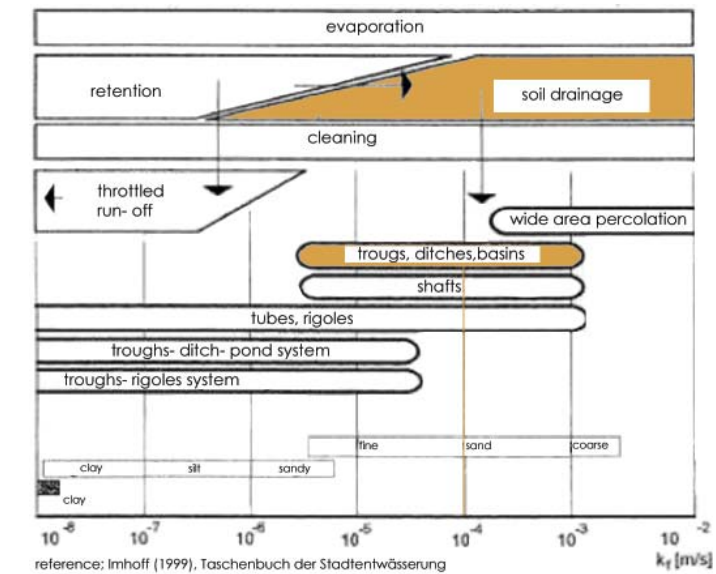


RAIN WATER

- The good percolation capability of the soil allows, that the entire settlement area can be networked with trough - rigole - systems for percolation. They collect the immense quantity of rain water falling in the summer and drain it, on the other hand they improve the microclimate in the dry periode and support the biotop-networking.

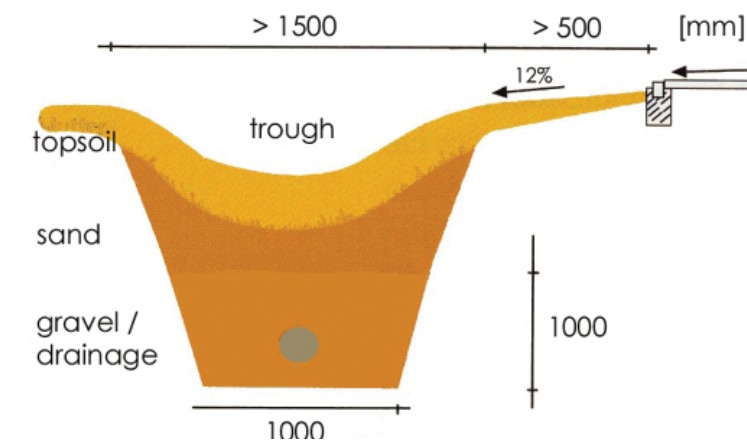
Overflow possibilities are also planned, which kann be green areas of any kind, gardens, parkings, recreational areas etc. which also have a positive effect on the urban climate and environment.

- Rain water utilisation is important especially for the public buildings like schools and kindergartens, but also for the private households. The rain water can be used for WC-flushing, cleaning and garten watering.



TROUGH - RIGOLE COMBINATED PERCOLATION

- Principle: Rain water retention and percolation into troughs, which are connected to underlying rigoles.
- The troughs have to be built trapezoidal and 30-40 cm deep. The water percolates from the trough through a 30-50 cm thick topsoil layer and a sand layer into the underlying rigole. The rain water is being cleaned by the percolation. The rigole itself consists of a gravel layer and a drainage. This drain pipe serves the evenly distributed percolation. It is advantageous to connect a percolation area to the troughs for the case, that the rain water level rises.



WIDE AREA PERCOLATION

- Principle: rain water percolation into open drainage systems through porous surfaces. The clarification level is rather high, because of the slow soil filtration.
- Fields of application: parking places, footpaths, playgrounds, gardens, parks. The (road) surface have to be pervious to water, like gravel, sand, pavement or grass.

RAIN WATER UTILISATION

- Field of application: The drinking water quality is needed only for the half of water used during a day. Rain water could be used especially for toilet-flushing, washing mashine, garden watering etc.
- The most simple form of collecting rain water is the underground cistern in the garden. It is a low-cost facility and can be installed without big technical efforts and is easy to maintain.

