

Sustainable Watersheds

Whole School Sustainability Audit



Resources developed by San Mateo County Office of Education's (SMCOE)
[Environmental Literacy and Sustainability Initiative \(ELSI\)](#) • Designed in 2018, last updated January 2021

Purpose and Overview of a Whole School Sustainability/Resiliency Audit

A Whole School Audit is a collection of data and observations for the 4C's pathways (Campus, Curriculum, Community, and Culture). In this type of audit, the purpose is to summarize what is going on for one environmental topic (i.e. waste) in a school site and district. The audit is useful for capturing and communicating evidence and data for the current context to internal and external stakeholder groups.

- **What is the process for completing the audit:** The person completing the audit will use a series of set prompts and questions (see following pages). More often than not, most sections of an audit can be completed through examining bills, or interviewing/surveying stakeholders. However, some sections will require the auditor to walk the campus or make classroom observations.
- **How long does the audit take to complete?** Depending on the availability of school staff and the engagement level of the environmental topic, a site level audit can take between 1 - 4 hours to complete. Auditors will need to consider how much information is needed in order to communicate the current status to stakeholders.
- **Do I need to complete all sections of this audit?** In order to achieve a complete baseline assessment it is recommended that auditors complete all sections of this audit; however, there are some sections that are “optional” depending on the level of detail that is most relevant to stakeholders. It should also be noted that responses will vary by school site, and some will have less data to report than others based on the existing efforts.
- **How do I use the results of this audit?** Audits inform the creation of a baseline assessment of a site and/or school district's sustainability efforts. Once completing this audit, communicate the results to all school stakeholders, in particular the lead project manager for the baseline assessment, who will include key findings in the [Sustainable Campus and Operations Baseline Assessment Report](#) (template). The summarized findings will then be used as the basis for the next phases: Strategic Planning, Project Implementation, and Continued Improvement Cycles.

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SCHOOL WATER SOURCING, QUALITY, AND BILLING

Directions: Identify the main source for your school districts water supply and quality tracking. This section will need to be completed by Business Services and Facilities Department representatives.

District and school sites that are being evaluated in this water audit:
 → Use the template table below to gather data points on the school facilities.

Site Name	Address	Jurisdiction	Water Utilities	Source Type*

* Water utilities may need to be contacted to confirm the source of drinking water.

Does your school district's facilities master plan discuss water conservation or infrastructure?
 → [San Mateo County District and Schools Facilities Master Plans](#)

Yes No
 → If Yes, link to it here:

Who is the lead school staff working on water management?

Describe how your school district monitors and tests for water quality. This can be part of the [William Settlement](#) for safe and decent school facilities. Other examples of relevant information is policies and practices that reduce the risks of Legionnaires Disease.

Describe how your school district tracks its water use. Some examples include: internal spreadsheets, utility provided tracking dashboards, other dashboard systems, etc. Link to any relevant tracking documentation.

A) Does the school districts meter indoor and outdoor water separately or together?

Describe any written policies, procedures, or board resolutions related to water consumption or safe water quality for your school/district. Link to any relevant documents.

Submit, or generate, a baseline of water use from existing **water bills** for at least one year cycle (could be calendar year, fiscal year, or

school year). Data should include the following points:

- Month/Time Interval
- Water Usage (gallons) - Could be provided by meter if applicable
- Occupants - Average, mostly applicable for indoor water usage

→ [SMCOE Example Water Data](#)

SCHOOL CURRICULUM & CULTURE

Curriculum	
Describe how watershed education is integrated into Curriculum and Instruction at the school.	
Provide any clear examples of how watershed education is integrated into core curriculum subject areas:	1) Grade levels receiving lessons about waste and consumption: _____ 2) Subject Areas focusing on waste and consumption: _____ 3) _____ # of teachers total teaching units/lessons on waste and consumption 4) _____ # of students impacted by these classroom lessons on waste and consumption
Describe the most relevant lessons/units being taught on the watershed.	
Describe any ongoing Professional Development for Faculty and Staff related to freshwater conservation.	
Describe any additional efforts specifically on fresh water systems that would be related to curriculum and instruction.	
Culture & Community	
List any specific policies that reinforce water conservation efforts.	

Describe any student club(s) or Associated Study Body (ASB) activities that support school-wide water conservation.	
List any other activities that exist in co-curricular and extracurricular programming that reinforce water conservation efforts (i.e. athletics reusable water bottles, community clean-ups, conservation challenges, etc.).	
Describe partnerships with community based partner organizations (i.e. water utilities, community based partners, etc).	
Describe any additional water conservation efforts that would be related to community engagement and culture.	

WATER USAGE AND CAMPUS INFRASTRUCTURE

Directions: Conduct a site assessment by accessing and evaluating the areas of highest water use at your school campuses. If assessing multiple campuses, complete the audit questions for each campus individually. Use the individual campus audits to make a summary document with the water infrastructure from across the district. If conducting an audit on site auditors should take photos to document the existing infrastructure. *If this audit is being conducted virtually (under COVID-19) note that in the assessment and complete to the best of your ability.*

INDOOR WATER USE

Obtain an interior map and a satellite image of each school. Use this map to take notes of any water infrastructure that needs repairs or maintenance.

Water Fountains

Are water fountains accessible and in good working order?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the water fountains equipped with water-bottle filling stations?	<input type="checkbox"/> Yes <input type="checkbox"/> No
How often is your school's drinking water tested for health and safety?	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Annually <input type="checkbox"/> Unknown
Cafeteria Facilities	
Are faucets "low flow?"	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are there any visible leaks?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are cafeteria staff rinsing dishes before putting them in the dishwasher? *Might not apply if food is not prepared in a central kitchen	<input type="checkbox"/> Yes <input type="checkbox"/> No
Bathrooms	
Does your school use water-saving toilets? (ex. Compostable toilets, waterless urinals, toilets with a two-way lever for high/low flow)	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes list what kinds:</i>
Do the toilets have any visible clogs or leaks?	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes take note on school map</i>
Are the faucets labeled "low flow?"	<input type="checkbox"/> Yes <input type="checkbox"/> No
If faucets are manual, do students turn off the water when not in use?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Faucets turn off automatically
Classrooms	

Do your classrooms have sinks?	<input type="checkbox"/> Yes <input type="checkbox"/> No → If Yes find the total number of classrooms that have sinks: → If no skip the remainder of this section
Are there any visible leaks or repairs needed for the faucets?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If faucets are manual, do students turn off the water when not in use?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Faucets turn off automatically
Is there any signage encouraging water conservation? (ex. "please turn off faucet when not in use")	<input type="checkbox"/> Yes <input type="checkbox"/> No
Describe any other indoor water use conservation efforts or areas of concern:	

OUTDOOR WATER USE

<p><u>Directions:</u> Audit campus outdoor areas, like athletic fields, lawns, flowerbeds and gardens. → If your school has turf athletic fields or doesn't have a garden, focus on other "green" areas on campus.</p>	
Landscaping	
Are there drought-tolerant plants included in the schools landscaped areas?	<input type="checkbox"/> Yes <input type="checkbox"/> No
What percent of the plants in the schools landscaping are drought-tolerant plants?	<input type="checkbox"/> 0 - 25% <input type="checkbox"/> 26 - 50% <input type="checkbox"/> 51 - 75% <input type="checkbox"/> 76 - 100%
Are there native plants included in the schools landscaped areas?	<input type="checkbox"/> Yes <input type="checkbox"/> No
What percent of the plants in the schools landscaping are native plants?	<input type="checkbox"/> 0 - 25% <input type="checkbox"/> 26 - 50%

	___ 51 - 75% ___ 76 - 100%
Are the landscaped areas “mulched” with woodchips or bark? → <i>Mulch increases water retention in the soil</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No
Does your school have a sports field?	<input type="checkbox"/> Yes <input type="checkbox"/> No → <i>If no skip rest of landscaping section</i>
Is the sports field lawn or turf?	___ Lawn ___ Turf ___ Other:
Irrigation	
How does your school district manage landscaping? Do you work with outside contractors?	
What is the process for repair when leaks or damages are found in landscaping irrigation systems?	
Do your school district use drip irrigation for landscaping (flowers, non-native plants, etc.) ?	<input type="checkbox"/> Yes <input type="checkbox"/> No → <i>If Yes, what percent of landscaping is drip irrigation: ___%</i>
Does your school district use timed irrigation systems?	<input type="checkbox"/> Yes <input type="checkbox"/> No → <i>if Yes, how is this managed?</i>
How many days a year does your groundskeeper need to irrigate?	___ days a year
Does your school use greywater to irrigate?	<input type="checkbox"/> Yes <input type="checkbox"/> No → <i>if Yes how much grey water is used for irrigation annually: ___gallons</i>
If your school uses greywater for irrigation are there signs promoting their water conservation efforts?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Does your school use sprinklers?	<input type="checkbox"/> Yes <input type="checkbox"/> No → If no skip rest of irrigation section
At what times of day do the sprinklers run?	
Stormwater Management	
What types of downspouts pipes are present at the school sites? (metal, aluminum, etc.)	
See if you can tell from the perimeter what type of roof your school has. Record anything you can observe from the ground or aerial images. Is the roof flat/sloped? How does water get off the roof?	
Does your school district have any rainwater catchment systems?	<input type="checkbox"/> Yes <input type="checkbox"/> No → If YES, what size rain barrel(s) does your school have? _____ gallons → If YES what is the collected water used for?
Is there any signage encouraging water conservation? (ex. "Greywater system in place here")	<input type="checkbox"/> Yes <input type="checkbox"/> No
Does your school district have any bioswales or natural water filtration systems such as rain gardens?	<input type="checkbox"/> Yes <input type="checkbox"/> No → if YES what is the total square feet of these systems: _____ sq. feet
Describe the storm drain systems on your school campuses. Are there any concerns or highlights?	

REFLECTION

A) Based on your audit, how well is the school district doing at conserving water?

B) Are school stakeholders aware of their water usage? What steps can be taken to spread awareness among them?

C) Are there opportunities to conserve water through policies or practices in the school district?