



COUNCIL REPORT

July 14, 2014

TO: Brian Kischnick, City Manager

FROM: Mark Miller, Director of Economic and Community Development
Steven J. Vandette, City Engineer

SUBJECT: Aquatic Habitat Restoration Project Status Report

Pre-Project Conditions:

The pond near the Aquatic Center trapped sediment for many years; it had an average depth of less than 2 ft. This accumulation of sediment caused the pond to no longer have the storage capacity needed to mitigate flooding during severe storm events. In addition, the overflow weir that regulated storm flow created a barrier to fish and aquatic organisms, as did the road culverts that were higher than the stream bed.

The aquatic diversity of the watercourse was significantly impaired due to channel instability, bank and bed erosion, and high water temperatures and turbidity.

Both sets of twin culverts at Town Center Drive and Civic Center Drive were severely rusted, causing several sink holes. The culverts were in need of replacement for several years.



Town Center Drive Culverts



Aquatic Center Pond Weir Wall

Project Funding and Purpose

The City was awarded a grant for \$985,000 from the National Oceanic and Atmospheric Administration (NOAA) with funding from the Great Lakes Restoration Initiative (GLRI). The project addressed the sediment accumulation, storm water control, bank erosion, aquatic habitat barrier, culvert deterioration, invasive plant species surrounding the pond and other environmental issues. The pond was replaced with a meandering water course and flood control structures built into the culverts to minimize long-term maintenance needs.

Approximately \$1 million of the \$2 million dollar project was funded through the Drains Fund; essentially for the replacement of the Town Center and Civic Center Drive road culverts.

Construction History and Outlook

Construction started in July, 2013. Heavy rains plagued the project last summer and fall, causing much of the work to be deferred to 2014. Spring and summer rains this year have been problematic as well since they have tended to be heavy downpours. This has caused significant problems with the restoration. Seeding was done several times only to have it washed away. Steam bank erosion has also taken place despite the stabilization work.

Construction has been completed and cleanup of the staging area south of Town Center Drive is near complete, but work continues on restoration.

A site meeting is scheduled for Wednesday, July 23 to fully inspect the project and prepare a punch list for restoration. Much of the seeding and hydro mulching that was installed will need attention due to heavy rain washouts that have occurred. Valleys formed by erosion will need to be hand raked, re-seeded and mulched. Watering will be needed now that dryer weather is approaching to ensure that growth of the desired species will occur and that the planted native plant species will survive. Given the time of year, this work will likely continue on into fall when more temperate weather will help with the restoration.



Town Center Drive Box Culvert



Stream and Floodplain