The Santiam-Albany Canal is an amazing example of the history of Linn County. The canal reflects 19th Century engineering in which gravity, water, and turbines powered industry. It was also used for both cities’ first electrical power and water works. The City of Albany has taken its drinking water from the canal since 1884.

“No institution has ever done so much for Albany as the Santiam Ditch…Not only has it been in the past a monument to our city, but it is now, and will be in the future….” — Albany Democrat, 1884

The eighth Avenue Canal is the only continuously-flowing side canal that remains from the original network of canals that fed Albany businesses along the Willamette River.

The combined Santiam-Albany Canal
When the Albany Canal’s intake washed out in 1922, the two canals were merged. In 1923, Mountain States Power Company took ownership, then PacifiCorp (1954), and the City of Albany (1985).

1923
Albany and Lebanon canals merge; single canal, single owner

21st Century Improvements Ensure Reliability While Protecting Natural Resources

2005
Original South Santiam River diversion dam rebuilt

2005
New fish ladder constructed on the South Santiam River

2005
Fish screen at the canal inlet keeps migrating fish out of the canal
The historic canal system that connects Albany with Lebanon was integral to the 19th century industrial development of both cities. The original Albany Canal (1872) was conceived as a transportation route but was more important as a source of municipal and irrigation water, water power to run mills and machinery, and in 1888, to generate hydroelectric power.

In the 1863 the toll road from Albany through the Santiam Pass, the Willamette Valley and Cascade Mountain Wagon Road opened up an Eastern Oregon market for Willamette Valley products. This augmented shipment of farm products by boat on the Willamette River. By 1870, the railroad had been built. In 1872, Thomas Monteith, from the Albany, New York, area, decided to build a canal from Lebanon to Albany, perhaps emulating the highly successful Erie Canal. The Santiam-Albany Ditch quickly became more important for municipal water supply and hydropower for industry than for transport of raw materials or finished goods.

Impact on Albany
The first industries in Albany were started in the early 1850s and were powered by water wheels on the Calapooia River but the canal allowed direct hydropower for businesses in downtown Albany. A network of side canals fed by the Eighth Avenue canal distributed flow along the waterfront, allowing the town to expand. Hydropower supported grain elevators, sawmills, flour mills, furniture factories, machine shops, a foundry, a woolen mill, and a twine mill. Today, Eighth Avenue and Thurston Ditches are all that remain.

Hydroelectric power generated by canal flows routed through a generator at Calapooia and First Avenue in 1888 allowed downtown to be lit by arc lights; a power line to Corvallis provided its first electricity. Gravity-fed water power became less important as electric service expanded in the early 1900s; side ditches were abandoned and mills along the canal closed.

Demand for electricity expanded; the power facility was moved to a new 1906 powerhouse at Vine Street between 3rd and 4th Avenues. In 1925, the present building was constructed. Steam turbines (since removed) also provided additional power to the city’s grid.

Some ideas of the magnitude of this water power can be formed when it is known that the water in the canal can reversely be used twice, and, in some cases, three times, before it empties into the river. The completion of this Canal has nearly altogether dispensed with the use of steam, only two engines now being in use in the city. Fourteen turbine wheels are now propelled by water from this canal, and others will be added to the number every year. Small races conduct the water from the main branch down several streams from Eighth to the river front, and, besides furnishing the power to propel machinery, renders the construction of fire cisterns entirely unnecessary in the main business portion of the city.

Impact on Willamette Falls

Albany was a leader in creating electricity—beginning in 1888, months before Oregon City at Willamette Falls. Early on steam was used; in 1924-1927, Mountain States Power built the current powerhouse and installed two hydroelectric generators. The plant was decommissioned in 1992 while obtaining a new FERC license (1998).

In 2008, one 1927 generator was replaced and the power system upgraded. Tax credits and grants from the Energy Trust of Oregon and Pacific Power helped make the upgrade pay for itself quickly.
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Impact on Lebanon
Lebanon grew, surrounded by sheep and cattle ranches and by wheatfields. During the 1880s, rapid growth in Lebanon centered on a shorter predecessor to the canal, fostered by the construction of the large O’Neil and Callaghan planing mill. Much of the industrial development in Lebanon occurred along the Lebanon-Santiam Canal, completed in 1892; it supplied water power to run machinery at mills and factories. By 1894, the canal was used to generate hydroelectric power and provided arc street lights as well as domestic water supply. By 1913, industrial growth was no longer centered on the canal, reflecting the increased use of electricity and the lessened importance of water wheels. A new hydroelectric facility was built on the present Main Street site in 1922 by Mountain States Power but was razed in 1968.