School Water Audit: Direct Water Use

One way to reduce a water footprint on a large scale is to take a close look at the operations of a large business, identify areas that can be made more sustainable, and then take action. What’s the closest business to you? Your school, of course! Auditing your school gives you an opportunity to gather concrete data on school operations that impact the environment, and then use that data to inform strategies that promote more sustainable, water-saving practices. For this activity, you will work in the same marketing teams that you used to create your How to Save Water Awareness Campaign. This worksheet is for Indoor and Outdoor Water Use. A separate worksheet is available for groups doing the Virtual Water Audit.

<table>
<thead>
<tr>
<th>If your team researched …</th>
<th>You will now be auditing …</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor water</td>
<td>School Water Audit: Indoor Water Use</td>
</tr>
<tr>
<td>Outdoor water</td>
<td>School Water Audit: Outdoor Water Use</td>
</tr>
<tr>
<td>Diet</td>
<td>School Virtual Water Audit: Food Purchasing</td>
</tr>
<tr>
<td>Electricity</td>
<td>School Virtual Water Audit: Energy Use</td>
</tr>
<tr>
<td>Buying habits</td>
<td>School Virtual Water Audit: Purchasing</td>
</tr>
</tbody>
</table>

Instructions

Your mission is to document the number and types of appliances on your school campus that are used to supply water. You’ll also track patterns of water use and interview staff members who can help you best understand the types of water fixtures on campus, either indoors or outdoors. Then you’ll put all that information together and use it to make recommendations to campus administrators to help your campus reduce water waste, improve efficiencies, and shrink the school’s water bill!

Materials

- Signed permission slip
- Map of campus (inside and outside)
- Clipboard
- Pencil
- Eraser
- Timekeeping device
- Meterstick, yardstick, or measuring tape
- Campus water bills or information from the bills
School Water Audit: Direct Water Use, continued

**Conduct the Audit**

1. Assign each member of your group a role, such as timekeeper, recorder/transcriber, interviewer, presenter, etc.

2. Come up with a strategy for conducting your audit. This step should not be underestimated! It is vital that you put together a detailed plan to guide you through your audit. You might begin by determining who you will interview to find out more about water fixtures on campus.

3. Then come up with a detailed list of questions you could ask these staff members to learn more about your school’s water footprint.

4. Next, put together a chart for tracking information on the water fixtures on campus. The chart will help you keep track of important information about the water fixtures on campus, including the location and type of each fixture you analyzed, an estimate of the number of uses per day, estimates on the volume per each use, total volume per day, total volume per week, total volume per school year, whether the fixture is in good working order (or leaking), etc.

5. You may wish to retake the [watercalculator.org](http://watercalculator.org) calculator to help you consider the right kinds of questions to ask and data to collect. Just remember that the calculator provides a personal water footprint while you’re doing a much larger audit, so consider how to expand those types of questions to inform a business audit. The Water Footprint Network site ([waterfootprint.org](http://waterfootprint.org)) offers a business water footprint assessment tool that may also be useful in informing what you do. In that case, you may want to simplify the questions. Be sure to ask your instructor for assistance if you need guidance or feel stuck.

6. Set up interviews in advance.

7. Conduct your interviews.

8. Evaluate water fixtures on campus. As you gather data, be sure to record units along with your data so it is clear what type of measurements you are taking (e.g., grams or ounces, kilograms or pounds, etc.). Be consistent! If you start out using metric units, continue to use metric throughout the audit. In order to estimate how much water fixtures typically require, you may need to do Internet research. The Alliance for Water Efficiency’s Home Water Works, the U.S. Green Building Council, and the U.S. Environmental Protection Agency’s Water Sense program are all useful resources.
School Water Audit: Direct Water Use, continued

**Synthesize Results**

Transcribe the interview recordings and organize the information you gathered from your audit of school water fixtures. Then synthesize and make sense of what you learned. You can use the following questions to help you reflect on your results.

1. What information was easy to locate?
   
   __________________________________________________________
   
   __________________________________________________________
   
   __________________________________________________________

2. What information was difficult to locate?
   
   __________________________________________________________
   
   __________________________________________________________
   
   __________________________________________________________

3. What information from the audit surprised you? Explain.
   
   __________________________________________________________
   
   __________________________________________________________
   
   __________________________________________________________

4. What information do you still need to complete your direct water audit?
   
   __________________________________________________________
   
   __________________________________________________________

5. How will you get the information you listed in #4 above?
   
   __________________________________________________________
   
   __________________________________________________________
School Water Audit: Direct Water Use, continued

6. How does the data you gathered for the school compare to your own personal water-use habits? What factors might account for any differences you note?

________________________________

________________________________

________________________________

________________________________

7. What is sustainable about the school's water use? Name some STRENGTHS that you observed.

________________________________

________________________________

________________________________

________________________________

8. What is unsustainable about the school’s water use? Name some WEAKNESSES that you observed.

________________________________

________________________________

________________________________

________________________________

9. How do you think the water-usage patterns that you observed on your campus might be improved?

________________________________

________________________________

________________________________

________________________________

10. What observations stand out to you as the most interesting so far?

________________________________

________________________________

________________________________

________________________________