

5.3 20th Century (1901-2000)

Throughout the twentieth century, the Grand River watershed experienced rapid population growth and widespread industrial expansion and urbanization. During this period, municipal and industrial wastewater was released into the river. This waste often resulted in fish kills. The fish able to remain were pollution-tolerant species such as common carp.

1904-- GREAT FLOOD

Water reached 19.5 feet in the Grand River. Over twenty-five hundred houses, affecting fourteen thousand people, were flooded. Fifty factories were shut down, putting 8,000 people temporarily out of work. The cost of the flood was over one \$1,800,000. In response, limestone was taken from the riverbed to construct the city's flood walls.

1900s-1940's-- MUSSEL BOOM & BUST

In the early 1900's, there were three pearl button factories in the Grand River. Mussels were raked from the river bottom using crow-foot dredges and baked in long pans on the shore. The buttons were punched from the shells. Overharvesting, habitat loss from dam construction, and pollution caused mussel populations to decline rapidly, leading to the closure of commercial mussel harvesting in Michigan in 1944. Today, many mussels in Michigan are still threatened or endangered. The federally endangered snuffbox mussel has a small population in the Grand River near where the rapids once were.

1929--

- Michigan bans Sturgeon fishing because the population had declined in response to overharvesting, habitat loss from dam construction, and pollution.
- The Stream Control Commission was created; and, while it did not make the discharge of pollutants or sewage illegal, causing harm as a result of discharge became illegal.

1930-- Navigation Channel below Grand Rapids is abandoned after steamboat traffic ceases and railways take over.

1931 – BEAUTIFICATION DAMS CONSTRUCTED

Use of water for power left the river slow and often dry in the summer. The riverbed below the Sixth Street Dam was often exposed, and the smell of the manufacturing waste and sewage dumped into the River caused the city to have an awful smell. The beautification dam (actually a set of four separate structures located near each other) was built to maintain water in the Grand River during the summer. As a result, movement of fish and other organisms was restricted and water temperatures in the river increased.

1941-- The weed shiner fish species is declared extinct in the Grand River.

1949-- The Water Resources Commission is established and requires the removal of pollutants before wastewater is released into all waters.

1960's-- Michigan declares the discharge of raw sewage illegal.

1969-- 12.6 billion gallons of untreated sewage flowed into the Grand River as a result of storm water and wastewater mixing.

1972-- Federal Clean Water Act establishes the goal of making all waters “fishable and swimmable.”

(Over)

1974-- Fish ladder put in at 6th street dam. By 1977, a series of six fish ladders have been installed in the Grand River, allowing passages all the way to Lansing for salmon and other sport fish.

1977-- Fishing Sturgeon in Great Lakes prohibited.

1990-- City of Grand Rapids begin the massive undertaking of removing combined sewers, spending over \$160,000,000. The combined sewers delivered both sanitary and storm water to the City of Grand Rapids Wastewater Treatment Plant. During periods of heavy rainfall, the sewers would overflow into the Grand River, resulting in beach closures downstream. The project would not be complete until 2015.

By the end of the Twentieth Century, water quality had improved to the point that recreationists were once again looking to the Grand River for waterskiing, boating, fishing, and swimming opportunities.