

## **Shiatown Dam      Goals and Objectives**

Since 2014, a group of stakeholders have been working on a plan for the restoration of the Shiawassee River at the site of the former Shiatown dam. Principle stakeholders include the Michigan Land Bank (the current dam owner through tax reversion), Shiawassee County (adjacent landowner of Shiatown County Park east and west of the dam), other riparian owners, Shiawassee Township, and Michigan Department of Natural Resources (MDNR), the funder of this work. The Friends of the Shiawassee River have served as a convenor, fiduciary agent, and permit applicant.

In 2012, with funds from the US Fish and Wildlife Service, the dam was partially removed and the impoundment drained to reduce the danger of dam collapse or overflowing. The goals for the next phase of the project have been initially determined by the dam owner and the terms of the MDNR grants providing for the removal of the dam and restoration of the site. The stakeholders have determined additional objectives and have adopted these goals

- reduce safety and liability concerns associated with the deteriorating structure(s)
- provide for fish passage through the site
- improve stream function through the use of natural channel design
- stabilize stream banks and connect functional floodplains
- reduce stream and bed sediment supply
- improve aquatic habitat and increase diversity of aquatic life; increase riffle and pool habitats
- create off channel spawning and nursery areas for fish
- create habitats for mammals, reptiles, birds and amphibians
- restore riparian vegetation and prevent invasive species
- improve aesthetics
- enhance recreational opportunities in conjunction with improvements to County park
- improve shore fishing access
- improve small boat access and passage through the project area

### **Shiatown Dam History 1840-2016**

A dam was first built at this site in 1840 and replaced with a hydroelectric dam in 1904. Consumer's Power Company acquired the dam in 1911, raised its height and expanded the impoundment; they operated the dam as a power facility until 1955. Ownership then passed to Shiawassee and Vernon Townships.

Shiawassee County became the owner of the dam site in 1965 and operated the dam as a recreational facility. During this time, the impoundment hosted hydroplane races, and the County Park was more fully developed.

From 1973 to 1976 improvements were made to the dam and spillway and new wooden gates were added to control impoundment levels. In 1974 there was a flood event that nearly caused the failure of the dam embankment. In 1981, another flood event almost resulted in the overtopping of the dam. In 1985 and 1986, the County removed the wooden gates to reduce the amount of water storage behind the dam and the level of the impoundment dropped. *(continued on reverse side)*

The County sold the dam as real property to a hydroelectric power company in 1986, and four separate companies tried, unsuccessfully, to find an economically feasible use for the dam. During the next 13 years of private ownership, there is no documentation of any dam maintenance.

In 1988, a 13 year-old boy drowned at the dam; it was at least the fifth drowning in 20 years.

In 1999, the dam reverted to the State of Michigan for failure to pay property taxes.

Another flood event in 2001 again almost resulted in the failure of the dam. A 75-foot trench was dug as an emergency spillway and sandbags were added on the embankment. Subsequently, the Department of Natural Resources spent \$68,000 for upkeep. This was the last dam maintenance conducted.

The Michigan Department of Environmental Quality conducted a safety inspection in 2010 and concluded that the dam was in poor condition and could become structurally unstable and fail. It ordered the owner of the dam, the State of Michigan, to undertake immediate repairs and/or begin removal.

In 2011, the State of Michigan asked the Friends of the Shiawassee River to become the local liaison to help assess options for dam removal and restoration of the site.

In May 2012, a 12 year-old girl drowned in the area below the dam apron in an 18-foot deep scour hole.

In the fall of 2012 partial dam removal began with funds from the US Fish and Wildlife Service (Phase I). The dam was lowered to within 4 feet of the river bed elevation, and the hole below the dam apron was partially filled with concrete rubble. The enlarged opening and lowered profile of the dam was enough to permit run-of-the river flow levels even at flood stage, thus reducing the risk of dam failure.

In 2013, the Friends of the Shiawassee River received additional funding from the Michigan DNR and the Saginaw Bay Watershed Initiative Network to further assess the site, do additional work to minimize safety concerns, restore fish passage, and begin restoration of the river at the damsite (Phase II).

In 2014, An advisory group of local officials was established to work with the Friends of the Shiawassee River, state representatives, and consulting engineers to review and develop plans for dam removal, river restoration, and park improvements. Shiawassee County Commission grants approval for access to the site and endorses dam removal project. Meetings held with surrounding property owners.

In 2015, an Aquatic Habitat Restoration Grant was awarded from the Michigan DNR to assist in rehabilitation of the river at the site of the Siatown dam (Phase III). Plans for removal (Phase II) were revised to better restore the river and support healthy fish populations and other habitat improvements.

In the fall of 2015, the stakeholders group met with consulting engineers and state officials to design a comprehensive project. In addition, Shiawassee County began an update of its County Parks Plan and improvements were proposed for Siatown Park that would take advantage of the recreational opportunities made possible by dam removal and site restoration.

*For more information visit the Friends of the Shiawassee River website [www.shiawasseeiver.org/dams](http://www.shiawasseeiver.org/dams)*