



PASSAIC RIVER COALITION

94 Mount Bethel Road, Warren, NJ 07059

Phone: (908) 222-0315

Fax: (908) 222-0357

E-mail: PRCWater@aol.com

AKruger@verizon.net

**Comments regarding
Contamination Assessment & Reduction Project (CARP)
&
Lower Passaic River Restoration Project (LPRRP)**

**Prepared by
Anne L. Kruger, Ph.D., Technical Advisor,
Diamond Alkali Superfund Site (Lower Passaic River and Newark Bay)
&
Ella F. Filippone, Executive Administrator, Passaic River Coalition
9 November 2007**

Restoration of the Lower Passaic River and Newark Bay:

The sediments in the Lower Passaic River and Newark Bay are badly contaminated with persistent toxic substances such as dioxin and PCBs. This contamination has profound impacts on the ecology and economy of New Jersey. For instance, most of the Lower Passaic River has not been dredged since the 1940s, primarily because of this contamination.¹ People can not use the river for commerce or transportation or recreation by fishing and boating. After decades of studying the causes and impacts of this contamination, it is time to take action to start restoring the Lower Passaic River and Newark Bay. Reports on studies done for the Lower Passaic River Restoration Project (LPRRP) and the Contamination Assessment & Reduction Project (CARP) became available in the summer of 2007.² Both of these studies find that removal of fine grained sediments from the Lower Passaic River by dredging, and treatment of these sediments on land would provide the most long-term ecological and economic benefits for the region.

Background for the Lower Passaic River Restoration Project (LPRRP) Studies:

Because of the contaminated sediments, most of the Lower Passaic River has not been dredged since the 1940s.³ When the Passaic River Coalition (PRC) was founded in 1969 the Passaic River was considered one of the most polluted rivers in the United States. Much has been done to clean up the

¹ Malcolm Pirnie, Inc. 2007. Lower Passaic River Restoration Project, Draft Source Control Early Action Focused Feasibility Study. Prepared for US Environmental Protection Agency, US Army Corps of Engineers, New Jersey Department of Transportation. June 2007. Executive Summary, pages ii-iii. (FFS).

² HydroQual. 2007. Contamination Assessment & Reduction Project (CARP), Modeling for the Evaluation and Management of Contaminants of Concern in Water, Sediment, and Biota in the NY/NJ Harbor Estuary, Contaminant Fate & Transport & Bioaccumulation Sub-models. July 2007.

³ FFS, Executive Summary, pages ii-iii.

river since then, and the PRC has been actively involved in these efforts. However, the Lower Passaic River remains badly contaminated. Studies of the contamination in the Lower Passaic River, Newark Bay, and the New York-New Jersey Harbor Estuary have been going on for many years. Representatives of the PRC have been active public participants in the Diamond Alkali Superfund case, Harbor Estuary programs, and other efforts to remediate this contamination since 1993. The Lower Passaic River Restoration Project studies were initiated in 2003.⁴ During the course of these studies, “sediments in the lower eight miles of the river were identified as a major source of contamination to the 17-mile” tidal portion of the river and to Newark Bay.⁵ A Focused Feasibility Study (FFS) “was undertaken to evaluate a range of remedial alternatives that might be implemented as an early action to control that major source.”⁶

Background for the Contamination Assessment & Reduction Project (CARP) Studies:

The New York-New Jersey Harbor is one of the most contaminated estuarine systems in the United States.⁷ The Contamination Assessment & Reduction Project (CARP) “was first envisioned in 1994 as port managers were in the early stages of what had become a dredging crisis resulting from the implementation of more restrictive dredged material management evaluation protocols. Since 1992, approximately 85% of the dredged material evaluated has been determined to be so contaminated that it is unsuitable for use at the Historical Areas Remediation Site (HARS) in the Atlantic Ocean. With few or appropriate, economically viable alternatives, the cost of disposal increased ten fold. As a result, assessment and reduction of contaminated sediments became, and continues to be, a critical regional priority for the Harbor.” Under the NY/NJ Harbor Estuary Program, a coalition of harbor partners with strong regional support and funding, mostly from the Port Authority of NY&NJ, formed the CARP in 1997. In 2007, after a decade of study, reports on CARP findings are being issued.

Findings and Recommendations from the CARP Studies:

The report by HydroQual on modeling for the evaluation and management of contaminants of concern in water, sediment, and biota in the NY/NJ Harbor Estuary lists the following implications for port and harbor management:⁸

- “Historical sources of most contaminants were much larger than current sources.” Most of the contaminants of greatest concern, such as dioxin and PCBs, are no longer getting into the river. Therefore, dredging and removing the contaminants from “legacy sources” that persist in sediments in the Lower Passaic River and Newark Bay should significantly reduce future risks.
- “Of the current sources of contamination, runoff and head-of-tide appear to be dominant for many of the contaminants.” The CARP analyses indicated that current contaminant inputs from Combined Sewer Overflows (CSOs) and permitted discharges are relatively low. Stormwater runoff does contribute significant loadings of contaminants such as PAHs, and better management of stormwater runoff is needed throughout the region.

⁴ U.S. Army Corps of Engineers, New York District; U.S. Environmental Protection Agency, Region II; New Jersey Department of Transportation, Office of Maritime Resources. April 2003. Project Management Plan, Lower Passaic River, New Jersey, Investigation and Feasibility Study for Remediation and Ecosystem Restoration.

⁵ Malcolm Pirnie, Inc. 2007. Lower Passaic River Restoration Project, Draft Source Control Early Action Focused Feasibility Study. Prepared for US Environmental Protection Agency, US Army Corps of Engineers, New Jersey Department of Transportation. June 2007. (FFS). Executive Summary, page i.

⁶ FFS, Executive Summary, page i.

⁷ <<http://www.carpweb.org/main.html>>

⁸ HydroQual. 2007. Contamination Assessment & Reduction Project (CARP), Modeling for the Evaluation and Management of Contaminants of Concern in Water, Sediment, and Biota in the NY/NJ Harbor Estuary, Contaminant Fate & Transport & Bioaccumulation Sub-models. July 2007. Page C-3.

- “A HARS suitable Newark Bay, in terms of PCB and dioxin/furan levels of contamination in worms, may be attained in the future if ... a cleanup of the in-place sediments in the Passaic River is undertaken.” The CARP models predict that if most of the contaminated sediments in the Lower Passaic River were removed, then someday in the future by 2040 sediments in Newark Bay might be clean enough for fish and crabs to thrive again, and for port channels to be dredged as needed.

Findings and Recommendations from the LPRRP Studies:

The Focused Feasibility Study (FFS) evaluated a range of remedial alternatives that might be implemented as an early action to control the contaminants in the sediments in the lower eight miles of the Passaic River.⁹ Based on the findings reported in this study and other studies, we made the following recommendations:

- Our preferred alternative for Early Action is “Alternative 1, Dredging” because it would be most effective at reducing risks to human health and the environment, and at helping to revitalize both the ecology and the economy of the Lower Passaic River and the New York-New Jersey Harbor Estuary.
- The Federal government should be considered a “responsible party” in the Diamond Alkali Superfund case.
- The navigational channels of the Lower Passaic River should be restored to their authorized depths by the U.S. Army Corps of Engineers.
- A processing facility, which would store dredged sediments temporarily on land, and then treat them so that they could be used beneficially, should be developed in the Newark Bay area. Such a facility has long been needed so that harbors along the East Coast can be dredged and revitalized, and so that Brownfields can be reused to the economic benefit of the region.
- Funding for this project must reflect a practical division of responsibility as presented in the PRC statement on the FFS dated 15 August 2007, page 14.

Benefits of Cleaning Up the Contaminated Sediments in the Lower Passaic River:

The CARP studies confirm that dredging the Lower Passaic River to remove the contaminated sediments and then treating them on land so that they can be used beneficially would greatly improve conditions in the NY/NJ Harbor Estuary. Economic benefits of such an Early Action project include:

- Reduction in illness and medical expenses from people ingesting contaminated fish.
- Reduction in losses and associated costs from flooding.
- Economic benefits from improvements in navigation in the Lower Passaic, Newark Bay, and the NY/NJ Harbor, the most important shipping center on the east coast of the US.
- Reinvigoration of the economy of the region by facing, fixing, and enjoying the Lower Passaic River and Newark Bay.

⁹ FFS, Executive Summary, page i.