

# History

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Since the early Middle Ages the development of the city of Salzburg has been strongly influenced by an artificial canal system called „Almkanal“. An impressive sample for the enormous expenses and efforts, that were made in the last centuries in order to meet the demand and create the luxury of flowing water in the inner city area, is delivered by the history around the „Hofbrunnhaus im Nonntal“.



Archbishop  
Guidobald  
Graf v. Thun

In the period between 1656 and 1661 Archbishop Guidobald von Thun had the magnificent fountain „Residenzbrunnen“ built. Its baroque style is unique north of the Alps. Until today the name of the artist who created this masterpiece remains unknown.

But, regarding the technically challenging construction of the water supply pipe, which could only be finished thanks to an inventive genius, a lot of details were passed on.

In the first place the fountain was planned to be fed by the water of the Fürstenbrunn spring at Untersberg mountain.



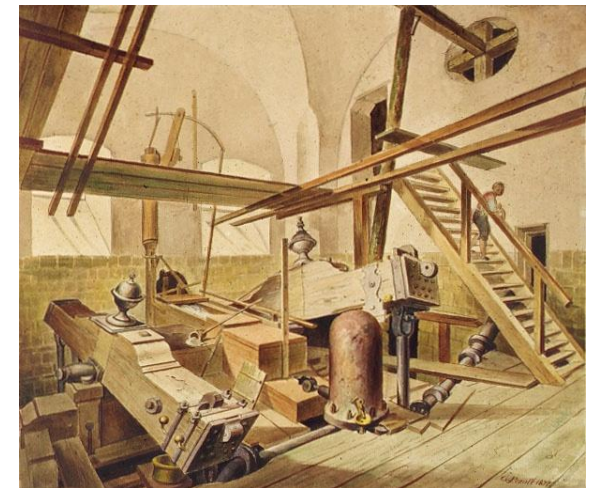
The Residenzbrunnen, Georg Pezolt, 1850

For 30,000 Gulden the Dutch expert on water pipes, Andree van der Waldt was entrusted with the project of the first „Fürstenbrunner Wasserleitung“ water pipeline. In 1661 the more than nine kilometre long pipe line across the swamps was completed. Separated in up to three parallel lines, it consisted of 8237 larch wood pipes. This pipe system, however, could not withstand the high pressure, so maintenance repairs became costly and permanent operation was impossible. Thus, the project had to be abandoned by Archbishop Max Gandolf in 1679.

In 1682 – 21 years after the completion of the „Residenzbrunnen“ – an expert on wells Rupert Kraimoser from Salzburg finally managed to establish efficient, functional water supply for the fountain. He had a pipeline built from Hellbrunn’s „Sternweiher“ lake to the „Brunnhaus“, at the southern hillside of the Festungsberg mountain in the district of Nonntal.

The „Brunnhaus“ was constructed in 1664 as a pumping station and the essential centrepiece of the pipeline system. Across the especially built canal „Nonntalarm“, water from the „Almkanal“ was led to the „Brunnhaus“. Therefore, the water stream was separated just before the entry of the – back then already 400 year old canal – „Stiftsarm“ into the Mönchsberg mountain. The watergate house to regulate the channel flow is still in operation today.

In the depth of the 13 metre deep cellar of „Brunnhaus“, the water then drove a giant water wheel, that measured five metres in diameter and powered huge plunger pumps to lift Hellbrunn’s spring water to a marble pool half way up the Festungsberg mountain. From this surge tank a pipeline ran across the Nonnberg mountain to another well house – the pipeline tunnel still exists today. The following steep drop of the heavy-walled lead pipeline through the district of Kaiviertel to the „Residenzbrunnen“, created such high pressure, that the water of the fountain ascended about 20 metres high.



The water pumps in Brunnhaus, Georg Pezolt, 1878

Over the years, more and more house wells were connected to the water supply line in Nonntal and Kaiviertel. In dry seasons, when the water would run short, it was mixed (up to one third) with water from the „Almkanal“.



In the 18th and 19th century, more water powered workshops settled at the lower section of the „Nonntalarn“ canal, stretching from „Brunnhaus“ to the opening into „Hellbrunnerbach“ stream. There were factories for fig coffee and boxes, a locksmithery, as well as a clay compacting shop with a glazing mill, alongside some laundry shops.

The decreasing run-out of the springs in Hellbrunn as well as the increasing pollution of the added water from „Almkanal“, despite expensive filter technology, led to problems with huge growth of algae. Therefore, in 1962 the desolate „Brunnhausleitung“ pipe was shut down and the „Residenzbrunnen“ fountain got a circulation pump connected to the city’s public water supply.

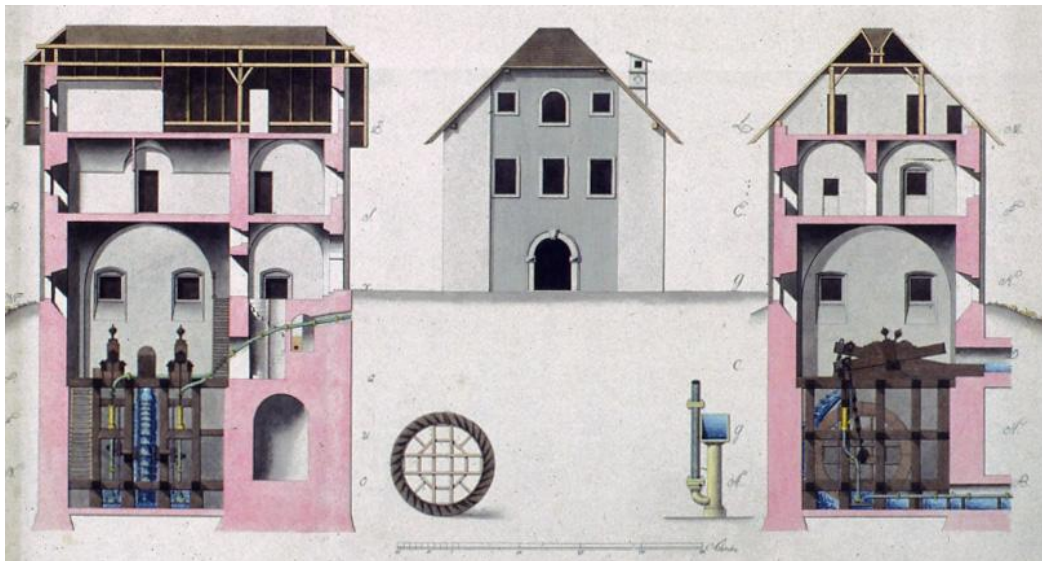
In 1977, all water rights of the pumping system were erased and parts of the pipeline, as well as the small building of the surge tank were removed. The pipeline tunnel between „Brunnhaus“ and the demolished surge tank, however, was taken over by neighbours and sustained.

In 1991, the old turbine unit was remodeled and adapted to generate power . The electric power that exceeds own usage is fed into the public power grid and covers a year’s demand for electricity of about 20 households.

In 1993, the state of Austria sold „Brunnhaus“ to the cooperative society „Wasserwerksgenossenschaft Almhauptkanal“, who made it their location of management and official residence.

## Chronology

- 1661 Completion of Residenzbrunnen
- 1664 Construction of Brunnhaus and Nonntalarn
- 1682 Water supply of the fountain with water from Hellbrunn
- 1816 The whole complex is given to the state following the secularisation
- 1877 Modernisation of the pumping station with iron sub-construction
- 1951 The water wheel is replaced with a Francis turbine, the plunger pump is replaced with a radial pump
- 1962 Pumping system out of operation
- 1977 Deletion of the water rights and removal of the surge tank at the Festungsberg
- 1991 Reactivation of the turbine for generating electric power
- 1993 Wasserwerksgenossenschaft-Almhauptkanal buys Brunnhaus from Republic of Austria.



*The archiepiscopal Brunnhaus, Nikolaus Höss, 1811*

## The Brunnhaus in Nonntal