



Next Generation Green Schools Program

Green School Operations Guide

Sustainable Water Use



We all need clean freshwater to survive. Water of this quality is a very limited resource, and is constantly threatened by pollution and wasteful management. Conserving water also conserves the energy used to heat and transport that water; as a result the greenhouse gases that cause global warming are reduced. Using this guide, schools can lead their students and the community in water conservation and pollution prevention methods.

Water Conservation

Water conservation means using only the amount of water you need. During dry years, up to 30% of Marin's water is imported from the Russian River. By implementing water conservation methods, schools can protect future water availability, cut operating expenses and help students better understand ways to conserve our precious natural resources.

General

- Regularly check water meters, even when school is not in session.
- Establish a baseline for water use and monitor and report consumption statistics. Integrate students in sciences classes to help with this.
- Establish methods to regularly check buildings for water leaks and report them to maintenance staff for repair.
- Establish a purchasing policy that specifies high-efficiency/air-cooled equipment when replacement is needed.
- Educate students, faculty and administrative staff on the benefits of and methods for conserving water.
- Let maintenance staff know that they are doing a great job reducing water use by sharing water use information with them (for example, as shown on water bills).
- Solicit input from students and teacher to reduce water use.

Indoor Specific

- Install low-flow toilets, shower heads and faucets. Rebates are often available; contact MMWD (see below).
- Install faucet aerators.
- Install waterless urinals. Rebates often available. Check with MMWD.

Outdoor Specific

- Landscape with drought-resistant native plants and other climate-adapted plants.
- Water early am or late pm to prevent evaporation loss.
- Improve irrigation efficiency on playfields.
- Compost green waste as much as possible.
- Apply mulch annually.
- Turn irrigation off when it's raining by installing rain shutoff devices.
- Use drip and other high efficiency irrigation devices whenever possible.
- Install soil moisture sensors.
- Use brooms rather than hoses to clean pavement.

Preventing Pollution

Water pollution occurs when toxins are either discharged directly into waterways or picked up by surface runoff. Schools can eliminate both types of pollution through education and policy changes.

- Hold a Stop Litter campaign to reduce trash entering storm drains.
- Make sure storm drains are clearly labeled "Drains to Creek (or Bay)."
- Purchase only non-toxic, biodegradable cleaning supplies.
- Use organic fertilizers on school grounds and use only the minimum amount.
- Use Integrated Pest Management methods on campus.
- Use manual methods to control weeds instead of herbicides whenever possible.
- Run-off Reclamation – implement projects to stop water from flowing into the storm drains. Parking lot runoff can be redirected into a planting bed.

Healthy Schools

Shade trees and school gardens educate students about sustainable water use and create a healthier physical environment.

Local Partners

Marin Municipal Water District, www.marinwater.org

North Marin Water District, www.nmwd.com

Resources

Water Systems on School Grounds

http://www.ecoschools.com/Water/Water_wSidebar.html

The Real Dry Facts

http://www.schoolfacilities.com/cd_1884.aspx

Describes how waterless urinals work, what they cost to buy and operate, and documents their successful installation in several schools in Floyd County, Georgia.

Water Conservation Ideas for Schools and Colleges

<http://web.archive.org/web/20070502132209>

Presents general water conservation ideas for schools, as well as suggestion for specific areas such as kitchens, pools, and grounds.

Water Conservation Checklist: Schools/Education Facilities. Every Drop Counts

<http://www.p2pays.org/search/pdf/frame.asp?pdfurl=/ref/23/22009.pdf>

Describes numerous steps that schools can take to implement a successful water conservation program, including initiating a school-wide conservation campaign, identifying water usage and repair leaks, fixture and equipment retrofits, water recycling, etc.



MARIN MUNICIPAL
WATER DISTRICT



COUNTY OF MARIN



MARIN COMMUNITY FOUNDATION

Marin Sanitary Service
CONSERVATION – OUR EARTH, OUR MISSION, OUR JOB

Autodesk



GREENLIGHT
SOLAR

Pacific Sun



STRAUS
FAMILY CREAMERY
ORGANIC



Bank of Marin



Good Earth
Natural Foods



MARIN COUNTY STORMWATER
POLLUTION PREVENTION PROGRAM



NORTH MARIN
WATER DISTRICT



TamalpaisBank



three twins
ice cream