



Sheboygan Natural Resource Damage Assessment

Criteria for Selection of Restoration Projects

Throughout the 20th century, industrial facilities along the lower 14 miles of the Sheboygan River released hazardous chemicals including PCBs, PAHs, and metals into the river and adjacent floodplains. These chemicals have been found in sediments and in fish at concentrations high enough to cause injury to natural resources, either directly or through the food chain. The contamination has also limited the public's ability to use and enjoy the Sheboygan River. For example, PCB contamination has required limitations on consumption of fish and waterfowl.

Following regulations under the Comprehensive Environmental Response, Compensation, and Liability Act and a process known as natural resource damage assessment, federal and state agencies known as "Natural Resource Trustees" may require polluters to address injuries to and lost uses of natural resources. Injuries can be addressed by funding or implementing activities that restore, replace, rehabilitate, or acquire the equivalent of the natural resources.

For the Sheboygan case, the Trustees are:

- Wisconsin Department of Natural Resources
- National Oceanic & Atmospheric Administration
- U.S. Fish & Wildlife Service

The Trustees are in the process of identifying suitable activities and projects. Regulations require us to consider certain criteria when evaluating restoration projects (43 CFR 11.82, see criteria #1-9 below). Trustees adopted additional site-specific criteria consistent with the regulations (#10-11 below). We will use these criteria to select restoration projects that will address natural resource injury and lost human uses.



Restoration will provide habitat for fish like these coho, chinook, and steelhead juveniles from Willow Creek, a tributary to the Sheboygan River. Natural reproduction of salmon and trout have been observed in Willow Creek. Other fish species living in the Sheboygan River and its tributaries include northern pike, walleye and smallmouth bass.

Restoration Project Selection Criteria

We will base our selection of restoration projects on the following criteria:

- 1. The project will have a high likelihood of success.** We will prioritize projects that use established, reliable methods known to be technically feasible. Trustees will generally not support projects focused solely on testing experimental methods or unproven technologies.
- 2. The project will appropriately balance short- and long-term benefits with short- and long-term costs.**
- 3. The project will demonstrate cost-effectiveness.** We will prioritize projects that return the greatest, longest-lasting, and earliest benefits for the cost. When two or more restoration projects provide the same or a similar level of benefits, the least costly project providing that level of



Excavating contaminated sediments from the Sheboygan River. Photo credit: Amy Kretlow.

benefits will be selected. Extra consideration may be given to projects that leverage the financial resources of partner organizations.

4. The project will complement and will not replicate cleanup actions. We will prioritize projects that complement planned or completed cleanup actions, do not interfere with cleanup activities, and do not duplicate benefits already provided by cleanup actions.

5. The project will not result in additional injury to natural resources. We will prioritize projects that prevent future injury associated with residual contamination and avoid collateral adverse impacts to the extent possible.

6. The project will provide benefits sooner or offer additional benefits when compared with natural recovery. We will compare the expected project benefits to the predicted benefits from natural recovery to determine the degree to which the project would accelerate benefits or derive additional benefits.

7. The project will not threaten public health and safety.

8. The project will be consistent with government policies. We will select projects that are consistent with federal, state, and tribal policies.

9. The project will be in compliance with all applicable laws.

10. The project should address multiple resource and service benefits. We will prioritize projects that provide benefits which address multiple resource injuries or service losses, or that provide ancillary benefits to other resources or resource uses. We will also, when possible, provide extra consideration to projects that build upon

and enhance on-going conservation efforts by the Trustees and their partners within the Sheboygan River watershed and adjacent watersheds.

11. The project should address natural resource injuries and human use losses. We will aim for a diverse set of restoration projects and project locations, addressing the array of resource injuries and human use losses that occurred due to the release of contaminants. We will evaluate the degree to which a project helps return injured natural resources to the conditions that would exist had the release not occurred and compensates the public for lost uses of those resources. Projects located closer to the area of the release of contaminants are preferred, but projects located within the Sheboygan River or adjacent watersheds will also be considered.

For more information, contact:

Terry Heatlie, NOAA
(734) 741-2211
terry.heatlie@noaa.gov

Betsy Galbraith, USFWS
(920) 866-1753
Betsy_Galbraith@fws.gov

Vic Pappas, Wisconsin DNR
(920) 892-8756 ext. 3012
Victor.Pappas@wisconsin.gov

For additional information, visit:

www.fws.gov/midwest/es/ec/nrda/sheboyganharbor/

www.darrp.noaa.gov/greatlakes/sheboygan/index.html