Water use, tracking,	INDICATOR DATA:
and feedback	(1) Use
	Total water use (gallons) per building square foot per year: 27.86
INTENT: Encourage	Total water use (gallons) per FTE staff per day: 122.58
efficient water use.	Total water use (gallons) per campus user (FTE staff + FTE students) per day: 7.45
institution collects and	(2) Tracking. Provide a description of how Lane tracks water use and cost data.
reports information on its own water use practices in ways that facilitate action.	Lane's water use is tracked on a utility data base that can be found at: <i>j:\group\utilities\DB\utilities.mdb</i> . We have one water meter for the main campus, so water use for irrigation is not tracked separately.
	(3) Feedback. Provide a description of how Lane provides feedback to campus users about water use.
	The energy analyst tracks water use and investigates potential problems. In 06/07 a student project to install low flow aerators on all applicable faucets on the 30 th Ave. campus was completed. This project resulted in a Torch article on April 27 about water conservation and a Daily announcement on May 24. The project was also featured in the Association for the Advancement of Sustainability in Higher Education newsletter on May 4, on local TV news station, KVAL, on May 19, and in the Eugene Register Guard on May 22.
	A presentation by the Sustainability Coordinator, the Energy Analyst, and the Recycling Coordinator on sustainability at the Spring Conference on May 5 included tips on water conservation.
	BENCHMARK:
	 (1) Use: Water use does not exceed 3.6 gallons per campus user per day or 61 gallons per FTE staff per day. [NOTE: No relevant or widely accepted benchmark exists. However, EWEB suggested in a letter to Lane Community College in April 2004 three water conservation measures that they estimate would reduce the college's water use by 50%. So the benchmark was set at 50% of the current amount. EWEB also provided an average and typical water use for educational facilities that is 118 gallons/person/day. This number is 4 gallons/person/day lower than our 122.03 gallons/FTE staff/day, however, EWEB's 118 gallons/person/day is not meant to be a benchmark, just an average for future planning. Please see attached notes from conversation with EWEB about benchmarks and conservation strategies dated October 5, 2004.] (2) Tracking: The campus has complete and clear records of its water use and there
	exists a regular, on-going reporting process for all water use and cost data. Water use for irrigation is tracked separately from other water use.
	(3) <i>Feedback</i> : The campus Facilities Department provides information to campus users about water use in ways that raise awareness and facilitate action.

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ANALYSIS:
Has Lane met the benchmark level? No.
Why or why not?
Despite the project to install low-flow aerators on faucets, water use increased between 03/04 and 05/06. The increased usage was most likely due to the new Package Wastewater Plant construction. The large holding tanks were flushed and filled many times during testing procedures.
 Additional water saving projects in 04/05 and 05/06 were: Plumbers retrofit about 90% of old toilets that use 3.5 gallons of water per flush (gpf) with auto flushers that use 1.6 gpf. Landscape Maintenance staff worked toward conserving water by mostly planting plants that will only need water to establish and most lawns are not watered during the summer.
Recommended strategies for improving performance in this area?
 Do more to promote water conservation, especially in high use areas such as the PE building and the Food Service areas. Provide campus users with information about water conservation efforts that are taking place and provide water saving tips that individuals can accomplish. Ensure that all old toilets that use 3.5 gallons of water per flush (gpf) are retrofitted with auto-flushers or valve diaphragms with water savers that use 1.6 gpf. Ensure that all old urinals are retrofitted with auto-flushers that use 1.0 gpf.
 Ensure that all showerheads in the PE building are low flow, retrofit if necessary
 Purchase computerized irrigation system that reads weather daily and determines whether plants need to be watered. The computer system also detects breaks in irrigation lines, notifies user, and shuts down the zone for large breaks. Installation of this computerized system is estimated to decrease our water use by 33%.
 Install ozone generators in the laundry. Ozone whitens laundry like chlorine, but is less environmentally hazardous and would require one less rinse cycle. (See attached letter from EWEB) Utilize all effluent from the future Package Wastewater Plant. Water should be used for irrigation and mechanical cooling water. Lane should also investigate whether treated water could be used in the laundry. (See attached letter from EWEB). Install rainwater catchment systems that connect to roofs and are used for irrigation or toilet flushing. Contact EWEB to get on the waiting list for the Commercial & Industrial Landscape Audit (CILA) water use analysis survey.
EWEB estimates that these upgrades would decrease our water use by more than 50%.

TO:	File
FROM:	Jennifer Hayward
DATE:	10/5/04
RE:	Conversation with Steve West, EWEB Water Management Specialist

I called Steve on 10/5/04 to ask if he could recommend an appropriate benchmark for water use that the college could use. Steve indicated that EWEB contracted a planning & management consulting firm to prepare a demand forecast for them in 1995. Steve provided me with the water use numbers that were given in this report. These numbers follow.

- Water use for government facility (national): 106 gallons/person/day
- Water use for government facility (local EWEB customers): 348 gallons/person/day (510 summer; 185 winter)
- Water use for educational facility: 118 gallons/person/day (146.8 summer; 89.6 winter)

Steve said that for government facilities "person" means FTE staff. Steve wasn't 100% sure if "person" in the educational facility only includes FTE staff and not FTE student, but he is almost positive that is does only include paid staff. This is not stated explicitly in the report, but Steve called some of the people who worked on this report and it was their recollection that "person" was just FTE staff.

Note that Lane's water use per FTE staff per day is 122. This is 4 gallons per person per day greater than the average.

I described some of the water conservation programs and plans that the college had to Steve. I told Steve that we are retrofitting old toilets and urinals with auto-flushers that decrease water use to 1.6 gallons per flush (gpf) for toilets and 1.0 gpf for urinals. Steve indicated that there might be EWEB incentive money available for this project. I also told Steve that we are planning to purchase a central irrigation controller. Steve indicated that there might also be incentive money or no-interest financing available for the irrigation controller. Steve also recommended that the college get on the waiting list for the EWEB Commercial Industrial Landscape Audit (CILA). This audit helps business refine their water needs and usually results in decreased water use with no reduction in landscape quality.

WATER INDICATOR FOR MAIN CAMPUS FY 2005/2006		
Water (gallons)	31,095,588	
Building square footage	1,116,122	
FTE students (actual) ²	10,738	
FTE budgeted staff ²	695	
Total campus users (FTE students + FTE staff)	11,433	
Water usage (gallons) per building square foot per year	27.86	
Water usage (gallons) per FTE staff per day	122.58	
Water usage (gallons) per total campus user per day	7.45	
1 Information on the Facilities Management and Planning server in 'Fmp1\Data'(J:)\group\Utilities	n the folder Office on	