PART I – NOMINEE INFORMATION

School, District (LEA), or Postsecondary Institution Name: Marie Reed Elementary School
Category of Nomination (School, District, or Postsecondary): School

Address: 2201 18th Street NW City: Washington State: DC Zip: 20009
Twitter: Facebook:

Top Official (School=Principal; District=Chancellor/CEO; Postsecondary Institution=President)
Title (Mr./Ms./Mrs./ Dr.): Ms. First Name: Katie Last Name: Lundgren
Position/Role (Principal/ Chancellor/ CEO/ President): Principal
Email: katie.lundren@k12.dc.gov Phone: 202-673-7308

Lead Applicant (if different)
Title (Mr./Ms./Mrs./ Dr.): Ms. First Name: Megan Last Name: Fisk
Position or Role (e.g., Teacher/ Sustainability Director/ Facilities Director): teacher
Email: megan.fisk@k12.dc.gov Phone:

Check all that apply:

- Early Learning ☒
- Elementary ☒
- Magnet ☐
- Non-Public ☐
- Middle ☐
- High ☐
- Two-Year ☐
- Four-Year ☐
- Public ☒
- Charter ☐
- Community College ☐
- Career and Technical ☐

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

Pell Recipients: N/A
Free and Reduced Price Lunch: Title 1
Minority: 77%
Limited English Proficient: 37%
Special Education: 11%
Graduation Rate: N/A
Attendance Rate: 95%

Provide the following:

Total Enrolled: 462 Number of Schools: 1 Buildings: 1 Campuses: 1

PART II – DOCUMENTATION OF SUSTAINABILITY ACHIEVEMENT

Narrative for Pillar I: Efforts to Reduce Environmental Impact and Costs

1. Eliminating greenhouse gases

- Automatic light sensors in all rooms, hallways, and closets.
- More energy efficient heating and cooling systems, including a VRF (variable refrigerant flow) system, water source heat pumps, and a VAV (variable air volume) system.

2. Water quality, efficiency, and conservation

- Automatic sensors on sink faucets.
- Toilets with dual flush to reduce water use.
- Large cistern in the school garden for watering plants and flowers with signs posted to explain the process to students and the community.
- Storm water is directed to gardens on site, reducing the need to use the municipal sewer system with drip irrigation thus minimizing water loss from evaporation.

3. Reducing waste

- Recycling/Composting in cafeteria – Our protocol has been practiced by students since 2017 but was halted due to Covid restrictions. We are working to resume protocol this year to the previous standard.
- Recycling in classrooms and communal areas – All classrooms have a blue recycling bin in addition to a garbage can. We have had a student-led green team to assist custodial team with collection during aftercare program. The program was paused during Covid, but we are working to resume the protocol this year. The custodians now pick up recycling from classrooms, but our student green team is working to educate students about the process by making signs and leading assemblies. They also will support custodial team with pickup once a week.

4. Alternative transportation

Marie Reed is on major bus routes and less than a mile from Metrorail stations. It is a community school with many families walking or riding bikes. Across grade levels, we utilize alternative transportation to support all students in learning how to navigate their community with a variety of transportation options.

- Biking – The PE teacher teaches the 2nd grade a unit on biking, which culminates in a grade-level field trip to Malcolm X Park. Students learn about navigating the city safely by bike using streets and bike lanes. They learn about the meaning of all traffic signs in addition to rules for bicycle travel.

- Bus/Metro – Many grades use city buses and Metro for travel during field trips to the National Mall and other museums around the city.
- Walking – Pre-K and Kindergarten have neighborhood walking field trips.
- Survey of student transportation modes. Data was collected and then graphed for students and the community.
- Parent Coordinator helps facilitate family access to metro cards for students that use public transportation.

5. Identify your energy-efficient facilities and practices, ecologically and educationally beneficial uses of grounds, and methods of disposal for solid and hazardous wastes.

- LEED Gold certification.
- The Department of General Services (DGS) implemented a renewable energy supply strategy for District Government buildings, which includes DCPS facilities. As part of this strategy 25-30 percent of the electricity load is supplied by a wind power purchase agreement. Any non-renewable energy is offset with Green-e® renewable energy credits (RECs).
- Since 2013, DGS has continued to be annually rated by the Environmental Protection Agency as one of the top ten Green Power Partnerships for Local Governments for annually offsetting more than 100% of its electricity supply with REC purchases.
- Marie Reed has innovative technology such as UV sensitive skylights in two large atriums. These skylights dim on very sunny days to limit the amount of air conditioning required in space. There are signs posted for students to read as they pass in the hallways, so that they can learn about the technology used in our school for energy efficiency.
- Automatic sensors for lights throughout the building.
- The school garden is used for teaching and learning.
- Recycling and compost are collected regularly.
- The renovation incorporated rain gardens and flood mitigating designs into the landscaping to maximize the ecological benefits of our small campus. When possible, historic trees were protected. The new, predominantly native plants incorporated into the design were chosen for diversity, bird and butterfly habitat, and air quality improvement.
- The school's property includes 10,000 cu ft of on-site storm water retention, through storm water best management practices like bioretention areas, permeable pavers and pavement, and a green roof.
- A large portion of the roof space is occupied by green roof infrastructure. Our unique building design means that roof spaces are at multiple levels allowing students to view the plants and the green roof from many classrooms throughout the building. The plants used in the design are diverse and support the rest of the landscaping at ground level with native species.

Narrative for Pillar 2: Efforts to Improve the Health and Wellness of Students and Staff

1. **Cleaning and Maintenance; mold and moisture; chemical and environmental contaminants; ventilation; pests and pesticides**

- The custodial staff at Marie Reed has access to green cleaning procedures as well as deep cleaning protocols using EPA approved cleaning supplies that follow CDC guidance. DCPS schools are encouraged to utilize these sustainable cleaning practices through use of EcoLogo and Green Seal certified products, which are recognized worldwide and guarantee the product has been manufactured in a sustainable way with minimal impact on the environment throughout its entire life cycle.
- In 2020, as part of the DGS initiative to mitigate the spread of COVID-19, Marie Reed's Direct Outside Air System (DOAS) HVAC system was outfitted with MERV-13 air filters designed to capture 50% of particles size 0.3-1.0 micron and 85% of particles size 1.0-3.0 microns. These filters are replaced on a regular schedule according to recommended practice. Indoor Air Quality is further addressed through the provision of portable HEPA filters in all classrooms, big box spaces (cafeteria and gym), the main office, and most offices.
- Natural and chemical-free pest control.

2. **Nutrition**

- FoodPrints program – We have an outdoor school garden that is maintained by the FRESHFARM FoodPrints program and community volunteers. In addition, we have a hydroponic garden and planters that provide us with winter greens, vegetables, and herbs. Students use the garden throughout the year during their FoodPrints lessons grades PreK-5 and during aftercare programs. During our school renovation, a modern kitchen classroom was built. Our school schedule is designed so that all classrooms' grades PreK-5 and BES participate in FoodPrints lessons throughout the year. Teachers and students love the classes. Lessons have students planting in the garden and making food using what they harvested.

3. **Outdoor physical activity**

- DC Scores – Marie Reed was the first elementary school to participate in the DC Scores program. It continues to be an important program for our school with both spring and fall seasons for boys and girls.
- Swimming program in grades 2nd-5th
  - Use of the regulation soccer field for PE, recess and homeroom classes is common.
  - Modern playgrounds for daily recess
- Outdoor Learning for all grade levels—Examples include reading circles, Spanish lessons, tree inventories, physics on the playground, outdoor sketches.

4. **Health education, health services, counseling, psychological and social services, sun safety, staff health promotion, and family and community involvement**

- Health and Wellness Team of Teachers.
- PTO (Parent Teacher Organization) sponsors an "outdoor clean-up" day.
- Restorative practices and behavioral health team.
- Walk/Bike to Work Celebration.
- Community of Hope Clinic on site.
- UPO Daycare on site.
- DPR (Department of Parks and Recreation) Rec Center on site.
- FoodPrints Community FoodShare coordinated through social workers and/or afterschool farm share.
- International Potluck – Community members share food and recipes.
- Fall Festival – In addition to a variety of seasonal activities, FoodPrints provides resources about federal benefits for healthy food including providing matching EBT funds at local markets.
- FoodPrints community garden days on Saturdays where families are invited to help with planting, share food, and get new recipes.

Narrative for Pillar 3: Efforts to Ensure Effective Environmental and Sustainability Education

1. **Interdisciplinary learning**

The leadership on the Green Team spans most grade levels, so that initiatives are always schoolwide. Individual teachers and grade levels have planned neighborhood climate marches, hiking trips, walk-to-school day events, and we have done school grounds clean ups. FoodPrints is a priority in our schedule and all classes have opportunities to learn about healthy living, and gardening and healthy cooking are the focus. FoodPrints also offers healthy snacks after school and has invited a farmer to have a crop share service provided to interested staff and parents. The bags are provided after school, so it is convenient for families to pick up fresh vegetables and eggs. Grade levels continue to participate in the OSSE programs that focus on environmental lessons. From Casey Trees' Cleaner Air Project/Nature Near Schools program, Garbology, Pumpkin Patch visits, Anacostia Watershed lessons, to the Shad classroom hatchery and fish release project with the Anacostia Watershed Society, students participate in a variety of lessons that focus on a range of local issues from Pre-K to 5th Grade. The librarian has curated an extensive collection of books at many levels that highlight climate change, sustainability, and other green issues. These books are periodically highlighted on shelves and during read aloud to make sure that students see and discuss them. We have an afternoon Kite flying Celebration for Earth Day, where students construct kites in Art and their classrooms to fly in the afternoon with parents.

Below is a description of experiences that take place at every grade level at our school. Instruction is led by the following: Classroom Teacher (CR), Science Special (S), PE Special (PE), Art Special (A), Aftercare (AC), FoodPrints (F)

- **Pre-K** – FoodPrints, Pumpkin Patch (CR) or Farm visit (CR), Hike to Zoo (CR), Seasons (S&CR), Habitats (S&CR)
- **Kindergarten** – FoodPrints, Climate March (CR), Animal Needs (CR), Engineering and design with recycled materials with recycled materials (S, A &CR), Hikes to Rock Creek Park (PE &CR), Weather (CR)
- **1st Grade** – FoodPrints, Engineering and design with recycled materials (S & A), Animal Adaptations (S & CR)
- **2nd Grade** – Woodprints (A), Land Surfaces and Weathering (CR), Garbology (CR), Zoo Visit (CR), Anacostia Watershed Shad Release and Water Plant Restoration of Shore Habitat (CR & S), Learn to Bike (PE), Engineering and design with recycled materials (S & A), Animal and Plant Parts (CR &S)
- **3rd Grade** – FoodPrints, Engineering and design with recycled materials (S & A), Building Hurricane resistant Structures (S), Climate Change Posters and Presentations (S & CR), Animal and Plant Development and Behavior (CR &S), Habitats and human inflicted changes to ecosystems (CR), Traits (S &F)
- **4th Grade** – FoodPrints, Engineering and design with recycled materials (S & A), Anacostia Watershed Shad Project (S), Anacostia Boat lessons (CR), Visit to the Whitehouse with a focus on climate change (CR), Nature near Schools (S) Changes Overtime to Earth Surfaces (S), Energy and Solar Oven Project (S), Student led environmental action project with support of Nature Near Schools and neighborhood ANC Representative- 2023-24 (S), Every Kid in a Park Program (CR)
- **5th Grade** – FoodPrints, Engineering and design with recycled materials (S & A), Human Impact on Earth Surface (S & CR), Outdoor overnight at Camp Fraser (CR), Casey Trees Clean Air Project now Nature Near Schools 2017-2023 (S), Techbridge Girls Afterschool Earth Engineers Program for girls and BIPOC students (AC), Embassy program with a focus on Climate Action (CR), Student-led environmental action project with support of Nature Near Schools and neighborhood ANC Representative – 2021-2023 (S)

2. Environmental Action Projects

Fifth grade students for the last few years and now 4th grade students have worked on Environmental Action Projcts. Students brainstorm environmental issues that they see on our school campus or in our building. They vote on the issues to focus on one or two issues as a class. They research the issues to determine potential solutions and actions that they can take.

- 2021-2022
  - 5th graders researched the health effects of rat overpopulation on our school campus. They wrote letters, alerted the ANC representative of their concerns and completed a 311 report. These reports and communications resulted in the Department of Health investigating. The landscaping was altered to decrease rat tunneling on the school campus.

- 5th graders organized an environmental issue poster session during our outdoor Earth Day celebration, including a field cleanup.
- 2022-2023
  - 5th graders saw an issue with waste and plastic in our school. They researched the DC regulations for plastic straws in the city. They decided to write a letter to the principal and alert the ANC representative, so that we could eliminate plastic straw use in our school.
  - 5th graders organized an outdoor campus cleanup to reduce waste going into the Anacostia River.
- 2023-2024
  - 4th grade students started their action by labeling the storm drains around our campus with signs to educate people that our storm water runs into the Anacostia.

PART III – SUMMARY NARRATIVE

Marie Reed Elementary School is a welcoming community of learners that serves 462 students in grades PreK-3 through 5. Located in the Adams Morgan neighborhood of Washington, DC, the Marie Reed community values diversity, equity, social-emotional learning, and strong family engagement. We regularly celebrate the cultures and languages from the many different countries represented at our school. Marie Reed is an arts-focused school, and we understand the value of having a strong learning community. Faculty and staff at Marie Reed are committed to having high expectations for all students and focus on providing quality, age-appropriate instruction to make learning fun and engaging. We leverage these connections and values to enhance our Environmental Literacy program, such that it is part of our culture.

In addition, Marie Reed has a history of community activism and stewardship to the environment. We strive to continue that legacy with actions and learning opportunities. Specifically, we seek out community partnerships like Casey Trees, the Embassy Sister program, Anacostia Watershed Society, National Park programs, Techbridge Girls, farm visits, and FoodPrints to enhance the experiences students get in class and on campus. These opportunities provide a wealth of background experiences for students to build on as they research and design their action projects in 5th grade. It also has pushed our students to ask us to lead afterschool and lunch bunch groups that focus on an environmental issue.

Fully modernized in 2017, Marie Reed is now a certified LEED Gold facility with sustainable features that can be used as teaching tools. We are proud of our bountiful school garden with an operational rain barrel, various outdoor classroom spaces, and a fully functional teaching kitchen. Our FoodPrints program has a meaningful impact in our

school. All our students learn about nutrition and gardening. Our robust school-wide recycling and cafeteria composting program has been an ongoing success. Students and staff are dedicated to reducing landfill waste. An enthusiastic team of custodians, teachers, and students ensure that recyclables are being sorted and managed properly. Students in Pre-K through first grade use their senses to learn about plant life cycles. In second grade, students observe a class worm bin over a two-week period to understand how food is broken down in the soil. In third grade, students upcycle old art materials for all grade levels to create original artwork. For example, dried out markers are soaked to create new watercolor paints and broken crayons are remelted to create new crayons that have warm and cool colors combined. Fourth grade students experience a boat trip on the Anacostia River and investigate the American shad restoration program. Grade 5 students work with Clean Air Partners and Casey Trees to test air quality in the community and develop independent Environmental Action Projects.

Other Achievements:

- Developed and maintained a school-wide composting and recycling program in the cafeteria and classrooms.
- Recognized by the Department of General Services for the DCPS Recycles! Honor Roll in 2016 and 2017 and Honor Roll with Distinction Award in *2018 and 2019.*
- Participated in the FoodPrints program, preparing healthy foods, and exploring in the school garden.
- Established a dedicated “Green Team” composed of teachers to help with recycling and environmental projects in 2016 and the group continues to meet in 2024 with 3 of the initial members continuing participation.
- Provided meaningful environmental education experiences to students across all grade levels.
- Community uniform share program.
- DC Capital LEAF (Leaders in Environmental Actions for our Future) Award – 2021 Sapling Level.