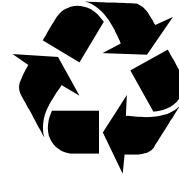




EcoNotes



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Water Conservation at CMC

California and water are and will always be inextricably linked. No resource is more valuable and worthy of conserving in our state.

California's weather fluctuates between flood and drought. Parts of the state are, at times, flooded -- most recently in January 1997. But the 1987-1993 drought served as a wake up call to many. It reminded us that we do, in fact, live in a desert, and water is an essential element of our economy and booming population. This year, precipitation in Southern California remains low -- about 20 percent of normal. Recent storms are helping remedy the situation, but, regardless, we are constantly aware of the arid environment in which we live.

As a resident of California, CMC accepts responsibility for the water it uses. We have installed water-saving plumbing fixtures and included drought-tolerant plant material in all landscape projects. We meter all residential buildings and monitor monthly activity.

We hope you will share this newsletter with a friend. It contains some important ideas and tips for saving water both on campus and at home. And don't forget, EcoNotes can also be found on the Web at: www.mckenna.edu/news/index.htm.

**Note: Data provided by the Water Education Foundation.*

You're Not the Only One

Water is used in many ways in daily life. The average person uses nearly 80 gallons of water per day in their home, primarily from personal hygiene and home cleaning.

Of course, we know that some of us use even more than the average person, depending on if we decide to wash the car and take a long shower every time we

go out. And then, much of our entertainment relies on water, including the water traps and sprinklers on our favorite golf courses and the great water rides at the amusement parks.

There's no doubt about it, we should be more careful with the water we use. However, it is important to note that residential use accounts for only 9% of all water use. Agriculture uses 47% and industry accounts for 40% of all fresh water use. This means that we have very little control over how much water is used throughout the state, right?

Well, it depends on how you look at it. We might feel helpless and the water we save at home may only be a drop in the bucket (pun intended). But, we still have a small measure of control over how much water is used around

us. We can, for example, call the city to complain when the park sprinklers come on in the rain or when the median irrigation system is flooding the street. We can also hold the schools and companies in our neighborhoods accountable for the way they use water.

Most importantly, we can vote to protect our water resources and our environment. Various public interest and environmental groups, urban water agencies, and irrigation districts are continuing their efforts to find a comprehensive solution for resolving California's water problems. If we support their efforts both with our time and our votes, they will know that their hard work is meaningful.

Water use in California will always be an issue. Using wisely is our only choice.

EcoNotes is published by the Environmental Concerns Committee, a group comprised of faculty, staff, and students. Any submissions or comments can be directed to the administrative services department. We reserve the right to edit all submissions.

EcoNotes

Down the Drain at CMC

- Traditional toilets use between five and seven gallons of water per flush.
- Americans use about 4.8 billion gallons of water for toilet flushing every day.
- Housing & Urban Development (HUD) estimates that if all conventional toilets were replaced with low consumption, 1.6 gallon per flush models, about 70 percent of the current national water supply could be saved.
- Low consumption 1.6 gallon gravity toilets are similar to traditional in that they depend on the water in the tank and gravity to push the contents of the bowl down to the sewer.
- Pressure-assisted 1.6 gallon toilets use a sealed vessel to store water in. It is then pressured by the building's own water pressure. When flushed, it delivers the pressurized 1.6 gallons at a much greater rate than that of a gravity toilet.

During north quad renovations in the late 80s, we went from a 5 gallon gravity flush to a 1.6 gallon low consumption gravity toilet. Over the next five years, we experienced an extraordinary increase in maintenance and service calls. Besides being a maintenance nightmare, we were losing ground in our conservation efforts.

In 1996/97, we ran a 12 month test period, replacing 16 low-consumption gravity toilets with pressure-assisted, low-consumption toilets. We monitored this test building closely over the next year. With absolutely no service calls in that test year, we found that, along with solving our continuous problems with maintenance, we also tackled our water conservation issue.

This study led to the replacement of 142 toilets in various buildings across the campus. Below is a sample of water meter readings (in gallons) for a month of full occupancy:

	<u>Sept. 1995</u>	<u>Sept. 1999</u>
Appleby	73,304	62,084
Boswell	117,436	69,564
Green	94,996	58,344
Wohlford	101,728	46,376
671	54,604	38,148
681	<u>59,840</u>	<u>38,896</u>
Total	501,908	313,412
Before		501,908
<u>After</u>		<u>313,412</u>
Gallons Saved		188,496

Water Fact

Singapore holds an annual water conservation program that includes shutting off water in different districts at different times. This undoubtedly inconveniences people, but also teaches them the value of water. Because potable water is scarce in Singapore, they buy a lot of their daily supply from Malaysia. Most people know about and appreciate the water supply because of these programs.

Southern California is in a similar situation in that we purchase a great deal of our water from Northern California and nearby states. If we don't shape up, should we consider turning off the water?

Earth Day

2000

Eco Club, the five-college student environmental group, is planning a series of Earth Day celebrations. Plans for the week of April 17th include environmental awareness programs, a special event, and a call for activism. We hope you will support their efforts by taking part in the celebration.
