxic, including Bona for our floors. We have order sustainably managed clay and non-toxic paints for our art classes.

We also must ship our waste off island for disposal, which adds to the cost of disposal and helps us be vigilant in our efforts to reduce, reuse, and recycle. Our recycling is handled through Community Treasures Recycling on San Juan Island.

In a highly innovative project with the Lopez Island Solid Waste (LISW), aka "Take it or Leave it" (https://www.lopezsolidwaste.org/) a student team repurposed HDPE milk jugs into 3D printer filament. This program has continued this year. We are investigating the possibility of sourcing out the filament. LISW also coordinates a public free swap space, where community members can take or leave items including clothing and other household goods – the district contributes lost and found items there. This project helps ensure that items that could be reused do not get thrown away and increases the sustainability of our solid waste issues on island.

We compost our meals and unfinished or unused food is shared with the preschool and senior center. Tuesday through Thursday's lunches compost is donated to one of the local farms in exchange for a lower price on meats. We are also investigating use of donating our used paper towels to a local farm for adding carbon to their raised beds.

With the STEM Lighthouse grant award, we purchased safer new chemicals for our Chemistry class and safely disposed of our decades-old chemicals off island in accordance with federal and state regulations.

#### **Element 1D: Transportation Alternatives**

The district has a greenhouse gas emission reduction plan in place that targets transportation. Some elements of this plan include replacing our older fleet of buses, participating in Safe Routes to School to encourage alternative modes of transit, and encouraging carpooling and the use of electric vehicles. Our district is updating our yellow school bus service to include all new buses that meet the Environmental Protection Agency's highest standards for reduced emissions – we are just two buses short of meeting this goal. We have a well-publicized no idling policy that applies to all vehicles including school buses. Bus loading and unloading and occurs more than 25 feet from school air intakes, doors, and windows.

We participate in the Safe Routes to School program. In 2017, as part of Earth Day, a "walkability" survey was done for the Office of the Superintendent of Public Instruction (OSPI) to improve the safety of walkers and bicyclists on their way to campus. This led to new walkway improvements and clearer paths to the school. Promotion of safe biking and coordinated group biking to school is done in the spring and early fall weather permitting.

In 2016, one of our seniors did his culminating project by designing and proposing the construction of a bike lane that would connect the ferry landing to Lopez Village. This project suggestion was met positively by San Juan Island County and is currently in the filing process.

In 2017, the school board approved free charging of electric cars for staff and students and we have designated electric vehicle parking stalls for this purpose.

### Pillar 2: Improve the Health and Wellness of Schools, Students, and Staff

#### **Element 2A: Health and Safety**

We maintain a stringent Asthma Management Plan because we have many students with asthma, as well as a plan to reduce students from exposure to known allergens. We also have an Indoor Air Quality Management Plan in place. We follow Washington Department of Health recommendations for student school supply lists to reduce chemicals in the classroom that can trigger asthma or allergies.

The district has a robust green cleaning program in place. This helps limit asthma triggers and has reduced our hazardous chemical disposal needs.

During the renovation, we contracted with Sage Building to monitor air quality throughout the construction project. At this time, buildings were renovated with radon resistant features and tested for radon to ensure no rooms had levels at or above 4 Picocuries Per Liter.

Our school also features several days where students assist in beautifying the campus and neighboring areas, which helps ensure the health and safety of our district community.

We have replaced outdated school playground equipment, removing all structures that had wood components to remove students' exposure to chromate copper arsenate. We practice Integrated Pest Management but are not fully certified by WSU standards. We have a chemical management system in place that ensures we do not purchase hazardous or dangerous chemicals. When specific chemicals are needed, for example in the chemistry lab, these are stored safely and securely.

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

Our district has instituted a coordinated school wellness policy that guides us on what is served in our cafeteria, what is made available for concessions and fundraisers, and restricts vending machines.

As mentioned in our narrative summary, we have an extensive farm to school program. Our orchard, student raised garden beds, and four greenhouses produce well over 15,000 pounds of organic produce for our students each year. We also ensure that our lunches are equitable, and students all pay the same for the same organic, sustainable lunch. We participate in the Healthier School Challenge but also the 'Taste of Washington' event. More importantly, our district serves as a model for neighboring districts in how to implement a farm to school program. We were happy to host the Bellingham School District and representatives with Whatcom County Farm to School program, offering our technical expertise.

Our students in either the Sustainable Agriculture or Culinary classes leave with key employable skills and many find work in the island's restaurants or farms. We also offer Intensives, a week-long seminar

on specific topics. During that time most students tend to choose three that emphasize being outside and physical stamina: rock climbing, personal fitness, and biking the San Juan Islands.

In Physical Education (PE) our students in grades 6-8 receive over 200 minutes weekly. Students in K-2 have 110 minutes of PE, and grades 3-5 receive 100 minutes weekly. Students K-5 also enjoy 210 minutes of recess per week. Our PE teacher incorporates the OSPI Health assessment into lessons. Most students participate in Washington Interscholastic Activities Association sports.

#### **Element 2C: Mental Health and School Climate**

Our school is in its third year of a compassionate school model approach. We employ restorative justice in disciplinary actions and have two trained staff members that implement it. This approach is board approved and has resulted in fewer conflicts and better resolution of conflicts. As a small island community, we are skilled at working through conflict resolution and teaching conflict resolution to our students.

In partnership with Safe San Juan (Social change/Advocacy/transFormation/Education), Family Resource Center and the Prevention Coalition, our school participates and examines data obtained through the Healthy Youth Survey. This guides our approach for the upcoming years in partnership with those organizations.

Our counselor leads Peace Pandas, a program for upper elementary students to resolve conflict in the classroom and on the playground. We were also awarded a LifeSkills grant and have incorporated those lessons into grades 6-8. Our counselor makes use of the SecondStep curriculum for grades K-5 and teaches those units once a week. We also spearheaded the San Juan Mental Health grant to provide additional counseling and therapy for students.

We are in our second year of implementation of the Common Sense Media curriculum to address concerns around social media use.

### *Pillar 3: Provide Effective Environmental and Sustainability Education which Incorporates STEM, Civic Skills, and Green Career Pathways*

#### Element 3Ai: Integrated Environmental and Sustainability Education

Our district was awarded the STEM Lighthouse Award for 2016-2017, in part due to our focus on bringing sustainability concepts into a STEM focus.

In grades K-5, our Lopez Elementary Engineering Program (LEEP) incorporates engineering problem solving to situations on campus and around the island. In addition to engineering standards, all of these are based on the Next Generation Science Standards (NGSS) environmental content standards. Students have engaged in repairing our pond, saving water for our gardens, and developing new spaces on campus for other plant/animal species.

In the 16-17 school year, the fourth-grade class undertook an engineering challenge of saving "Rishi Pond." The pond was named after a student who died due to a farming accident in the early 1980s. It is

an ideal outdoor classroom for elementary students who often gather around it for reading lessons. We were advised by Risk Management to close the pond due to the depth. Our 3-5 STEM teacher created a design thinking experiment where students in those grades asked and answered the following questions: What is the problem? How can we fix the problem? Why should we solve it? Solutions were generated in a collaborative fashion and students explored various answers before settling on a new layer of gravel. They also examined the aquatic life in the pond to find a solution that did not disturb the life already there.

One of our Intensives offers Boulder Outdoor Survival School–a wilderness survival course. We developed two new CTE approved courses in Marine Biology and Sustainable Agricultural Practices. These courses are based outside and in the ecosystem of Lopez Island. We also have had linked courses of Biology and Environmental Literature.

Our partnership with the Bureau of Land Management (BLM) and Kwiáht have given us new after school opportunities with Hands on the Land and internships related to the study of salmon, and marine invertebrates.

#### **Element 3Aii: Teacher Professional Development**

All science teachers in the district attended the workshop "Deep Dive into the NGSS" taught by Brian MacNevin at Northwest Educational Service District 189. The school's grade 3-5 STEM teacher recently finished her Master degree in STEM education with a focus on environmental engineering.

The Sustainable Agriculture teacher has attended workshops concerning how to make biochar, how to ferment food, and plans to attend an upcoming NGSS and climate workshop developed by OSPI's Environment and Sustainability Department.

Both the secondary principal and high school science teacher are a part of the NextGen science teacher project, bringing a much-needed voice from schools to this consortium. The secondary science teacher was also a member of the InTeGrate workshop "Connecting Earth Science and Sustainability to Teach the NGSS" during the summer of 2018.

#### Element 3Bi: Science Supported by Environmental and Sustainability Education

The Lopez Island School District is a recognized leader in teaching of STEM practices, especially when aligned to environmental and sustainability education. Our LIFE program stretches from grades K-12. From the Garden enrichment to Environmental Science our students in every grade level have a deep appreciation for and understanding of the Life Science standards. We have articulated that sense through well trained staff members who teach fully to the NGSS and probe student learning through their questioning and reasoning.

This is explored through a specialist model in the elementary school and students there participate in many hands-on learning opportunities - salmon seining, active gardening, Skype tours with other locations, and field trips both on and off the island.

The secondary school provides students with a rich offering of science and CTE electives. Through Chemistry, Physics, Environmental Science, Environmental Literature, Marine Biology, Sustainable Agriculture, Astronomy, and Biology our students can connect and apply a deep understanding of those domains to their lives.

#### **Element 3Bii: Environmental Career Connected Learning**

Two of our CTE courses are specifically aligned to environmental and sustainability concepts and relate directly to the career field. Already several alumni of those courses are employed on island having used the expertise taught in those courses.

Both Marine Biology and Sustainable Agriculture are aligned to 21 Century career standards and give students opportunities to hone workplace skills. For example, students participating in Marine Biology have been performing a long-term longitudinal study of both Hummel Lake and Fisherman Bay. These exercises are in conjunction with Kwiáht, an environmental non-profit, for future job skills and real-world applicability. Graduates of the Sustainable Agriculture course are employed at farms on and off the island.

Our other CTE course, Career Choices, is built around the senior project where a key component must be something of "local or environmental importance". Among others, these projects have led to the construction of a wood fired truck, awareness of orca pods, and an environmental survey of Fisherman Bay - which was used by San Juan County in drainage studies.

The Culinary class witnesses the life cycle of plants. Students in the class see and use the produce of inseason fruits and vegetables. This experience falls under the umbrella of healthy food choices and creates in students an awareness of how our dietary choices have an effect on the environment. It also helps students engage in Culinary Arts as a possible career choice.

#### **3C: Civic Engagement**

Along with the internships with Kwiáht and BLM, our students must log over 20 hours of community service, while graduates in the class of 2021 must log over 60 hours. Many of these hours are completed at the local solid waste and recycling facility. We host an annual Earth Day event that focuses more on what students can do in the face of the many problems concerning the environment. This has led to interviews with students in Iguigig, Alaska concerning the development of Pebble Mine, and tree plantings that students have done in other countries.

Many of the senior projects take on an environmental focus and there is considerable energy and time with mentors to set up something meaningful and applicable in their lives and for the community. This has included creating a reMake Lab, writing a children's book addressing Salish Sea health, addressing groundwater runoff into Fisherman Bay, and living a net-zero lifestyle.