

Organizing a Schoolyard Cleanup

Select a site

- You **must** receive principal/administration consent to clean up in that area.
 - Do you have adults that are willing to help supervise the site?
- If you choose to register the site with the Trash Free Potomac Watershed Initiative, (TFPWI), then site decisions must be made:*
- Parking availability
 - Whether your site will be open to all volunteers or closed to your school group only

Assess the site

Accessibility:

- Will everybody be able to get to your site?
- Where will volunteers park?
- Is there an event going on near your cleanup date that will change the layout? (such as a sporting event)
- Will it be easy to transport trash off your site (trash removal is your responsibility)?

Safety:

- Are there any hazards such as steep banks, poison ivy, slippery rocks, broken glass, or sharp metal objects?
- What can you do to minimize the hazards at your site? Or should you investigate a different site?

Ecology:

- Look for sensitive features: check for animal homes or nests that need to be avoided
- Avoid areas with rare or abundant plants that could be trampled

Size:

- If your site is large, divide the area into mini sites with a leader or group in charge of each area.

If you choose to be an official site of the cleanup, now is the time to **register with TFPWI:**

Visit www.fergusonfoundation.org and click on the Potomac River Watershed Cleanup tab to register, or:

Download a registration form and mail or fax it to Alice Ferguson Foundation (AFF); or: Call AFF at 202-972-8203 to register over the phone

Recruit

- Recruit volunteers at your school
- Post flyers in your area
- Talk to people; ask them to join
- Make an announcement over the PA system

Supplies

- If your site is going to be a registered TFPWI site, supplies are provided on the condition that you register by the deadline in March as found on the website: www.potomaccleanup.org **and** your cleanup is scheduled for the month of April.
- AFF provides: yellow (trash) and blue (recyclables) bags, gloves, data sheets, planning guides and safety information
- You need to choose a distribution center nearest you to pick up your supplies. Call the Alice Ferguson Foundation ahead of time to find out where and when to receive them: 202-972-8203
- If you are **NOT** registering with TFPWI, they need to be acquired on your own time and budget.

Arrange For Disposal

- Talk with your school's janitorial staff to confirm places to set your trash for collection
- Ask them when/where it would be convenient for them to pick up your trash, and set a time for them to collect it.

Recyclables:

- Will your trash removal plan include recycling blue-bagged containers?
- Can you or a volunteer take the recyclables to a local recycling facility, drop off center or home for curbside pick-up?

Trash Collection: Recyclables

- Ensure that blue bags are used for recyclables; make sure you know which items can be considered recyclable and those that cannot.
- If contaminated**, recyclable bags (blue) should be reported on the data sheet and disposed with trash.

Separating Recyclable Materials

- How will you organize students to separate recyclables?
- How will you identify contaminated recyclables from clean recyclables?
- Who will be in charge of recyclables recovery?
- Can you recycle tires and scrap metal by contacting your county landfill?
- See "Recyclable Recovery Procedures" for more information.

*Separating is important for both education and data collection

*Alice Ferguson Foundation would like all sites to recycle the containers collected. However, this is often not possible due to contamination from dirt, unknown liquid, oils, etc.

Data Collection

It is important to have at least one member of your group in charge of data, and to organize a method of recording data for:

- Count number of yellow and blue bags (unused and used)
- Estimate pounds of loose trash (items too large to fit in bags)
- Establish other items of interest you would like to collect information on (top three brand names found, plastic bags, cigarette butts)

Visit the TFPWI website for data sheets to tally trash found at the cleanup:

http://www.potomaccleanup.org/trash_initiative/rc_volunteertrashtallysheet.pdf

Safety/HAZMAT

- Read safety and HAZMAT guidelines:
http://fergusonfoundation.org/trash_initiative/rc_safety.shtml
 - Familiarize yourself with sharps/disposal
http://fergusonfoundation.org/trash_initiative/rc_sharps.shtml
 - Make sure you have a container ready for these materials. Use these printable HAZMAT labels for identification:
http://fergusonfoundation.org/trash_initiative/rc_hazmatlabels.pdf
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**Organize
Classroom
Lesson**

- Read over the classroom prep, cleanup activity, and reflection activity sections to become familiar with the timing and materials needed.
- The preparation/introduction may need to occur the day before the cleanup

TIP: If you are interested in creating a student-led schoolyard cleanup, consider having interested students attend an offsite TFPWI cleanup site. Students can then bring back knowledge about how the cleanup works and teach their fellow students at your schoolyard cleanup.

Checklist for Schoolyard Cleanup Organizer:

Step	Actions
<input type="checkbox"/> Select Site	<ul style="list-style-type: none"> • Get permission from principal/administration • If registering with TFPWI, establish parking and whether it will be an open or closed site
<input type="checkbox"/> Assess Site	<ul style="list-style-type: none"> • Evaluate the area for any unsafe conditions • Ensure it is accessible for all participants • Plan layout of event, be aware of any events going on around date that may affect • Scout area for any ecology to avoid (animals, native/rare plants) • Make note of size of area, plan for division if necessary
<input type="checkbox"/> Register your site with TFPWI	Contact AFF to register
<input type="checkbox"/> Recruit	<ul style="list-style-type: none"> • Post flyers, talk to people • Make announcements over loud system
<input type="checkbox"/> Supplies	Either through AFF, or acquired on your own if not registered
<input type="checkbox"/> Organize Collection	<ul style="list-style-type: none"> • Talk to janitorial staff to arrange time and place for pick up and disposal • Decide whether you will recycle recyclable items
<input type="checkbox"/> Trash Collection: Recyclables	<ul style="list-style-type: none"> • Make sure you know which items are considered recyclable • Define what is a contaminated versus clean recyclable
<input type="checkbox"/> Data Collection	Ensure you have a tracking system in place for recording bags, large items, and items of interest
<input type="checkbox"/> Safety/HAZMAT	<ul style="list-style-type: none"> • Read guidelines on AFF website for safety guidelines and HAZMAT information • Create a deposit for HAZMAT materials
<input type="checkbox"/> Organize Classroom Lesson	Prepare for the introductory lesson and set aside time to complete the section before your scheduled cleanup

Schoolyard Cleanup

- Overview**
- Students will review definitions of a watershed, trash, and the 4R's.
 - Students will explore the significance of trash in their lives.
 - Students will engage in litter cleanup exercise and record data, with post-cleanup reflection and discussion.
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Lesson Characteristics Use the table below for lesson planning purposes.

Time Required	Part 1, Introduction: 45 minutes-1 hour Part 2, Cleanup and Tally: 1 hour+
Key Concepts/Terms	Watershed; Trash and Litter; Connection of people to environment; 4 R's: Rethink, Reduce, Reuse, Recycle
Prerequisites	Teachers: complete "How To Organize a Schoolyard Cleanup"
Setting	Part 1: indoors, with computer access Part 2: outdoors (cleanup), indoors (tally/reflection)

Learning Objectives After completing this lesson, students will be able to:

- Explain the concept of a watershed and the impacts of trash and litter on water, ecosystems, and people
 - Recognize where drinking water comes from and describe how trash impacts the quality of our drinking water
 - Identify what trash items can be recycled
 - Make environmentally responsible decisions about their trash consumption in order to positively impact the health of their environment.
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Materials Needed The table below lists the materials needed to conduct this activity.

	Items Needed for the Whole Class	Items Needed for Each Group
Part 1 (Introduction)	Internet access	N/A
Part 2 (Cleanup) <i>Note: for those schools registering their cleanup site with the Potomac River Watershed Cleanup, many of these supplies will be provided for you.</i>	<ul style="list-style-type: none"> • Total trash tally sheet • HAZMAT/sharps container (one per adult) • Gloves for each student/adult dealing with trash • Timer 	<ul style="list-style-type: none"> • Trash bag for recyclables and trash • Trash tally sheet • Clipboard • Watch/timer

Background Information

Trash is a serious problem in the Potomac River Watershed, and its major tributaries. Trash travels from our streets into storm drains and waterways until it reaches the Potomac. While there is currently limited research or regional data that tracks the sources of regional trash, we speculate that the majority of this trash originates as refuse improperly or intentionally disposed of along roadsides and in public and private open spaces.

Trash...

- that ends up on the ground often times finds its way into the Potomac River or one of its tributaries such as the Anacostia or Rock Creek;
- can clog public sewer systems and become entangled in creeks, creating a 'damming effect' which traps debris, wildlife, and prevents water flow;
- negatively impacts community aesthetic and well-being;
- interferes with public use and enjoyment of river and streamside parks;
- can have significant negative chemical and biological impacts including: leaking and/or leaching of toxics from certain types of disposed items such as used oil quart containers, oil filters and car batteries;
- can interfere with the establishment of emergent aquatic plants;
- can be hazardous to wildlife through ingestion of or entanglement in floating debris;
- costs regional jurisdictions millions of dollars each year to clean up, money that can be better spent on more worthy causes such as education, recycling efforts, etc.;
- contributes to filth, bacteria, and toxins harmful to you and those you love.

Facts about the Potomac River Watershed Cleanup:

- The average American throws out 5 pounds of trash per day (Metropolitan Washington Council Of Governments)
- Over 14,000 volunteers collected 252 tons of trash from over 275 sites at the 2010 Potomac River Watershed Cleanup
- Of that trash, 19% was comprised of materials that could have been recycled
- If we don't stop this trash in our own neighborhoods, it will make its way to the Potomac River, which is the source of drinking water for residents in the Metropolitan District of Columbia area.

Procedure

Follow the steps in the table below to conduct the activity.

Part 1: Introduction

Phase	Step	Action
Engage	1	<p>Ask: "What is a watershed? What do you want to know about watersheds?" Record student answers. Answers can be recorded in a KWL chart.</p>
	2	<p>Ask: "What is trash? Is trash a problem to you? What do you wonder about trash?" Record student answers, adding to the KWL chart.</p> <p>TIP: There is potential here to have students save a day's worth of their trash and classify and weigh it to compare to the results found in the schoolyard cleanup.</p>
Explore	3	<p>Say: "We are now going to find out what a watershed really is." Visit "The Ways of a Watershed" online lesson: http://fergusonfoundation.org/hbf/raindrop_roadtrip/index.shtml</p>
Explain	4	<p>Revisit student answers about trash. Add information that students learned to the KWL chart. Were student questions answered? Share facts about the cleanup (see background information in this lesson plan). Mention environmental problems associated with trash. Ask: "Where does your tap water come from?" Some students will say "WSSC," "DC Water," or "a water treatment facility." Challenge them to understand that most of the tap water in the District of Columbia Metropolitan region comes from the Potomac River. It starts there, goes through a water purification facility, and then is brought to our taps by DC Water. The cleaner our water is to begin with, the easier and less expensive it is to be made safe for us to drink. The more polluted our water is, the more difficult (more expensive) it is to purify. There is a finite amount of water on our planet; we cannot create more water. Your tax dollars are hard at work making fresh water safe for consumption.</p>
	5	<p>Introduce the 4R's: Reduce, Reuse, Recycle, Rethink: Visit "Nature Recycles, Shouldn't We All?" online lesson: http://fergusonfoundation.org/hbf/nature_recycles/trashlesslunch.shtml</p>
	6	<p>Discuss: "What can we do to reduce trash?" <i>Stop using certain materials, recycle, reuse, cleanup what is already out there</i> Answers can be added to the KWL chart.</p>

	7	Say: “We are going to help reduce trash in our watershed by cleaning up our schoolyard.”
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Part 2: Schoolyard Cleanup

Note: The main objective is for students to beautify their schoolyard by removing trash. If you like, have students separate recyclable drink containers from “other” trash. You can also have students consider the most common brand names that they see and keep track of the number of plastic bags they find. The amount of detail you take in tracking this trash is up to you. Use the Potomac River Watershed Cleanup Trash Tally Sheet as your guide.

*If you are not registered as an official cleanup site, or would like another format for your students to record data, refer to the attached Trash Tally Sheet.

Phase	Step	Action
Elaborate	8	<p>Safety Talk with all students (Note: it is recommended that the safety talk be discussed indoors with students' captive attention):</p> <ul style="list-style-type: none"> • Students DO NOT pick up sharp objects, including broken glass and needles. They go in a sharps container. Students should call an adult over to handle these items. • Students DO NOT pick up aerosol containers, including spray paint and hairspray. They are disposed of separately because they may burst. Students should call an adult over to handle these items. • DO NOT empty any bottles that contain liquid. Though they may contain the same innocuous liquid as described on the label, they may also contain a foreign liquid that cannot be identified and may be unsanitary. Keep lids on! <p>Discuss any possible hazard areas, like steep sections or slippery spots, and inform of possible dangerous plants or animals/insects (poison ivy/oak, ticks, bees).</p>
Elaborate	9	<p>Logistics</p> <p>Discuss special items, e.g. recyclables, brand names, plastic bags, etc. that you would like students to keep track of. Alternatively, students may choose which items they think are particular problems in your schoolyard and may decide to track those items of choice. Review trash tally method/sheet.</p> <p>Organize locations for each student/group to focus on, and specify the area boundaries. Make sure everybody understands, and set a time limit (or until all the trash is cleared; whichever comes first).</p>

	<p>10</p>	<p>Distribute materials</p> <ul style="list-style-type: none"> • It is suggested that students work in groups with roles (such as note-taking/tallying, supplies organizer, timer, boundary monitor, etc.) to ensure everybody is involved. This also makes for better tracking. • Each group or participant receives: a pair of gloves, trash bags (one yellow for trash, one blue for recyclables), and a sheet to tally trash (http://www.potomaccleanup.org/trash_initiative/rc_volunteertrash_tallysheet.pdf). Adult leaders receive one sharps container each in addition.
	<p>11</p>	<p>Picking up and cleaning up</p> <ul style="list-style-type: none"> • Let students disperse to collect; once an area is cleared, have students reassemble. • Consolidate items from un-filled bags into full bags • Flatten emptied bags and fold together to be reused.
	<p>12</p>	<p>Weighing: could be done indoors to keep attention Have each group record the number of bags, weigh and record the weight of any loose trash, and place all trash in the appropriate area for removal.</p>
<p>Evaluate</p>	<p>13</p>	<ul style="list-style-type: none"> • Combine the individual group counts into a class Trash Tally (including any special items defined) **if registered with the Potomac River Watershed Cleanup, gather and submit Trash Tally sheet to the appropriate contact person.** • Look at the amounts of trash, and review the types of trash found. Discuss where students think the trash came from. Tie into definition of watershed, and where the trash would have gone if it was not picked up (harmed wildlife, clogged storm drains, into water treatment plant).
	<p>14</p>	<p>Student reflection (can be written or verbal): "What can you do each day to reduce the amount of trash you produce?" and "How do you feel about your experience today?" *There is possibility here to have students share their reflections with the class. AFF would also love to receive sample reflections if you have the opportunity to pass them along!</p>
<p>Optional Elaboration</p>		<p>If you would like to incorporate a math activity into the cleanup, visit the Trash Free Potomac Watershed Initiative's website for data: http://fergusonfoundation.org/trash_initiative/trash_cleanup.shtml and look for the sidebar "Data & Results". You can compare the numbers and percentages from various years, and create graphs and charts based on the data.</p>

Individual/Group Special Trash Tally Worksheet

Type of Trash (Brand name, plastic bag, cigarette butts, etc.)	Tally	Total Number
Example: Plastic Bags		4

How many trash bags did you fill? _____

How many recyclable bags did you fill? _____