

Reuse of Treated Used Water is Not New

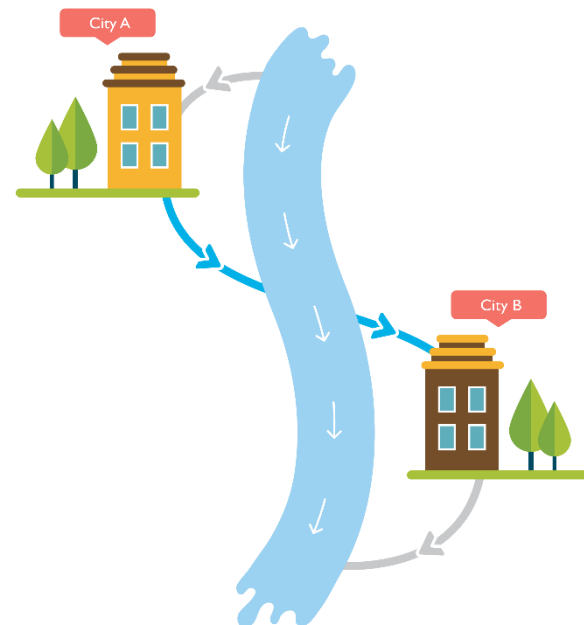
The reuse of treated used water is not new. In countries with long riverine systems, upstream communities use the water and discharge the used water after treatment back into the river. Successive downstream communities then reuse the water several times, before the river finally flows into the sea. Until recently, the constraint to greater recycling was cost. Now, new technology has produced superior filters and membranes and significantly reduced the cost of microfiltration and reverse osmosis. It has become economically attractive to recycle used water on a large scale.

Unplanned Indirect Potable Use

As shown in the illustration, Unplanned Indirect Potable Use occurs when an upstream water user (City A) discharges used water into a river, lake or a aquifer that serves as a source of water supply for a downstream user (City B).

Many large communities have unintentionally been practising Unplanned Indirect Potable Use over the years. Some examples are cities along the Rhine and Thames rivers in Europe, Mississippi River in the US, Yangtze River in China, and Mekong River in Indo-China.

UNPLANNED INDIRECT POTABLE USE



Planned Indirect Potable Use

Planned Indirect Potable Use is the intentional abstraction, treatment, and distribution of water for drinking from a river, lake or an aquifer that is part of a used water discharge system. This practice is common in water scarce growing cities. Some examples in the US are Water Factory 21, Orange County Water District, Southern California and Upper Occoquan Service Authority (UOSA), North Virginia.

