Encouraging a Healthy Environment for Rouge River

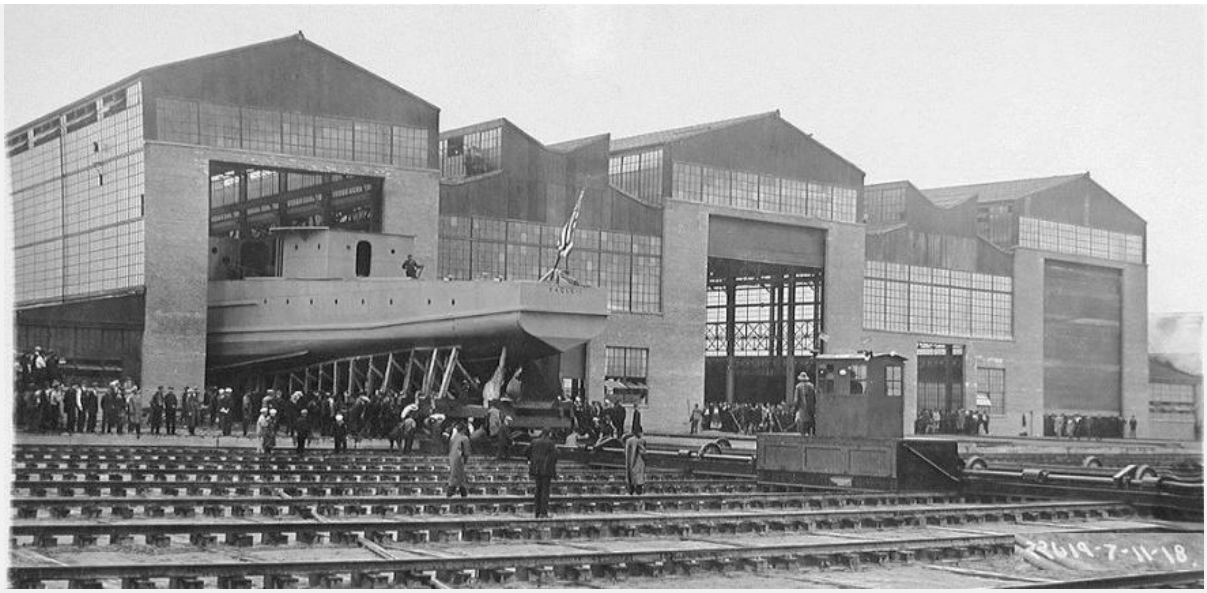
By: Tim McGahey, John Kerr, and Sally Petrella, Guest bloggers

A view of the Project Area prior to boat and debris removal.

As many fishermen know, removing a boat from shallow water without a launch can be a challenge. Now add to the equation that the boat has been in the water for more than 20 years and has a tree growing through the bow. Tricky right? Well that is exactly what we encountered with one of the 21 boats we removed last year from the Oxbow Channel of the Rouge River at Fordson Island.

In August 2010, the Detroit/Wayne County Port Authority (DWCPA) was awarded a National Oceanic and Atmospheric Administration (NOAA) Marine Debris Program Grant and Great Lakes Restoration Initiative (GLRI) dollars to remove abandoned boats and debris from the Rouge River oxbow channel around Fordson Island in Dearborn, Michigan. The Project Team included DWCPA, Friends of the Rouge, Southwest Detroit Environmental Vision (SDEV), and AKT Peerless Environmental & Energy Services.

The Rouge River flows through 48 municipalities and three counties in southeast Michigan until it reaches the Detroit River. Fordson Island is located in the Lower Rouge River, and was created in 1917 by the dredging of a new channel in the Rouge River between the Ford Motor Company's – Ford Rouge Plant and the Detroit River. World War I was underway, and President Woodrow Wilson commissioned the Ford Motor Company to manufacture submarine-chasers, known as Eagle Boats.



An Eagle Boat is launched from the Ford Rouge Plan. Photo courtesy of Industrial News/Industrial Artifacts Review's website.

Henry Ford needed a wider, deeper, more direct channel to transport the Eagle Boats to the Detroit River then Atlantic Ocean via the St. Lawrence River. The Army Corp of Engineers found it more efficient to excavate a new channel rather than excavate the existing shallow, winding

river. And with that, Fordson Island was born. Located in the City of Dearborn, but now cutoff by the new channel, the only access to the island was via a small bridge from the City of Detroit.

Over time, the reduced flow in the old Rouge River channel slowed and sediment began to accumulate. The shallow water in the channel restricted access, and eventually boats were abandoned. Residents that once called the island home began leaving in the 1970s. The last residential dwellings on the island were demolished by the City of Dearborn in 1989. However, the Fordson Island shoreline remained littered with abandoned derelict boats, a decrepit boat house, pilings, and other debris from former residential structures.

A Google Earth aerial view of Fordson Island. The abandoned vessels are depicted along the southern and western portions of the oxbow channel.

Friends of the Rouge were made aware of the derelict boats when they began sponsoring a public kayak tour of the lower Rouge every September. The boats and other debris were a terrible eyesore along the share of Fordson Island, which boasts some of the last remaining undeveloped habitat in this highly industrialized area. Old fuel stored in these boats could potentially devastate the fish and macroinvertebrate communities, and reduced the availability of good, native habitat.

With all proper permits in place, we mobilized to the island in May 2011 to begin removing abandoned vessels from the oxbow channel. After a few weeks, 21 boats were removed from the channel and near-shore area of the island. These boats and other surface debris represented approximately 122 tons of material. The response from the community was overwhelming and five volunteer events were scheduled throughout the summer. Gritty and committed volunteers proceeded to remove over 365-cubic yards of debris scattered throughout the island.

A vessel and former dock structure are removed.

During our pre-removal fish survey in 2010 we encountered 165 total fish representing 11 different species. The Stream Quality Index in the Project Area was considered poor (21 with only 6 taxa identified). We recently completed post-removal surveys and found encouraging results. Our post-removal fish survey revealed 318 total fish representing 16 different species, including one Northern Pike which was a target species. Our post-removal Stream Quality Index

shows a slight increase in the health of our project area (26 with 12 taxa identified). All signs of an ecosystem that, with a little help from the community, is beginning to right itself.

The ecosystem is beginning to right itself.

The Project Team plans to continue monitoring the improvements in this area of the Rouge River as part of other ongoing efforts in the Rouge River Basin. Stay tuned for updates and other exciting work in the Rouge River! For more information on this project, please contact Sarah Opfer at NOAA (sarah.opfer@noaa.gov) or Tim McGahey at AKT Peerless (mcgaheyt@aktpeerless.com).

Tim McGahey is Region Manager of Operations for Southeast Michigan at AKT Peerless; John Kerr is the Director of Economic Development & Grants Management for the Detroit/Wayne County Port Authority; and Sally Petrella is the Volunteer Monitoring Program Manager at Friends of the Rouge.