



King County Green Schools Program

Success Story

Reduce • Reuse • Recycle • Rethink

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 2014-15:
Achieved in May 2015

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

Sustaining Green School 2021-22:
Achieved in May 2022

Sustaining Green School 2022-23:
Achieved in May 2023



Green Team students help recycle.



Students present their poster about conserving electricity.



A poster highlights benefits of conserving energy and water.

Waste Reduction and Recycling (Level One)

- Shadow Lake increased its recycling rate from 54% to 79%.
- The school regularly 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 from the Green Schools Program showing 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 bins to recycling bins by placing a hanger above each recycling bin with examples of actual recyclable materials. He made leftover liquids buckets by painting black and white cow spots on old garbage bins. Students emptied unwanted leftover liquids into these buckets so milk cartons and plastic bottles were empty and ready for recycling.



Green Team students helped 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 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 to learn about recycling and to brainstorm how to improve conservation practices. Each school's team presented their ideas.
- The Green Team tallied recycling contamination. Based on the results, the team taught the school community that straws and caps belong in garbage bins.
- Fourth-grade students created skits during Earth Week to teach students how to sort recyclables and reduce contamination in recycling bins.



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 learned how rain gardens filter stormwater pollution.
- At a monthly PTSA meeting, students demonstrated how to pack a waste-free lunch. The parent newsletters also included information about packing waste-free lunches.
- The school continued to hold waste-free lunches on Wednesdays.



Sustaining Green School 2021-22

- The school Green Team includes fourth- and fifth-grade students, who were invited to join via emails sent to their families. 56 students attended an informational meeting which was held to create interest and share goals as well as past projects.
- At each regular Thursday meeting, an average of 25 students participated.
- Green Team students created videos for weekly video announcements and visited classrooms to present about waste reduction and other conservation practices.
- Teachers and students were encouraged to use both sides of their paper, and recycling bins continued to be used in each classroom and in the lunchroom.
- Future Ready teacher Liz White makes use of reusable materials in her student activities. This year, students built roller coasters using scrap paper.
- Students bringing lunches from home were encouraged to “pack it in; pack it out” by bringing leftovers and reusable containers home.
- The team shared the People, Power, Planet website with teachers and families, and all school community members were encouraged to explore the site and take the pledge. Simple tips such as turning off water when brushing their teeth, using natural light instead of electricity, and powering down were shared.
- The Green Team maintained a Green Schools bulletin board in the lunchroom hallway so students, staff, and visitors see information about the People Power Planet Pledge and waste reduction tips.

Sustaining Green School 2022-23

- The Green Team consisted of third- to fifth-grade students who met on Tuesdays after school starting in October 2022. Posters around the school invited students to join. In the fall, the students created a commercial to encourage additional students to join.
- The Green Team partnered with the school's production team to make weekly video announcements to share information about conservation practices.
- A representative from Republic Services, the school's recycling hauler, visit a Green Team meeting to share information about recycling and how to sort correctly.
- The Green Team learned about a new “R” – refuse. By refusing single-use items, waste was cut. Green Team students created videos on how to avoid single-use materials and instead choose reusable materials. The videos were shared with the entire school in weekly announcements.



Students post People Power Planet pledges on a hallway pledge board.

- Students picked up litter around campus, and created a video urging students to be mindful about non-recyclable packaging and how litter clogs storm drains.
- The team's holiday video shared less wasteful alternatives for gifts and wrapping. Instead of treats or paper products on Valentine's day, Green Team students upcycled old t-shirts into reusable bags.
- Each classroom continued to use a recycling bin and a scrap paper box for paper used only on one side.
- Students learned about energy vampires, which are devices that continue to use energy even when turned off. As a solution students promoted a day during Earth Week to "unplug" and get outside.
- For water conservation, the team used Green Schools Program website resources and played the fact or fiction game to learn how to conserve water.
- Green Schools Program recognition was shared at a school assembly, and the school's Green Schools banner continued to hang in the hallway outside the cafeteria.

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 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).