conditions were restored. As the Bethlehem area sank to its normal elevation, the deepened river channel was filled. In Lehigh County, Jordan Creek has similarly a fill of forty feet of alluvium. It is hoped that more data of this kind can be secured; then more positive explanations can be offered.

Eight dams have been constructed across the Lehigh River between the Lehigh Gap and Easton in order to effect navigation by the canal boats that transported anthracite from the coal regions to Philadelphia and towns between for over 100 years. The boats navigated the open river in places but in other places the canal dug beside the river. At present the canal is used only to furnish a small amount of water power at several places.

The Lehigh River receives some drainage from the anthracite districts and the black silt along the banks contains coal that has been carried from the culm banks and washeries of the coal mines. One can easily recognize coal particles in many places and occasionally, as far down as Bethlehem, thin streaks or small pockets of almost pure coal can be found.

A recent report based on a special survey of the rivers of Pennsylvania, describes the fine-coal dredging operations along the Lehigh River. Three of these lie partly within Northampton County. They are confined to the region above the Lehigh Coal & Navigation Company dams at Lehigh Gap, Three Mile Dam below Walnutport and the Treichler Dam at Laurys Station. The dredgers pay a royalty of fifteen cents per ton to the Navigation Company. The coal, when separated from the sand by screens and tables, is of good quality. The quantity obtainable varies with the seasons. Each flood brings down new supplies.

The Lehigh River throughout most of Northampton County is in early maturity. Flood plains of considerable width are developed on one or both sides at many points. On these flat lands bordering the streams many residences and establishments have been built but the major portions of the river towns are on the higher ground. Railroads and highways follow well developed flood plains on both sides of the river across the county. In the construction of the railroad lines and highways it was necessary to remove considerable rock in some places but not an excessive amount.

The principal tributary streams of Northampton County and their drainage areas are as follows:

13 Comprehensive Studies and Analyses, Coal and Sand and Gravel Dredging Industries, Department of Forests and Waters of the Commonwealth of Pennsylvania, 173 pp., 1933.