

Water Crisis Hits The Hill

by Julie Kosterlitz

However far removed the University may seem to be at times from the rest of the world, the fact is that students, faculty administrators and staff are very much affected by the laws of nature. This truism becomes especially significant, in light of the severe water shortage that currently afflicts most of the western United States, and particularly California, where the problem is compounded by competing claims from several densely populated urban centers, and the demands of agriculture. (See accompanying article.)

Santa Cruz County is hardly an exception to the rather grim terms laid down by the drought: last July, the rainy season was termed "the driest in 127 years," and this winter's rainfall has provided scant relief. Faced with a potential 30 percent decrease in the city water supply, the Santa Cruz City Council adopted a rationing plan in early March which would allow the average Santa Cruz resident up to 80 gallons a day at no increase in price. Water department estimates in February placed normal usage at over 100 gallons per person per day. This would require that residential users cut their overall water consumption by about 20 percent.

However, the University, as an institutional user is faced with different restrictions. According to the terms of the city ordinance, effective May 1 (although billing includes 2 weeks of April) the University is allotted only 70 percent of the amount it used in corresponding months in 1975. For anything in excess of this amount, the University will be charged at the rate of \$25.00 per hundred cubic feet. (One hundred cubic feet is equal to 748 gallons.)

The terms of this arrangement may not appear alarming, but the vast quantities of water used by the campus multiply the seemingly small rates of surplus charges into five and six digit figures.

This is a monthly breakdown of UCSC water consumption in 1975, contrasted with the projected allotment for those same months in 1977. The 1977 figures represent 70% of the 1975 figures, in addition to certain proposed adjustments, to take into account new circumstances and facilities: (for example, an additional 700 cubic feet for newly constructed Oakes College.)

MONTH	1975 Water Use (100 Cubic feet)	1977 Projected Allotment (100 Cubic feet)
April	12,033	9,123
May	17,192	12,734
June	22,288	16,302

The Campus Energy and Fuel Commission has been formulating a policy for campus water usage designed to keep the University within the consumption standards specified by the City. Campus Facilities is the department charge with the implementation of any such policy. Because of the decentralized college structure of the University, Campus Facilities is proposing a rationing structure which will identify how much water each college and core building uses; in the event that the University as a whole exceeds its total water allotment, any individual area which has used more than its quota will be required to pay the corresponding fine out of its own monies.

For example, if College 5 uses water in excess of its allotment, College Five will have to pay the resulting fine out of funds that would have otherwise been available for such items as dorm activities, and telephones.

If a core area such as the Classroom Unit exceeded its allotment, the fine would be payed out of State funds designated for this campus; this represents money which is already desperately needed by other campus programs, and not intended for the payment of such fines.

The current proposal identifies campus units as follows: Housing, Farm and Garden, Arboretum, Athletic Use, Campus General Use, Campus Irrigation. The Chancellor is expected to approve the proposal sometime this week.

Specific implementation of the plan will depend on the resolution of certain peculiarities of the Universities water needs: For example, the University's water usage fluctuates markedly from month to month because of the nature of the academic calendar: in March, consumption would be well under the amount allotted to the University because of the Spring break,



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whereas in other Spring months, the amount used could possibly exceed the University's quota. Should the city's charges be levied against the University on a monthly basis? Or might it be more equitable to access the University's consumption on a quarterly basis?

To aid the individual units in cutting down on their water consumption, the University has spent somewhere in the area of \$1,800 on water-saving devices. These devices include water-dams for toilet tanks (an expected saving of 1 to 2 gallons per flush), new shower heads (at Oakes College, for example, an expected saving of 7 gallons per minute) and shut-off valves (which cut consumption by reducing overall water pressure, and make it possible to turn off shower while soaping, without readjusting water temperature.)

At the same time, growing student concern for water conservation is calling attention to the necessity for individual self-regulation. Several students from Professor Deck Cooley's Environmental Workshop have formed a Campus Conservation Committee. Committee member John Swift points out that many students are not aware how the statistics on water usage translate into terms of everyday, individual consumption. "When thinking in terms of thousands of students engaged in all kinds of frivolities and eccentricities, from orgies in the shower, to self-searching meditation with the aid of pulsating shower heads, 748 gallons (one hundred cubic feet) doesn't even sound like a drop in the bucket," says Swift. He cites some rather sobering figures provided by the Santa Cruz Water District:

NORMAL USE:

Shower	Water running	5 min.	25 gal.
Brushing teeth	Tap running	3 min.	10 gal.
Tub bath			36 gal.
Shaving	Tap running	4-5 min.	20 gal.
Dishwashing	Tap running	15 min.	30 gal.
Washing hands	Tap running	3 min.	2 gal.
Toilet flushing			5-7 gal.
Washing machine	Full cycle		60 gal.
	Top water lev.		
Outdoor watering	Average hose	10 gal. per minute	
Leaky faucets		Hundreds of gal. per day	

Another Campus conservation Committee member, Melissa Hays, comments, "the cheapest and most effective water saving device is still the human hand." She reports that Student Apartments is doing a feasibility study in recycling laundry water for garden irrigation: "All sewage exclusive of toilet wastes is termed 'greywater'. This includes sink, shower-tub, and laundry wastes. Greywater recycling is illegal, although the Director of California's Department of Water Resources has said that restrictions on greywater are 'too rigid.' UCSC is technically no answerable to county regulations. The project under consideration at Student Apartments would save about 2.5 cents per cubic foot by avoiding outgoing charge on all sewage, in addition to the 3.5 cents per cubic foot

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The Politics of Water

by Kent Dannehl

By this time Californians know there is a general water shortage in the western states. The Media reports daily on urban conservation measures designed to curtail personal and business consumption. It is worthwhile to remember, however, that the largest single consumer of water in California is agribusiness; and waste and misuse of water in this sector affects the small farmer and the city consumer both by making less water directly available and by increasing the prices of basic foodstuffs. Who gets water and how much they get is a political question, and like most political questions, points toward some interesting answers.

The Politics of Water Allocation

Water politics in the west has long been plagued by charges of corruption, mis-management and waste. Participants in the scenario of water control include farmers, ranchers, the energy industry, and the State and Federal water agencies; and they are all battling over a big prize: control over water allocation means

control over agriculture, energy development, and land use, all of which mean potentially vast amounts of wealth. In a contest over such large stakes, seemingly 'minor' decisions affecting western water use have far-reaching implications on national resource policy.

Problems presented by the drought itself—the public water projects and the battle for water allocation—are the major problems facing consumers and State or Federal policy makers. Solutions to these problems will have far-ranging effects on our economy and our lives.

The Drought

The Pacific Coast states suffered a severe drought last year. This year, these states have had only 30-50 percent of their average rainfall. Some irrigation projects are cutting back water supplies by as much as 75 percent in 1977. James Youde, head of California's Agriculture Department, predicts that California's drought-related losses could range from \$2-\$6 million, with most of the losses in the Central Valley. Some small farmers, unable to bear the economic burden of a

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