



# Be Water Wise

## School Water Measurement Activity

### A. School Buildings

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The questions in this section ask about water use at your school. You may need the assistance of the school custodian or facility manager to answer these questions.

**1. What is the source of your school's water supply?**

- Municipal water supply
- School has own well

**2. If your water comes from a municipal supply, what is its source?**

- Well (aquifer)
- Lake (surface water)

**3. If your water comes from a municipal supply, what did your school pay last year for water?**

\$ \_\_\_\_\_

**How much does the water company charge per unit of water?**

\$ \_\_\_\_\_ per \_\_\_\_\_

**4. Does your school have a swimming pool?**

- Yes
- No

**If you answered yes, is a pool cover used? (This is important because pool covers can limit evaporation)**

- Yes
- No

**5. Does your school have a cooling tower? Cooling Towers are usually found outside next to the Chiller (HVAC) Room. Sometimes it is located on the roof above the Chiller. See Appendix A for help identifying the cooling tower.**

- Yes
- No



## B. Indoor Water Using Devices

Complete the chart on water using devices throughout the school building. Add rows if necessary to collect information on all of the indoor water using devices in your school building.

Place the number of each device found at each location on the chart, and after that number, indicate the number that are leaking in parentheses. Example: If bathroom 1 has 10 faucets and two are leaking, write 10(2).

These notations are used in the chart:

A = Automatic (equipment that must be turned on manually but turns off automatically)

S = Sensors (equipment that turns on and off based on the movement of a person)

M = Manual (equipment that must be physically be turned on and off by user)

GPM = Gallons per minute (faucets and showers) \*\*

GPF = Gallons per flush (urinals and toilets) \*\*

\*\* See Appendix B for instructions on how to identify or calculate GPM and GPF

Location	Room Number	Faucets				Toilets			Urinals			Showers	
		A	S	M	GPM	S	M	GPF	S	M	GPF	M	GPM
Classroom 1													
Classroom 2													
Classroom 3													
Classroom 4													
Classroom 5													
Classroom 6													
Classroom 7													
Classroom 8													
Classroom 9													
Classroom 10													
Bathroom 1													
Bathroom 2													
Bathroom 3													
Bathroom 4													
Bathroom 5													
Bathroom 6													
Locker Room 1													
Locker Room 2													
Nurse's Office													
Custodial 1													
Custodial 2													
Custodial 3													
Cafeteria													
Teacher Prep Room													
Pool													
Other:													
Other:													
Other:													
Other:													
Other:													



## C. School Grounds (outdoor water use)

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In this section you will collect data about outdoor water use on the school property. Again, you may need the assistance of the custodian or facility manager to answer some of these questions. Many of these questions will be most easily answered within a few hours of watering.

1. **How many water faucets are located outside of the school building?** \_\_\_\_\_
  
2. **How many outdoor water faucets are leaking?** \_\_\_\_\_
  
3. **How many outdoor faucets have been secured so that only school staff may turn them on or off?** \_\_\_\_\_
  
4. **Does your school building have gutters and/or down spouts?**
  - Yes
  - No
  
5. **Does your school have a rain collection system (such as rain barrels?)**
  - Yes
  - No
  
6. **Does your school have any outdoor fountains or artificial waterfalls?**
  - Yes
  - No

**If yes, answer the following:**

- a. Are they turned off in the evening?
  - Yes
  - No
  
- b. Are they turned off in very hot weather?
  - Yes
  - No
  
- c. Do they re-circulate water?
  - Yes
  - No
  
- d. Who maintains them? \_\_\_\_\_



See Appendix C for help identifying the areas described in questions 7 through 13.

**7. How many water meters are there at the school? \_\_\_\_\_**

A water meter measures and records the amount of water flowing through it at any moment. They may be found buried outside the building or indoors where the water line comes into the building.

a. Do the meters supply water for both indoor and outdoor use?

Yes

No

If yes, what do you think is the ratio of water used outdoors vs. water used indoors? \_\_\_\_\_

**8. Do you see dry or soggy patches in the grass, in flowerbeds or in other landscaped areas?**

Yes

No

If yes, describe the location and what you see. Take photographs or sketch the area.

**9. Do you see puddles or standing water resulting from irrigation runoff?**

Yes

No

If yes, describe the location and what you see.

**10. Do you see moss growing or slippery-wet areas on any paved areas?**

Yes

No

If yes, describe the location and what you see. Take photographs or sketch the area.



**11. Do you see cracks in the pavement, uneven sidewalks where water runs off or other water damage in the pavement or parking lots?**

- Yes
- No

If yes, describe the location and what you see. Take photographs or sketch the area.

**12. Do you see lots of weeds in the landscape?**

- Yes
- No

If yes, describe the location and what you see. Take photographs or sketch the area.

**13. Are there slopes in the landscape?**

- Yes
- No

If yes, complete the following:

a. Describe the location and what you see. Take photographs or sketch the area.

b. Do you see dirt running off of landscape due to slopes?

- Yes
- No

If yes, take photographs or sketch the area.



## D. Outdoor Irrigation Controllers

Complete the chart below as you survey the irrigation controllers on the school campus or adjacent park. You will need the assistance of the school custodian or facility manager in order to complete this section. See Appendix D for help identifying outdoor irrigation controllers.

Controller	Basic Information			What does it water?			How many zones can it manage?	How many zones are active?	How long does each zone run when it irrigates?	What day(s) is each zone watered?	Is there a Rain Sensor? Y/N	Is the system grounded? Y/N
	Make	Model	Location	% Turf	% Trees and Shrubs	% Low water-use plants						
1												
2												
3												
4												
5												

Notes:



## Appendix A: Cooling Towers

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This is what a Typical Cooling Tower looks like. It is usually found outside next to the Chiller (HVAC) Room. Sometimes it is located on the roof above the Chiller.



## Appendix B: Identifying Flow Rates

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The following pictures can serve as a guide when identifying key information such as sensor type and flow rates. The sensor type and flow rate are usually indicated near the rear of the fixture.

*Toilet:* Look for gallons per flush (GPF) near the rear of the toilet.



*Sink:* if the sink utilizes a sensor it is typically located at the base of the fixture.



*Urinal:* Look for the gallons per flush (GPF) on the side of the Urinal



## Appendix C: Outdoor Irrigation

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Use these pictures to help you identify areas where landscape irrigation has affected paved areas.

*Damaged asphalt due to runoff*



*Slope in landscaping causing runoff*



*Standing puddle due to runoff*



## Appendix D: Outdoor Irrigation Controllers

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This is a picture of an outdoor irrigation controller. Ask the school custodian or facility manager for help identifying the location of the irrigation controller on your school's campus.

