

Tools for a WATER-WISE SCHOOL PROGRAM

The San Francisco Public Utilities Commission (SFPUC) is partnering with schools in San Francisco to create water-wise facilities and grounds that save potable water, lessen the stormwater burden on the City's combined sewer system, and foster resource-efficient kids. Each program helps San Francisco become even more water-wise!

In the School Yard

Rainwater Harvesting Projects

From 2009 to 2011, the SFPUC provided funding and technical assistance to the San Francisco Unified School District to plan and install rainwater harvesting systems at over 20 schools.



Cisterns range in size from 620 to 5500 gallons. Rainwater can be used on edibles or native plants.



Schools submit plans and system details for SFPUC technical assistance

Green Schoolyards

Several schools also de-paved portions of their schoolyards to increase permeability and keep stormwater out of the sewer system. Many of these de-paved areas were turned into vegetable gardens and native plant areas and have become outdoor classrooms.

Financial Support

The SFPUC provides assistance through grants, incentives, partnerships, and free technical assistance to help schools and their students use water efficiently.

Rainwater grants and subsidies

From 2009 to 2011, the SFPUC provided funding and technical assistance to the School District to plan and install rainwater harvesting systems at over 20 schools through:

- Watershed Stewardship Grant Program
- Rainwater Harvesting Subsidy Program
- Supplemental Environmental Projects

Conservation rebates and services

The SFPUC provides free audits, water-saving devices, rebates and replacement of inefficient fixtures and a large landscape grant program. We also sponsor the operation of a water-wise demonstration garden, provide free class field trips to the site, and fund classroom presentations and other programs.



Students learn about rainwater harvesting.

In School Buildings

Water Audits and Free Devices

The SFPUC integrates training and on-the-spot water savings into school water conservation audits by partnering our conservation inspectors with school maintenance staff, showing the staff how to install aerators and detect and fix simple leaks.



SFPUC inspector conducting water audit

Major Water Use in School	Total Number of Fixtures	Number of Individual Fixtures	Fixture Replacement Ratio	Average Daily Use by SFPUC's Student & Staff	Average Daily Use by S.F.U.C. Student & Staff	Existing Flow Rate (GPM)
Kitchen Faucet 1	2	2	1.00	1	1	2.2
Kitchen Faucet 2	2	2	1.00	1	1	2.2
Kitchen Faucet 3	1	1	1.00	1	1	2.2
Restroom Faucet 1	1	1	1.00	1	1	2.2
Restroom Faucet 2	1	1	1.00	1	1	2.2
Restroom Faucet 3	1	1	1.00	1	1	2.2
Classroom Faucet 1	17	17	1.00	0.1	0.1	2
Classroom Faucet 2	17	17	1.00	0.1	0.1	2
Classroom Faucet 3	17	17	1.00	0.1	0.1	2
Laundry Faucet 1	10	10	1.00	2.96	2.96	1
Laundry Faucet 2	10	10	1.00	2.96	2.96	1
Laundry Faucet 3	10	10	1.00	2.96	2.96	1
Leak						

Future Savings	Total Number of Fixtures	Number of Individual Fixtures	Fixture Replacement Ratio	Average Daily Use by SFPUC's Student & Staff	Average Daily Use by S.F.U.C. Student & Staff	Existing Flow Rate (GPM)
Toilet Model 1 - County Flush Toilet (High)	3	3	0.18	2.96	0.54	3.5
Toilet Model 1 - County Flush Toilet (Low)	2	2	0.18	2.96	0.54	3.5
Toilet Model 2 - Flushometer	17	17	0.18	2.96	0.54	1.5
Toilet Model 3 - Flushometer	7	7	0.18	2.96	0.54	1.5
Toilet Model 4 - Child's Flushometer	3	3	0.18	2.96	0.54	1.5
Toilet Model 5	2	2	0.18	2.96	0.54	1.5

This tool is simple and can easily be used by anyone with basic Excel skills.

School Water Savings Calculator

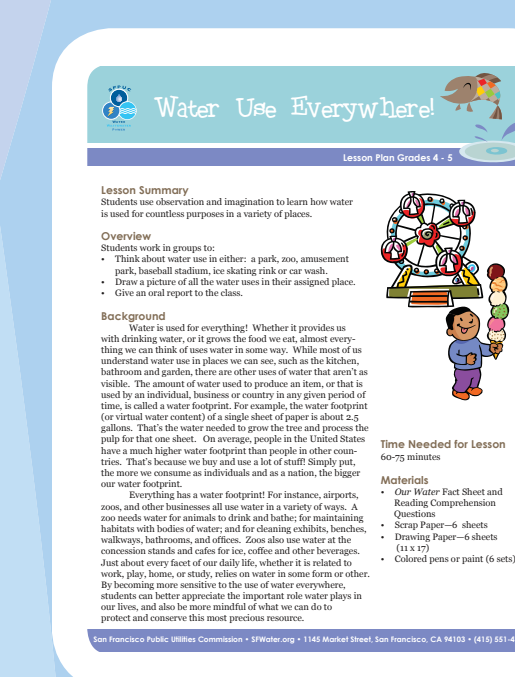
This calculator can estimate a school's water use, potential savings from each retrofit installation, and payback periods. The school can use the estimates to make retrofit decisions.

In the Classroom

Water & Watershed Stewardship Curriculum

The SFPUC has developed multiple educational programs and curriculum that guide teachers through lessons on water supply and conservation, rainwater harvesting, stormwater pollution prevention, and watershed awareness.

We also provide hands-on field activities to support in-class teachings. These include field trips to a water-wise demonstration garden and use of the rainwater harvesting projects as a way to teach students about San Francisco's water supply and sewer systems and rainfall's role as a valuable resource.



Develop a curriculum



Engage students through interactive exercises like poster contests



Supplement the curriculum with special presentations

On the Internet

Find out more about our water-wise school efforts

sfwater.org/education

sfwater.org/conservation

sfwater.org/rainwater