# **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: Achieved in

- 2014-15
- 2015-16
- 2016-17
- 2017-18
- 2018-19
- 2019-20

## **Waste Reduction and Recycling (Level One)**

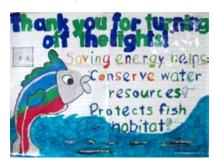
- Shadow Lake Elementary increased its recycling rate from 54 percent to 79 percent.
- The school made morning announcements with recycling facts and suggestions for home.
- The school initiated a lunchroom recycling program to and water recycle milk cartons, aluminum cans, and plastic bottles. Recycling stickers listing what can be recycled was placed on all recycling bins.



Green Team students help recycle



Students present their poster about conserving electricity



A student poster highlights benefits of conserving energy and water

- 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 members also were trained at a staff meeting.
- 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



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 members to keep apple cores and other 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.
- 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, decided they should teach the school community
  where to place straws, yogurt containers, and lids.



- 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, the school provided a food share table where 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.
- A newsletter with information on waste-free lunches was sent home and the school continued to hold waste-free lunches on Wednesdays.

# **Sustaining Green School 2019-20**

Green Team students visited all classrooms to explain how to complete a People.
 Power. Planet pledge to reduce waste and conserve energy.

- Green Team students placed a Good On One Side (G.O.O.S.) box in the employee workroom to encourage paper reuse. The paper collected was distributed to classrooms for scratch paper.
- Students created paper conservation signs to display on paper towel dispensers.
- Green Team participated in a Green Team action planning workshop on improving
  waste reduction and recycling practices. Students practiced sorting waste and
  discussed how waste reduction and recycling reduce water pollution and emissions
  that lead to climate change.
- To educate students about water conservation, Green Team members created
  posters and video announcements about the importance of conserving water. In a
  new spirit day called "Bed Head Day," students were encouraged to skip a shower
  for one day and come to school with a "bed head."
- The Green Team conducted energy audit Power Patrols to assess energy use and promote energy conservation. Students shared tips for energy conservation and praised good conservation practices.

#### Awards

- Custodian John Olson received a King County Earth Heroes at School award in May
   2015 for leading recycling efforts and mentoring students.
- In 2014, the 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).