



A HISTORY AND THE FUTURE OF WATER-SUPPLY IN VIENNA

History

100-200 A.D Already the ancient Romans had spring water transported from the area south of Vienna to their military camp Vindobona. 1565 „Hernalser Wasserleitung” transported 1500 cubic metres of water from today’s 17th municipal district of Vienna to the well-house in Hoher Markt square. In addition, water was available at public wells or sold from big wooden barrels by „watermen” and „waterwoman”. ~1600 In that period, the population drinking water supply was ensured by means of private wells.

1804 „Albertinische Wasserleitung” was the first step towards solution of Vienna’s water supply problems. It led from the village of Hütteldorf to the city and supplied four suburbs with spring water.

1841 The construction of the „Emperor Ferdinand water pipeline” created the first extensive pipeline network that also permitted transporting water to suburban residential buildings. This water was of low quality and caused diseases and epidemics!!!

12.7.1864 On the basis of proposals made by the geologist Professor Eduard Suess, the City Council passed a resolution to build a spring water main originating in the Rax-Schneeberg area.

1869-1873 Construction of the 90km pipeline from Kaiserbrunn to Vienna, the first water reservoirs as well as of the municipal pipeline network of Vienna.

24.X.1873 Inauguration of the *1st Spring* water main by Emperor Francis Joseph.

1898-1899 Construction of the Favoriten Water Tower, this water tower supplied the high-lying sections of two large municipal districts.



1900-1910 Construction of the 180km pipeline from Wildalpen in „Steiermark” to Vienna. Over 10,000 workers were recruited to complete the 180km 2nd Viennese Spring water main. The water originating in Hochschwab spring takes 36h to reach consumers in Wien.

2.XII.1910 Inauguration of the *2nd Spring* water main by Kaiser Franz Josef at Vienna City Hall.

1964- 1966 Construction of the Lobau waterwork, this waterwork is situated in the nature protection zone and national park of Danube wetlands.

Today the Lobau-waterwork is mainly taken into operation to absorb peak loads or during maintenance and repairs of the spring water mains.

1970-1995 Vienna’s pipeline network is over 125 years old and more than 3,200km long. For the 25 years, it has become necessary to replace 30km of this network annually in order to reduce leakages. Due to the reduced leakage rate, all municipal districts of Vienna can be supplied exclusively with mountain spring water. 1998 Moosbrunn waterwork taken into operation. Its purpose is to absorb peak loads.

Vienna's water originates in the Styrian high alpine zones. Today the spring zone of the 1st Spring water main includes the Schneeberg, Rax and Schneealpen, that of the 2nd Spring water main, the Hochschwab massif. The conduction of the water from the Pfannbauern spring, situated in the eastern foothills of the Hochschwab, into the 1st Spring has created a nearly complete supply ring. The 2 spring zones cover an area of more than 600km².

Future

3th pillar of Vienna's water supply. In case of inspections of one of the 2 mountain spring mains, another supply resource must be provided to substitute the suspended output. Vienna Waterworks are planning to establish 2 waterworks whose joint performance will correspond to the output of one of the spring water mains.

Rehabilitation of reservoirs

The Vienna Waterworks operate 32 reservoirs with a total storage capacity of 1.65 million m³ of drinking water.

The varying construction dates and architectural and technical characteristics of these structures make their maintenance very cost-intensive. The reservoirs are situated in densely populated urban areas or in architectural protection zones, which do not allow changing their location. Due to their architecture, these buildings require both costly maintenance work and ongoing technical updates to ensure their compliance with the state of the art in technology.