Water Conservation

# POST-ACTION AUDIT, GRADES K-2

Did the class/team work with any resource experts and/or volunteers? Yes No

If applicable, please list.

REQUIRED METRICS

1. Number of water using devices monitored.
2. On average, by how many gallons has the school’s water usage decreased?

SURVEY

### Before starting the water audit or going further, survey students and record the average response.

1. We have access to clean usable water. True False Unsure
2. Wasting water has impacts on the environment. True False Unsure On a scale from 1-10, 10 being the most important and 1 being the least important,
3. How important is it to you to conserve or not waste water?

### How have student’s attitudes and ideas changed from the baseline audit?

TABLE 1. DEFINING THE STUDY SITE

|  |  |
| --- | --- |
| 1. Since the baseline audit have the school’s water sources been tested (first test or follow-up test) for the following contaminants.\*(faucets, fountains, showers)2016 WIIN Act – Provision, Sec. 2107: Lead testing [in school and child care program drinking water](https://www.epa.gov/dwcapacity/wiin-grant-lead-testing-school-and-child-care-program-drinking-water) |  lead bacteria iron mercury copper nitrates tested within the last 365 days |
| 2. Is the school and/or district on track to use moreor less water than was estimated in the baseline audit? |  More Less Information Unavailable |

\*Do you have questions regarding water quality at school? The [Healthy Schools Pathway](https://www.nwf.org/Eco-Schools-USA/Become-an-Eco-School/Pathways/Healthy-Schools) can help. If the team needs a timely response, please contact us at eco-schoolsusa@nwf.org.

# IRRIGATION

## CHART 1. GENERAL IRRIGATION

|  |  |
| --- | --- |
| 1. During the baseline audit, team members walked the school grounds to observe land cover. Has land cover changed anywhere on the school grounds? |  Yes NoIf yes, how so?  |
| 2. Looking back at your weather observations between the baseline and post-action audit, how would you describe the amount of rain the school received? A lot of rain Same amount as usual Much less rain |

Continued on the next page.

## CHART 2. IRRIGATION SYSTEMS AND SPRINKLERS

|  |  |
| --- | --- |
| 1. Did the team’s action plan address issues found with the school’s irrigation system and/or sprinklers? |  Yes NoExplain:  |
| 2. Do team members have a reporting system in place for water leaks, broken heads ormalfunctioning sprinklers? |  Yes No |

### Think about the following questions as you summarize the information in Charts 1 and 2.

1. What did team/classes learn about water conservation outside the school?
2. Describe one action the team/class took to improve water conservation on the school grounds?

# CHART 4. SCHOOL BATHROOM TOILETS

Use the same school maps as were used for the baseline audit, or using a highlighter, mark the same locations on a school map where auditing occurred. Work with the team/class to complete the audit and calculations. These tables and charts will be used to draw conclusion about water use and how use and reporting have changed since the baseline audit.

(A/S) Automatic/Sensor (M) Manual (flush by hand)

|  |  |  |
| --- | --- | --- |
| Bathroom Location | Toilets | Any Observed Leaks? |
|  | A/S | M |  |
| Example: 1st grade hallway |  | 6 |  X Yes No |
|  |  |  |  Yes No |
|  |  |  |  Yes No |
|  |  |  |  Yes No |
| Totals |  |  |  |

# CHART 5. SCHOOL BATHROOM URINALS

(A/S) Automatic/Sensor (M) Manual (flush by hand)

|  |  |  |
| --- | --- | --- |
| Bathroom Location | Urinals | Any Observed Leaks? |
|  | A/S | M |  |
| Example: 1st grade hallway |  | 6 |  X Yes No |
|  |  |  |  Yes No |
|  |  |  |  Yes No |
|  |  |  |  Yes No |
| Totals |  |  |  |

# CHART 6. SCHOOL BATHROOM FAUCETS

(A/S) Automatic/Sensor (M) Manual (turn on/off by hand)

|  |  |  |
| --- | --- | --- |
| Bathroom Location | Faucets | Any Observed Leaks? |
|  | A/S | M |  |
| Example: Oriole Hallway | 8 |  |  X Yes No |
|  |  |  |  Yes No |
|  |  |  |  Yes No |
|  |  |  |  Yes No |
| Totals |  |  |  |

# CHART 7. OTHER WATER USING APPLIANCES

(A/S) Automatic/Sensor (M) Manual (by hand)

|  |  |  |  |
| --- | --- | --- | --- |
| **Location** | **Water Fountains** | **Other****\_** | **Any Observed Leaks?** |
|  | **A/S** | **M** | **A/S** | **M** |  |
| Front hallway by the office |  | **2** |  |  |  Yes X No |
|  |  |  |  |  |  Yes No |
|  |  |  |  |  |  Yes No |
|  |  |  |  |  |  Yes No |
|  |  |  |  |  |  Yes No |
|  |  |  |  |  |  Yes No |

### Think about the following questions as you summarize the information in Charts 3-6.

1. Are more students and staff aware of and report water conservation problems?
2. Describe one action the team/class took to improve water conservation inside the building?

TABLE 2. WATER CONSERVING APPLIANCES, DEVICES AND PRACTICES

|  |  |
| --- | --- |
| 1. Do all indoor faucets have aerators? |  Yes, in place before the audit Yes, as a result of our action plan No |
| 2. How many of the school’s toilets and urinals are considered low-flow/high-efficiency? |  More than half of the toilets and urinals are considered low- flow/high-efficiency before the audit More than half of the toilets and urinals are considered low- flow/high-efficiency as a part of our action plan total number of toilets and urinals total number of low-flow/high efficiency |
| 3. Does the school have water bottle filling stations (not water fountains)? |  Stations were in place before our auditsStations are in place as a result of our action plan How many? No |
| 4. Does the school encourage students to bring and use reusable water bottles? |  Yes, this practice was in place before the audits Yes, this practice is now in place as a result of the action plan No |

### Continued on the next page.

TABLE 2. WATER CONSERVING APPLIANCES, DEVICES AND PRACTICES, CONTINUED

|  |  |
| --- | --- |
| 5. Does the school have functioning rain barrels and/or cisterns? |  Functioning rain barrels were in place before our auditsFunctioning rain barrels are in place as a result of our action plan How many? No |
| 6. Does the school use native grasses, trees, shrubs and flowers in its landscape design? |  This practice was in place before the audits This practice is in place as a result of our action plan No |
| 7. Do any part of the school grounds use xeriscaping, have installed rain gardens and/or bioretention ponds? |  These water conserving practices were in place prior to the audits These water conserving practices are now in place as a result of our action plan No |
| 8. List any other new water conserving practices used at the school. Provide practices not listed in the baseline audit and were implemented as a direct result of the team’saction plan. |  |

**Continued on the next page.**

**Think about the following question as you summarize the data in Table 2.**

1. Based on the responses in Table 2, how would the team/class rate the school’s use of water conserving practices?

 Much Better (improved) Stayed the Same Not as Good (declined)

Explain.

1. Describe one action the team/class took to improve water stewardship?

### Review of All Data

* 1. Based on what is known and has been learned, what claims can be made based on the data and other evidence collected about water conservation inside and outside the school?
	2. In water conservation there are natural and man-made systems. Explain the **systems** students identified as man-made or natural.
	3. Provide at least one **cause and effect** relationship related to water conservation that was observed as teams/classes investigated water conservation at school.
	4. What **patterns** did team/classes observe while investigating water conservation?