

## عنوان مقاله:

(Water saving and efficient use in water coolers)(Case Study: Ilam City

## محل انتشار:

دومین کنفرانس بین المللی علوم و مهندسی (سال: 1394)

تعداد صفحات اصل مقاله: 6

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## خلاصه مقاله:

Due to the limitations of water resources in terms quality and quantity, the inappropriate use of water resources, groundwater, treated water, the lack of management and proper systematic planning for the use of water and the drought of last few decades in Iran, a lot of problems have been made in terms of water shortage for this country. Given the critical situation of water in the world and Iran, and the lack of rainfall and low water levels of Ilam dam which provides about 90% of water for Ilam, and the need to save drinking water which its large volume is wasted or consumed by water coolers in the warm months of year (June, July, August, September and the first 15 days of October) between the hours of 10 am to 17 pm, we assess the amount of savings in cooler with shade and without shade and measure the amount of water consumption in them, and finally compare these two coolers for an hour according to the coolness and moisture generated by each one as well as the changes in temperature and the amount of consumed water in them at the same hour of 13:30 pm when is the peak hour of water heat and vaporization. The comparison of changes in temperature of room and percentage of air moisture for both coolers is almost equal with minor error percentage. The results indicate that the cooler located under the shade has need 2.04 liters of water per hour less than the cooler without shade. Ultimately, the suggestions are offered to improve and reduce the consumption of this system.

## کلمات کلیدی:

Limited water resources, saving, water cooler, temperature, shade, Ilam

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/490467>

