Shadow Lake Elementary School

School District: Tahoma

School Location: Maple Valley

Began participating in the Green Schools Program: May 2008

Level One of the Green Schools Program: Achieved in December 2009

Level Two of the Green Schools Program: Achieved in May 2011

Level Three of the Green Schools Program: Achieved in April 2012


Sustaining Green School 2015-16: Achieved in May 2016

Sustaining Green School 2016-17: Achieved in May 2017

Sustaining Green School 2017-18: Achieved in May 2018

Sustaining Green School 2018-19: Achieved in May 2019

Waste Reduction and Recycling (Level One)

- Shadow Lake Elementary increased its recycling rate from 54 percent to 79 percent.
- The school made morning announcements with recycling facts and suggestions for home.
- The school initiated a lunchroom recycling program to recycle milk cartons, aluminum cans, and plastic bottles. On all recycling bins, staff placed recycling stickers listing what can be recycled.
• In 2014, the school began collecting food scraps at breakfast to be sent to a composting facility. Every morning, Green Team students visited each classroom to collect compostable materials and empty them into the correct cafeteria bins.
• In 2012, the school started collecting juice pouches in the lunchroom to mail to TerraCycle, a company that uses juice pouches to make new products.
• At the beginning of each school year, students were trained in proper recycling and composting behavior. Staff were also trained via a staff meeting presentation.
• Students in Discovery classes emptied classroom and office recycling containers and took materials to the outdoor recycling container.
• Shadow Lake converted its parent newsletter and other outreach materials to electronic documents, saving approximately 39,000 pieces of paper each year.
• The Green Team invented a recycling game to help students improve sorting recyclable materials and were vigilant about keeping recycling containers free of contaminants.
• Green Team students made buttons out of plastic salad containers and gift bags from non-recyclable chip bags and gave them to the school board as gifts.
• Custodian Bill Smith converted garbage containers to recycling containers by placing a hanger above each recycling container that includes real examples of recyclable materials. He made leftover liquids buckets by painting black and white cow spots on old garbage containers. Students emptied unwanted leftover liquids into these buckets so milk cartons, plastic bottles and other recyclable beverage containers were empty and ready for recycling.

Green Team students help to keep the school litter free by participating in a Litter Treasure Hunt.

Green Team students assessed energy use with a heat sensor.
The Green Team received grant money from Donors Choose, a nonprofit organization that allows individuals to donate directly to public school classroom projects, to start two worm bins which were successfully maintained in 2011-12.

- Bottle caps were collected to create bottle cap art, and ink jet cartridges were collected for recycling.
- Green Team students monitored all waste stations for proper sorting and ensured all stations included signed and labeled recycling and compost bins.
- Each classroom maintained a Good On One Side paper reuse box to reduce paper waste.
- Students harvested compost from their classroom vermicomposting containers.

**Energy Conservation (Level Two)**

- Students placed “Turn Off Lights” stickers on all light switches.
- To promote energy conservation, students made regular reminders over the PA system to turn off lights in classrooms and other areas.
- Staff members regularly checked closets and other rooms to make sure the lights were turned off when not in use.
- Green Team students conducted Power Patrols three times throughout the school year to ensure classrooms were conserving energy by turning off lights, powering down equipment, and closing shades.
- All computers were programmed to shut down at the end of the day.
- At curriculum night, the Green Team shared information with parents and students about vermicomposting and energy conservation.
- In 2014-15, students and staff practiced “unplugged Fridays” where electronics were unplugged whenever possible to conserve energy, and the custodian regularly reminded staff to turn off lights and equipment at the end of the day.

**Water Conservation and Pollution Prevention (Level Three)**

- Posters and school announcements helped to remind students and staff of the importance of water conservation and how to conserve water at school.
- In 2011-12, students performed perk tests for a water conservation garden.
In 2012, students planted a native plant and rain garden to protect the local watershed by conserving and protecting water sources.

Staff members were asked to conserve water by filling containers with water and using brushes or sponges to clean equipment and tools instead of letting the faucet continuously run.

Science classes included water conservation education in their Salmon, Land, and Water Units. Third-grade students went on a field trip to Shadow Lake Bog.

The school’s water use was monitored throughout the school year by the building manager Gina Castagna. All water leaks were reported to the head custodian and building manager.

Aerators and Turn Off Faucet signs were installed on all faucets to conserve water.

Shadow Lake used permeable concrete in the courtyard beneath some of the benches in order to prevent storm water runoff.

School dishwashers were only run when there was a full load of dishes.

Sustaining Green School recognition

Shadow Lake Elementary School was recognized as a Sustaining Green School for sustaining and building on its Level One waste reduction and recycling practices, Level Two energy conservation practices, and Level Three water conservation strategies. How the school did this each year is described below.

Sustaining Green School 2014-15

In 2014-15, Shadow Lake participated in McKinstry’s People, Power, Planet (PPP) program to help the school conserve energy. To earn power points, the school conducted energy audits in classrooms, created educational posters about energy conservation, had students sign pledges to reduce energy use, and displayed quotes about energy conservation around the school.

The school reduced energy by one percent, and announced this success on the PPP website, in school announcements, and in newsletters.
Sustaining Green School 2015-16

- Shadow Lake collected reusable clothing and textiles through the America Recycles UsAgain program.
- Starting in April 2016, the school’s food waste was sent to a bio-digestion company in Auburn.
- To improve its collection of compostable materials, students began to eat breakfast in the lunchroom instead of in classrooms where it is challenging to collect food scraps.
- Green Team students designed Earth Day t-shirts and sold them as a fundraiser to raise money to support the school/s conservation efforts.
- Shadow Lake continued to participate in the PPP program, earning 100 power points by conducting classroom energy audits, creating educational posters, displaying quotes about energy conservation, and collecting 660 energy conservation pledges signed by students.
- Students toured their school facility to learn how the school uses energy.

Sustaining Green School 2016-17

- The Green Team conducted a waste audit by sorting waste from three classrooms. They used the results to remind students and staff to keep apple cores and food items out of recycling bins.
- The school conducted a litter patrol to remove any litter found around the school.
- In December 2016, Shadow Lake classes exchanged gently-used items such as books, magazines, DVD’s, and games.
- Green Team students participated in the district’s first student Sustainability Summit in March 2017. Students learned how to properly sort items in recycling, composting, and garbage bins. Green Team students brainstormed ways to help the school send less garbage to the landfill. Each school’s team presented their ideas for sustainability efforts.
- Fourth-grade students created skits during Earth Week to teach students how to properly sort recyclables and reduce contamination in recycling bins.
• The Green Team tallied how much recycling contamination occurred during Earth Week and, based on the results, knew they should teach the school community where to properly place straws, yogurt containers, and lids.

**Sustaining Green School 2017-18**

• Shadow Lake students conducted a school-wide litter cleanup to beautify the campus and prevent water pollution.
• As part of the Pollution Solution challenge, the Green Team conducted a no-idling campaign. Notices were sent to parents and student volunteers created and held up signs during pick-up time to inform drivers of the no-idling rules.
• The Green Team collaborated with the Maple Valley Lions Club to discourage the use of straws in the Maple Valley community. Third-grade students conducted a letter writing campaign by sending opinion essays to the mayor about the harms of plastic straws.

**Sustaining Green School 2018-19**

• All Shadow Lake students signed the People. Power. Planet pledge to reduce waste, recycle and conserve energy.
• To reduce food waste, at the cafeteria Share Table, Students left or took unopened packaged foods from the school lunch program.
• Green Team students participated in a Building Operator’s Tour led by custodian Nancy Rinker to learn about electrical, water, natural gas, and waste systems at school. Ms. Ranker shared ways she helps to reduce waste and conserve water and energy in her job.
• Students learned how to measure energy use and waste during Power Patrols.
• Third-grade students learned about the water cycle and the importance of conserving water.
• Fourth-grade students went on a field trip to Shadow Lake Nature Preserve to learn about water ecosystems, water conservation, and water pollution prevention.
• During a rain garden clean-up day, Green Students removed litter and weeds and leaned how rain gardens filter stormwater pollution.
• At a monthly PTSA meeting, students demonstrated how to pack a waste-free lunch and encouraged PTSA members to promote waste-free lunches in the parent newsletter.

• A newsletter with information on waste-free lunches was sent home and the school continued to hold waste-free lunches on Wednesdays.

Award

• Custodian John Olson received a King County Earth Heroes at School award in May 2015 for leading recycling efforts and mentoring students.

• In 2014, Shadow Lake Elementary School received a U.S. Green Ribbon School award for excellence in three pillars: Pillar 1 (environmental impact including waste reduction, recycling, and energy and water efficiency; Pillar 2 (healthy school environment); and Pillar 3 (environmental and sustainability education).