PART I - ELIGIBILITY CERTIFICATION

School and District’s Certifications
The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school’s eligibility and compliance with the following requirements is true and correct to the best of their knowledge. *In no case is a private school required to make any certification with regard to the public school district in which it is located.*

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)

2. The school has been evaluated and selected from among schools within the Nominating Authority’s jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.

3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.

4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.

5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution’s equal protection clause.

6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.

7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.
For Public Schools only:  [ ] Charter  [ ] Title I  [ ] Magnet  [ ] Choice

Name of Principal Mr. Terry Duty
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name Tahoma Senior High School
(As it should appear in the official records)

School Mailing Address 18200 SE 240th St.
(If address is P.O. Box, also include street address.)

Covington  WA  98042
City State Zip

County King State School Code Number*  2 8 4 9

Telephone (425) 413-6200  Fax (425) 413-6333

Web site/URL www.tahomahigh.com  E-mail terry@tahomacsd.us

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

(Principal's Signature)  Date 2/26/13

Name of Superintendent* Mr. Mike Maryanski
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name* Tahoma School District  Tel.(425) 413-3400

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate. This is one of the highest performing green schools in my jurisdiction.

(Superintendent's Signature)  Date 2/26/13

*Private Schools: If the information requested is not applicable, write N/A in the space.
PART II – SUMMARY OF ACHIEVEMENTS

Instructions to School Principal

Provide a concise and coherent "snapshot" that describes how your school is representative of your jurisdiction’s highest achieving green school efforts in approximately 800 words. Summarize your strengths and accomplishments. Focus on what makes your school worthy of the title U.S. Department of Education Green Ribbon School.

PART III – DOCUMENTATION OF STATE EVALUATION OF NOMINEE

Instructions to Nominating Authority

The Nominating Authority must document schools’ high achievement in each of the three ED-GRS Pillars and nine Elements. For each school nominated, please attach documentation in each Pillar and Element. This may be the Authority’s application based on the Framework and sample application or a committee’s written evaluation of a school in each Pillar and Element.

Nominating Authority’s Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the school’s eligibility and compliance with the following requirements is true and correct to the best of the Authority’s knowledge.

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)

2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.

3. The school meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: WA State Office of Superintendent of Public Instruction

Name of Nominating Authority: Ms. Gilda Wheeler

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the
school meets the provisions above.

Date: February 11, 2013

(Nominating Authority’s Signature)

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to green.ribbon.schools@ed.gov according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509
Expiration Date: February 28, 2015

Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.
There is something increasingly in short supply at Tahoma High School: waste.

Whether it is the school’s new Waste-Free Wednesday challenge, the water-bottle-refilling stations in its hallways, recycling and composting efforts, or the computer refurbishing program there is a common and growing attitude among students and staff to not only talk about sustainability but to actively participate.

Sustainability concepts are becoming embedded in Tahoma’s curriculum. The school’s Grade 10 academy programs, Global Academy and Outdoor Academy, provide students with opportunities to learn about issues of consumption, waste, and environmental footprint. They work collaboratively on stewardship and do a number of community service projects, such as raising food for the local food bank and restoring riparian areas along the Cedar River. These programs use the environment and critical issues of our time to frame learning for students around sustainability.

Partnerships are keys to our students’ success. Students have opportunity to engage in real experiences that make a difference in our community and region as they learn about sustainability. They might visit McKinstry company, where they learn about practical applications of sustainability in business and industry, or be part of a field trip that examines how the Seattle Mariners baseball team manages waste produced by thousands of fans. The students also work with local government to learn how it is meeting water management requirements of the Clean Water Act and other legal requirements that monitor impact on the environment. This has brought a whole new level of engagement and civic responsibility to student projects.

There are other opportunities to learn and practice sustainability outside the classroom. Tahoma students are encouraged to volunteer in the community as a way of making stewardship and sustainability come alive. Multiple school clubs (Sustainability Ambassadors (green team), Key Club, FBLA, and Leadership) participate individually in Adopt a Road and the city of Maple Valley’s Make a Difference Day. Curriculum in Global Academy Inquiry Science, Environmental Biology and AP Environmental Biology involves visits to the Shadow Lake Bog, and working on-site with Friends of the Cedar River Watershed. THS has numerous students involved in producing and presenting the renowned Watershed Report. Our Sustainability Ambassadors also hosted a booth at the Maple Valley Farmers Market to help inform the community about our exciting recycling programs offered at THS for batteries, Styrofoam, bottle caps, plastic bags and cell phones. Students in our PC Tech Repair Program refurbish surplus school district desktop computers and make them available to families in need, instead of sending the computers to landfills.

In addition to what they experience in high school, Tahoma students bring with them a growing environmental awareness gained in previous school experiences. They help nurture that process by returning to elementary schools as seniors to present environmental lessons to Grade 4 students. Seniors study environmental issues and then develop their own lessons that will be presented to fourth-grade students who are studying Humans and the Environment. This unit challenges students, as complex thinkers, to consider how environmental issues will affect their generation and the ones that follow it. The curriculum covers several grade levels, having seniors
circle back and present information to students who are just beginning their studies. Seniors are required to research environmental topics and then present them in creative ways. The fourth graders are introduced to topics that include sustainability, global warming, deforestation, recycling, energy efficiency, preserving water resources, and dangers associated with plastic waste at sea. High school students use creative ways to engage the younger learners and often use the outdoor areas at the school to help bring the learning to life. This partnership gives students the tools to make a difference at school, in their homes and in their community.

Tahoma takes great pride in guiding its students on how to become environmentally conscious and how to ensure they are informed about the importance of sustainability. One way is our daily announcement by the Sustainability Ambassadors that reminds the students how to take small steps to a greener future. For example, we ask students to carpool and give data to support why they should; we also explain to the students why they should not idle cars in the parking lot. We teach students how to properly recycle and compost not just for a greener school but also so they can take those habits home and teach their families. Students are encouraged to bring reusable water bottles to school and refill them at hallway hydration stations. Posters and signs encourage sustainability, teachers talk about it, and students find themselves immersed in information and activities that encourage responsible use of resources. Sustainability is becoming synonymous with life as a Tahoma Bear.
### OSPI Green Ribbon Schools Reviewer Scoring Sheet and Rubric

**Name of School:** Tahoma Senior High  
**Average Total points:** 73/100  
**5 Reviewers**

<table>
<thead>
<tr>
<th>Green Ribbon Pillar and Elements</th>
<th>Reviewer Notes</th>
<th>Points</th>
</tr>
</thead>
</table>
| **Summary Narrative**                              | Strong and comprehensive narrative  
Pronounced and demonstrated commitment to E/S! KUDOS!  
Very impressive application.                        | N/A    |

<table>
<thead>
<tr>
<th>Cross Cutting Questions – 5 Points</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participation in Green School Programs and/or Awards for Environmental and Sustainability Efforts.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 pt</td>
<td>In addition, school has received one award.</td>
<td></td>
</tr>
<tr>
<td>2-3pts</td>
<td>In addition, school has received more than one award and has achieved an advanced level of progress in at least one recognized program.</td>
<td></td>
</tr>
<tr>
<td>4-5 pts</td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pillar I: Reduce Environmental Impact and Costs – 30 Points</th>
<th>Reviewer Notes</th>
<th>Points</th>
</tr>
</thead>
</table>
| **Element IA: Increased energy conservation and efficiency 15 pts** | Good energy reduction reported. Not an Energy Star rated facility or has an energy master plan.  
Good thoughtful efforts here by team. | 21    |
| 1-5 pts                                                   | School has an Energy Star rating and an Energy Master Plan  
Demonstrates substantial reductions in electricity and heating energy use and carbon footprint  
Generates or purchases some renewable energy  
Has green building recognition for some new, renovated and/or existing buildings at minimum Silver level or equivalent  
Measures and offsets some of its remaining carbon footprint |       |
| 6-10 pts                                                 | School has an Energy Master Plan  
Is Energy Star rated above 90  
Demonstrates reductions from baseline in electricity, heating and carbon footprint of 35% or more;  
>50% of energy use comes from renewable sources  
Offsets a substantial amount of its remaining footprint  
Has received green building recognition at the Gold or higher for all new, renovated, and existing buildings |       |
| 11-15 pts                                                |                                                                             |       |

| Element IB: Improved water quality, efficiency, and conservation 5 pts | | |
| 1 pt | 2-3 pts | 4-5 pts |
- The school protects its water from contaminants
- Cleans its drinking water fountains
- Controls lead in drinking water

In addition
- School has smart irrigation and landscaping that is water-efficient
- Conducts annual water audits and controls leaks
- Installs some water-conserving fixtures and/or appliances (e.g. waterless urinals, dual-flush toilets, appliances)
- Can demonstrate a modest amount of reduction in water-use compared to baseline
- Has some amount of grounds devoted to ecologically beneficial uses

In addition
- School demonstrates a substantial amount of reduction in water-use compared to baseline
- Uses only alternative water sources for irrigation (e.g. gray water; rainwater harvesting)
- Provides only water-efficient fixtures
- Uses other creative measures for protecting and conserving water at the school site (e.g. bioswales for controlling stormwater runoff; reducing impermeable surfaces)
- Devotes substantial amount of grounds to ecologically beneficial uses

18% reduction domestic.
18% reduction in domestic water use but a 6% increase in irrigation water use. Not clear why that is with no irrigation noted in the narrative. No water efficient fixtures. District has a storm water master plan.
$80,000 grant for storm water pollution controls.

<table>
<thead>
<tr>
<th>Element IC: Reduced waste production 5 pts</th>
<th>1-2 pts</th>
<th>3-4 pts</th>
<th>5 pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>School monitors its hazardous waste and disposes of it as required by state law</td>
<td>In addition</td>
<td>In addition</td>
<td>School also has made substantial, measured progress towards a “zero waste” goal</td>
</tr>
<tr>
<td>Has a recycling program that diverts 20% of its solid waste (but no organics/ compost)</td>
<td>School also has a pollution prevention approach to reduce the use of hazardous chemicals</td>
<td>Has a recycling program that diverts 50% or more of its solid waste (including organics like yard waste and food waste)</td>
<td></td>
</tr>
<tr>
<td>Purchases some paper with some recycled content</td>
<td>Recycles computer and electronics responsibly</td>
<td>Purchases substantial amounts of paper with &gt; 30% recycled content, and chlorine-free</td>
<td></td>
</tr>
<tr>
<td>Uses some “third-party certified” cleaning products and describes a few creative ways the school community practices the 4Rs (Reduce, Reuse, Recycle, Rot)</td>
<td>Uses substantial amount of “third-party certified” cleaning products</td>
<td>Has an environmentally-preferable purchasing policy and a hazardous waste management policy that reduces and prevents solid and hazardous wastes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Has a recycling program that diverts 35% of its solid waste (some organics/ compost, such as yard waste)</td>
<td>Uses 100% “third-party certified” cleaning products (not including disinfectants)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Purchases substantial amounts of paper with recycled and chlorine-free content</td>
<td>Has a custodial program that meets “green” institutional services standards</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Describes several creative ways the school community practices the 4Rs</td>
<td></td>
</tr>
</tbody>
</table>

Element ID: Alternative transportation 5 pts

Good waste diversion and compost program but limited green cleaning supplies / programs.
Electronic waste recycling and 100% PCF paper, but no mention of mercury in lamps. P.C. Tech is innovative and unique. Outreach at farmers market and teaching grade school students.

Washington State Green Ribbon Schools Scoring Rubric Tahoma Senior High
| 1-2 pts | 3-4 pts | 5 pts | School is not in a walkable or 
bikeable area, high 
percentage of students 
carpool. Transportation has 
a high STARS efficiency rating, 47% bus, 53% drive-80% of 
them carpool. |
| --- | --- | --- | --- |
| • School has programs in 
place to promote more 
efficient and healthier 
transportation, including 
designated carpool stalls, anti-idling policy, no 
loading/unloading near air 
intakes |
| In addition |
| • School has a high 
percentage of students that 
do not drive in a single 
vehicle to school |
| • Participates in Safe Routes 
to Schools and identifies safe 
pedestrian routes |
| In addition |
| • School has alternative-fuel buses 
and other creative means of 
promoting alternative transportation |
| • Adopts a policy to promote 
active transportation |
| Additional efforts towards Pillar 1 |
| School has at least one 
innovative or unique practice 
and/or partnership to help 
reduce its environmental 
footprint (could be related to 
footprint monitoring, access to 
community expertise, training, 
in-kind support, 
student/community 
engagement, contests, or 
other practices). |
| School has at least two 
innovative or unique practices 
and/or partnerships to reduce its 
footprint. |
| School has at least three or more 
innovative or unique practices and/or 
partnerships to reduce its footprint. |
| N/A |

<table>
<thead>
<tr>
<th>Pillar II: Improve Health and Wellness of Students and Staff – 30 Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Element II A: An integrated school environmental health program 15 pts</td>
</tr>
<tr>
<td>Reviewer Notes</td>
</tr>
<tr>
<td>---</td>
</tr>
</tbody>
</table>
| School complies with all 
relevant state laws related 
to pesticides, mercury, 
tobacco and other 
hazardous materials |
| In addition |
| • School tests classrooms for 
radon within last 24 months |
| • Implements an Integrated 
Pest Management plan that 
eliminates pesticides indoors 
and outdoors |
| School has completed everything in this 
section and describes numerous 
aggressive approaches to eliminating 
environmental health and safety 
hazards (physical, biological, chemical, 
natural), including, for example, 
environmental asthma triggers, 
pesticides, mold, mercury |
| No IPM program mentioned 
IAQ plan or CO 
detection/alarms. Gas is 
reported as 54% of energy 
used, therefore there are 
combustion appliances (gas 
boiler or furnace on site) and 
need CO monitoring. Has 
removed some asthma 
triggers and provides above 
code minimums for 
ventilation. |
| 1-5 pts | 6-10 pts | 11-15 pts | 20 |
### Element IIB: Nutrition and fitness 15 pts

<table>
<thead>
<tr>
<th>1-5 pts</th>
<th>6-10 pts</th>
<th>11-15 pts</th>
</tr>
</thead>
</table>
| - School conducts at least an average of 120 minutes per week per student of physical education with a reasonable amount conducted outdoors.  
- Has an on-site food garden.  
- Participates in some nutrition program. | In addition  
- School participates in a farm-to-school program.  
- Participates in USDA or other nutrition program at a high level.  
- Students participate in Sunwise-type program.  
- Some food purchased is certified organic.  
- Food from school garden is eaten by students or community.  
- Compelling description of student outdoor activities. | In addition  
- School also purchases a substantial amount of food certified organic.  
- Reduced UV and heat exposure.  
- More than 50% of physical education annually takes place outdoors.  
- Describes unique and innovative practices and partnerships to promote healthy nutrition, and high quality outdoor time. |

#### Additional efforts towards Pillar 2

| School has at least one innovative or unique practice and/or partnership to improve nutrition and fitness. | School has at least two innovative or unique practices and/or partnerships to improve nutrition and fitness. | School has at least three or more innovative or unique practices and/or partnerships to improve nutrition and fitness. | N/A |

### Pillar III: Environmental and Sustainability Education – 35 Points

#### Element III A: Interdisciplinary learning about the key relationships between dynamic environmental, energy, and human systems 20 pts

<table>
<thead>
<tr>
<th>1-5 pts</th>
<th>6-10 pts</th>
<th>11-15 pts</th>
</tr>
</thead>
</table>
| - School incorporates limited environmental and sustainability (E/S) activities in some grades.  
- Includes limited E/S concepts in some assessments.  
- <20% of teachers participate in. | - School integrates E/S concepts into many subjects.  
- Integrates E/S into some class and school assessments.  
- >50% of teachers participate in occasional E/S professional development opportunities.  
- Enrolls at least 5% of students are proficient in. | - School focuses E/S literacy on understanding the key relationships between dynamic environmental and human (social, economic, etc.) systems.  
- Incorporates E/S themes and topics in many grades, subjects, classroom and school assessments.  
- Students are proficient in. |

- School has an E/S matriculation requirement which is focused on understanding the key relationships between dynamic environmental and human (social, economic, etc.) systems.  
- Fully integrated E/S into the curricula scope and sequence of learning and matriculation.  
- Very integrated E/S curriculum. Some teachers get directed PD training. 180 students participating in AP Enviro Sci. No matriculation standards described.  
- More info on 10th grade and senior project. Very good progress and exemplary efforts. |

27
<table>
<thead>
<tr>
<th>Occasional E/S professional development opportunities</th>
<th>School's eligible graduates in AP environmental science during their high school career</th>
<th>These assessments</th>
<th>Standards for all grades</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt;75% of teachers participate in one or more E/S professional development opportunities annually</td>
<td>Inquiry- and project-based learning activities are described</td>
<td>&gt;50% of the school's eligible graduates enroll in AP environmental science during their high school career</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inquiry-based, project-based activities are described</td>
</tr>
</tbody>
</table>

**Element IIIB: Use of the environment and sustainability to develop STEM content, knowledge, and thinking skills 5 pts**

<table>
<thead>
<tr>
<th>1-3 pts</th>
<th>4-5 pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>School sometimes integrates E/S into science courses; makes some connections to E/S careers</td>
<td>School frequently integrates E/S concepts into STEM courses</td>
</tr>
<tr>
<td>Provides some additional evidence about links to STEM</td>
<td>Curricula makes many connections throughout to E/S careers, career tech/green jobs</td>
</tr>
<tr>
<td></td>
<td>Offers E/S related Career Technical Education courses</td>
</tr>
<tr>
<td></td>
<td>Provides a substantial amount of additional evidence about links to STEM education</td>
</tr>
</tbody>
</table>

**Element IIIC: Development and application of civic engagement knowledge and skills 10 pts**

<table>
<thead>
<tr>
<th>1-3 pts</th>
<th>4-7 pts</th>
<th>8-10 pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>School has civic projects related to environment and sustainability in some grades</td>
<td>School employs best practices for inquiry-based, hands-on, experiential learning in both their civic and outdoor experiences</td>
<td>School receives full credit when all grades have civic projects</td>
</tr>
<tr>
<td>Occasional meaningful outdoor learning experiences in a few grades</td>
<td>Projects are not &quot;one-off&quot; but instead are in-depth service learning and civic projects fully integrated with school's academic coursework</td>
<td>When all grades have meaningful outdoor learning experiences</td>
</tr>
<tr>
<td>A few community partnerships, perhaps only involving donations of funds/supplies</td>
<td>When the quality and quantity of community partnerships results in sustainability advances at the school, other schools and the wider community.</td>
<td>Higher points for inspiring and creative projects and partnerships</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Very active in the community at various grade levels, it's not clear what 9th graders are doing specifically.</td>
</tr>
</tbody>
</table>

**TOTAL POINTS (100 possible)**
### School Contact Information

**School Name**
- Tahoma Senior High

**Street Address**
- 18200 SE 240th

**City**
- Covington

**State**
- WA

**Zip**
- 98042

**School Website**
- [http://tahomahigh.com](http://tahomahigh.com)

**Principal First Name**
- Terry

**Principal Last Name**
- Duty

**Principal Email Address**
- tduty@tahomasd.us

**Principal Phone Number**
- (425)413-6200

**Lead Applicant First Name**
- Kevin

**Lead Applicant Last Name**
- Patterson

**Lead Applicant Title**
- Public Information Officer

**Lead Applicant Email**
- kpatters@tahomasd.us

**Lead Applicant Phone Number**
- 425-413-3409

**Level**

School Type
Public

School Setting
Fall 2012 total enrollment
1753

2011 - 2012 attendance rate
Graduation rate (if applicable)
86.8

Student demographics
Percent of students who qualify for free or reduced price lunch : 12.5
Percent of English language learners at school : 2
Percent of special education students at school : 8.9
Percent of non-white students at school : 18

District and Code
Tahoma School District - 17409

My school's Educational Service District (ESD):
Don't know your ESD? check out our interactive state map.
Puget Sound ESD 121

4. New Page

Summary Narrative

Please summarize your school's efforts in all three pillars. You should focus on unique and innovative practices and partnerships. (800 word maximum)

Tahoma High School has solar energy panels on its roof, water bottle refilling stations in its hallways, an organic garden on its campus, fresh and fresh-frozen food in its cafeteria, and about 1,700 students and staff who become more environmentally literate and aware with each passing year.

Students at Tahoma High School are expected to meet district and state learning standards as they move toward graduation. They are also expected to gain knowledge and understanding of complex issues that relate directly to sustaining the Earth. There is much to learn and Tahoma's students are making great strides. But it's not enough. With each achievement, students learn that there is more to learn and more to do. The good news is that they are not only eager to do it but that they also are willing to change what they do when they are away from school to embrace sustainability.

Sustainability concepts are directly taught in the two Grade 10 academies, Global and Outdoor. Students learn about issues of consumption, waste, and environmental footprint. They work collaboratively on stewardship issues and do a number of community service projects including raising food for the local food bank and restoring riparian areas along the Cedar River. These programs use the environment and critical issues facing us around sustainability to frame learning for students.

Partnerships we have created are key to our success. Students have opportunity to engage in real experiences making a difference in our community and region learning about sustainability. This ranges from large business and professional sports stadium through our involvement with McKinstry and Safeco Field or working with local city government to meet the surface water management requirements of the Clean Water Act and measures our local government is accountable to in monitoring the impact of their actions. This has brought a whole new level of engagement and civic responsibility to student projects.

There are other opportunities to learn and practice sustainability outside the classroom. Tahoma students are encouraged to volunteer in the community as a way of making stewardship and sustainability come alive. Multiple school clubs (Green Team,
Key Club, FBLA, and Leadership) participate individually in Adopt a Road, and/or the city of Maple Valley’s Make a Difference Day. Curriculum in Global Academy Inquiry Science, Environmental Biology and AP Environmental Biology involves visits to the Shadow Lake Bog, and working on-site with Friends of the Cedar River Watershed. THS has numerous students involved in producing and presenting the renowned Watershed Report. Our green team also hosted a booth at the MV Farmers Market to help inform the community about our exciting recycling programs offered at THS for batteries, Styrofoam, bottle caps, plastic bags and cell phones.

In addition to what they experience in high school, Tahoma students bring with them a growing environmental awareness gained in previous school experiences. They help nurture that process by returning to elementary schools as seniors to present environmental lessons to Grade 4 students. Seniors study environmental issues and then develop their own lessons that will be presented to fourth-grade students who are studying Humans and the Environment. This unit challenges students, as complex thinkers, to consider how environmental issues will affect their generation and the ones that follow it. The curriculum covers several grade levels, having seniors circle back and present information to students who are just beginning their studies. Seniors are required to research environmental topics and then present them in creative ways. The fourth graders are introduced to topics that include sustainability, global warming, deforestation, recycling, energy efficiency, preserving water resources, and dangers associated with plastic waste at sea. High school students use creative ways to engage the younger learners and often use the outdoor areas at the school to help bring the learning to life. This partnership gives students the tools to make a difference at school, in their homes and in their community.

Tahoma takes great pride guiding its students on how to become environmentally conscious and how to ensure they are informed about the importance of sustainability. One way is our daily Green Team announcement that reminds the students how to take small steps to a greener future. For example, we ask students to carpool and give data to support why they should; we also explain to the students why they should not idle cars in the parking lot. We teach students how to properly recycle and compost not just for a greener school but also so they can take those habits home and teach their families. Students are encouraged to bring reusable water bottles to school and refill them at hallway hydration stations. Posters and signs encourage sustainability, teachers talk about it, and students find themselves immersed in information and activities that encourage responsible use of resources. Sustainability is becoming synonymous with life as a Tahoma Bear.

5. New Page

1. Is your school participating in a local, state, or nationally recognized green school program (for example, Washington Green Schools, Eco Schools USA, PLT Green Schools, King County Green Schools, Cool School Challenge)?

Yes

Which program(s) are you participating in and what level(s) have you achieved?

<table>
<thead>
<tr>
<th>Program</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>King County Green Schools</td>
<td>Level 2</td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

2. Has your school, staff or student body received any awards for health, environmental, or sustainability stewardship/action?

Yes

Please list the awards you have received and the years you received them.

<table>
<thead>
<tr>
<th>Award</th>
<th>Year Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>WA State Green Schools Pillar 2 Healthy School Environment</td>
<td>2012</td>
</tr>
</tbody>
</table>
7. New Page

3. Has your school received EPA ENERGY STAR certification?
   No

Please provide the following information

4. Can your school demonstrate a reduction in GHG emissions?
   No

Please provide the following information:

5. Has your school reduced its total non-transportation energy use from an initial baseline?
   Yes

Please provide the following information:

- Current energy usage (kBTU/student/year) : 7,140
- Current energy usage (kBTU/square foot/year) : 67
- Percentage reduction : 33%
- Time period measured (mm/yyyy - mm/yyyy, should be a minimum of 12 months) : 09/2008-08/2012
- How did you document this reduction (ie. ENERGY STAR portfolio, district report)? : Utility Manager and district reports

6. What percentage of your school's energy is obtained from:

<table>
<thead>
<tr>
<th>Type(s)</th>
<th>Percentage(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-site renewable energy generation</td>
<td>0%</td>
</tr>
<tr>
<td>Purchased renewable energy</td>
<td>0%</td>
</tr>
<tr>
<td>Non-renewable energy</td>
<td>Natural Gas</td>
</tr>
</tbody>
</table>

7. In what year was your school constructed?
   1971

8. What is the total square footage of your school?
   184,536

9. Has your school constructed a new building or renovated an existing building in the past ten years?
   No

Please provide the following information:

<table>
<thead>
<tr>
<th>New construction</th>
<th>Renovated building(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What percentage of the building area has achieved green build standards (for example, LEED, CHPS, Green Globes, WA State Sustainable Schools Protocol)?
10. Can you demonstrate a reduction in your school’s total water consumption (measured in gallons/occupant) from an initial baseline?

Yes

Please provide the following information:

Average baseline water use rate (gallons/occupant): 988
Current water use rate (gallons/occupant): 945
Percentage of reduction in domestic water use: 18%
Percentage of reduction in irrigation water use: 6% increase
Time period measured (mm/yyyy - mm/yyyy, should be a minimum of 12 months): 09/2008 - 06/2012
How did you document this reduction (eg. ENERGY STAR Portfolio Manager, school district reports)? District report through Utility Manager

11. Please provide the following information about your school’s landscaping:

What percentage of your total landscaping is considered water-efficient or regionally appropriate?: 100%
What types of plants are used and where are they located?: Plants are native or climate appropriate, in designated planting areas in front of the school, in courtyards and adjacent to parking areas.

12. Please describe the alternative or non-potable water sources used for irrigation. (Maximum 50 words)

Plants are native or climate appropriate and require no irrigation. The football/soccer field is artificial turf and requires no irrigation. The softball and baseball fields are not irrigated and go dormant in the summer months. The student gardens are watered manually and use rain barrels when possible.

13. Please describe efforts to reduce stormwater runoff and/or reduce impermeable surfaces. (Maximum 50 words)

Student leaders were granted $80,000 from State Farm Insurance to implement stormwater pollution solutions, creating a Stormwater Master Campus Plan and impacting green infrastructure and management practices at each school. The district works with county inspectors on annual reviews and implemented stormwater maintenance to maintain free-flowing, clean water.

14. Our school’s drinking water comes from:

Municipal water source

Please describe how the water source is protected from potential contaminants. (Maximum 50 words)

15. Please describe how you control lead in drinking water. (Maximum 50 words)

Tahoma High School is served by Covington Water District. The water is treated with chlorine and manganese removal. Water quality is monitored regularly. Forty random water samples are taken each month, which are independently tested and results submitted to the DOH. An annual water quality report is public information.

16. What percentage of your school grounds are devoted to ecologically beneficial uses (e.g. rain gardens, cisterns and grey water saving, native plant sinks, living walls, plants and flowers that encourage pollination)?

Approximately 12% of the site is devoted to ecologically beneficial uses. The property is bounded by natural forest on one side and all planting areas contain native plants. The water retention pond mitigates stormwater runoff and is used by science classes to study stormwater runoff and water quality impacts.
17. What percentage of solid waste is diverted from landfiling or incinerating due to recycling and/or composting (i.e. Recycling Rate)?

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected) : 103
B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected) : 96
C - Monthly compostable materials volume(s) in cubic yards (food scrap/food soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected) : 8

Recycling Rate = [(B + C) / (A + B + C) x 100] : 50%

Monthly waste generated per person = (A/number of occupants) : 103/1800=.057

18. What percentage of your school’s total office/classroom paper content by cost is post-consumer material or fiber from forests certified as responsibly managed?

0%

19. What percentage of the total office/classroom paper content by cost is totally chlorine-free (TCF) or processed chlorine free (PCF)

100%

20. Please list the types and amounts of hazardous waste generated annually by your school in each category

<table>
<thead>
<tr>
<th>Type(s)</th>
<th>Amount (in lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable liquids</td>
<td>0</td>
</tr>
<tr>
<td>Corrosive liquids</td>
<td>0</td>
</tr>
<tr>
<td>Toxics</td>
<td>0</td>
</tr>
<tr>
<td>Mercury</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
</tr>
</tbody>
</table>

21. How is hazardous waste disposal tracked?

Custodians and teachers diligently track expired chemicals. The District outsources its hazardous waste disposal to Clean Harbors, a third party vendor. All disposals are tracked by chemical and quantity.

22. Please describe other efforts to reduce solid waste and eliminate hazardous waste. (Maximum 100 words)

TSHS has participated in the King County hazardous material reduction program since 2003. Science and CTE teachers have hazardous materials/safety training. Teachers conduct formal checklist lab audits each semester. Custodial staff follow procedures for monitoring and securing hazardous materials. Most hazardous products have been substituted with green alternatives. In science labs simulation, substitution and replacement of traditional experiments involving hazardous materials has occurred with small-scale lab equipment and procedures reducing the amount of hazardous waste generated. We keep computers out of the landfill with the computer refurbishment and give-away program; food waste has been drastically reduced through composting.

23. Please provide the following information about the cleaning products used in your school:

What percentage of all products is certified? : 30%
Which green cleaning custodial standard is used? : New standards are in development
What specific third party certified green cleaning product standard does your school use? : New standards are in development
10. New Page

24. What percentage of your students walk, bike, bus, or carpool (2+ student in the car) to and from school?

Currently, 47% of TSHS students are transported to school via school bus. The remainder arrive by car, driving themselves, riding with parents. Approximately 80% of students who drive carpool. Few students bicycle, due to hazardous road conditions, and the remote location of the school is impractical for walkers.

25. How is this data collected and calculated? (Maximum 50 words)

Tahoma tracks ridership in accordance with state requirements, with formal counting in October to determine level of state funding. Carpool percentage is estimated by the high school principal monitoring exiting cars from the main lot at the completion of school. Cars with 2+ students in car were recorded as carpool.

26. Has your school implemented any of the following? (Please check all that apply)

Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows.
Safe Pedestrian Routes to school.

Please describe your Safe Pedestrian Routes program including activities and communication. (Maximum 50 words)

The school location is a remote corner of the district, not within walking distance of student housing. The road fronting the school is highly traveled but has not been improved to include sidewalks. Carpooling is encouraged.

27. Please describe how your school transportation use is efficient and has reduced its environmental impact. (Maximum 50 words)

Catalytic converters have been installed on all buses. All new bus purchases include urea diesel exhaust fluid systems to reduce diesel emissions. All school districts in the state are evaluated on their transportation efficiency through the STARS program. The District was awarded a 100% efficiency rating.

11. New Page

28. This is the end of Pillar 1. Please describe any other efforts your school has made toward reducing environmental impact with a focus on innovative or unique practices and partnerships. (Maximum 100 words)

- Puget Sound Energy Solar4Schools grant provides solar panels, clean energy curriculum
- PC Tech Repair class annually refurbishes 125+ computers with free distribution to local families, keeping hazardous waste out of the landfill, giving computer access to students in need, providing training and Microsoft certification to students.

- McKinstry Company supports our monitoring and energy efficiency:
  - Energy Star fluorescent lighting
  - Increased natural lighting
  - Multiple switches and motion sensor shutoffs in all rooms
  - Computers on automatic shut-down
  - Standard heating/cooling temperature 60-70°F; 75°F with air conditioning
  - Hot water set at 120°F; pipes insulated
  - Off hours energy reduction
  - Upgrade weather stripping, insulation, and window hardware.

13. New Page

29. What is the volume of your annual pesticide use (gallon/student/year)?
30. Please describe your efforts to reduce pesticide use. (Maximum 50 words)

The district uses no pesticides except in unusual situations where herbicides and other green efforts have not been successful. When this occurs, a third-party professional is used.

31. Which of the following practices does your school employ to minimize exposure to hazardous contaminants? (Please check all that apply)

Our school has identified and removed sources of elemental mercury and prohibits its purchase and use in the school.

Our school has tested all frequently occupied rooms at or below ground level for radon gas and has fixed and retested all rooms with levels that tested at or above 4 pCi/L or our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L.

Our school does not have any wood playground equipment or other structures that contain chromate copper arsenate or we have identified these structures and have taken steps to eliminate exposure.

32. If your school has combustion appliances, are you taking steps to protect occupants from carbon monoxide?

Our school does not have combustion appliances.

33. Please describe how your school manages chemicals routinely used in the school (e.g. adhesives, science lab supplies) to minimize occupant exposure. (Maximum 100 words)

Science and CTE teachers have made changes in lab experiments and materials used in the automotive, art, and robotics programs to reduce or eliminate hazards. Small-scale and micro equipment are used to reduce volumes of chemicals used. Small quantity purchasing reduces volume of chemical storage on site. Training is provided to ensure staff follow prudent practices for handling and disposal of chemicals. Chemical fume hoods are located in labs to minimize exposure when hazardous chemicals are being used. Custodial practices ensure hazardous materials are used with appropriate safety precautions. MSDS sheets are kept up-to-date and available centrally in the main office.

34. Please describe the actions your school takes to prevent exposure to asthma triggers in and around the school. (Maximum 100 words)

All filters are changed semiannually and inspected by the HVAC mechanic on a regular basis. Students and staff are encouraged not to wear perfumes as they may be asthma triggers.
35. Please describe the actions your school takes to control moisture from leaks, condensation, and excess humidity and promptly clean up mold or remove moldy materials when found. (Maximum 100 words)

Custodians and maintenance personnel are trained to monitor regularly for leaks and condensation. All issues identified are addressed immediately. Any mold found is removed and all surrounding areas are cleaned with bleach and water. Humidity is controlled by the HVAC system and proper use of outside air (20%).

36. Our school has installed local exhaust systems for major airborne contaminant sources.

No

37. Please describe your school’s practices for inspecting and maintaining the building’s ventilation system and all unit ventilators to ensure they are clean and operating properly. (Maximum 100 words)

The district has hired a full-time state licensed HVAC mechanic who oversees the system. This individual monitors the system to ensure proper ventilation (20% outside air). The school HVAC system is equipped with a global system where the economizers are easier to monitor. All filters are changed semi-annually by the custodial staff and inspected by the district HVAC mechanic. Any air quality concerns are sent directly to the district insurance representative who works closely with the district insurance company and maintenance department to address any concerns or issues.

38. Please describe the actions your school takes to ensure that all classrooms and other spaces are adequately ventilated with outside air, consistent with state or local codes, or national ventilation standards. (Maximum 100 words)

The District maintains a 20% outside airflow at all times, which exceeds standards. The system is monitored by the head custodian and HVAC mechanic. Any issues found are addressed immediately.

39. Please describe any other steps your school takes to protect indoor environmental quality such as implementing EPA IAQ Tools for Schools and/or conducting other periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action. (Maximum 200 words)

Periodic inspections are made by the District Resource Conservation Manager and Industrial Hygiene Consultant. Any issues found are investigated and resolved by the District.

14. New Page

40. Which practices does your school employ to promote nutrition, physical activity and overall school health? (Please check all that apply)

- Our school participates in the Coordinated School Health program.
- Our school manages a food garden either on-site or in close proximity to our building.
- Our school garden supplies food for our cafeteria or other community resource (cooking class, food bank, etc.).
- Over the past year, our students spent an average of at least 120 minutes per week (for middle and high schools) or 90 minutes per week (for elementary schools) in school supervised physical education.
- At least 50% of our students’ annual physical education and physical activity (including recess) takes place outdoors.
- At least 50% of our students have participated in the EPA’s Sunwise program (or equivalent program).
- Our school integrates health measures into assessments.

Your school’s USDA Healthier School Challenge

Please describe your school’s Farm to School partnership. (Maximum 100 words)

Please list the types and percentages of your school’s food that are certified “environmentally preferable.”

<table>
<thead>
<tr>
<th>Type (fresh produce, dairy, etc.)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please describe your school's food garden. Please include your garden's size and year of inception. (Maximum 100 words)

Global Academy built its own garden in 2009, with 900 square feet under outdoor cultivation along with an 800 square foot greenhouse. It started with community partners including Cedar Grove Composting, Home Depot and parents donating necessary supplies. Students and staff spent many weekends building the school garden and PVC greenhouse. Benefits:
• Integrate curriculum in science, social studies, and language arts.
• Connects students to the earth and the source of their food.
• Enhances student awareness and appreciation of the environment.
• Contributes to a strong sense of belonging, fellowship, caring, and community through garden activities.
• Instills pride, ownership, and responsibility.

Please describe where and how the food from your school garden is used. (Maximum 100 words)

Students harvest the crops and share with staff and donations are made to the local food bank. Produce is distributed to student families who contribute to the garden program and our Food Service has used lettuce grown in the garden for the lunch program. The garden is used as an outdoor learning space for a number of programs teaching about sustainability, composting, crop rotations and organic gardening practices. The garden produce also has been used to support community-building at the high school with fun student events.

Please describe your school's physical education program. (Maximum 100 words)

Tahoma High School believes comprehensive physical education is an integral part of the school's wellness plan. Our program offers progressive instruction that is physically, cognitively, and socially engaging within a balanced curriculum focused on fitness concepts, stress management, nutrition and decision making, while incorporating a variety of physical activities. Students keep an electronic health and fitness portfolio where they track their nutrition, fitness, and wellness activities and engage in weekly personal reflection. We believe this supports building habits and skills necessary for a lifetime of wellness. Staff fitness activities are sponsored by our health and fitness staff.

Please describe the type of outdoor exercise opportunities and nature-based recreation available to students. (Maximum 100 words)

Outdoor Academy integrates core academics and PE through outdoor recreation. Students examine the natural environment while participating in outdoor activities. In the rivers unit students cast fly rods and craft flies prior to a day at a local river. Fostering commitment to stewardship, students participate in environmental restoration. Activities include building and maintaining trails, planting native plants and removing invasive species. Students develop skills for safe recreation while appropriately using the region's resources. In Outdoor Recreation, students experience recreation activities without integration of science and language arts. Outdoor Club allows participation in hiking and other activities outside the school day.

Please describe how you integrate health measures into your school's assessments. (Maximum 100 words)

School climate as a health measure is monitored along with student academic achievement in annual school site plan reporting to the school board. Student academic success is impacted by relationships with students, staff and the overall school climate. Tahoma High leads the way in focus on those critical relationships and involvement of students in understanding and leveraging an environment where "Every Bear Counts." We monitor in many ways including the school climate My Voice survey. New initiatives in support of this include parents in new ways and include table top conversations on college and career readiness and Future Ready Day.
nutrition and fitness. Please highlight innovative or unique practices and partnerships. (Maximum 100 words)

The lunch and breakfast programs at Tahoma High School have undergone significant change over the past three years, beginning with research and advocacy about improving nutrition by students in the Global Academy program. Students researched nutritional value of foods served by fast-food restaurants and began to question whether school meals could be improved. The district's Food Services responded and introduced a healthier menu, eliminating canned fruits and vegetables from menus across the district serving only fresh or fresh-frozen fruits and vegetables. Only whole-grain bread is served. Last year, chocolate milk was eliminated from the menu to reduce sugar intake.

17. New Page

42. Which practices does your school employ to support environmental and sustainability literacy? (Please check all that apply)

- Environmental and sustainability concepts are integrated throughout the curriculum.
- Environmental and sustainability concepts are integrated into assessments.
- Professional development opportunities in environmental and sustainability education are provided for all teachers.
- Our school has an environmental or sustainability literacy requirement.

Please describe your school's environmental or sustainability literacy requirement. (Maximum 200 words)

The Tahoma School District established the District Outcomes and Indicators nearly 20 years ago and with a community and staff team refreshed those 8 years ago. Those outcomes include Community Contributor, Self-Directed Learner, Complex Thinker, Quality Producer, Effective Communicator, and Collaborative Worker. We see environmental and sustainability literacy embedded in both Community Contributor and Complex Thinker. Environmental and sustainability literacy is seen as an essential component of the Tahoma curriculum and a way to engage both the heart and mind of our learners around some of the most important problems our world must solve. Our school board and district leadership is committed to sustainability in both the curriculum and operations of the school system. Sustainability concepts provide a thread that runs through social studies and science across all grade levels. While there is no formal isolated literacy requirement the integration of economic, environmental and cultural sustainability experiences thread through the education for our students and results in a pervasive and enduring understanding and commitment to sustainability concepts in our students.

Please describe how environmental and sustainability concepts are taught and which subjects they are integrated into. (Maximum 200 words)

Environmental education concepts are integrated throughout the curriculum at Tahoma High School. Sustainability concepts are directly taught in the two Grade 10 academies, Global and Outdoor. Students learn about issues of consumption, waste, and environmental footprint. They work collaboratively on stewardship issues and do a number of community service projects including raising food for the local food bank and restoring riparian areas along the Cedar River. In addition, all seniors participate in a unit titled "Humans and the Environment," where they focus on a self-selected environmental issue and develop their own lessons to present to Grade 4 students at each elementary school. The seniors are required to research the environmental topic and then present the topic in creative ways to the fourth-graders. Many use laptop computers for PowerPoint presentations, quizzes and games designed to help the younger students understand concepts such as nonrenewable and renewable resources. The students are introduced to topics that include sustainability, global warming, deforestation, recycling, energy efficiency, preserving water resources, and dangers associated with plastic waste at sea. The high school students take this project very seriously and are committed to educating our next generation to become stewards of the environment.

Please describe how you integrate environmental and sustainability concepts into classroom based or schoolwide assessments, how you measure proficiency, and what percent of your students score "proficient" or better. (Maximum 200 words)

Students are assessed on environmental and sustainability concepts throughout their classes where there is a focus on sustainability education, such as in Global Academy and Outdoor Academy. Approximately 90% or higher perform at or above standard on these assessments. In addition, all seniors take part in a unit called Humans and the Environment. In this unit the culminating project requires them to teach Grade 4 students about a topic linked to sustainability and the environment, called
Choices for Tomorrow. The rubric for this project incorporates our district outcomes, including Complex Thinker, Community Contributor, Quality Producer, Effective Communicator, Self-Directed Learner, and Collaborative Worker. Specific criteria for the Choices for Tomorrow project include the following: sharing information about an environmental issue, incorporating the concepts of sustainability and interdependence, persuading the audience of the need for action. The overall goal of this project is to teach students ways to make a positive difference in preserving the quality of the environment. All of our Grade 12 students successfully complete this project, meeting or exceeding standards.

Please describe professional development opportunities available to your teachers in environmental and sustainability standards. Please include the percentage of teachers who participated in these opportunities for the 2011 - 2012 school year. (Maximum 200 words)

Tahoma High School has a long history of professional development connected to the environmental and sustainability standards. In the last three years this has focused on preparing our social studies and science teachers to deliver instruction and provide experiences through the use of systems-thinking tools. Two of our teachers presented at the Creative Learning Exchange Conference in Boston. These two teachers have coordinated with district leadership and the principal to provide professional development opportunities and support over the last three years and this year the district has demonstrated deep commitment though a half-time release of one teacher to support integration of systems tools into the curriculum and coaching of teachers at the high school. The school principal, district leaders, several teachers and students have attended Camp Snowball, focusing on systems thinking and sustainability, hosted by SoL Education Partnership. Currently, all science and social studies teachers have undergone professional development and are integrating various environmental and sustainability standards into their curricula using systems-thinking strategies. Several language arts teachers have also participated in this professional development. A total of 20 teachers at Tahoma High School have participated in this training. This represents 25% of teachers.

43. Does your school serve grades 9 - 12?

Yes

Please describe the academically rigorous coursework your school offers in environmental and sustainability studies. Include offerings such as AP Environmental Science and college in the high school courses. (Maximum 200 words)

At Tahoma Senior High School AP Environmental Science is taught in two different contexts. A traditional AP Environmental Science class is offered and we typically enroll 60-90 students annually in this year-long course. AP Environmental Science also provides a cornerstone for our 10th grade Outdoor Academy program, where 90 students have the integrated experience with AP Environmental Science, language arts, and Health and Fitness. We have also added an AP Human Geography class to our offerings for 9th grade and an Environmental Biology course for students in grades 10-12. In addition to these formal classes where the curriculum is focused on sustainability education there is an academically challenging unit on Global Climate Change in our 10th grade inquiry science class and the community call to action focus for Humans in the Environment unit as part of our 12th grade social studies class.

44. Describe your students' meaningful outdoor learning experiences at every grade level. (Maximum 200 words)

At Grade 10, specific student experience is dependent upon program but all include rich meaningful field experiences. Examples include the Puget Sound Energy Wild Horse Wind and Solar Farm, recycling and green infrastructure at Safeco Field, restoration and invasive species removal at the Log Cabin Reach, green building and resource conservation management with McKinstry, water quality and riparian zone sampling on Cedar River, hiking and trail restoration on Tiger Summit, fly fishing coupled with reading “A River Runs Through It” and reflection on the Cedar River. At Grade 11 all students experience the Seattle Public Art trip where students self select a course and walk through approximately 4 miles of downtown Seattle visiting the waterfront, farmers market, and concluding at the Seattle Center. Students find, document, and interpret Seattle public art. Most Seattle public art highlights themes of nature and environment, providing students with a vivid opportunity to experience and appreciate contributions of artists to understanding themes of environment and sustainability. At Grade 12 all students identify, develop, and implement a sustainability lesson they teach to our 4th grade students. Students are encouraged to use outdoor learning opportunities at each school as part of the activity portion of the lesson.
45. How does your school use sustainability and the environment as a context for learning science, technology, engineering, and mathematics skills and content knowledge? (Maximum 200 words)

We believe students learn best when topics studied touch substantive issues that impact their lives. Sustainability and the environment provide wonderful content for students to engage in as so many of the most significant issues facing our world today involve the environment and the struggle to balance competing needs in developing sustainable solutions. Given this rich content and commitment by the district leadership and board of directors to balanced exploration of sustainability issues, teachers have embraced the opportunity. Teachers customize lessons and examples to use in making relevant connections to key content across all areas, but especially in science, technology, engineering, and mathematics skills and content knowledge. Examples in the 10th grade Inquiry Science curriculum include global population growth and carrying capacity of the earth, global climate change, and biodiversity and extinction of species to name just a few. 10th graders plant native seedlings while removing non-native invasive weeds at the Cabin Reech project in Issaquah to learn about native and non-native invasive weeds. Non-native invasive plant species (NNIS) threaten the health and biodiversity of our public lands. These unwelcome plants disrupt natural ecosystems, displace native plants, impact native wildlife, and degrade the wonderful diverse wild lands of King County.

46. How does your school use sustainability and the environment as a context for learning about green technologies and career pathways? (Maximum 200 words)

Tacoma’s CTE courses all have specific college-to-career connections. In sustainable design this plays out in an exciting way in our PC Tech repair program. As curriculum becomes more online we find the digital divide is growing for families that are struggling financially. This increasingly affects our students, especially at the high school, as teachers include 21st Century digital skill expectations across all curriculum. Through our PC tech repair class, families in need receive a refurbished computer at no cost. Students help the family with set up of the computer. To date this year, our students have refurbished and placed 129 computers into homes of students in our district. To purchase a refurbished computer would cost a family $300 or more. The value of this program to our community strictly in the value of the computer is $38,700. In terms of students having easy access to the tools they need for learning both at home as well as at school the benefit is much higher. This is a great example of economics, environment, and culture all coming together in a way that is sustainable over time and makes a difference in the lives of our families.

47. Describe your students’ civic and/or community engagement projects integrating environmental and sustainability topics. (Maximum 200 words)

Each school site has multiple outdoor learning spaces. At the high school this includes the school garden, greenhouse, native landscape plantings, retention pond, sports fields and a bordering forest. In a current grant funded through State Farm Insurance, high school students are developing a district-wide campus master plan and will identify sustainable infrastructure improvements that will be made that will also serve as additional teaching features to support the sustainability curriculum at all levels. Demonstration projects will include native plantings, pervious pavement, cisterns, rain gardens, stormwater retention pond beautification, porous concrete, and bioswales. As part of the senior culminating project every student completes a self-selected 20 hour product that exemplifies and supports community service, their career pathway, or lifelong learning. 37% of students in spring 2012 had projects that linked to community service. Of these projects 10% were connected to topics related to the environment or sustainability. Examples include building signed nature trails, construction of wood duck boxes, catching and testing fish for pollutants, Mason bee boxes, community service as a naturalist for Cedar River salmon spawning, construction of a solar powered generator, volunteering at the local Shadow Lake Bog, and teaching environmental lessons at a preschool.

48. Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills. (Maximum 200 words)

Students are encouraged to volunteer in the community, making stewardship and sustainability come alive. Multiple school clubs (Green Team, Key Club, FBLA, and Leadership) participate individually in Adopt a Road and Maple Valley’s Make a Difference Day. Curriculum in Global Academy Inquiry Science, Environmental Biology and AP Environmental Biology involves visits to the Shadow Lake Bog, and working on-site with Friends of the Cedar River. THS has students involved in producing and presenting the renowned Watershed Report. Our Green Team hosted a booth at the Maple Valley Farmers Market to inform the community about our exciting recycling programs offered at the high school for batteries, Styrofoam, bottle caps, plastic bags and cell phones and is working with other schools in the district to establish district-wide Waste Free
Wednesdays. Green teams will ask the school board to encourage the community to join us in Waste Free Wednesdays. Student leaders are expanding their reach across the nation, taking the lead in sponsoring and hosting Google+ conversations with green team leaders attending the sustainability summer conference called Camp Snowball. The focus of sharing will be on practices that teams are engaging in at their schools to seed and support innovation in leadership practices.

49. Describe your partnerships and how they help your school achieve in the 3 Pillars. Include both the scope and impact of your partnerships. (Maximum 200 words)

Partners are critical to our work. Educators from Friends of the Cedar River Watershed meet Environmental Biology and Global Academy classes in the field to support systems thinking, watershed stewardship and native species planting. Tahoma works with Cedar Grove Composting and recently became a pilot school to help other schools start food composting. Global Academy students visit McKinstry Company to learn about “green” building and energy management. Puget Sound Energy supports learning about sustainable power, including wind and solar. Maple Valley Farmers’ Market provides students with a venue to educate the community about food waste, recycling, and school events. The Green Team has connected with elementary students in our district. Green Teamers coordinated the video taping of the “Food Waste Rap” performance during lunch at Rock Creek and helped with the garden and donated 9 boxes of plastic bottle caps, collected at the high school, for an art mural at Glacier Park. The Global Academy Garden has enjoyed partnerships with Johnson’s Do-it Center, Carpinito Brothers, Cedar Grove Composting and Uncle Ian’s through many donated supplies. Garden produce goes home with students, staff and is donated to the MV Food Bank, helping students see the importance of in-season, sustainable, local produce.

21. Thank You!

Email Confirmation
Jan 04, 2013 17:00:25 Success: Email Sent to: kpatters@tahom.asd.us

Response Location

Country: United States
Region: WA
City: Seattle
Postal Code: 98103
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