Project no. 4CE439P3

URBAN_WFTP

Introduction of Water Footprint (WFTP) Approach in Urban Area
to Monitor, Evaluate and Improve the Water Use

WP 5.2.3 Water use and management practices evaluation

Vicenza Urban Water Footprint Lab

Start date of project: 1 November 2012 **Duration: 25 months**

Submission date: June 2014

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1 Introduction

In output WP 5.2.2. the Vicenza Urban Water Footprint Lab declared that its water footprint improvement objective is:

1) enhanced protection of subsurface water resources via decreased soil sealing and other methods of improved infiltration of storm water into the soil, as well as reduced extraction of subsurface water;
2) educating the population in order to improve both the blue and green water footprints of the city of Vicenza.

A plan of actions has also been laid out in the same document.

More detail is provided in output WP 5.2.4 with details of the targets, the measures, risks, costs, stakeholders, expected timelines.

This document evaluates the likely change of the water footprints as a result of the actions based on the water footprint model already set up for Vicenza.

2 Predicted change of the water footprint

The results are estimated on the basis of the actions that will be taken encouraging the infiltration of rainwater into the aquifer through harvesting, dual separation of sewer, adoption of best practices by citizens and controls on water supply from private wells.
It is expected that improvement actions planned by the laboratory may affect indicators identified as follows.

Action 1)
Census of wells and taps.
This affects in particular the GREY WATER as it would decrease the volume of water that is sent to treatment. For each 10% of taps shut will be reduced by about 1.28% of GREY WATER. Putting all faucets of wells and making sure they are closed (only used to need) the maximum reduction would be around 12%.

Action 2)

Sensitisation of citizens.

With regard to awareness-raising interventions, for every 1000 people who reduce water withdrawals of 10%, we reduce the BLUE WATER of 0.033% and the civil GREY WATER of 0.06%. If the entire population were reducing withdrawals of 10% would be the 4% reduction of BLUE WATER and 6.7% civil GREY WATER.