

HOW MUCH WATER DOES A PERSON NEED? WATER CONSUMPTION NORMS

We often do not notice how much water we use to satisfy our needs. Here is what the average indicators of water consumption by person tell according to the needs. And these needs can be conditionally divided into the following:

Consumption of water for drinking.Usually a person drinks 2-3 litres of water per day;



Water is used for cooking food. Consumption of water for this purposes makes around 3 litres per person per day;



Different daily **hygiene needs** (brushing teeth, washing hands, etc.), require up to 6-8 litres of water per person per day;



Daily washing of dishes consumes from 7 to 12 litres of water for one person;



If there is a **bath or shower** in the house/ apartment, water consumption increases up to 150 litres per person. With availability of shower, the usual calculation makes 15-20 litres per minute or on average, up to 200 litres of water per person per day;



Laundry. Here the consumption is up to 100 litres of water but this is not what is consumed on a daily basis.



If there is a **sewage system**, the average of 15 litres of water is needed per person per day for flushing the toilet;



Other consumptions: With availability of a garden, garage (water is also used for watering the garden and car wash), there are additional related calculation for water consumption.



However, it is not known how much water we use for our specific national customs - washing carpets.



WHY DO WE NEED WATER CONSUMPTION NORMS:

«WATER CONSUMPTION NORMS is the estimated amount of drinking water necessary to meet the physiological and household needs of a person per one day"

For projection and construction of drinking water supply systems. The water consumption norms established by the standards are the basis for projection of the capacity of the drinking water supply systems. This covers decisions on both magistral level infrastructure as well as within the micro-districts and buildings: starting from cross-sections of pipes up to calculation of the water pressure.

For regulation of water supply volume.

With population growth and expanding housing units, the norms of consumption serve as a basis for calculating the needs for additional water pumps, water towers, reservoirs etc.



For billing the water consumers.

Norms of water consumption also serve as the main means for calculating and billing for water usage. Considering that in Tajikistan the majority of consumers today do not have water meters, the billing is calculated based on these standardized norms of water consumption. That's why water supply companies use



information about the number of residents in the house/apartment for billing purposes. Often there are disputes over the fact that the residents provide the number family members registered in the property while the water supplier bills according to factual number of residents. In this case the water supplier company is right.

For consumers. If the water supplier company bills a consumer according to the standardized norms, then the consumer can demand a compensation in case if the company fails to provide the exact amount of water defined by those norms. In Tajikistan's judicial practice¹ there was a case when the consumer demanded recalculation of the service bills. He considered that he did not receive the amount of water declared in the water consumption norms (due to problems with the pumps, the consumers in the micro-district received water only 1-3 hours per day).

 $^{^{\}rm 1}$ $\,$ The case of Consumers Union of Tajikistan against KGUP Khujandvodokanal, Khujand town Court, 2004

WATER CONSUMPTION NORMS IN TAJIKISTAN LEGISLATION:

REGULATIONS

on using utility public systems on water and sewage supply in the Republic of Tajikistan

approved by the Decree of the Government of RT as of 30 April 2011, №234

Consumer list

Types of consumption

Water consumption norms in litres

Water standpipes of common usage (street) Consumption from street water standpipes

50

Consumption from yard taps and standpipes (multi-family house buildings)

95

Residential buildings

With water pipes and sewage system (without bath)

130

With water pipes and sewage system (with bath and gas)

150

With water pipes and sewage system and baths, heaters on solid fuel

180

Consumer list

Types of consumption

Water consumption norms in litres

Residential buildings

The same, with instantaneous gas and electric heaters with multipoint standpipes



Houses with centralized hot water supply equipped with wash stands and showers



The same as part 4 but with sit-on baths



The same as part 4 but with baths with 1500-1700 mm. length, equipped with showers



The same as part 4 with a building of more than 12 floors with improved living conditions



Consumption unit





1 person/day

«Norms for water consumption from the water and sewage supply system can be increased or reduced to 10-20% depending on the warm and dry climates of the districts/ areas»

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registered under the Ministry of Justice on 24 August 2009, № 541

Specific average daily (for 1 year) water consumption for household and drinking needs of the population (in litres)

Construction of buildings, equipped with in-door water pipe and sewage system:

without bath



with bath and local water heaters



with centralized hot water supply system





