

## The German Model of Rainwater Collection

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The goal of the German system is to provide the highest quality of rainwater (non-potable). While the Germans were driven by the ecological benefits as a whole, economic benefits came from the reduction of CSO's (combined sewer outflows).

It is a four step process:

1. Pre-filtering to remove items larger than 1/90 of an inch,
2. Calming the inlet of water into the storage tank in order to not stir the sediments within the tank,
3. Use of a floating intake in order to draw water from just below the surface of the tank,
4. The construction of an overflow that will allow for skimming of the surface when an overflow conditions exists.

These steps insure that only minimal amounts of debris enter the tank which allows the water in the tank has to opportunity to precipitate out the heavier than water debris. The floating filter ensures the cleanest water will always be removed from the tank. The lighter than water debris and oils will be removed from the surface during overflow conditions.

This process denies bacteria and other pathogens the proteins they need to reproduce and insures that the storage area maintains a surface which allows for maximum oxygen contact with the water.

While the German system does not produce directly potable water, it does produce water of high quality. Starting the potable process with this level of quality makes the treatment process easier and the resultant water much more desirable.

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