



The Western Pacific Railroad's Feather River Route was built in 1909 to compete with the Southern Pacific's (original Central Pacific) route over Donner Pass. While significantly longer, the Feather River Route crosses the Pacific Crest at Beckwourth Pass (about 5,000 feet) compared to the SP/CP Donner Pass Route (elevation about 7,000 feet). However, the Feather River watershed is so rugged that none of the Feather River tributaries could be followed to Beckwourth Pass. The engineering key to the Western Pacific Railroad's Feather River Route was a crossing from the North Fork Feather River to the Middle Fork Feather River at a location called Spring Garden. And, this crossing was the most challenging of many engineering challenges on the route. The crossing from the North Fork to the Middle Fork Feather River was accomplished with the Spring Garden Tunnel and the Williams Loop.

The Spring Garden Tunnel is 7,344 ft long, the longest of 34 tunnels on the Feather River Route, longer than the Chilcoot Tunnel under the Pacific Crest at Beckwourth Pass.



Inside the west portal of the Spring Garden Tunnel.





Groundwater drains out of the Spring Garden Tunnel.



A siding just outside the west portal of the Spring Garden Tunnel.





The Williams Loop maintains the railroad's overall 1.0 percent grade, the most gentle of any grade on a transcontinental railroad. The loop, together with the Spring Garden Tunnel located about a mile west of the loop, carry the grade over the west slope of the North Fork-Middle Fork divide.

This view of the upper part of the Williams Loop where it crosses over the lower part, with a road crossing in the distance. Note the Ponderosa Pines and Incense Cedars typical of the western Sierra Nevada.





A westbound container train works down the Williams Loop after exiting the Spring Garden Tunnel.



The train passes over the loop overpass.





The container train passes under its own tail on the Williams Loop. The loop exists to create the elevation change in the photo.