ELIZABETH RIVER

Arrival of summer has caused both the Township Committee and the Board of Health to renew their search for preventive measures against flooding, accumulation of debris and industrial or sanitary pollution of the Elizabeth River.

The Township Committee too seeks early completion of the Elizabeth River Parkway development for recreation purposes.

The Elizabeth River, only a small stream ranging from a few inches to five feet in depth, is an old river winding through a wide valley from the Orange Mountains to the Arthur Kill and unmentioned in most annals and maps of rivers in New Jersey.

In 1912, residents of the Old Lyons Farms section selected the center of the river to serve as the boundary line between the Townships of Hillside and Union from Irvington to Elizabeth. As such, the three mile stretch is Hillside's longest boundary today.

Although only a small slow stream most of the year, it becomes a swift flowing torrent in heavy rain and carries a total of 2,700 cubic feet per second. At this peak, the river has more than twice as much water as the Delaware River does at Trenton when the Delaware is low.

Engineers have estimated that these flood waters which have a 28 foot elevation may be increased from 5,000 to 10,000 cubic feet per second if sufficient retention basins are not erected in the Hillside area soon.

Once noted for its attractive meadows, forests, small game, fish and swimming, the river today has little wild life, no fish, is unnavigable, gives no power, is undrinkable, unswimmable and still lacks the completed park area.

History of the Elizabeth River . . .

The Elizabeth River was discovered September 4, 1604, when John Coleman and four shipmates rowed up the Arthur Kill from Henry Hudson's Half Moon.

When the English settled Elizabethtown in 1665, land was distributed in four-acre portions on the river front. Daniel Denton, one of the original purchasers, in 1670, wrote about the availability of fish in it.

Thomas Rudyard, another writer in 1683, noted that some sections were heavily timbered along the river and the ship building industry was flourishing along the mouth.

From the mouth of the river for about a mile, the river was navigable. From that point it was too shallow for anything but canoes and rowboats.

The navigable area played an important part in the growth of Elizabeth. The river here changed little until the eighteenth century when a miller dammed it at today's Salem Road and Liberty Avenue and the area became known as Salem Dam.

On November 26, 1874, the "Elizabeth Daily Journal" announced plans by the Elizabethtown Water Company for erection of a reservoir to be called Ursino Lake. This reservoir with a 100 foot dam was built between Trotters Lane and North Avenue for a reported \$26,000.

The reservoir had a capacity of 135,000,000 gallons of water and an annual ice yield of 13,000

tons. It became a center for ice skating. From December, 1935, to the mid-forties, ice skating was under the supervision of the Elizabeth Board of Recreation which paid a \$1 annual rental.

The Irvington Avenue Reservoir in Elizabeth was constructed beside the river in 1885.

At the turn of the century, the river still was being enjoyed for rowboating, fishing, ice skating, swimming, and as a water source.

About this time, the river began to become a sewer outlet by receiving drainage from outhouses and cesspools. The industrial growth in the region, accompanied by the emptying of poisonous refuse in the river, caused additional pollution.

By 1918, the Elizabethtown Water Company had erected filtration plants beside the river to test the water. In the period between 1926 to 1929, the tests showed that the water had become more polluted. It was abandoned as a water source in 1929.

Union County Park Commission . . .

The Union County Park Commission was organized June 4, 1920, and plans for the Elizabeth River Parkway were made in 1921. At one time, a road was supposed to run along the river, but this plan was eliminated.

Development of other county park areas and lack of funds for land purchase and maintenance of the proposed 437 acre area postponed activities here. Following conferences in 1937 among park and municipal officials, some land acquisition was begun.

When Robert C. Crane, then a resident of Hillside, became a member of the Union County Park Commission in 1950, he encouraged the body to make some expenditures here. A group called "The Elizabeth River Parkway Association" was formed to encourage development along the East Branch in the Conant Street area By 1954, the Park Commission had obtained some 25 acres of the John Kean and Woodruff property in Conant Street and the Woodruff Area had begun. Today it includes a baseball field, ice skating, parking and picnic area. A softball area is under construction. A large area was landscaped.

At the same time, the township completed deeding three acres of land at Liberty Avenue by Salem Dam and a softball field and skating lagoon have been completed. Another five acres have been developed into a baseball field and parking area at Rutgers Avenue.

Future Plans of the Park Commission . . .

The park commission has now obtained about 325 of the 437 acres proposed for park area. Across the river in Union Township the Chatfield Section in Morris Avenue has one baseball field, one softball field and a parking area; the West Branch has a softball field, baseball field, and two tennis courts and the Lightning Brook section near North Union Avenue has lawn area, parking area and a baseball field.

The commission hopes to develop the area between North Avenue and North Union Avenue. When the unowned parcels of land are purchased, there will be a continuous grassy area for most of the way along both sides of the river. In Elizabeth the park will extend from South Broad Street to Summer Street and Mattano Park.

A thirteen acre area around Ursino Lake may be acquired sometime in the future. No plans are being made for the river between North Union Avenue and Mill Road, now used by the Garden State Parkway.

Flood Problems . . .

By July 7, 1925, the local Township Committee was receiving reports of unsightly conditions at Salem Dam. The collection of debris in the river caused the water to back up during storms and flood property in the Cornell Place, Harvard Avenue and Yale Avenue areas.

Township Engineer Henry Kreh, Jr., on March 23, 1932, proposed lowering the river to assist in flood control. He noted the stream had an elevation of only a foot in a distance of 2,500 feet above the dam, while abutting properties were only slightly higher.

Conferences were held with the Board of Chosen Freeholders, park commission, Township of Union and water company urging that the river be dredged and park areas developed as flood retention basin. The State Water Policy was requested to assist and designed a plan.

In 1938, Irvington put the river into a concrete flume. This construction increased the volume of water entering the river and at the river's peak inundated adjacent Hillside territory between Mill Road and Salem Dam.

In 1940, master plans were being studied to control the flood waters. Engineers asserted there would be greater danger to Elizabeth than Hillside and Union, if remedial measures were not taken.

It was pointed out that when the river flowed through open country, it received a steady influx of surface water through rainfall, gradual seepage, natural drainage and springs.

The paved streets and drainage from buildings all served to intensify the velocity of water in a twenty square mile watershed and only a small rain could cause much damage. The flooded areas extended down stream into Glenwood Avenue, along the East Branch into Baker Street, up the West Branch and around the too narrow bridge in North Avenue.

The park commission has prepared plans in connection with its work for five retention basins to help control the flow: Basin 1, from North Union Avenue to U. S. Highway 22; Basin 2, from Route 22 to Salem Dam; Basin 3, from Salem Dam to Lehigh Valley Railroad; Basin 4, from the railroad to North Avenue; and Basin 5,

Ursino Lake. Estimated cost of these basins is \$1,700,000.

The U. S. Army Corps Engineers, now conducting a study of floods in North Jersey, has been asked to study this river too.