The creek flows westward approximately 25 miles from the headwaters near the community of Cottrell to where it joins the Willamette River in the city of Milwaukie. The watershed drains about 52 square miles and crosses six jurisdictions.

The potential for flood problems along the creek began in the mid-1800s as pioneers cleared and filled the floodplain for farming. By the 1920s, many residential areas had sprung up in the northwestern area of the watershed, and impervious surfaces replaced naturally draining soils.

As urbanization moved eastward, more homes were built on floodplains, increasing the number of structures damaged by repeated flooding.

In the 1930s the Works Progress Administration widened, deepened, rock-lined and channelized 15 miles of Johnson Creek in a failed effort to prevent future flooding.

Johnson Creek has had at least eight major damaging floods in the last 45 years. In some areas the creek flooded, on average, every other year. The worst event occurred in 1964 when approximately 1,200 structures were flooded. A flood in 1996 caused an estimated $4.7 million in damage.

In 1993, a committee of agencies, businesses and citizens developed the Johnson Creek Resources Management Plan. It was the first multi-jurisdictional, watershed-wide plan to address flooding in the context of...
other important watershed issues such as water quality and fish and wildlife habitat. In 2001, the Johnson Creek Restoration Plan was published to build off of the recommendations made in the Resources Management Plan within the context of the 1999 Endangered Species Act which listed several species of salmon native to Johnson Creek.

When it became clear that real solutions would require substantial investments in property acquisition and open space restoration, Portland’s Johnson Creek Willing Seller Program involved other potential partners to make acquisition of flood-prone properties feasible.

In recent years several projects were developed to reconnect Johnson Creek to its natural floodplain, enhance natural and wetland features and increase floodplain storage and mitigate flooding that impacts improved properties.

A high priority for mitigation action was in the Lents neighborhood where the floodplain is most expansive. The most troublesome section of the creek caused serious and repetitive flood damage and traffic nightmares along Foster Road. Creation of the Foster Floodplain Natural Area involved removing approximately 195,700 cubic yards of fill from the Johnson Creek floodplain to create 120 acre-feet of new flood storage, improve flow conditions and significantly improve habitat for fish and wildlife.

“We’ve addressed flood damage and we’ve made wildlife habitat improvements by restoring the natural functions of floodplains,” said Maggie Skenderian, Johnson Creek Watershed Manager for Portland Environmental Services. “Before this, we moved water, pumped it; it didn’t work.”

The project site consisted primarily of residential properties that were acquired by the city of Portland through the Willing Sellers Program. The total project cost was about $4.6 million with a federal award of $2.7 million from the Federal Emergency Management Agency Hazard Mitigation Grant Program.

In 2013, the community celebrated completion of the East Lents Restoration Project. The improvements greatly reduce the frequency and impact of flooding on more than 1,585 surrounding residential, commercial and industrial properties both in and out of the project footprint.

Additional benefits include reduced damage to public infrastructure and fewer closures of Foster Road, which carries about 26,000 one-way car trips a day. Before the project was completed this major artery flooded about every other year. Now it can be expected to flood about every six to eight years.

Many organizations and volunteers helped with the restoration project, planting thousands of trees and native vegetation. The residents of East Portland now have a new natural area to explore, complete with trails and a new footbridge over the creek. It’s a beautiful addition to the neighborhood.

More information:
FEMA Hazard Mitigation Assistance: www.fema.gov/hazard-mitigation-assistance
Oregon Office of Emergency Management: www.oregon.gov/OMD/OEM/
Portland Environmental Services: www.portlandoregon.gov/bes/