

Three Governments Collaborate to Enhance Stream Health

The Challenge:

Emerald ash borer infestations and streambank degradation from urban storm water flows have combined to create harmful stream health conditions along the Chippewa River. Because sediment and nutrient runoff from the Chippewa River and its surrounding connected waterways ultimately flow into Lake Huron, these water bodies are key focal points to address the degraded conditions in Michigan’s Saginaw Bay Area of Concern. The bay itself has ample fish habitat; however, reduced water quality is impacting bay health and native fish populations.

The Solution:

U.S. Forest Service Northeastern Area State and Private Forestry worked with the Saginaw Tribe of Chippewa Indians to reduce storm water runoff from several degraded sites along the Chippewa River. Working with Isabella County and the city of Mount Pleasant in Michigan, the partnership planted 439 native trees and shrubs to stabilize riparian buffers. These trees and shrubs included 15 different species, among them dogwoods, red maples, sycamores, black gums, elms, birches, lindens, hornbeams, and others, to increase biodiversity.

Resulting Benefits:

The planting project will capture and filter more than 85,000 gallons of water over its first 5 years and millions more over the life of the trees. This effort will also help protect the city of Mount Pleasant from flooding. By addressing tree losses due to both the emerald ash borer and flood damage, the partnership created a healthier riparian habitat in six public parks. These plantings help reduce urban and local runoff as well as sediment and nutrients moving into the Chippewa River, Saginaw Bay, and Lake Huron. This project also successfully linked Tribal, city, and county objectives to protect a valued public amenity in the Chippewa River.



Young trees mitigate flood potential while adding beauty and diversity. (Courtesy photo by Chris Bundy, Mount Pleasant, MI)

Sharing Success:

This project addressed important natural resource concerns for Lake Huron and made a valuable contribution toward meeting the lake’s objectives for reducing nonpoint source pollution. It has been shared as a successful approach to integrating local government efforts and taking a landscape approach to riparian restoration. Public presentations will highlight the positive outcomes of this project in the hopes of replicating its results elsewhere..

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