

TEACHERS: Planning Your Week Packet Fall 2018

WELCOME to Waskowitz!

We are thrilled to you have join us on this magical journey exploring the diversity of people and nature! This packet includes details about instructional time and lesson plans for you to use during your week of outdoor school.

Instructional Time at Waskowitz

On your **Teacher Planning Form** (Google doc online) you will choose 5 CORE Lessons that you would like to teach during your week. Waskowitz will create a master schedule taking into consideration:

- An off-site field trip to the Cedar River Watershed that is facilitated by Waskowitz and Watershed staff
- Whether or not you would like a Waskowitz Outdoor Educator to co-teach a lesson
- How much hiking you would like to do

After planning for the above, Waskowitz will fill in your schedule with CORE Lessons starting with your first preference and moving down the list. Keep in mind, you may not have time during the week to teach all 5 lessons.

Please complete your **Teacher Planning Form (located on our website under Teacher Planning Resources)** at least 2 weeks prior to your scheduled week with students. Contact Meredith von Trapp with questions: meredith.vontrapp@highlineschools.org.

Types of Lessons

CORE lessons are place based lessons that will help your students explore and engage with the Next Generation Science Standards practices, concepts and core ideas.

Enrichment lessons are to be used along with core lessons to provide extended learning about the concept or topic.

Pre-trip lessons are optional lessons to be done prior to your week of outdoor school to pre-teach core lesson concepts.

Pre-trip BEETLES Exploration Routines can enhance your core lesson and enrichment instruction. These lessons include excellent field based teaching strategies that you can use when teaching and learning outside. You will want to review these lessons prior to your trip at Waskowitz since they are designed to give you teaching strategies in the field and those strategies can be applied during any lesson. If you visit



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the BEETLES website, beetlesproject.org, you will find videos of their instructors teaching these lessons. The videos are a great resource to you as a field instructor!

CORE Lessons

Choose 5 of the following lessons and submit these choices on your Planning Form. Depending on how much hiking you want to do, you may not have time to teach all 5 lessons.

Adaptation Rooms

Location: The education buildings

Students explore the concept of animal adaptation by modeling the benefit of an adaptation in the introduction (teacher led), and by observing and critically reflecting on some common adaptations in the three rotations (HS leader led) following the introduction; students will explore common adaptations found in the skulls, pelts, and tracks of regional animals. The class begins as a group for the introduction, before dividing into 3 smaller groups paired with HS leaders and rotating through 3 adaptation rooms. Teachers can opt to have leaders rotate with the groups, or stay in a specific room for all 3 rotations (recommended).

Suggested enrichment lessons: Camouflage, Sly Fox, Bath and Moth

Bark Beetle Exploration: BEETLES lesson

Location: anywhere there is evidence of bark beetles

In forested areas, students are often intrigued by mysterious sticks covered in carved tunnels, which they often think were made by human artists or termites. After students complete this activity, they'll have the skills to identify bark beetle galleries, to make explanations about patterns, and to interpret what these tracks tell us about the life history of the organisms that made them.

Suggested enrichment lessons: Sit Spot, Plant Dramas, Meet a Plant, Meet a Tree, Each One Teach One, Build a Tree

Basic Orienteering

Location: the large field

Students practice basic compass and navigation skills. This lesson includes experimenting with the construction and use of a homemade compass, an introduction to cardinal directions presented as degree bearings on a modern compass and the establishment of a personal 100' pace count. Students apply these skills in small groups to complete a basic ecologically themed orienteering course (with the guidance of high school leaders).

Suggested enrichment lessons: Landmark Mapping

Case of the Disappearing Log: BEETLES lesson

Location: anywhere there are fallen logs

Students assume the roles of detectives faced with a nature mystery. First, they explore a decomposing log and look for evidence of how the log is changing. They make possible explanations for what might be



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causing log the to disappear. Students then learn about common “suspects”—organisms that decompose wood—and the signature evidence they leave behind. Students use a Disappearing Log Key to identify which organisms might have left behind which evidence, and use this information to make explanations about what has been happening to the log. Finally, students learn that the log isn’t really disappearing, it’s turning into the invisible gases that are part of the cycling of matter in all ecosystems.

Suggested enrichment lessons: Meet a Tree, Sit Spot, Plant Dramas, Meet a Plant, Meet a Tree, Each One Teach One, Build a Tree

Critter Surveys

Location: anywhere

Students use the “beat sheet” method to sample the insect/invertebrate communities found on the Waskowitz campus. The sample collection method involves placing a white pillowcase beneath a plant/shrub and shaking it vigorously or “beating” it with a small (approximately the length and width of a yardstick) “stick”. The agitation of the plant will cause a surprising number of “critters” to fall off the plant and onto the “sheet”. The previously largely unseen invertebrates become highly visible once landing on the sheet, and are easily collected for identification and analysis. Ideally, this sampling serves as a basis for comparison between different sites or different “host” plant species. **Note:** This activity can be extended to offer a complete tour of the “Scientific Process” by guiding students beyond the data collection process and onto critical reflection and even presentation.

Suggested enrichment lessons: Sit Spot, Plant Dramas, Meet a Plant, Meet a Tree, Each One Teach One

Fire Sculpture

Location: at the Fire Sculpture Shelter

The “Fire Sculpture” is a large and dramatically burnt snag (stump) located a short walk from the Waskowitz campus; the fire of unknown origin and date left behind a bizarrely shaped 30 ft stump. This lesson gives students an opportunity to appreciate, and be inspired by a unique natural space, and to practice sketching and creative writing skills.

Suggested enrichment lessons: Sit Spot, Plant Dramas, Meet a Plant, Meet a Tree, Each One Teach One, Build a Tree

GPS

Location: main campus based out of the council hall or barn

Students reflect on various approaches to navigation, and practice using GPS units. After a brief teacher led intro, the class breaks into 3 or 4 small groups, each led by a high school leader. Each small group uses GPS units, and enters coordinates that lead to cached stamps and ink pads. After stamping the corresponding box in the journal on the GPS page, the group moves on to the next waypoint. There are 5 waypoints in total. Reconvene for a brief conclusion.

Suggested enrichment lessons: Landmark Mapping



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Lichen Exploration

Location: main campus 30 acres or possibly elsewhere

Students observe and explore this “weird organism” that grows on rocks and trees. They learn what lichen is, use a key to identify three types of lichen, reflect on the symbiotic relationship of fungi and algae that make up lichens, and finally search for evidence of lichen succession. After this activity, students will likely begin to notice lichens everywhere, and will be motivated to continue their explorations.

Suggested enrichment lessons: Sit Spot, Plant Dramas, Meet a Plant, Meet a Tree, Each One Teach One, Build a Tree

Oh Deer!

Location: main campus on the field

Students will become different components of an ecosystem and learn about habitat interactions in this kinesthetic learning activity. By graphing the results of this game, students can discuss topics in population dynamics, limiting factors, and carrying capacity. Students will understand animals' basic needs for survival: food, water and shelter. Students will learn that limiting factors such as lack of resources or diseases naturally regulate animal populations. Students will understand that some population fluctuations are part of natural cycles.

Suggested enrichment lessons: Camouflage, Sly Fox, Bath and Moth, Tracking

Plant ID Tournament

Location: anywhere

This activity, which can be done anywhere at Waskowitz, provides a simple introduction to the world of plant identification. Students will use Plant ID cards with a name, picture, and characteristics to help them find a real, living specimen of that plant. This activity teaches students:

- New botanical vocabulary words
- Observation and identification skills
- Collaboration with peers
- The names of at least 5 plants native to the Pacific Northwest

Suggested enrichment lessons: Sit Spot, Plant Dramas, Meet a Plant, Meet a Tree, Each One Teach One, Build a Tree

Salmon Survival

Location: main campus on the large field

Students learn about salmon life cycle stages and simulate the salmon journey from egg to breeding adult in a fun running game. The playing field includes a “river” (either a trail or an area in the field marked off by cones) and an “ocean” (marked off by cones in the field). Students will learn:

- The importance of salmon ecology in the Pacific Northwest



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- Predator-prey relationships as well as the environmental challenges faced by salmon
- The human impacts on salmon
- How to generate questions and ideas about protecting salmon in the future

Suggested enrichment lessons: Camouflage, Sly Fox, Bath and Moth, Tracking

Water Ecology

Location: main campus at the river

Students will discuss and assess the ecological health of the South Fork of the Snoqualmie River using evidence gathered through testing water chemistry and by identifying the macroinvertebrates found there. Students use their journals to record data and observations. After the introduction, the class is divided into two groups (macroinvertebrate sampling and water chemistry). The groups will rotate after about 30min. **Teachers can also expand and extend this activity by including enrichment elements like River Sense, or the Long Haul. Discuss with Waskowitz staff in advance if you would like to plan for additions to the lesson as described here. For instance, if you wish to add a third rotation (River Sense, etc.) to the typical two station format (macros and chemistry), this will affect timing and material needs. You should indicate this option on your planning form.**

Suggested enrichment lessons: Long Haul, River Sense, Sit Spot, Oil Pastels or Watercolor

Teacher Tool Boxes

Each teacher will be assigned a Teacher Tool Box to use throughout the week. The Teacher Tool Box includes a set of materials that you can use at any time (instructional blocks, class meetings, teacher's choice night etc). Here is a list of enrichment lessons and materials that are included in the box:

- **4 Binoculars**
- **Animal Field Guide** students can use this guide while hiking on the trails to identify commonly found animals at Waskowitz.
- **Build a Tree** (15 minutes) Class takes on roles of the parts of trees
- **Class set of magnifiers**
- **Critter Cards** (15 minutes) These cards could be used as a critter focused Each One Teach One or similar to plant dramas where you give each small group one card and they create a skit, advertisement, song etc to teach the rest of the class about their critter
- **Each One Teach One** (45 minutes to 1 hour) A leapfrog activity where students have the opportunity to teach each other. Concepts include: fungi, forest structure, lichens, moss...
- **Nature Circles** Unique collection of 22 cards featuring suggested nature activities for students along with corresponding open-ended questions.
- **CORE LESSON: Plant ID Tournament** (45 minutes – 1 hour) In small groups, students use the picture clue cards to teach see how many plants they can identify
- **Plant Drama Cards** (30 minutes) Students create a skit, riddle, rap or commercial using what they learned about plants.



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- **Silent Walk** (30 minutes – 45 minutes) Similar to the activity at the watershed, the facilitator holds up prompts and the students silently think about the prompt while walking through the forest.
- **Sly Fox** (20 minutes) A sensory game in which a blindfolded person in the middle of the circle tries to protect the “treasure” from other trying to sneak in and steal it - simulation for teaching animal adaptations and sense of hearing
- **Who am I** (20 minutes) Whole Class game - the person facilitating the game tapes one of the Who Am I cards to each student’s back and then students ask yes or no questions to figure out who they are

Additional Supplies

In addition to the materials needed for the core lessons above, the supplies below are also available for your use during outdoor school.

Chalk	Grease Pencils	Watercolors
Charcoal	Index cards	Ziploc bags gallon size
Colored Pencils	Markers	Ziploc bags quart size
Construction Paper	Oil Pastels	
Dry erase Markers	Pencils	
Envelopes	Rulers	
Glue	Scissors	

Outdoor Educator on Teacher Support (OEoTS) lessons

Outdoor Educators support teachers by planning for and teaching a 60-90 minute block during your week. It is optional to have an Outdoor Educator co-teach a lesson with you. Please select 1 of the 5 activities below on your Planning Form if you would like an OE scheduled during your week:

1. **Environmental Education Game: Oh Deer (1 hour)**
Location: main campus on the field
 See lesson overview above
2. **Case of the Disappearing Log (1.5 hours)**
Location: on the trail to the Lookout Tower or Burma Bridge
 See lesson overview above
3. **Lichen Exploration (1.5 hours)**
Location: main campus 30 acres or possibly elsewhere
 See lesson overview above
4. **Outdoor Educator led Hike (1.5 hours)**
Location: on the trail to the Lookout Tower or Burma Bridge



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This hike sets an exciting tone of exploration and discovery, encouraging an inquiry mindset that helps establish a community of curious, active learners. Students gain tools to explore the natural world—and are inspired to discover and attempt to explain the abundant nature mysteries that surround us. The OE will take your class on a guided hike to the Lookout Tower or Burma Bridge while facilitating the Nature Scene Investigator lesson.

5. Water Ecology (1.5 hours)

Location: main campus at the river

See lesson overview above

High School Leaders

High School leaders serve as Cabin leaders and **teaching assistants**. It is important to remember that they are still teenagers who vary greatly in their abilities and maturity, but they all have a desire to do a great job. Establishing a relationship with the high school leaders is important to their success as well as to the success of the entire program. WELS students are enrolled in our high school program and have the opportunity to be a part of the Waskowitz Environmental Leadership School for up to 3 years. These students receive advanced training and attend outdoor school more than one week during the year. There are also OWLS, our One Week Leaders. Both groups attend a weekend training and learn how to:

- Assist with GPS/Basic Orienteering, Water Chemistry and Adaptation Rooms. *Leaders are trained to help you run small groups during these lessons. You, the teacher, should take the lead on the introduction and closing for each lesson.*
- Teach quick silly games (as time fillers and brain breaks)
- Build a fire for the cookout
- Build a community in their cabin focused on physical and emotional safety for all students
- Help role model and implement nature centered thinking and inquiry fever (I notice, I wonder, It reminds me of)

Suggestions for Teacher Choice Night 7:00-9:00 pm

On Day Two (or Day Three for 5 day weeks), you will have two hours in the evening with your students to lead an evening program. You will have your high school leaders to assist you during this time. Here are some suggested activities:

- Teacher led folk dance
- Art activity: oil pastels, watercolor, charcoal
- Journal Activity/Sit Spot
- Class campfire
- Star gazing/moon watching
- Night hike (we have a lesson plan for this!)
- Storytelling/Read Aloud
- Plastic Bag Theatre: students create a skit using various objects in a bag
- Sound Mapping: Students create a map of night sounds



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Campfire Location/Shelters

You will have the opportunity to do a cookout on Outdoor Lunch day if you choose the cookout option. Teachers who want to hike all day on outdoor lunch day typically like to hike further (Olallie or Elk Meadows). On the contrary, some teachers will hike the morning of Outdoor Lunch day and return to camp for their cookout and final lesson. Look at the sample schedule on the last page to get a feel for how this works. We will take into account the preferences listed on your Planning Form when assigning your lunch shelter. You may also want to have a fire during Teacher Choice Night. Use this list to know which shelters are across the river and how far they are from camp. Times listed below are for one way.

Across the River – Nearest to Farthest

- Da'Bomb (10 minutes)
- Olsen Chapel (15 minutes)
- Fire Sculpture (20 minutes)
- Winter Wren Shelter (30 minutes)
- Burma Bridge (45 minutes)
- Lookout Tower (45 minutes)
- Bear Tree (45 minutes)
- Olallie (1 to 1.5 hours)
- Elk Meadows (1 to 1.5 hours)

Near Main Campus

All of these shelters are 15 minutes or less walking distance from main camp.

- The River
- 30 Acres
- Cedar Grove
- Hoot Hollow
- Plant ID

Hiking at Waskowitz: Teaching Outdoors

Trail-based learning and Enrichment Lessons: Much of the forest at Waskowitz is dense and doesn't permit for easy off-trail use. Thankfully, many of our lessons/activities are well suited for use along a narrow, long trail. Enrichment Lessons like ***Each-One-Teach-One, Landmark Mapping, and Camouflage*** and good options that allow you to break up travel time with instruction.

Large Group Lesson Sites: These sites indicated on your map are large maintained clearings suitable for gathering your students closer together, and allowing for easy work in the Expedition Group Format. Use these sites for the following Core Lessons: ***Case of the Disappearing Log, Critter Survey, Plant ID Tournament, and Bark Beetle Exploration.***

Note: Please carefully read the trail descriptions and lesson plans when planning your Outdoor School experience. Our model gives you a lot of flexibility, but planning and preparation are key.



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Trail Descriptions

Introduction: Times are approximate and based on the walking pace for a class of 25, 6th grade students. Times can vary greatly depending on the group, weather, and your use of teachable moments! Use these descriptions along with the trail map to plan your routes. We do our best to maintain our extensive trail system. Please note and communicate areas that require additional maintenance, and please disregard unofficial social trails.

Fire Sculpture Trail

This level trail runs parallel to and above the south bank of the South Fork of the Snoqualmie River. It connects main campus to the Fire Sculpture (a large and beautifully burned out Western Red Cedar snag). The shelter at the Fire Sculpture, at the east end of the trail, features benches and a fire pit. This is the site for the Core lesson **Fire Sculpture**, and is a good place to consider leading a night hike.

20-45 min one way.

Snoqualmie Valley Trail

Often referred to as the Hike and Bike trail. This is a converted railroad bed that is a public multi-use trail maintained by the state and used by bicyclists, hikers, runners and occasionally horses. It stretches across the entire state, and even goes through a 2 mile long tunnel beneath Snoqualmie pass, just south of I-90. It is wide, gravel, level, and well maintained. Use it minimize travel time between locations. Consider using “Walk and Talk” prompts to fill this time with content, if needed.

Big Fir Junction to Main Campus: 20 min

Crystal Springs Trail

Consists of a series of boardwalks over springs and marshy areas. The wooden boardwalks can be slippery when wet; caution is advised. Parallels the hike and bike trail with very little elevation gain. It affords opportunities for contrasting wetland areas with the forest. Notable plants often found along this trail in the spring include Skunk Cabbage, Bleeding Heart, and Corydalis. This trail does not afford many opportunities for large group work, as leaving the boardwalk is not advised.

15-40 minutes one way.

WELS Trail

Moderately sloped and climbs through young coniferous forest with open understory. Opportunities for succession studies and tree comparisons. Can be used as part of a loop with the Bear Tree Shelter and/or lookout tower.

Big Fir Trail

Short rolling hills through large, old trees. This is a good place to see wildlife including a variety of woodpeckers and owls. The large trees found here and on the neighboring trails include Sitka Spruce, Douglas Fir, Western Hemlock, and Western Red Cedar. This trail will often be used as part of a loop including Burma Bridge. **Note: The Big Fir tree (approximately 7 feet in diameter) fell over in the late summer of 2016. It has been repurposed as a foot bridge, and offers a great talking point to discuss the cycle of disturbance and forest succession. Some students may find this crossing intimidating.**

From Burma Bridge to Main Campus: 45 min



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Elk Meadow Trail

Passes through a mosaic of older forest and more recent meadows ringed by deciduous trees. Level, with a good possibility of seeing wildlife or sign of wildlife. Elk Meadows Shelter is the furthest shelter from the main campus. It has seating, fire ring, and outhouse. The trail between the Shelter and the lookout tower offers 2 good large group lesson sites. *Elk Meadows Shelter to Main Campus: 45-60 min., Elk Meadows Shelter to Lookout Tower 30-40 min.*

Woods Trail

Another level trail between the Lookout Tower and Elk Meadows Shelter. This is similar to and parallel with Elk Meadows Trail, and the two make a good option for a loop. These trails both offer good opportunities for solo activities such as the Enrichment Lesson **Sit Spot**.

Americorp Trail/Emergency Access Road

The Americorp trail often serves as part of a day long loop, and can be used to link the Elk Meadows area with the Burma Bridge area. It crosses the primitive Emergency Access Road. Travel southward on the road from this junction is not recommended due to time/distance considerations, and is blocked by a simple rope boundary. The Olallie Shelter at the east end of the Americorp Trail has seating and a fire ring.

The Emergency Access Road links 156t St to the Lookout Tower via the Elk Meadows area. It is a nice path to walk on in its own right, and can be used to save time and energy. It is also wide and varied enough to accommodate most of our Core and Enrichment Lessons

From Olallie to Main Campus: 40-50min

Deer Trail

The Deer Trail is a short arc of trail in the middle of the 300 acre property. It gives access to the seating, shelter, fire ring, and outhouse found at Bear Tree Shelter, as well as a good Large Group Lesson Site. The SE end of Deer Trail leads to another popular Large Group Lesson Site and trail junction area called the 3B Triangle.

From Bear Tree Shelter to Main Campus: 30-40min

Trails to the Lookout Tower

Note: *The Lookout Tower Key is attached to your Waskowitz Name Tag. This key is required to gain access to the top of the lookout tower. The Lookout Tower area can offer great views, and has an outhouse, shelter, and lots of open space.*

Steep Tower Trail

A steep hike to a real Forest Service lookout tower, formerly used for fire prevention at Stampede Pass. This trail gives the quickest access to the Lookout Tower from Main Campus, but will require more of your legs and lungs than some of the other options. If the ground is wet, going down can take longer than going up.

From Lookout Tower to Main Campus: 25-30min



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Easy Tower Trail

A more gradual approach to the Lookout Tower, also providing access to the Bear Tree Shelter area.

From Main Campus to Lookout Tower via Easy Tower Trail: 40min

Ridge Trail

A scenic and longer approach to the Lookout Tower. Provides access to a great Large Group Lesson Site. The end of this trail leading to the Woods Trail junction is a steep and rewarding climb through a beautiful stretch of forest.

From Lookout Tower to Main Campus: 30-40min

30 Acres Trails

This section describes the much smaller trail network located at the west end of main campus (the section of Waskowitz across the river from the main trail system, described above). The Perimeter Trail shown on the **Waskowitz 30 Acres and Perimeter Trail Map** provides many convenient opportunities during outdoor school. It is a good option for a night hike, solo or quiet/reflective activities, and many of the lessons described earlier in the document. It is an ideal site for the Core Lesson **Plant ID Tournament**, and the Enrichment Lesson **Meet a Plant**. It also gives access to several shelters and the beautiful Large Group Lesson Site called Cedar Grove, a perfect location to observe Western Red Cedars.

The trail is level and passes through a varied forest full of ferns, salal, and Big Leaf Maples draped with moss. ***The 30 Acres is home to the Waskowitz Challenge Course. Obey posted signs, and DO NOT use these elements for your Outdoor School program.***

Round Trip to/from Main Campus: 25-30min

Suggested Vocabulary

Abiotic – Nonliving.

Acid – A substance that releases hydrogen ions in water. Acids have a sour taste and a pH less than 7.

Adaptation – An evolutionary modification that improves the chances of survival and reproductive success of a population in a given environment.

Base – A compound that releases hydroxide ions when dissolved in water. Causes solutions to have a pH greater than 7.

Biodegradable – Referring to a chemical pollutant capable of decomposed (broken down) by organisms or by other natural processes.

Biodiversity – The number, variety, and variability of Earth's organisms.

Biotic – Living.

Carnivore – An animal that feeds on other animals; flesh eater. A secondary consumer.

Compost – A natural soil and humus mixture that improves soil fertility and soil structure.

Conifer – Any of a group of woody trees or shrubs that bear needle-like leaves and seeds in cones.

Conservation – The sensible and careful management of natural resources.

Consumer – An organism that cannot synthesize its own food from inorganic materials and therefore must use the bodies of other organisms as sources of energy and body-building materials.



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Consumption – The human use of materials and energy; generally speaking, in people in highly developed countries are extravagant consumers, and their use of resources is greatly out of proportion to their numbers.

Deciduous plants – Trees, such as oaks and maples, and other plants that survive during dry or cold seasons by shedding their leaves.

Decomposer – A heterotroph that breaks down organic material and uses the decomposition products to supply it with energy. Decomposers are organisms of decay.

Deforestation – Removal of trees from a forested area.

Ecology – The study of systems that includes interrelationships among organisms and between organisms and their environment.

Ecological footprint – The amount of land and ocean needed to supply an individual with food, energy, water, housing, transportation, and waste disposal.

Ecological succession – The changes, over time, in the structure and function of an ecosystem. When no previous vegetation exists on site, the process is called primary succession. When a site supported vegetation previously, but was disturbed, the process is called secondary succession.

Herbivore – An animal that feeds on plants or algae. A primary consumer.

Humus – Black or dark brown decomposed organic material.

Indicator species – An organism that provides an early warning of environmental damage. Examples include lichens, which are sensitive to air pollution, and amphibians, which are sensitive to pesticides and other environmental contaminants.

Invasive species – Foreign species whose introduction causes economic or environmental harm.

Macroinvertebrate – An organism that can be seen without the use of a microscope. The presence or absence of certain macroinvertebrates help determine the ecological health of a river, stream or lake.

Niche – An organism's physical location and function within an ecosystem; the role or job of an organism within a given area; space and function that an organism occupies in an ecosystem.

Omnivore – An animal that eats a variety of plant and animal material.

pH scale – A measure of acidity or basicity of an aqueous system.

Photosynthesis – The biological process that captures light energy and transforms it into the chemical energy of organic molecules (such as glucose), which are manufactured from carbon dioxide and water. Photosynthesis is performed by plants, algae, and several kinds of bacteria.

Primary consumer – An organism that consumes producers.

Producer – An organism that manufactures complex organic molecules from simple inorganic substances.

Recycling – Conservation of the resources in used items by converting them into new products.

Reduce – To consume less of a good or service in order to reduce one's environmental impact and to save money.

Reservoir – An artificial lake produced by building a dam across a river or stream; allows water to be stored for use.

Reuse – Conservation of the resources in used items by using them over and over again.

Water pollution – Any physical or chemical change in water that adversely affects the health of humans and other organisms.



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Waskowitz Outdoor School

Shorewood – Jane Ellen Flooddeen 20
 Shorewood – Stevie Torstenbo 22
 Shorewood – Pat Reardon 28

Gregory Heights – Mary Saffold 28
 Gregory Heights – Shannon Martin 32
 Gregory Heights – Jared Cole 28

Week 2: October 17-20 (Tue-Fri)
Sample Master Schedule

Tuesday	Wednesday: Watershed Day	Thursday: Outdoor Lunch Day	Notes
<p>OEQTS = Outdoor Educators on Teacher Support (Naturalist)</p> <p>The OEQTS lesson will take about 60-90 minutes, so you will need to have an enrichment lesson or two to fill the rest of the instructional block. There will also be times after CORE lessons like Adaptation Rooms, that you will have extra time to fill...there are several activities you can use whenever you want in your Teacher Toolbox (Sly Fox, Plant ID Tournament, each one teach one, build a tree etc.)</p> <p>2:00-4:30 JEF—Water Ecology ST—Fire Sculpture PR—Adaptation Rooms MS—Hike to the Lookout Tower SM—Salmon Survival JC—Lichen Exploration w/OEQTS</p>	<p>9-15-12:15 JEF—NSI hike w/OEQTS to Lookout Tower ST—Water Ecology; Adaptation Rooms PR—Watershed MS—Watershed SM—Watershed JC—Watershed</p> <p>1-45-4:30 JEF—Watershed ST—Watershed PR—GPS MS—Oh Deer w/OEQTS; Adaptation Rooms SM—Adaptation Rooms, Oh Deer w/OEQTS JC—Water Ecology; Salmon Survival</p> <p>Teacher's Choice JEF—Fire at Cedar Grove, Dancing ST—Fire at Olsen Chapel, Dancing PR—Fire at Plant ID, Dancing MS—Dancing, Fire at d&Bombs, SM—Dancing, Fire at Fire Sculpture, JC—Dancing, Fire at Hoot Hollow</p>	<p>9-30-12 JEF—Adaptation Rooms, Hike to Burma Bridge ST—NSI hike w/OEQTS to the Lookout Tower PR—Hike to Burma Bridge MS—Water Ecology SM—Hike to Burma Bridge then Lookout JC—Fire Sculpture then Burma Bridge</p> <p>Lunch spots JEF—cookout at Burma Bridge ST—cookout at Bear Tree PR—cookout at Elk Meadows MS—cookout at Olsen Chapel SM—cookout at Lookout Tower JC—cookout at Olallie</p> <p>1-3-30 JEF—Fire Sculpture ST—Hike to Burma Bridge PR—Hike to the Lookout Tower MS—Hike to Burma Bridge SM—Water Ecology JC—Hike to the Lookout Tower</p>	<p>Class Meeting Locations JEF—Barn ST—Barn PR—Council Hall MS—Ed 4 SM—Ed 1 JC—Ed 2/3</p> <p>Teacher/Leader Meeting Locations JEF—Main office upstairs ST—Main office downstairs PR—Teacher's lounge MS—OE office SM—Green room JC—Teacher's room</p>

Waskowitz Outdoor School is a magical journey of discovery exploring the diversity of people and nature, while providing a safe, high quality, affordable residential experience for the students of the greater Puget Sound area.

