

WEST BRANCH CHANNEL FACT SHEET

January 2022



Finding Solutions

SERVING Sarpy, Douglas, Washington, Burt, Thurston and Dakota Counties.

The NRD is governed by an elected, 11-member Board of Directors.

THE MISSION of the Papio-Missouri River NRD is to wisely conserve, manage and enhance our soil, water, wildlife and forest resources.

- *Flood Control
- *Water Quality
- *Groundwater Resources
- *Soil Conservation
- *Outdoor Recreation
- *Domestic Water Supply
- *Fish and Wildlife Habitat
- *Forest Resources
- *Environmental Education

Flood History

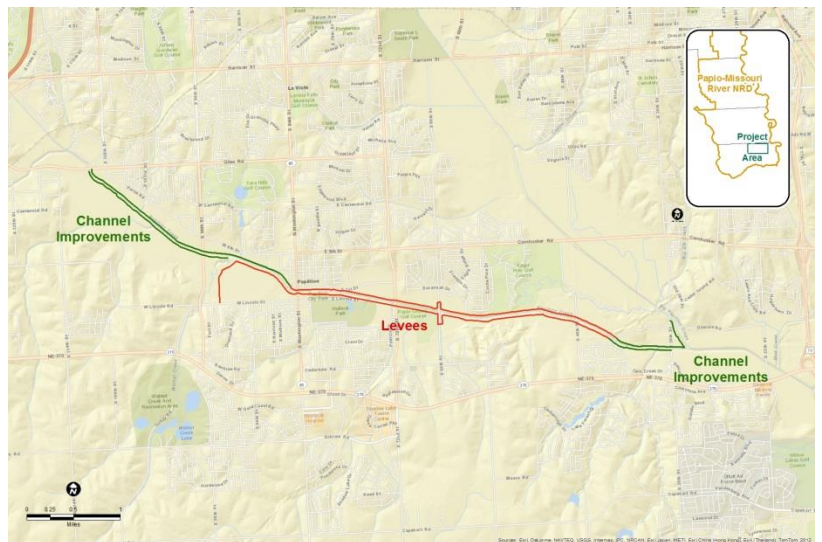
In the early 1900's, Drainage Districts were formed to enlarge and realign the channel from its original meandering course to its present alignment. All Drainage Districts dissolved after that work was completed. As the Papillion Creek basin urbanized, the existing channel is no longer adequate to handle major flood flows.

The West Branch of the Papillion Creek has flooded throughout history with recorded floods in 1917, 1932, 1941, 1948, 1950, 1959, 1964, 1965, 1980, 1991, 1993, and 1997.

Project Descriptions

West Branch Channel Project on the Papillion Creek consisted of constructing channel/levee improvements. This involved enlarging the channel cross-section to allow additional flow capacity and to allow for easier access for mowing and other maintenance. In addition, earthen levees were constructed along the top of the channel improvements to provide additional flood flow capacity, between 42nd Street and 90th Street. All of the improvements, except the levees from 90th Street to 72nd Street were constructed by District personnel and equipment.

This project extends from 36th Street to Giles Road. The channel/levees were built to a level equal to the 100-year flood level (a flood that has a one percent chance of occurring in any given year) plus three feet. As of February 2002, the entire project reach from 96th Street to 36th Street had been completed.



The final segment, 96th Street to Giles Road reach was completed in May 2013.

Project Cost

The estimated cost for the entire project is \$6 million. The total project length is about five miles. The segment through the City of Papillion, from 72nd to 96th Streets, cost approximately \$4 million, with the City contributing \$500,000 of the cost, and the Papio-Missouri River NRD providing the remainder of the cost. The District is responsible for operation and maintenance of the improvements. Local landowners benefiting from the flood control improvements were not assessed.

Benefits

The future of flood prevention for the City of Papillion and property owners along the West Branch also includes the completed Walnut Creek Lake, Prairie Queen Lake, Big Elk Lake and Portal Recreation Area Lake Dams. West Branch channelization, the four dam sites, proper floodplain management and soil



West Branch Channel Project
Looking Downstream Towards Washington Street (84th)

conservation will add up to an effective and comprehensive flood control effort. The improvements reduced the average annual costs of flood damages along the West Branch Papillion Creek in the protected area by at least 20 percent. The levee on top of one side of the channel also provides a route for a multi-county walking and biking trail constructed by the District from 42nd Street to Giles Road. This adds to the metro-area recreational opportunities.



Walnut Creek Lake Dam
Looking northwest towards Hwy. 370