



King County Green Schools Program

# Success Story

Reduce • Reuse • Recycle • Rethink

## Kent-Meridian High School

**School district :** Kent

**School location:** Kent

**Began participating in the Green Schools Program:** March 2009

**Level One of the Green Schools Program:** Achieved in March 2010

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

**Level Three of the Green Schools Program:** Achieved in May 2012

**Sustaining Green School 2015-16:** Achieved in May 2016



Environmental Science students receive this King County award in April 2011

## Waste reduction and recycling (Level One)

- Kent-Meridian High School maintained a 57 percent recycling rate.
- Thanks to the school's recycling success, garbage pick-ups were **reduced by half, resulting in an average savings of \$250 per month.**
- Through a campaign to encourage students to "only use a tray if necessary," **tray use was reduced from 1,500 trays per day to approximately 1,250 trays per day, or a total of approximately 20,000 trays from January through April 2010.** The decrease in tray use resulted in **cost savings of about \$700**, since each tray costs the district 3 1/2 cents.
- In 2010-11, the school switched from Styrofoam trays to wax-lined paper trays for pizza. In spring 2011 the school piloted the use of cardboard trays to replace Styrofoam trays at breakfast and lunch.
- Under the direction of teaching assistant Matt Arnold, students with special needs learned life skills by regularly emptying indoor recycling containers campus-wide. Their work resulted in consistent recycling collection throughout the school and was key to the program's success.
- To initiate recycling improvements in 2009-10, teacher Dianne Thompson led environmental science classes to interview the principal and kitchen staff to request feedback and encourage program buy-in.

- Environmental science classes promoted recycling by hanging posters in the cafeteria, creating a PowerPoint presentation to show in the cafeteria during lunches, and visiting selected classrooms to conduct surveys about recycling.
- Students helped start bottle and can recycling in the cafeteria, and student lunchroom monitors helped other students sort garbage and recyclable materials.
- The Environmental Science classes set up a freecycle station in the staff lounge. Throughout the school year, teachers placed unwanted or surplus items in the freecycle container and other teachers take the items they need. Teachers often sent an email to other staff to inform them about what items were available in the freecycle station.

## **Energy Conservation (Level Two)**

- Staff and students posted signs near light switches reminding people to turn lights off when they leave the room.
- Through the Cools Schools Challenge, students calculated their carbon footprints and 80 teachers partnered with environmental science students to complete:
  - A pre-challenge audit in which students interview staff members to ascertain how much energy is currently used both in the classroom and in the means of transportation the staff member uses.
  - A tip sheet for how to conserve energy provided to all teachers.
  - A post-challenge audit including the use of a carbon and energy calculator that allows students to see changes in each classroom and school-wide.

## **Gardens and outdoor spaces**

- The environmental science classes teamed with the woodshop classes to build an outdoor classroom. The benches convert to desks. Teachers can reserve the outdoor classroom for class use.
- Woodshop students also built a schoolyard wildlife habitat in the school's courtyard, with four areas: pond garden, hummingbird garden, butterfly garden and songbird garden.

- A “taste the change” garden with edible plants was built by woodshop students. This garden included plants used as Native American food sources.
- Students removed invasive species on the school campus and replaced them with native plants.
- The school adopted City of Kent Campus Park. Students collected trash, removed invasive species, such as English Ivy and Himalayan Blackberry, and replanted the area with native plants. Woodshop students built birdhouses and bat-houses for the park.
- In 2010-11, students worked with King County’s Master Gardener program to add a vegetable and herb garden which is used by the culinary arts students.
- In 2011-12, the compost created by the previous year’s vegetable garden and schoolyard wildlife habitat was used to amend soil and set up eight worm bins.
- Students used the square foot gardening method to see how much food could be grown in small spaces, including containers.
- In 2011-12, environmental science students became official partners with Kent City Parks to do native habitat restoration. Students were assigned an area in Campus Park, and City of Kent park employees taught students which invasive species to remove so they would have space to plant native plants.

## **Water Conservation (Level Three)**

- The student Green Team completed a school water use audit and presented findings to the principal and custodian.
- The school participated in World Water Monitoring Day, testing water from the nearest stream and entering results into an international database.
- Students completed a Take Back the Tap anti-bottled water campaign. Classes did a double-blind taste test comparing the school’s tap water to six brands of bottled water. Four classes worth of data suggested that students could not tell the difference in taste between tap and bottled water.
- Students researched where their tap water comes from and led a school poster campaign to teach other students and staff about the source of their tap water and the environmental impact of using bottled water versus drinking tap water.

- Students applied Northwest Association for Biomedical Research lessons on ethics to clean drinking water issues. They researched places around the world with water shortages and used ethics to answer the question “Should having access to clean drinking water be a right shared by people worldwide?”
- Kent-Meridian completed a school water use audit and presented findings to the principal and custodian.
- The school participated in World Water Monitoring Day, testing water from the nearest stream and entering results into an international database.

## **Sustaining Green School 2015-16**

- Kent-Meridian sustained its waste reduction and recycling (Level One), energy conservation (Level Two), and water conservation (Level Three) practices.
- Special education students emptied classroom recycling bins.
- Reminders about reducing waste, recycling, conserving energy and water were shared in morning announcements and included in the Royal Weekend Review.
- Environmental Science students conducted a waste assessment of each classroom and placed recycling stickers on classroom bins.
- Students pledged to lower their carbon footprints by reducing waste, recycling, and conserving energy and water.
- The district sent reminders to staff on a regular basis to remind them to turn off equipment when not in use and to power down electronics for the weekend.
- The school installed refillable water bottle stations and held a reusable water bottle campaign where students received reusable water bottles and were encouraged to use them instead of single-use plastic water bottles.
- Environmental Club students maintained the school garden and worked with Green Kent to remove invasive plants in nearby parks and plant native species. The students also observed trees during the year to see if there were changes in budding, etc. related to climate change.
- The school installed automatic shut off faucets.

## Grants received

- National Environmental Education Foundation: \$5,000 used for creating the schoolyard wildlife habitat and outdoor classroom.
- Planet Connect: \$1,000 to support a student internship in environmental science and for classroom worm bins to recycle food scraps; and \$500 to support a student internship in environmental science and to purchase bird feeders that use native wildflower seeds.
- Sustainable Seattle: \$1,150 to fund student projects to plant an edible garden, purchase compost bins for yard waste, and purchase three worm bins.
- Wild Places in City Spaces: \$5,000 to remove invasive species and plant natives on campus and in the nearby city park.
- Washington Native Plant Society: \$500 to support Schoolyard Wildlife Habitat and campus gardens.

## Awards and certifications

- Kent-Meridian High School was the first Washington school to receive an Eco-School certification from the National Wildlife Federation.
- Kent-Meridian staff Matt Arnold received a King County Earth Hero at School award in April 2012 for his work teaching students with special needs life skills through taking over the paper and plastic recycling program for the entire school.
- Third-period Environmental Science students received a King County Earth Hero at School Award in April 2011 for teaching about non-toxic alternatives to toxic household cleaners to students at Mill Creek Middle School.
- Teacher Dianne Thompson received a King County Earth Hero at School award in April 2010, and won the PTSA Teacher of the Year award in 2008-09.