

WAYS OF WATER COUNTING SIGNIFICANTLY EFFECT DRINKING WATER CONSUMPTION IN RIGA CITY (LATVIA)

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The knowledge about possible future drinking water consumption is crucial for the sound development of water production industries. Factors such as demography, economy, climate changes and development of technologies are traditionally considered the most important in forecasting of drinking water consumption in the cities. In contrary to predictions, drinking water consumption has started to decrease after changes from flat-rate tariffs to flat water meters accounting system for used water in Riga city in the mid-nineties. The objective of this study was to investigate weather the accounting system effects water consumption rate in Riga.

During the study period of 6 month in 84 houses readings from individual water meters in the flats were compared with total water consumption of the houses. The accuracy of 19 water meters was checked. The results showed that an average specific consumption by residents according to individual flat meters was 80 litres per capita per day (LCD) but for residents without individual flat meters it was about 314 LCD. The study showed that the accounting system for used water is one of the most important factors governing water consumption and thus it should be taken into account in forecasting of drinking water consumption in the cities.