

10th World Congress and Expo on Recycling

July 26-27, 2018 | Amsterdam, Netherlands

Evolution of water reuse

A. N. Angelakis

Institution of Iraklion - Greece

Domestic wastewater was used for irrigation and aquaculture by prehistoric civilizations (e. g. Mesopotamian, Indus valley, Egyptian, and Minoan) since the Bronze Age (ca. 3200-1100). Thereafter, wastewater was disposed or used for irrigation and fertilization purposes by Greek civilizations and later by the Roman one in areas surrounding cities (e. g. Athens and Rome). Sanitation practices re-emerged in force in the more recent history following the great epidemics in several regions of the world. After the mid of 17th century the need for sanitation led to the development of effluent application practices, known as “sewage farms” as a means to protect public health and to control water pollution. Wastewater application to the land for disposal and agricultural use was originally operated in European cities and later on in USA. Today, planning of projects for water reclamation and reuse is significantly increasing in several regions of the world. Also recycled water is used for almost any purpose including potable use. This paper provides a brief overview of the evolution of water reuse over the last 5000 years. It provides a historical context and links to some of the latest developments in sustainable water reclamation and reuse. By understanding the practices and solutions of the past, we are better placed to meet present and future challenges. Finally, the important role that water reuse will play in the future highly urbanized world is highlighted.

info@a-angelakis.gr