



COMMUNITY INVOLVEMENT PLAN

for the

LOWER PASSAIC RIVER

JULY 2017

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Newark, NJ nighttime skyline on the Passaic River



INTRODUCTION

In March 2016, the U.S. Environmental Protection Agency (EPA) finalized a cleanup plan for the lower 8.3 miles of the Passaic River. This project is part of a comprehensive strategy to clean up the 17-mile stretch of the Lower Passaic River, from Dundee Dam to Newark Bay.



Figure 1:
Project Location Map

In March 2016, the U.S. Environmental Protection Agency (EPA) finalized a cleanup plan for the lower 8.3 miles of the Passaic River. This project is part of a comprehensive strategy to clean up the 17-mile stretch of the Lower Passaic River, from Dundee Dam to Newark Bay. The Lower Passaic River and Newark Bay are part of the Diamond Alkali Superfund Site. Under Superfund law and EPA policy and practice, people whose lives are impacted by hazardous waste sites have a voice in the cleanup process. The agency is committed to involving the public and providing opportunities for participation so that people have a say in what happens in their communities.

This Community Involvement Plan (CIP) is the latest effort in the ongoing public outreach about the Passaic River cleanup. The first CIP for the 17-mile Lower Passaic Restoration Project and Newark Bay Study was released in 2006 and addressed outreach for the entire project area. As the project enters the design and construction phase for the lower 8.3-mile cleanup, the agency recognizes the need for a more targeted CIP. Although the plan's

recommendations may apply for future cleanup of other portions of the river and Newark Bay, this document is focused on outreach for the lower 8.3 miles of the Passaic River, which extends from Newark Bay to the border between the City of Newark and Belleville Township.

As the EPA works on the details of the design and implementation of the cleanup, the agency is committed to involving the public and keeping the community informed about cleanup activities and how these activities may impact them. In keeping with that commitment, this CIP has been developed to facilitate two-way dialogue between the communities affected by the Passaic River cleanup and the EPA to encourage community involvement in site activities.

Specifically, the CIP provides an overview of the outreach tools and techniques that the EPA uses to share information and to inform and involve the public during the cleanup process. It is based on several rounds of community

interviews with residents, elected officials, agency representatives and other stakeholders in the Lower Passaic River communities, combined with feedback received during the multi-year site investigation process and during the public comment period on the EPA's proposed cleanup plan.

The CIP serves as a roadmap for the EPA in providing opportunities for public information and input during the cleanup of the Passaic River. The CIP is an evolving document and will be updated or revised as needed to ensure that opportunities for public participation continue throughout the cleanup process.

This CIP contains the following sections:

1. Overview
2. Project Background
3. Community Feedback
4. Community Profile
5. Community Involvement Action Plan

Sections may be read independently of each other.

Acronyms are spelled out upon first reference, and a full list is provided in [Appendix 1](#). The Appendices are designed to serve as a resource guide for both the EPA and the community. Specific sections include EPA and other agency contacts, local government contacts, where to find additional documents, a glossary of terms, and other relevant project background information. A Works Consulted is listed in [Appendix 19](#), as individual citations are not included in this CIP. Please note that bolded terms appear in [Appendix 2](#) - Glossary.

Newark, NJ skyline on the Passaic River





OVERVIEW

The following section describes the purpose and scope of the Community Involvement Plan (CIP) as well as applicable legal authorities.

1.1 Purpose of the Community Involvement Plan

This CIP is the foundation for the EPA's Superfund Community Involvement Program for the Lower Passaic River, from Dundee Dam to Newark Bay. Based upon the 2006 CIP, the plan has been updated and revised to focus on the cleanup of the lower 8.3 miles of the Passaic River, from Newark Bay to the Newark/Belleville border. It describes a range of community involvement and outreach tools and activities that EPA uses to communicate with the community (described in Section 5.1). Not all of the tools and activities will necessarily be implemented. Rather, the EPA

will periodically review, select, and prioritize which tools and activities to implement, based on input from stakeholders and in consideration of a number of project management and community factors.

The plan's purpose is to outline actions and activities that the EPA may undertake to encourage meaningful public engagement during cleanup and restoration activities in the Lower Passaic River. It is also designed to assist the communities and other stakeholders throughout the project area to become more informed and involved in the project, especially with regard to the design and construction phase of the lower 8.3 miles of the river.

The EPA collaborated with a broad cross-section of stakeholders to gather their input on designing a successful community involvement and outreach program. This plan is based on the following information:

- Community interviews (2005, 2014, and 2016) with local residents, officials, representatives from environmental and community organizations and other interested parties. See [Appendix 16](#).

Historical information and records pertaining to community concerns (i.e., land use, redevelopment and **environmental justice**).

- The previous CIP for the Lower Passaic River/Newark Bay (2006) and community involvement activities related to the Diamond Alkali site, which was added to the National Priorities List (NPL) in 1984
- Feedback received during the 2014 public comment period on the proposed cleanup for the lower 8.3 miles of the river and public meetings held during that time.
- The EPA's ongoing dialogue and communication with the Passaic River **Community Advisory Group (CAG)**.

COMMUNITY INVOLVEMENT GOALS

- Provide the public with accurate, timely and understandable information;
- Facilitate opportunities for the public to give informed and meaningful input;
- Respect and give full consideration to community input and provide feedback to the public on how their concerns are addressed.

1.2 Scope of the Community Involvement Plan

As discussed further in Section 2, the EPA recognizes the unique nature of this project, which affects a number of large communities. Given the Passaic River's proximity to large, diverse population centers and the geographical extent of sediment contamination, a plan with broad-based public involvement goals was developed. The tools and activities in this CIP are not specifically targeted toward other state and federal cleanup and restoration efforts planned or underway within the project study area; however, this CIP is consistent and compatible with related efforts and initiatives, such as:

- The U.S. Army Corps of Engineers' (Corps) federal mission areas, including
 - › Restoration (i.e., the overall Hudson-Raritan Estuary [HRE] Ecosystem Restoration Feasibility Study),
 - › Water Resources Development Act (WRDA)-authorized and Clean Water Act (CWA)-regulated navigation program activities
 - › Dredged material management
- The NY/NJ Harbor Estuary Program (HEP)
- State agency-run site cleanups on the industrial waterfront and other relevant locations
- Other EPA Superfund work in the study area

All watershed-based improvement activities are best understood as interrelated, with due consideration given to other efforts in the study area.

This plan offers options for community involvement and outreach, rather than a prescriptive approach. The suggested outreach activities and tools in the following pages are flexible in nature and were designed to appeal to multiple audiences. The EPA recognizes that not all outreach activities and tools are suited for all groups.

Where possible, the CIP attempts to lay out a sequence of project activities. The EPA does not currently have the information necessary to identify the precise timing of all activities and opportunities for community involvement and outreach. Therefore, this CIP will remain a living document that will be reviewed and updated as needed. Specific time-line information on the major project documents, decisions and activities will be provided to the public through fact sheets, project website updates and email.

Lower Passaic River Community
Advisory Group (CAG)



1.3 Agency Partnerships and Legal Authorities

In 2003, the EPA formed a partnership with the Corps, the State of New Jersey, the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Fish and Wildlife Service (USFWS) to conduct a joint study that would bring each agency's authorities to bear on the complex environmental problems of the Lower Passaic River. These agencies, referred to as “**the Partner Agencies**” continue to collaborate on a

number of activities. See Table 1 for an overview of their individual missions. For further discussion, refer to [Appendix 18 – Legal Authorities](#).

The study, remediation and restoration activities of the Lower Passaic River are being conducted under a number of federal laws and regulations, most notably the **Comprehensive Environmental Response, Compensation, and Liability Act** of 1980 (CERCLA, commonly known as Superfund) and the Water Resource Development Act (WRDA). The restoration study

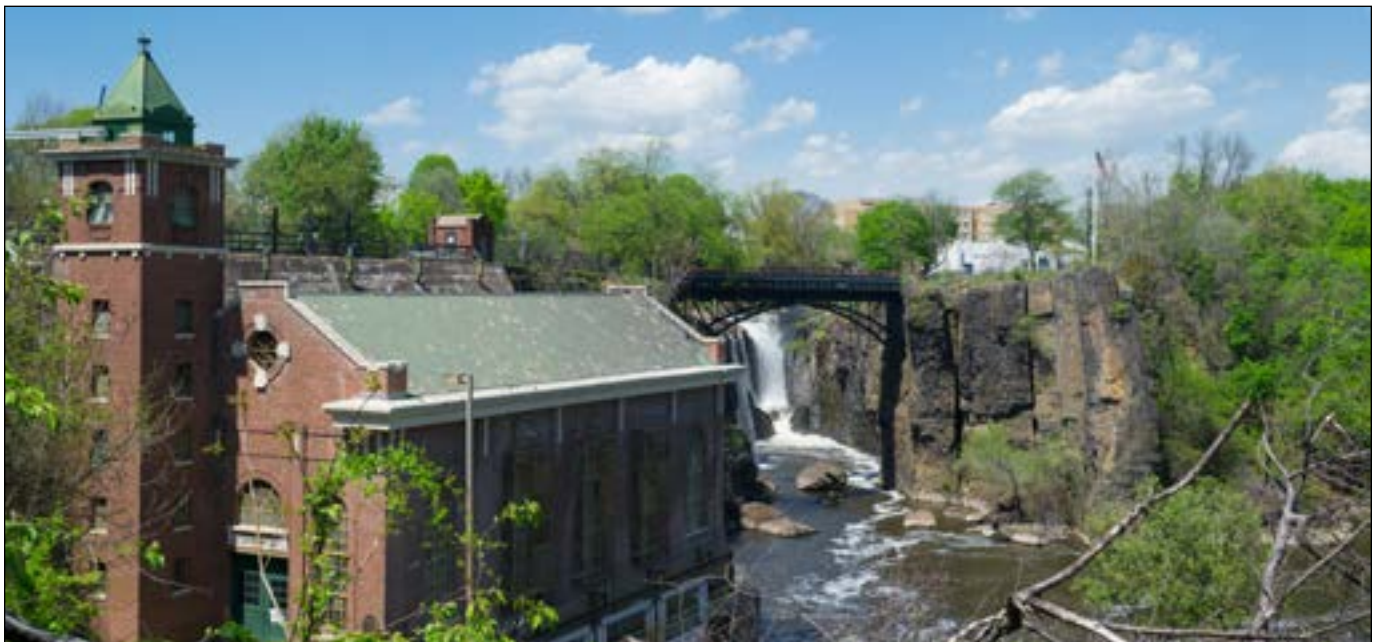
was specifically authorized by a resolution of the Committee on Transportation and Infrastructure of the U.S. House of Representatives dated April 15, 1999. At a minimum, federal agencies are required to conduct public meetings to facilitate and encourage public participation with regard to decisions that affect the quality of the human environment and cleanup. Please see Table 2 below for a brief summary of relevant federal legal authorities. More comprehensive descriptions are provided in [Appendix 18](#).

Table 1: Agency Missions

AGENCY	DESCRIPTION
U.S. Environmental Protection Agency	To protect human health and the environment - air, water and land. EPA, state, local and tribal agencies work together to ensure compliance with environmental laws passed by Congress, state legislatures and tribal governments. EPA oversees numerous programs, including Superfund.
U.S. Army Corps of Engineers (Corps)	To provide vital public engineering services in peace and war to strengthen our Nation's security, energize the economy and reduce risks from disasters. Corps environmental cleanup programs focus on reducing risk and protecting human health and the environment in a timely and cost-effective manner. Corps focuses on three primary Civil Works Missions: 1) navigation; 2) flood risk management and 3) ecosystem restoration.
National Oceanic and Atmospheric Administration (NOAA)	To understand and predict changes in climate, weather, oceans and coasts, to share that knowledge and information with others, and to conserve and manage coastal and marine ecosystems and resources.
U.S. Fish and Wildlife Service (USFWS)	To conserve, protect, and enhance fish, wildlife, plants and their habitats for the continuing benefit of the American people.
New Jersey Department of Environmental Protection (NJDEP)	To protect the air, waters, land and natural and historic resources of the State of New Jersey to ensure continued public benefit. The Department's mission is advanced through effective and balanced implementation and enforcement of environmental laws to protect these resources and the health and safety of New Jersey's residents.

Table 2: Relevant Federal Legal Authorities

LEGAL AUTHORITY	LEAD AGENCY	DESCRIPTION
The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) , as amended by the Superfund Amendments and Reauthorization Act (SARA), commonly called Superfund	EPA leads the cleanup; Natural Resource Trustees lead the natural resource restoration	CERCLA or Superfund provides federal funding to clean up hazardous waste sites as well as accidents, spills and other emergency releases of contaminants into the environment. Through CERCLA, the EPA is given authority to find the parties responsible for any release and assure their cooperation in the cleanup. The regulation follows the “polluter pays principle,” which states that the parties who caused the pollution should ultimately pay for the cleanup, not the general public. Natural Resource Trustees are designated under CERCLA’s regulations to recover compensatory damages for injury to natural resources as well as reasonable costs of assessing injury.
The Water Resources Development Act (WRDA)	The Corps	WRDA is a piece of legislation that provides authorization for water resource projects to be studied, planned and developed by the Corps.
The National Environmental Policy Act (NEPA)	All federal agencies	NEPA requires federal agencies to integrate environmental values into their decision-making processes by considering the environmental impacts of, and reasonable alternatives to, their proposed actions.
Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations	All federal agencies	This order directs federal agencies to address environmental and human health conditions in minority and low-income communities to avoid the disproportionate placement of any adverse effects from federal policies and actions on these populations.



Old brick power generating station at the Passaic River and Paterson, NJ



PROJECT BACKGROUND

The **Diamond Alkali Superfund Site** is being cleaned up in phases. The site includes the former Diamond Alkali facility at 80-120 Lister Avenue in Newark; the 17-mile **Lower Passaic River Study Area** (including the lower 8.3 miles of the river); and the Newark Bay Study Area. The following section describes the history of the Lower Passaic River cleanup and the scientific issues it addresses.

2.1 History of Contamination

The Passaic River was one of the major centers of the American industrial revolution starting two centuries ago. The Dundee Dam, constructed in the mid-nineteenth century, was originally conceived to provide water power to nearby businesses, supporting further industrialization along the banks of the river. Along with the Dundee Dam, another defining component of the development and urbanization of the Lower Passaic River was the construction of a navigable channel for commercial vessels. Between 1884 and 1915, dredging projects authorized by Congress and constructed by the Corps created a federally

authorized navigation channel from the river's mouth at Newark Bay to Wallington. By the end of the nineteenth century, a multitude of industrial operations, such as manufactured gas plants, paper manufacturing and recycling facilities, petroleum refineries, shipping, tanneries, creosote wood preservers, metal recyclers and manufacturers of materials such as rubber, rope, textiles, paints and dyes, pharmaceuticals and chemicals, had located along the river's banks as cities such as Newark and Paterson grew. Industrial operations and municipalities used the river for wastewater disposal. To date, over 100 industrial facilities have been identified as potentially responsible for discharging contaminants into the river, including the contaminants of concern listed in Table 3.

During the study of the 17-mile Lower Passaic River, the EPA determined that the sediments of the lower 8.3 miles of the Lower Passaic River pose an unacceptable risk to human health and the environment due to the presence of a variety of contaminants, most of which stay in the environment for a long time and **bioaccumulate** in fish and crab. Table 3 describes eight contaminants that pose the greatest potential risks to human and environmental health in the lower 8.3 miles. Therefore, the EPA made a decision on a final cleanup plan for the sediments of the lower 8.3 miles of the river, while the 17-mile Lower Passaic River study is ongoing.

Table 3: Contaminants of Concern

AGENCY	DESCRIPTION
Copper (Cu)	Copper is a metal that enters the environment through releases from factories that make or use copper metal or compounds, leachate from landfills, combustion of fossil fuels, wood processing, fertilizer production and natural sources such as dust from soils, volcanoes and forest fires. Although copper is an essential dietary element at low levels for organisms, at higher levels it is highly toxic in aquatic environments and builds up in fish and shellfish. Copper can cause adverse effects in fish, invertebrates and amphibians. Copper also impacts growth, development and causes organ problems in birds and mammals.
DDT	DDT is a pesticide that was banned for use in the U.S. in 1972. It was used widely to control insects on crops and to control mosquitoes that spread malaria. DDT and its breakdown products build up in fish and shellfish and can cause adverse reproductive effects such as eggshell thinning in birds.
Dieldrin	Dieldrin is a pesticide that is no longer produced or used, but was once used extensively as an insecticide on crops or to control termites. It builds up in fish and shellfish. Dieldrin is highly toxic to aquatic crustaceans and fish. Dieldrin also causes liver damage, central nervous system effects, suppression of the immune system in mammals, and eggshell thinning in birds.
Dioxins and Furans	These chemicals are by-products of chemical manufacturing, combustion (either in natural or industrial settings), metal processing and paper manufacturing. The dioxin compound known as 2,3,7,8-TCDD (2,3,7,8-tetrachlorodibenzo-p-dioxin; the most toxic form) and others were byproducts in the manufacture of herbicides, including “Agent Orange,” a defoliant used in the Vietnam War. Dioxins build up in fish and shellfish. Toxic effects in humans include reproductive problems, problems in fetal development or early childhood, immune system damage and cancer. In fish and wildlife, effects include developmental and reproductive problems, hemorrhaging and immune system problems.
Lead (Pb)	Lead occurs naturally in the environment, but most of the higher levels found in the environment come from mining or factories that use lead compounds. Lead is also released into the air during burning of coal, oil or waste. Lead does not build up in fish and shellfish. Lead can cause muscular and neurological effects in fish. It is also toxic to invertebrates and can cause damage to the nervous system in birds and mammals.
Mercury (Hg)	Mercury is a metal that comes from a variety of sources, including metals processing, burning of coal, improper disposal of medical and other wastes, industrial effluent discharge and atmospheric deposition. Exposure to methylmercury (one type of mercury) most commonly occurs when people eat fish and shellfish that have high levels of methylmercury in their tissues. Mercury builds up in fish and shellfish. Toxic effects in humans include developmental and reproductive problems, and effects on the brain, nervous system and kidneys. In birds and mammals, mercury can cause effects in the central nervous system.
PAHs	Polycyclic aromatic hydrocarbons (PAHs) are chemicals that are a major component of petroleum products, and are formed during incomplete burning of coal, oil, gas, wood or other substances. PAH molecules are composed of two or more carbon and hydrogen rings. There are more than 100 different PAHs, which generally occur as complex mixtures. PAHs do not build up in fish and shellfish. PAHs are toxic to invertebrates and cause inhibited reproduction, delayed emergence, sediment avoidance and mortality. In fish, PAHs cause liver abnormalities and impairment of the immune system. PAHs can cause adverse effects on reproduction, development and immunity in birds and mammals.
PCBs	Polychlorinated biphenyls (PCBs) are manufactured chemicals that were used widely as coolants in transformer oils, and also in the manufacture of paints, caulking and building material until they were banned in the late 1970s. PCBs are mixtures of up to 209 compounds (or congeners). Some commercial PCB mixtures are known in the U.S. by their industrial trade name, Aroclor. PCBs build up in fish and shellfish. Children exposed to PCBs may develop learning and behavioral problems later in life. PCBs are known to adversely impact the immune system and may cause cancer in people who have been exposed to them over a long time. In birds and mammals, PCBs can cause various health effects, including: anemia; liver, stomach and thyroid gland injuries; and immune system, behavioral and reproductive problems.

2.2 Description of Project Area

The Lower Passaic River Study Area in northeastern New Jersey is the 17-mile, tidal portion of the Passaic River, from the river's confluence with Newark Bay at River Mile (RM) 0 to Dundee Dam at RM 17.4, and its watershed, including the Saddle River (RM 15.6), Third River (RM 11.3), and Second River (RM 8.1). This area is bounded at the upper end by the Dundee Dam, which physically

isolates the Upper Passaic River from the tidal mixing of sediments that influences the lower portion of the river, and at the lower end by the confluence of the Lower Passaic River and Newark Bay.

This CIP focuses on the lower 8.3 miles of the Lower Passaic River, which extend from RM 0 to RM 8.3 near the border between the City of Newark and Belleville Township.

Passaic River at 1st Street, Newark, NJ





Figure 2:
The Lower 8.3 Mile Cleanup Area

2.3 Project Activities

Table 4 lists project activities within the Lower Passaic River Study Area to provide context for the lower 8.3-mile cleanup.

Table 4: Diamond Alkali Superfund Site Project Activities

DATE	ACTIVITY
1940s	Manufacturing facility located at 80 Lister Avenue, Newark, NJ begins producing DDT and phenoxy herbicides.
1951-1969	The Diamond Alkali Company (subsequently known as the Diamond Shamrock Chemicals Company) owns and operates a pesticides manufacturing facility at 80 Lister Avenue. In 1960, an explosion destroys several plant processes; also in 1960, production limited to herbicides, including those used in the formulation of the defoliant "Agent Orange". Diamond Alkali Company ceases operations in 1969.
1970-1983	80 Lister Avenue goes through a series of new ownerships and production processes.
1976	Congress authorizes the Corps to begin flood control study for the Passaic River Basin under the Water Resources and Development Act (WRDA).
1982	NJDEP releases fishing advisories for reduced consumption of white perch and white catfish in the Passaic River. A portion of the river abutting 80 Lister Avenue is closed for commercial fishing of American eel and striped bass.
1983	NJDEP and the EPA collect samples; high levels of dioxin are detected in the Passaic River and at/around the 80 Lister Avenue property. Diamond Alkali site proposed by the EPA to the Superfund NPL. Fish advisories begin for the Passaic River and Newark Bay.
1984	NJDEP signs an agreement with the Diamond Shamrock Chemicals Company to perform an investigation of 80 Lister Avenue. Site finalized on the Superfund NPL. Site investigation of 80 Lister Avenue begins. NJDEP signs an agreement with Diamond Shamrock Chemicals Company to perform cleanup of select dioxin-contaminated properties and to perform an investigation of 120 Lister Avenue.
1985-1986	NJDEP releases investigation results and cleanup options for 80 and 120 Lister Avenue properties to the public.
1987	The EPA and NJDEP hold public meeting to discuss the Proposed Plan for cleanup. EPA selects an interim cleanup plan (Record of Decision [ROD]) for the 80 and 120 Lister Avenue portion of the Diamond Alkali Superfund site, requiring the containment of contaminated materials.
1990	The federal court approves an agreement among Occidental Chemical Corporation, as successor to Diamond Shamrock Chemicals Company, and Chemical Land Holdings, Inc. (now known as Tierra Solutions, Inc.) and EPA and NJDEP to implement the 1987 interim cleanup plan. Corps receives Congressional WRDA authorization for the Joseph G. Minish Passaic Waterfront Park and Historic Area flood control study as an element of the Passaic River Flood Damage Reduction Project.
1993	The Passaic River portion of the Diamond Alkali Superfund site transferred from state lead under NJDEP to federal lead under the EPA.
1994	The EPA posts trilingual fishing advisory signs along the banks of the Passaic River near the former Diamond Alkali facility. The EPA and Occidental Chemical Corporation sign an agreement for the company to investigate the lower six-mile stretch of the Passaic River under EPA oversight. Demolition of buildings at 80 Lister Avenue is completed.
1996-1999	The EPA, at the request of the local community, explores the potential for implementing an alternative to the interim cleanup plan selected in 1987. Alternative plan not found. EPA reviews and approves design of the 1987 interim cleanup plan.

DATE	ACTIVITY
1999	NJDEP releases investigation results and cleanup options for 80 and 120 Lister Avenue properties to the public.
2000	The Corps initiates a Reconnaissance Study for the HRE Study Area and identifies the Lower Passaic River as a priority site. Under EPA oversight, interim cleanup begins at the 80-120 Lister Avenue portion of Diamond Alkali Superfund site, which includes installation of a cap, slurry wall and flood wall around the properties and groundwater pumping and treatment.
2001	Interim cleanup plan is completed at the 80-120 Lister Avenue portion of Diamond Alkali Superfund site, under EPA oversight. The Corps completes the Reconnaissance Study for the HRE.
2002	The Urban Rivers Restoration Initiative is launched; the EPA and Corps sign a National Memorandum of Understanding for the purpose of coordinating the planning and execution of urban river cleanup and restoration.
2003	The six-mile study of Lower Passaic River is expanded to include the extent of contamination in the lower 17-miles of the Lower Passaic River. State and federal trustees sign a Memorandum of Agreement for NRDA and Restoration for the Diamond Alkali Superfund site and environs. The EPA, the Corps, and the State of New Jersey sign a Project Management Plan for the Lower Passaic River Restoration Project. A feasibility cost sharing agreement is signed by the Corps and the State of New Jersey. The Passaic River is selected as one of eight national pilot projects of the Urban Rivers Restoration Initiative.
2004	The EPA enters into an agreement with 31 potentially responsible parties (PRPs) to fund the Superfund portion of the Lower Passaic River Restoration Project (the 17-mile Remedial Investigation and Feasibility Study). Additional PRPs added to the agreement in 2005 and 2007, resulting in a group of over 70 PRPs named the Cooperating Parties Group (CPG). The EPA and Occidental Chemical Corporation enter into an agreement for the company to conduct a multi-year study of contamination in the Newark Bay Study Area with EPA oversight.
2007	The EPA enters into another agreement with the CPG for them to take over performing the 17-mile Remedial Investigation and Feasibility Study under EPA oversight.
2008	An agreement among the EPA, Occidental Chemical Corporation and Tierra is signed under which Occidental Chemical Corporation agrees to remove, in two phases, a total of 200,000 cubic yards of contaminated sediment from the portion of the river directly in front of the former Diamond Alkali facility in downtown Newark (action known as the Tierra Removal).
2012	Phase I of the Tierra Removal is completed. The EPA and the CPG sign an agreement for a time-critical removal action at a mudflat in Lyndhurst to address the risks posed by high concentrations of dioxins, PCBs and other contaminants (action known as the River Mile 10.9 Removal).
2013	The Passaic River becomes one of the new locations selected for the Urban Waters Federal Partnership (UWFP). This partnership will reconnect urban communities, particularly those that are overburdened or economically distressed, with their waterways by improving coordination among federal agencies and collaborating with community-led revitalization efforts to improve our nation's water systems and promote their economic, environmental and social benefits. The EPA and Corps are co-leads for the Lower Passaic River UWFP location.
2014	Dredging and capping for the River Mile 10.9 Removal are completed (except for where water supply line runs under river). The comprehensive site investigation reports and proposed cleanup plan for the lower 8.3 miles of the Passaic River are released to the public for comment.
2016	The EPA selects a final cleanup plan (in a Record of Decision) for the sediments of the lower 8.3 miles of the Passaic River. The EPA signs an agreement with Occidental Chemical Corporation for the company to perform the remedial design of the lower 8.3-mile cleanup, with EPA oversight.
2017	The HRE Draft Feasibility Report and Environmental Assessment was released recommending up to 33 restoration sites in the NY/NJ Harbor including five sites within the Lower Passaic River.

2.4 The Cleanup Plan for the Lower 8.3 Miles

In March 2016, the EPA selected a final cleanup plan for the sediments of the lower 8.3 miles of the river. The selected plan was based on the Proposed Plan and consideration of the comments received during the public comment period.

The major components of the \$1.38 billion cleanup plan include the following:

- **Capping** the entire lower 8.3 miles of the river bank-to-bank to isolate the contamination in the sediment and prevent it from entering the food chain.
- Dredging 3.5 million cubic yards of contaminated sediment to prevent the cap from making flooding worse and to allow continued commercial use of the navigation channel in the 1.7 miles closest to Newark Bay.
- Barging or pumping dredged materials for dewatering to a sediment processing facility in the vicinity of the Lower Passaic River/Newark Bay shoreline.
- Transporting dewatered materials from the sediment processing facility to permitted treatment facilities and landfills in the U.S. and Canada.
- Long-term monitoring and maintenance of the engineered cap. Long-term monitoring of fish, crab, river water and sediment quality. Enhanced outreach to improve awareness of fish and crab consumption advisories.

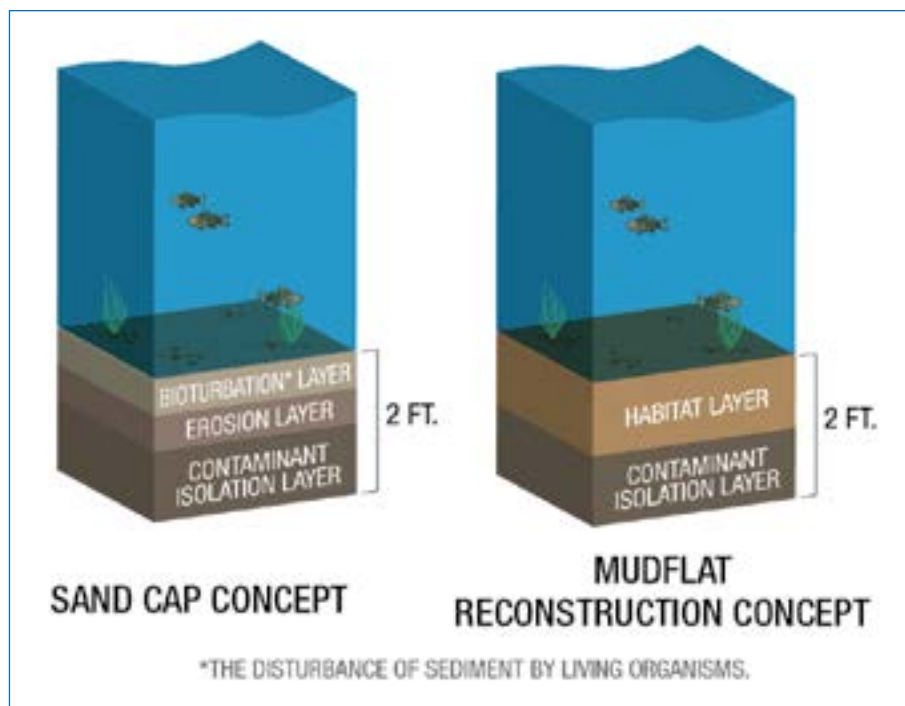
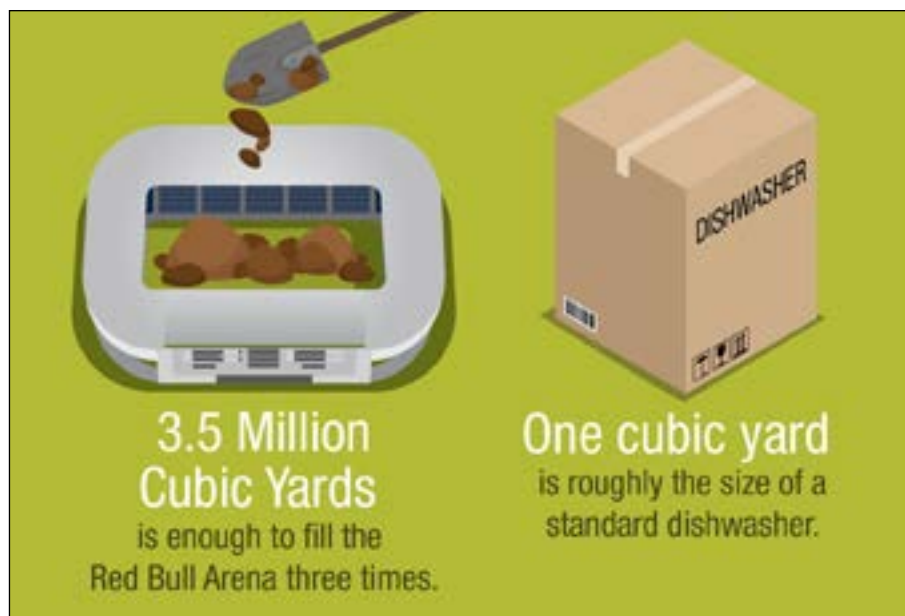


Figure 3:
Examples of Caps

2.5 Next Steps

Table 5 below describes steps in the Superfund cleanup process. The cleanup of the lower 8.3 miles of the Passaic River is at Step 6. Steps 7, 8 and 9 are forthcoming.

Table 5: Steps in the Superfund Process

STEP	NAME	DESCRIPTION	
1	Preliminary Assessment/ Site Investigation (PA/SI)	The PA/SI involves a records review, site visits and limited soil and groundwater sampling to determine whether the site warrants further investigation.	PAST
2	National Priorities List (NPL) Listing	The NPL is a federal list of the most serious sites identified for long-term cleanup. When the EPA proposes to add a site to the NPL, the agency publishes a public notice about its intention in the Federal Register and issues a public notice through the local media to notify the community.	
3	Remedial Investigation and Feasibility Study (RI/FS)	The RI/FS involves more comprehensive sampling to identify the nature and extent of contamination at the site. The remedial investigation helps to determine the need for and extent of cleanup that might be required. The feasibility study identifies, describes and evaluates various alternatives for cleaning up the site. For complex sites, the EPA may do a Focused Feasibility Study (FFS) as part of an early action to achieve significant risk reduction quickly or expedite the completion of total site cleanup.	
4	EPA Proposed Plan and Public Comment Period	The Proposed Plan identifies the EPA's preferred alternative for cleanup and describes the other alternatives considered. Public meetings are held and comments are solicited and recorded.	
5	Record of Decision (ROD)	The ROD documents the selected cleanup remedy and includes a response to public comments.	
6	Remedial Design (RD)	During RD, the specific engineering aspects of the remedy selected in the ROD are designed, including land use controls, etc.	FUTURE
7	Remedial Action (RA)	The RA is the actual construction or implementation phase of Superfund site cleanup.	
8	Long term operation and maintenance	Ongoing monitoring and maintenance of the remedy ensure that the cleanup remains effective in protecting human health and the environment in the long-term.	
9	Deletion from the NPL	A site may be deleted from the NPL when the final ROD requirements are attained (the remedial objectives) and the site is fully protective of human health and the environment.	

2.6

Remedial Design (RD) and Remedial Action (RA)

Remedial design (RD) is the phase in Superfund site cleanup where the technical specifications for the cleanup are designed. During this phase, the EPA will consider community preferences expressed during the public comment period for the Proposed Plan and input gathered during additional public outreach in the design.

Remedial action (RA) follows the remedial design phase. It involves the actual construction or implementation of Superfund site cleanup. The RD/RA is based on the specifications described in the Record of Decision (ROD) and remedial design.

HOW TO GET INVOLVED DURING THE CLEANUP DESIGN AND CONSTRUCTION

- Learn about the design for the cleanup by attending public events or reading the information the EPA distributes.
- Review the Timeline of Remedial Design for Lower 8.3 Miles of Lower Passaic River.
- Work through the Community Advisory Group (CAG), the Technical Assistance Grant (TAG) recipient or Technical Assistance Services for Communities (TASC) Program provider to stay informed about the progress of the cleanup. Contact the EPA's [Community Involvement Coordinator](#) with questions or comments.

Table 6: Timeline of Remedial Design for Lower 8.3 Miles of Lower Passaic River

This timeline was developed by the EPA at the request of the Passaic River Community Advisory Group (CAG). This is a summary of the dates and documents associated with the design. For official dates and full descriptions of the design requirements, please see the Administrative Settlement Agreement and Order on Consent for Remedial Design, CERCLA Docket No. 02-2016-2021. After the EPA comments are incorporated into or after the EPA approves these documents, they will be made publicly available and the EPA will brief the CAG about them.

DOCUMENT	DESCRIPTION (SUMMARY)
Project Management Plan	Strategy to complete the Remedial Design and Remedial Action successfully, including, but not limited to: <ul style="list-style-type: none"> • Overall management strategy for performing design • Proposed approach to contracting and general approach to Remedial Action • Communication strategy during design • Schedule
Remedial Design Work Plan	Plans and technical approaches to performing design <ul style="list-style-type: none"> • Description of data gaps/anticipated problems • Descriptions of how each major component in design will be approached and implemented • Emergency Response Plan
Pre-Design Investigation (PDI) Work Plan	Sampling plan to gather information needed for the design, including Health and Safety Plan, and Quality Assurance Project Plan.
Pre-Design Investigation Evaluation Report	Sampling scheduled for at least one year. This is the report on the results of the sampling.

DOCUMENT	DESCRIPTION (SUMMARY)
Site Wide Monitoring Plan	Sampling plan to gather information on the extent of contamination 1) now, as a baseline; 2) during construction; 3) for the long-term after construction.
Site Selection and Evaluation Work Plan	Plan to identify and select a site or sites for the sediment handling station(s) and processing facility.
Site Selection and Evaluation Report	Report on the results of the work done to select a site or sites for the sediment processing facility.
Treatability Study Work Plan	Plan to evaluate capping technologies, sediment processing technologies and habitat reconstruction techniques
Treatability Study Evaluation Report	Report on the results of the treatability studies
Preliminary (30%) Remedial Design	<p>Preliminary draft of the design, including but not limited to:</p> <ul style="list-style-type: none"> • Outline of specifications • Lists of drawings and schematics • Draft schedule for construction • Transportation and Off-Site Disposal Plan
Intermediate (60%) Remedial Design	<p>Second draft of the design, including but not limited to:</p> <ul style="list-style-type: none"> • Draft specifications • Drawings and schematics • Unit price lists • Updated draft schedule for construction
Value Engineering Study Results	Results of systematic study to identify and reduce unjustifiably high project costs without sacrificing reliability or efficiency
Pre-final (95%) Remedial Design	<p>Third draft of the design, including but not limited to:</p> <ul style="list-style-type: none"> • Complete set of construction drawings/specifications • Construction Quality Assurance/Quality Control Plan • Operations and Maintenance Plan • Institutional Controls Implementation Plan
Final (100%) Remedial Design	Final design

2.7 Long-term Monitoring and Maintenance

During construction, monitoring of water and air will be conducted to evaluate whether the cleanup activities are being managed most efficiently to reduce potential releases of contaminants to the environment. In instances in which water or air quality standards are exceeded, the related construction activity will be evaluated and additional protective measures implemented where appropriate. During and after construction, enhanced community outreach will be conducted regarding New Jersey's fish and crab consumption advisories to improve awareness.

After project completion, monitoring of contaminant levels in fish, water and sediment will be conducted to determine progress toward meeting cleanup goals. Monitoring and maintenance of the engineered cap will be required both on a regular basis and after significant storms. Controls prohibiting disturbance of the engineered cap by river users will be necessary to maintain cap integrity. A review of site conditions will be conducted at least once every five years, as required by federal law.

Opportunities for community involvement related to long-term monitoring and maintenance include:

- Working through the CAG or TAG to participate in and review the results of regular site evaluations.
- Visiting the river.
- Inviting the EPA's Community Involvement Coordinator to community events to discuss results of the five-year review.
- Planning an event to celebrate major milestones in the cleanup of the site.

DECISIONS TO BE MADE DURING THE DESIGN PHASE OF CLEANUP

- Exact volume of sediment to be dredged.
- Selection of dredging technology – either hydraulic or mechanical.
- Sediment processing facility location.
- Transportation routes to move dredged materials for treatment and disposal.
- Sediment disposal and treatment locations.
- Engineered cap thickness and composition.
- Engineering performance standards.
- Quality of life performance standards such as air quality standards, noise and odor monitoring.

2.8 Local Workforce Participation during Construction

The EPA expects that hundreds of workers will be involved in the cleanup of the lower 8.3 miles of the Passaic River. It is possible that many of those jobs will come from New Jersey, and some could include local workers from the affected communities along the Passaic River. In addition to these workers, numerous local vendors (including sign makers, concrete suppliers, fuel suppliers, food service companies, steel fabricators, etc.) will be needed to support the cleanup.

At the beginning of the construction phase of cleanup, the EPA will work closely with the companies that are performing the cleanup and their contractors to encourage local hiring and use of local support services to the maximum extent possible. The EPA will work closely with the Passaic River CAG, local officials, and other stakeholders to spread the word and provide contact information for those interested in applying for jobs. The EPA will broadly disseminate information on potential jobs and job training programs through a variety of ways, including community groups, local officials, and on the Web.

EPA Community Involvement Coordinator, David Kluesner (far right) assists with an environmental job training course in Newark, NJ.





COMMUNITY FEEDBACK

The following section describes the history of community involvement in the broader Lower Passaic River Study Area.

3.1 Highlights of Community Involvement to Date

The Diamond Alkali Site has generated a high level of public interest since it was first identified in the 1980s. The EPA's early outreach efforts on the Lower Passaic River included alerting the public about New Jersey's prohibitions and advisories on fish and crab consumption for the Lower Passaic River and Newark Bay.

In order to foster community involvement in the Lower Passaic River cleanup, beginning in 2004, the EPA convened quarterly meetings with stakeholders including the Partner Agencies, municipalities, PRPs and other interested parties and members of the public called Project Delivery Team (PDT) meetings. At the PDT meetings, the EPA reported on progress on various aspects of the Lower Passaic River investigation and cleanup work that was underway, including the focused

study of the lower 8.3 miles. In 2011, PDT meetings were replaced by **CAG** meetings.

In 2009, the EPA facilitated the formation of a CAG, comprised of stakeholders with a broad range of interests. Representatives of EPA, NJDEP and the other Partner Agencies routinely attend CAG meetings, which are open to the public and generally held every month or every other month, at which any stakeholder may be invited by the CAG chairs to share Passaic River-related information with the community.

For the lower 8.3 miles, the EPA published an early draft FFS on its website in June 2007, inviting comment from all stakeholders. Further outreach efforts included convening PDT workgroup meetings to discuss formulating cleanup options, discussing current and future uses of the river with the CAG, convening a meeting of a broad range of stakeholders (from PRPs to municipal officials to environmental and community

groups) in February 2011 to share views about remedial alternatives, discussing recreational uses of the river below Dundee Dam with rowing clubs, and consulting with the Corps on current and future uses of the federally authorized navigation channel. The EPA's Region 2 office also consulted with the EPA's Contaminated Sediments Technical Advisory Group (CSTAG) and National Remedy Review Board (NRRB), each of which provided an opportunity for community participation in 2008 and 2012.

Then, in 2014, during the public comment period for the lower 8.3-mile Proposed Plan, the EPA held a series of public meetings in Newark, Kearny and Belleville to present the findings of the RI, the FFS and the EPA's Proposed Plan to the public, including local residents and officials, those who use the river for recreational or commercial purposes, and any other interested parties. The EPA also participated in various public forums and meetings sponsored by stakeholders to present information and answer questions about the RI/FFS and Proposed Plan.

3.2 Timeline of Major Community Involvement Activities

Table 7 lists major community involvement activities associated with the cleanup of the Lower Passaic River.

Table 7: Major Community Involvement Activities

DATE	ACTIVITY
2004	Quarterly meetings of the Project Delivery Team (PDT) convened to report on the various aspects of the Lower Passaic River investigation, including the focused study of the lower 8.3 miles of the river.
2004	Technical Assistance Grant (TAG) awarded to the Passaic River Coalition (PRC). PRC uses this grant to assist the community in interpreting technical documents associated with the study of the Lower Passaic River.
2004-2005	The EPA conducts community interviews with more than 50 individuals across a broad spectrum of interests and in a variety of locations in NJ from Monmouth County, Keyport, and Sandy Hook to Newark, Rutherford, Clifton, and New York City.
2006	Community Involvement Plan for the Lower Passaic River and Newark Bay published.
2007	Draft Focused Feasibility Study (FFS) released on the EPA's website, inviting comment from all stakeholders.
2008	Eight stakeholder groups associated with the site are invited to present their views to the EPA's Contaminated Sediments Technical Advisory Group (CSTAG).
2009	Community Advisory Group (CAG) specific to the Lower Passaic River cleanup is formed. CAG meetings are open to the public and are held monthly or every other month.
2011	The EPA convenes a meeting with a broad range of stakeholders to share views about cleanup options for the lower 8.3 miles of the Passaic River.
2012	The EPA provides a summary of the RI/FFS to CAG and stakeholders, so that they can provide input on the cleanup of the lower 8.3 miles of the Passaic River to the National Remedy Review Board (NRRB) and CSTAG. Written comments are submitted by a variety of environmental organizations, the CAG, PRPs, federal and state agencies, and the Ironbound Community Corporation.
2013	A Technical Assistance Grant (TAG) is awarded to the NY/NJ Baykeeper.
2014	At the request of the CAG, the EPA provides them with a Technical Assistance Services for Communities (TASC) contractor to respond to technical questions related to the lower 8.3 mile RI/FFS. The RI and FFS Reports are released for the lower 8.3 miles of the Passaic River, along with its Proposed Plan for remediation. The EPA solicits public comment on these documents, which are made available at local information repositories as well as on www.ourpassaic.org . The EPA holds a series of public meetings in Newark, Kearny and Belleville to present the RI/FFS and the Proposed Plan to the public. Fact sheets summarizing the Proposed Plan and the various cleanup options are produced in English, Spanish and Portuguese and distributed at meetings and online. The EPA conducts additional community interviews.
2016	The EPA conducts a third round of community interviews to assess the concerns, knowledge level, and needs of the community as related to the lower 8.3-mile ROD.

3.3 Overview of 2016 Community Interview Process

Three separate rounds of community interviews were conducted for the Lower Passaic River project. The first interviews were conducted in 2004-2005; the second round was conducted in 2014; and the third round in 2016 for a total of 85 interviews. In each round, a series of questions were asked across a variety of subjects, and interviewees were encouraged to share their opinions, concerns, suggestions and criticisms in an honest and straightforward manner and fully engage with the EPA (and Partner Agencies).

In June and July of 2016, the EPA (with contractual support from the Louis Berger Group) conducted a round of community interviews to assess the concerns, knowledge level and needs of the community as related to the lower 8.3-mile ROD signed in March 2016. In order to expand upon the information gathered from previous interviews, interviews

were targeted to the towns of Belleville, Kearny and Newark's North Ward. Approximately 12 individuals were interviewed from local civic, ethnic and social organizations, as well as representatives of local government, educators and coaches from local schools, recreational users of the river, and community members living near the Lower Passaic River.

A series of questions were asked to ascertain the public's knowledge of the recent EPA decision on the cleanup of the lower 8.3 miles of the Passaic River; to uncover gaps in the knowledge base and develop efficient means to close them; to identify key concerns about the cleanup and its impacts to local land and business development, river access and health issues. Information gathered during these conversations was incorporated into this CIP. A copy of the community interview questions may be found in [Appendix 16](#).

3.4 Key Community Concerns

The lists below highlight key concerns communicated to the EPA during the third round of community interviews. Community concerns associated with the first round of interviews may be found in the 2006 CIP, accessible at www.ourpassaic.org. Concerns raised in the second round may be found in [Appendix 16](#).

SUPERFUND CLEANUP ACTIVITY CONCERNS

- Concerns were raised about the legal process potentially taking a long time and the cleanup being dragged out. The majority of interviewees expressed a desire for the cleanup to commence as soon as possible.
- Cleanup activities should take into consideration river traffic, especially the groups who row regularly on the river.
- Questions and concerns about the dredging included: how it will affect wildlife, how the dredged material will be transported and where it will go.
- One recommendation was to produce more information about the dewatering process and dredged materials management in general.
- Several concerns were raised about quality of life issues such as air quality, noise and odor concerns during work.

- Some interviewees mentioned trucking route concerns and potential impacts on local residents and businesses, as well as the need to take into account traffic and bridge closures.
- The EPA should coordinate early with local municipalities before cleanup activities on the river begin.
- Important that jobs are created locally. Employment, training and local hires were highly recommended. In addition, transparency of the contracting process was recommended.

REDEVELOPMENT AND RIVER ACCESS CONCERNS

- Most interviewees expressed a desire for as much park and open space as possible along the river.
- Waterfront access was cited as a significant factor in economic development of the cities along the river.
- Nearly all interviewees stated that public input is essential regarding economic development issues.
- Overall, nearly all interviewees were interested in economic development and the role the river cleanup can play; some expressed concerns about the potential impacts of gentrification.

HEALTH AND QUALITY OF LIFE CONCERNS

- There was general knowledge of anglers fishing along the Lower Passaic River, though interviewees lacked information about fish consumption.
- Some people expressed concerns about the homeless population along the river and potential consumption of contaminated fish, though none had witnessed homeless people fishing first-hand.
- Rowers are concerned about debris and trash in the water as well as general water quality concerns since they may come into contact with the water.

OUTREACH CONCERNS AND SUGGESTIONS

- A majority of interviewees indicated a preference for informal meetings held in the evening. One person suggested a combination of formal and informal meeting formats and several mentioned that small group interaction is key.
- Suggestions for increased outreach included: cell phone text messaging, door-to-door visits, posters and banners, including information with utility bills, public access TV and radio stations, posting information to town websites, and attending community festivals as well as community board meetings and other groups' meetings.
- The EPA should make use of social media (Instagram, Snap Chat, Facebook, Twitter) to disseminate project-related information.

- Information should be provided in different languages to reach people who may not speak English (see Section 4.2). Information should be provided to local ethnic publications, especially in Spanish and Portuguese.
- For elderly residents, direct postal mailings were recommended as the most effective method of communication as well as continued outreach to senior groups.
- There was some awareness of the CAG by interviewees, but few participants attend regularly and some do not attend at all. There was an additional concern expressed about the need to recruit residents from mid-river and other towns to join the CAG.
- Most respondents believed that fact sheets are helpful, but felt that the EPA should use illustrations and graphics to explain technical issues.
- Few interviewees were aware of www.ourpassaic.org. Others recommended that it be more user-friendly.
- Few interviewees had familiarity with the Proposed Plan.
- In general, increased public education about the Lower Passaic River was strongly recommended. Suggestions were made that the EPA build capacity with local groups and thought leaders to conduct and expand outreach.



COMMUNITY PROFILE

The following section describes the current physical, social, and economic conditions of the lower 8.3 miles of the Passaic River. Information presented below was retrieved from the U.S. Census, NJ GIS, county websites, and municipal websites, among other sources. Some topics are presented at a county-specific level, while other topics such as population and demographics are discussed in finer detail.

4.1 Land Use Characteristics and Infrastructure

The lower 8.3 miles of the Passaic River are located in a highly developed urban area. At the mouth of the river and around Newark Bay, the near-shore land uses are commercial and industrial, in part to take advantage of the transportation infrastructure (rail, air and marine). About four miles upriver from Newark Bay, commercial uses of near-shore properties begin to be mixed with more residential and recreational uses as well. There are narrow bands of park and open space along the river, surrounded by commercial

and dense urban residential development. Near river mile seven, there are marinas and boat launches along with park land surrounded by more suburban residential neighborhoods. Hard shorelines, such as bulkhead and riprap (some with overhanging vegetation) make up approximately 95 percent of the banks of the lower 8.3 miles, while aquatic vegetation predominates along about 5 percent of the banks. Approximately 100 acres of the lower 8.3 miles consist of mudflats. Intertidal mudflats and the associated shallow-water subtidal areas are important habitats for estuarine organisms, providing valuable foraging habitat for fish, blue crab and water birds.



Aerial view of Port Newark, Newark Bay, in Bayonne, NJ

4.1.1 REDEVELOPMENT

Since the mid-1990s, portions of the lower 8.3 miles of the Passaic River have experienced significant real estate investment, including: the redevelopment of Brownfields, construction of new residential housing units, increased multi-modal transportation options, complete street improvements, enhanced open spaces, and the provision of public walkways. According to an August 2016 article in the New York Times (that cites the City of Newark's Department of Economic and Housing Development) about \$2 billion in commercial and residential development is currently underway, 1,500 units of housing are under construction, and another 4,000 are planned. Notable investments in Harrison include the Red Bull Arena, a 25,000-capacity stadium that serves as the home of Major League Soccer's New York Red Bulls. The first phase of Newark Riverfront Park was completed in August 2013 and now connects downtown Newark and the Ironbound to the Passaic River. The park has been widely praised as an oasis of active and passive recreation between the river and Raymond Boulevard. In October 2016, construction crews began the third phase of development, which will add four more acres of park land along the Passaic River. A signature feature of the expansion will be the Horizon Wellness Trail.

4.1.2 TRANSPORTATION INFRASTRUCTURE

Cities and towns throughout the study area are linked by a variety of major highways, including the New Jersey Turnpike (I-95), the Phillipsburg–Newark Expressway and the Newark Bay Extension of the New Jersey Turnpike (I-78), the Garden State Parkway, I-80, and I-287. The entire area is served by public transportation in the form of bus, train, and light rail service, and there is ferry service to and from New York City. Two heavily used transit systems within the study area are NJ TRANSIT and the Port Authority Trans-Hudson (PATH). Newark-Liberty International Airport, one of the nation's busiest international travel hubs, is located two miles south of downtown Newark.

THE NORTH JERSEY TRANSPORTATION PLANNING AUTHORITY (NJTPA)

is the federally authorized Metropolitan Planning Organization for all counties in the lower 8.3 miles.

4.1.3 DRINKING WATER, SEWERS AND POWER

The Lower Passaic River is not used as a source of drinking water. Drinking water is supplied by a number of water companies, including the Passaic Valley Water Commission, United Water, and Newark Water. It is derived from a variety of reservoirs including, but not limited to the Oradell Reservoir, the Boonton Reservoir, and the Wanaque Reservoir. Power is provided by PSE&G. The sewer system is operated by the Passaic Valley Sewerage Commission (PVSC), in conjunction with the municipalities that operate certain portions of the system.



4.1.4 FLOOD CONTROL

The Passaic River Basin has been recognized by hydrologic experts as one of the most flood-prone river systems in the United States. On April 23, 2010, Governor Christie signed Executive Order 23, establishing the Passaic River Basin Flood Advisory Commission to develop and recommend solutions to the chronic flooding problems that plague New Jersey residents. In addition, the Corps signed an agreement with NJEDP in 2014 to evaluate a potential **coastal storm risk management project** in and surrounding tidal portions of the Passaic River. In the aftermath of Superstorm Sandy, a number of communities in the Passaic River Basin are pursuing flood risk reduction changes to their master plans, zoning ordinances, and flood prevention ordinances, to guide future development away from floodplains or prevent future development in flood-prone areas.

4.1.5 RECREATION

There is a long tradition of rowing on the Passaic River, beginning with regattas held annually since the late 1800s. That tradition survives in the form of the Passaic River Rowing Association and the Nereid Boat Club, along with several high school rowing programs. These organizations sponsor regular rowing practice and events on the Passaic and promote stewardship of the Passaic River environment. Rowing associations and boating groups use the Passaic River from the spring to the late fall, which includes hosting and participating in regattas and races. Other types of recreational boating occur throughout the Lower Passaic River. For a list of seasonal events and activities related to the Passaic River, please see **Appendix 14**.

4.2 Population and Demographics

The following description of the population in the project area includes the eight municipalities that are most likely to be affected by the lower 8.3-mile cleanup, depending on where the sediment processing facility is located. Subsections 4.2.1 through 4.2.4 and 4.2.7 are discussed based upon statistical analysis of American Community Survey (ACS) data of the eight city area. The ACS provides cross-sectional data on social, economic, demographic and housing characteristics of the U.S. population at various geographic levels (nation, region, state, congressional district, census tract). In general, ACS estimates are period estimates that describe the average characteristics of population and housing over a period of data collection. The 2010-2014 ACS five-year estimates represent the period from January 1, 2010 through December 31, 2014. Multiyear estimates cannot be used to say what is going on in any particular year in the period, only what the average value is over the full period.

PUBLIC PARKS AND RECREATIONAL AREAS LOCATED NEAR THE LOWER PASSAIC RIVER

- Dundee Preserve, Clifton
- Glotzbach Memorial Park, Nutley
- Great Falls National Park, Paterson
- Hatheway Park, Wallington
- Kearny River Bank Park, Kearny
- Minish Park, Newark
- Pennington Park, Paterson
- Pulaski Park, Passaic
- Riverfront Park, Newark
- Riverside County Park, Lyndhurst
- Rutherford Memorial Park, Rutherford
- Van Winkle Park, Rutherford
- Waterfront Park, Wallington
- Westside Park, Paterson

4.2.1 POPULATION

According to ACS five-year estimates, the total population for the eight municipalities that are most likely to be affected by the lower 8.3-mile cleanup was approximately 821,090 people for the period between 2010 and 2014. The largest population was concentrated in Newark, which included 278,750 people on average between 2010 and 2014.

4.2.2 AGE

Median age represents the midpoint of the population. Half of the population is older than the median age, and half of the population is younger. Based on a five-year average, the median age in the eight municipalities was approximately 35 years for the period of 2010-2014. The lowest median ages were found in Newark (~32) and Elizabeth (~33). The highest median ages were in Belleville and Bayonne (~38).

4.2.3 HOUSEHOLD INCOME

Median income is the amount that divides the income distribution of a population into two equal groups, half having income above that amount and half having income below that amount. The median household income of residents in the eight municipalities, on average, was \$53,523 based on ACS five-year estimates for the period of 2010-2014. Based on data for the period 2010-2014, residents of Newark had the lowest median household income of \$34,012, while residents of Belleville had the highest median household income of \$65,462.

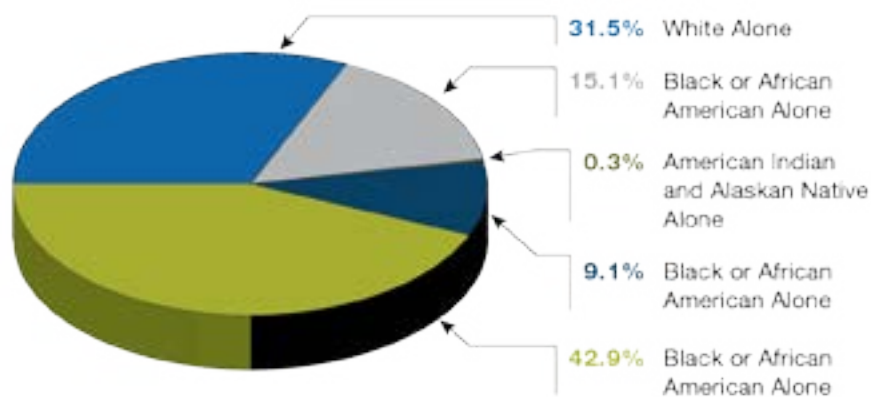
The U.S. Census Bureau's poverty statistics represent the number of people below the bureau's poverty thresholds. Poverty thresholds vary by family size, number of children, household units (single vs. multi-family), and whether or not respondents are elderly.

The poverty rate for the category "all families" living in the eight municipalities was approximately 15 percent, on average, during this time period. Newark had the highest poverty rate for all families at approximately 27 percent. For the purposes of statistical analysis, a family consists of a householder and one or more other people living in the same household who are related to the householder by birth, marriage or adoption. Unmarried couple households can be family or nonfamily households depending on the relationship of others in the household to the householder.

COMMUNITIES MOST LIKELY TO BE AFFECTED BY THE CLEANUP OF THE LOWER 8.3 MILES OF THE PASSAIC RIVER

- Belleville, Essex County
- Bayonne, Hudson County
- East Newark, Hudson County
- Elizabeth, Union County
- Harrison, Hudson County
- Jersey City, Hudson County
- Kearny, Hudson County
- Newark, Essex County

Figure 4: Race in the Eight Municipalities



Source: U.S. Census, ACS 5-Year Estimates 2010-2014. Data reflects respondents who claimed only one race. For the purposes of this analysis, a statistically insignificant number self-identify as Native Hawaiian and Other Pacific Islander alone. Because Table 3 presents 5-year estimates, the percentages do not equal 100 percent. For further information on statistical standards and the computation and use of standard errors, refer to the Census Bureau's Demographic Statistical Methods Division.

4.2.4 RACE AND ETHNICITY

Within the eight municipalities, the vast majority of the population (97 percent) identified as one race during the period of 2010-2014 (see Figure 3). Among these individuals, 15.1 percent self-identify as Black or African American alone; 0.3 percent self-identify as American Indian and Alaskan Native alone; 9.1 percent self-identify as Asian alone; and 31.5 percent self-identify as white alone. The U.S. Census does not have an estimate for Hispanic or Latino alone; 42.9 percent self-identify as Hispanic or Latino of any race.

4.2.5 IMMIGRANT AND MINORITY POPULATION AND LINGUISTIC TRENDS

No single statistic or set of statistics can capture the complex population mix and levels of integration in urban America. Consequently, this section discusses communities broadly. New Jersey is recognized as one of the most racially and ethnically diverse states in the nation. According to data compiled by Rutgers University, the state's immigrant population has risen significantly – from 967,000 people in 1990 to more than 1.8 million in 2013. The state's largest

foreign born populations come from India (10 percent), Mexico (6.7 percent), and the Philippines (4.9 percent). The most densely settled areas of New Jersey (e.g., Newark, Jersey City, Elizabeth, and Paterson) are likewise high-density centers of immigrant populations. For example, Jersey City has the second highest Asian Indian population in the state.

Within the eight municipalities most likely to be affected by the cleanup of the lower 8.3 miles of the Passaic River, a number of languages other than English are spoken at home. Spanish is the second most spoken language in New Jersey with more than

Table 8: Demographic Summary Statistics

CITY OR STATISTICAL AREA									COMBINED AREA	
	Bayonne	Belleville Twnship	East Newark	Elizabeth	Harrison	Jersey City	Kearny	Newark	Total	Average (Rounded to Nearest Whole)
County	Hudson	Essex	Hudson	Union	Hudson	Hudson	Hudson	Essex		
Total Population	64,763	36,201	2,577	126,964	14,436	255,861	41,538	278,750	821,090	
Median Age (Years)	38	38.3	32.8	32.5	34.5	33.5	36.7	32.1		35
Median Household Income (Dollars)	\$55,224	\$65,462	\$53,750	\$43,966	\$53,772	\$58,907	\$63,093	\$34,012		\$53,520
Poverty Rate for All Families	13.0%	7.1%	16.6%	17.0%	12.0%	16.2%	8.4%	26.9%		15%
% of the population aged 25+ with a least a high school diploma or equivalent	88.1%	86.3%	79.0%	73.2%	76.1%	84.9%	81.5%	71.4%		80%

1 million speakers in the state. Chinese (including Mandarin, Cantonese, and other dialects) is spoken by 111,000 people in New Jersey.

According to a 2015 article by NJ Spotlight that relies on U.S. Census data, three of the “top 10 multilingual municipalities” in New Jersey are located within the communities potentially impacted by cleanup of the lower 8.3 miles of the Passaic River. They include Jersey City, Newark, and Elizabeth. Among residents of Newark, there are an estimated 80,000 Spanish-speakers, 21,000 Portuguese and Portuguese Creole speakers, 2,600 French Creole speakers and nearly 5,000 speakers of various African languages. Among the 67,000 Spanish speakers in Elizabeth, significant majorities are of Colombian, Ecuadoran, Salvadoran, Dominican, Cuban and/or Peruvian descent. Additionally, there are approximately 8,000 Portuguese speakers and 3,600 French Creole speakers.

TOP 10 LANGUAGES BESIDES ENGLISH SPOKEN AT HOME IN NJ (2009-2013):

- | | |
|---------------------|-------------|
| 1. Spanish | 6. Korean |
| 2. Chinese Dialects | 7. Gujarati |
| 3. Portuguese | 8. Polish |
| 4. Tagalog | 9. Hindi |
| 5. Italian | 10. Arabic |

4.2.6 ENVIRONMENTAL JUSTICE

On February 11, 1994, President Clinton issued Executive Order 12898. This order directs agencies to address environmental and human health conditions in minority and low-income communities to avoid the disproportionate placement of any adverse effects from federal policies and actions on these populations. The EPA defines environmental justice as the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.

Conditions giving rise to environmental justice concerns are specific to individual communities and their histories. Contributing factors may not be related to the cleanup of the Lower Passaic River, but are relevant to its impact on the health of the community. Urban communities typically face higher levels of pollution from multiple sources, including toxic waste sites, industrial plants and heavy city and port traffic. Environmental justice populations may also struggle with economic divestment, aging infrastructure and Brownfields. Economic divestment is the reduction of assets within a community or the opposite of investment.

4.2.7 EDUCATION

Within the eight municipalities most likely to be affected by the cleanup of the lower 8.3 miles of the Passaic River, approximately 80 percent of the population, on average, aged 25 years and older possessed at least a high school diploma or equivalent for the period 2010-2014. Municipalities with the lowest percentage of individuals possessing this level of education or higher include Newark (71.4 percent) and Elizabeth (73.2 percent).

THERE ARE SEVERAL LARGE UNIVERSITIES IN THE LOWER 8.3 MILE STUDY AREA:

- Rutgers University – Newark
- St. Peter's University
- The New Jersey Institute of Technology (NJIT)
- The University of Medicine & Dentistry of New Jersey



COMMUNITY INVOLVEMENT ACTION PLAN

The following section discusses specific community outreach tools and activities that the EPA has used successfully. Not all of the tools listed will necessarily be used during the cleanup of the lower 8.3 miles of the Passaic River. In addition, the EPA may develop other activities to inform the community of the project and encourage community participation.



5.1 Communication Goals

The EPA is committed to involving the public in all stages of the Lower Passaic River cleanup. Four major goals will guide the community involvement and outreach process:

GOAL 1: BE APPROPRIATE

The EPA aims to use the most appropriate communication methods and tools for each segment of the public because one size does not fit all.

GOAL 2: BE UNDERSTANDABLE

The EPA endeavors to use clear, consistent language when communicating with the public. Technical aspects of the cleanup and decision-making processes will be explained using everyday language.

GOAL 3: BE RESPONSIVE

The EPA will respond to community questions and concerns and will solicit feedback from community members throughout the cleanup process. Every effort will be made to respond in a timely manner.

GOAL 4: BE ACCURATE

The EPA strives to provide the public with accurate and timely information. When new information is available, it will continue to be shared through the most appropriate methods.

To attain these goals, the EPA will reach out to and seek to involve the public in the broadest sense – those community members, interest groups and other organizations or institutions located in the project areas who are potentially affected by the project or problems being addressed through the project,

or who closely identify with the cleanup or restoration efforts associated with the Lower Passaic River. The stakeholders that constitute the “public” within the project areas include:

- Community members, including homeless populations
- Elected officials
- Environmental organizations
- Academia
- Science foundations
- Business/Economic development organizations
- Potentially Responsible Parties (PRPs)
- Local, state, and federal agencies
- Civic/community groups
- Local media
- Sports/recreational clubs

The EPA will seek to use state and local officials to assist in community outreach and involvement in order to increase the frequency and consistency of communications. The agency will routinely coordinate with and brief local officials to ensure they are informed about all major aspects of the project and to provide opportunities for input into decision-making.

5.2 Community Involvement Tools and Outreach

Table 9 lists key tools that the EPA may use to communicate with stakeholders. Subsequent sub-sections discuss tools and outreach in further detail.

Table 9: Key Tools

TOOL	METHOD
Coordination with Local Government and Other Agencies	Coordinate with local government and other state and federal agencies to keep them informed about project activities and will schedule briefing meetings as needed to discuss the progress of cleanup.
Community Advisory Group	Provide information to the CAG.
Community Events	Attend community events such as fairs, festivals, boating regattas and races, and cultural festivities to distribute information and answer questions.
Community Involvement Coordinator	Return calls or respond to email in a timely manner.
Email	Continue to maintain an email group list to quickly provide the public with timely information on project developments and news.
Fact Sheets	Produce fact sheets throughout the life of the project to keep the public informed and educated on it and the decision-making process. Dissemination to the public through direct mailings, Web postings and at public forums will continue.
Fish and Crab Consumption Advisories	Work with NJDEP to educate communities about the potential dangers of eating contaminated fish and crab.
Health and Safety Information	<p>Share information pertaining to health and safety with the community during scheduled public meetings and in informational materials created for the site. Anticipated topics of interest include, but are not limited to:</p> <ul style="list-style-type: none"> • Trucking and transportation routes • Work hours • Worker protection • Community safeguards • Environmental monitoring • Emergency response • River use restrictions
Information Repositories	Update information repositories with copies (either electronic or paper) of major site documents, fact sheets, and other relevant items as they become available.

TOOL	METHOD
Maps and Visual Aids	Include maps, photographs, and other visual aids in documents and fact sheets, at public sessions, and on the website.
Media Notification/Media Events	Provide presentations on site-related topics such as the design and cleanup process and monitoring and sampling techniques.
Presentations	Provide presentations on site-related topics such as the design and cleanup process and monitoring and sampling techniques.
Press Releases	Disseminate press releases to local area media.
Project Website www.ourpassaic.org	Post relevant project documents to the website, including new fact sheets, final technical documents, meeting announcements, etc.
Public Comment Period	Solicit public comment at key milestones and as required by law.
Public Input	Accept informal public input throughout the cleanup process.
Public Meetings	EPA will announce public meetings via a variety of methods such as: newspapers, the project website, town websites and the email list.
Public Notices	Announce public comment periods and public meetings via formal public notices in local publications and via the project website.
School/Education Outreach	Provide project information to local schools and academic institutions and will work with existing educational programs to “piggyback” project information and identify additional opportunities for environmental education.
Social Media	Post public announcements, meeting reminders and other relevant information to the EPA’s social media accounts such as Twitter and Facebook.
Technical Assistance Services	Respond to community requests for technical assistance to understand the cleanup.

5.2.1 COMMUNITY ADVISORY GROUP (CAG)

DESCRIPTION: A CAG is made up of representatives of diverse community interests who serve as liaisons for their communities and constituents. A CAG can assist the EPA in making better decisions on how to clean up a site. It offers a unique opportunity to hear—and seriously consider—community preferences for site cleanup and restoration. The existence of a CAG, however, does not eliminate the need for the EPA to keep the community informed about plans and decisions throughout the cleanup and restoration process.

GOAL: Provide a public forum for community members to present and discuss their needs and concerns related to the decision-making process. This tool will also provide the community with an arena to raise issues already voiced as key concerns.

METHOD: The EPA will continue to communicate regularly with the CAG. The EPA will attend public CAG meetings and planning sessions. The EPA will present regular updates to the CAG and provide the CAG opportunities to provide comments on key aspects of the project and cleanup progress. In addition, the EPA will provide presentations on topics of interest as requested.

5.2.2 COMMUNITY EVENTS

DESCRIPTION: The EPA will attend community events such as fairs, festivals, boating regattas and races and cultural festivities to distribute information and answer questions.

GOAL: Community events provide the EPA with the opportunity to build and maintain positive relationships with residents. These events also allow the agency to understand and appreciate the variety of events and activities that are important and enjoyed by community members. Community events also serve to enhance awareness about environmental justice issues and allow the EPA to interact directly with community members who might not typically attend EPA meetings.

METHOD: The EPA will continue to supply staff and provide information at a booth or table at appropriate events. Refer to [Appendix 14](#) for a list of seasonal events and activities.

5.2.3 COORDINATION WITH LOCAL GOVERNMENT AND OTHER AGENCIES

DESCRIPTION: The EPA will coordinate with local government and other state and federal agencies to keep them informed of project activities and obtain feedback on their concerns. Communication with these representatives will continue through the life of the project.

GOAL: To ensure that local government officials and other state and federal agencies are kept informed of project activities and issues that may impact their constituencies. Ongoing coordination with local governments and other agencies will address communities' concerns that may be associated with the project. Coordination will also foster consistency among local health advisories and clarify the roles played by various governmental entities.

METHOD: The EPA will continue to brief local government officials and other state and federal agencies on the cleanup progress throughout the life of the project.



5.2.4 DOOR-TO-DOOR NOTIFICATIONS

DESCRIPTION: When the EPA or its contractors are working in the field or in the river, the agency may provide notices or solicit feedback from residents and businesses through door-to-door notifications. In person outreach will also be attempted with any homeless population in the area.

GOAL: To communicate specific information regarding active field work or construction and convey pertinent health or safety information that may impact local residents or businesses.

METHOD: When the EPA or its contractors will be performing work that may impact nearby residences or businesses, representatives of the agency may make personal visits to those immediately affected to ensure that they are properly notified.

5.2.5 EMAIL

DESCRIPTION: Electronic mail can be used to contact agency representatives for information or to ask questions and receive answers about the projects. Email addresses and links are provided on the project website at www.ourpassaic.org, and email contact information is included in all outreach materials.

GOAL: Email provides another method to assist the public in providing input or requesting information.

METHOD: The EPA maintains an email list to provide the public with news and timely information on project developments.

5.2.6 FACT SHEETS

DESCRIPTION: Fact sheets, also called project updates, are brief documents written in plain language, often containing user-friendly graphics, to help the public understand highly technical reports, concepts, and information.

GOAL: Provide information about the cleanup in an easy-to-understand format.

METHOD: Fact sheets will continue to be produced throughout the life of the project to keep the public informed on cleanup progress and the decision-making process. Dissemination to the public through email, Web postings, and at public forums will continue. As needed, the EPA will provide translation of fact sheets and project updates into Spanish and/or Portuguese. Please see [Appendix 17](#) for examples of fact sheets.



TO SIGN UP FOR EPA EMAILS,
PLEASE CONTACT:

Sophia Rini, Community Involvement Coordinator
rini.sophia@epa.gov

Alice Yeh, Project Manager
yeh.alice@epa.gov

5.2.7 FIELD NOTIFICATIONS

DESCRIPTION: This type of information consists of advisories, restrictions and explanatory signs posted to clearly mark for the public any project work areas and access restrictions.

GOAL: These notifications are intended to keep the public informed of project field activities and maintain public safety. They will address the specific key public concern of the potential health issues related to the Lower Passaic River, such as New Jersey's prohibitions against eating fish and crab due to contamination.

METHOD: All advisories, signs and restrictions to access or project work areas will continue to be clearly posted and may be translated into languages other than English. Health and Safety Plans will also be used to inform and maintain a safe environment for both the public and project workers.

5.2.8 INFORMATION REPOSITORIES

DESCRIPTION: Information repositories are located in local public buildings such as libraries, universities or government offices where site-related and supporting documents are available for public review. Information repositories for the Lower Passaic River Restoration Project and Newark Bay Study are located at the EPA Records Center, Newark Public Library, and Elizabeth Public Library (see [Appendix 12](#)). The documents in the information repositories (called the Administrative Record) are also available on the EPA's website. (<https://semspub.epa.gov/src/collection/02/AR63167>)

GOAL: Provide accessible public locations at which residents can read and copy official documents. Provide a website where stakeholders can download and read documents.

METHOD: The EPA will continue to maintain the information repositories, adding documents and information as they become available.

5.2.9 MAPS AND VISUAL AIDS

DESCRIPTION: Maps and visual aids help people understand the geography of the site and locations of activities and resources, especially in relation to where they live, work, and attend school.

GOAL: To communicate complex issues simply and effectively.

METHOD: Inclusion of maps, photographs, and other visual aids in documents and fact sheets, at public sessions, and on the website www.ourpassaic.org.

5.2.10 MEDIA NOTIFICATION/ MEDIA EVENTS

DESCRIPTION: The EPA will continue to provide updates and information to local newspapers, radio and television outlets.

GOAL: To reach a large audience quickly and reinforce important messages and information related to the project.

METHOD: The EPA will continue to coordinate with key stakeholders to ascertain the best media outlets to reach the target audience, ensuring that the entire project area is covered by those outlets and that the information presented is concise and understandable. See [Appendix 13 – Media List](#).

5.2.11 NEWSLETTERS

DESCRIPTION: Newsletters use clear, understandable language, are more community-oriented, and may include articles, columns and photographs.

GOAL: To keep the public informed and up to date, and regularly provide information. Newsletters will serve to enhance the public knowledge base on issues regarding project status and information.

METHOD: If newsletters are created in the future, the EPA intends to distribute them via email and post them to www.ourpassaic.org. Print copies will be made available at public meetings and forums on the project and will be provided to stakeholder organizations, which will help achieve a broader reach. At other Superfund sites, newsletters have been mailed, on a limited basis, to those on a postal mailing list. The EPA may periodically review the efficiency and effectiveness of mailing newsletters on this project and will consult with stakeholders in deciding how this tool would be implemented.

5.2.12 PUBLIC COMMENT PERIOD

DESCRIPTION: This is a formal opportunity for community members to review and comment on various agency documents or actions. Comment periods are legally required for, among other things, proposed plans, consent decrees and the addition to or deletion of a site from the NPL.

GOAL: Provides an opportunity for the public to give meaningful input in the decision-making process.

METHOD: The EPA has announced each comment period through one or more of the following methods: public notices in local newspapers, email notifications and fact sheets to ensure that the public has sufficient opportunity to understand what is being presented, when comments will be accepted, how long the comment period will be open and how to submit comments.

5.2.13 PUBLIC INPUT

DESCRIPTION: Written communications and informal discussions with agency staff are just some of the ways that the EPA can be reached to communicate about project-related information. This open line of communication is important to gain better understanding of the public's concerns and needs, so that they can be addressed efficiently and effectively.

GOAL: Verbal comments and letters provide continued opportunity for the public to give input and allow the EPA to recognize trends in issues of public concern and identify areas that require information and clarification.

METHOD: Informal comments can be offered at any time, such as during availability sessions, open houses, community visits, and workshops. See [Appendix 3](#) for agency contact information. Written comments may be submitted via mail or email.

5.2.14 PUBLIC MEETINGS AND PUBLIC INFORMATION SESSIONS

DESCRIPTION: Public meetings are structured, formal meetings, often required by law, that are open to the general public, featuring a presentation and interaction with the public. Public meetings may feature the use of a court reporter and the issuance of meeting transcripts. Other types of meetings are less formal and may be held in a variety of formats including small group discussions, informal open-house style information sessions and poster presentations.

GOAL: To provide personal contact with agency representatives, update the community on site developments and address community concerns, ideas, questions and comments.

METHOD: At various stages throughout the project, the EPA will hold meetings to keep the public informed, answer questions and further explain the cleanup process. Each meeting will be structured to fit its purpose by using different formats (e.g. open houses, informal discussions, PowerPoint presentations, etc.).

5.2.15 PUBLIC NOTICES

DESCRIPTION: Widely distributed announcements of public comment periods, public meetings and major project milestones.

GOAL: Communicate an important announcement to as many people as possible.

METHOD: Public notices have been released to announce public comment periods and public meetings using a wide variety of places and methods, such as: email notices, project website announcements, press releases and newspaper display ads. The EPA has also reached out to stakeholder and community groups to request their assistance in getting out the word.

5.2.16 PUBLIC SERVICE ANNOUNCEMENTS (PSAS)

DESCRIPTION: Radio PSAs may be used to announce project news and provide basic information about upcoming public meetings and forums being held by the EPA on the project. Local public access television is also a medium that may be used as appropriate.

GOAL: To distribute project information to a broad audience, including non-English speakers.

METHOD: The EPA may produce PSAs, and working with appropriate local media, ensure that the announcements are delivered to as wide an audience as possible. PSAs will incorporate a reminder message, where feasible and appropriate, regarding fish and crab consumption advisories in effect for the Newark Bay and Lower Passaic River study areas.

5.2.17 PROJECT SITE VISITS/TOURS

DESCRIPTION: Small groups can be given guided tours to view project activities when such tours are appropriate, feasible and safe.

GOAL: Site visits and demonstrations provide the public with a good, working understanding of project work and conditions. Bringing the public to the project areas and demonstrating and/or discussing project activities in the field will provide project updates and address community concerns that surround the Lower Passaic River and Newark Bay.

METHOD: The EPA may conduct tours within the project areas to explain field activities and why they are important to the project. There may be activity or location-specific circumstances however, where the EPA will have to limit activities or areas visited given health and safety requirements.

5.2.18 PROJECT ROADMAP

DESCRIPTION: Over the course of the Lower Passaic River Study, a significant amount of technical work will continue to be performed, and many technical documents will continue to be developed, providing a basis for cleanup decisions. The roadmap will describe the major project activities and include a listing of the reports that will be prepared by the EPA. The roadmap will contain a description of the major issues addressed in each report and highlight some of the planned public involvement activities.

GOAL: The intent of the roadmap is to illustrate the general sequence of events that takes place over the period of time leading up to and including the decision-making process for the Lower Passaic River and Newark Bay Study Areas. The roadmap functions as an important tool to assist the public in understanding the flow of the projects, as well as the various types of documents that are part of the process. By illustrating the project in “installments,” the roadmap aids in addressing the public concern of how to best communicate the project over time.

METHOD: The EPA may create the project roadmap as a stand-alone document that will be periodically updated as work progresses.

5.2.19 PROJECT WEBSITES

DESCRIPTION: Electronic versions of technical reports, progress reports and updates on the Lower Passaic River cleanup are available on www.ourpassaic.org and via the [EPA's Diamond Alkali Superfund website. \(https://cumulis.epa.gov/supercpad/cursites/csinfo.cfm?id=0200613\)](https://cumulis.epa.gov/supercpad/cursites/csinfo.cfm?id=0200613) The websites also provide links to the websites of the Partner Agencies and to other related sources of information.

GOAL: The www.ourpassaic.org website provides key resources for accessing both general and specific information about the project, the Partner Agencies, and public outreach activities. Access to the website is available through home and public computers at libraries throughout the project area.

METHOD: The EPA will continue to post project updates, notices and technical documents in a timely manner. The website is updated and enhanced regularly. Moving forward, the EPA may periodically solicit input from the public at public forums and workgroup meetings on how to make the website more fun, interesting and useful. Feedback to the website contacts is encouraged.

5.2.20 SCHOOL/EDUCATIONAL OUTREACH

DESCRIPTION: The EPA will provide project information to local schools and academic institutions and will work with existing educational programs to “piggyback” project information and identify additional opportunities for environmental education.

GOAL: Educational outreach helps bring project awareness to new audiences and builds bridges between the agencies and various constituencies within the community. Engaging students and teachers will assist in addressing a number of community concerns such as: sharing important information about fish and crab consumption advisories, raising awareness of environmental justice issues and encouraging environmental stewardship.

METHOD: Educators and students may request a visit to their school by EPA staff. Agency staff will also maintain an open line of communication with groups that provide environmental education to local schools and partner with them when appropriate.

5.2.21 SOCIAL MEDIA

DESCRIPTION: The EPA may use social media (such as Twitter and Facebook) to post updates about the project and announce major project milestones.

GOAL: To reach more people and provide another method for sharing information.

METHOD: The EPA has used Twitter and Facebook to share press releases, send out CAG meeting reminders, etc. and may continue to write and post social media content regarding announcements and major project milestones.

5.2.22 SUPERFUND JOBS TRAINING INITIATIVE (SUPER JTI)

DESCRIPTION: Super JTI is an environmental cleanup job readiness program that provides free job training and employment opportunities for citizens living in communities affected by Superfund sites.

GOAL: To assist communities in the development of job opportunities and partnerships that remain long after a Superfund site is cleaned up, especially in communities facing environmental justice challenges.

METHOD: The EPA offers SuperJTI training through its Technical Assistance Services for Communities (TASC) Program (see 5.2.24) and is subject to funding availability. SuperJTI combines classroom instruction with hands-on training exercises for each participant. Program graduates gain the technical skills necessary to work on a broad range of projects in environmental remediation and construction fields. Positions may include dump truck drivers, environmental technicians, general production operators, material handlers and heavy equipment operators.

5.2.23 SURVEYS/FOCUS GROUPS

DESCRIPTION: The EPA will consider conducting print or telephone surveys to solicit public feedback. The EPA will also consider conducting focus groups on public concerns, issues and feedback regarding the project or specific issues within the project.

GOAL: Surveys and focus groups allow the EPA to continue to identify and address community concerns and issues related to the project. They also serve as a “snapshot in time” of the effectiveness of agency communication with the public and the establishment of meaningful dialogue. The EPA may also use this tool to gauge public concern/opinions about various key issues that have been raised, such as communications and the relationship between the public, agencies, and the PRPs, as well as land use and redevelopment issues.

METHOD: Surveys may be used as necessary, particularly in communities that have questions and concerns about the project, but may not have had much access to other community involvement and outreach activities. Focus groups may be helpful in assisting the agency to ascertain public awareness and feelings about specific issues within the project scope, such as fish consumption advisories, environmental justice issues, and specific populations of concern.

5.2.24 TECHNICAL ASSISTANCE GRANT (TAG)

DESCRIPTION: A TAG provides money to community groups so they can hire technical advisors to interpret and explain technical reports, site conditions and the EPA’s cleanup proposals and decisions at Superfund sites. An initial TAG of up to \$50,000 is available for any Superfund site that is on the EPA’s NPL or proposed for listing on the NPL where a response action has begun. As specified in Section 117(e) of the Superfund law, there can be only one TAG for each Superfund site. When the grant recipient changes, however, (e.g. when the EPA or the recipient terminates the original TAG), the process of applying for a TAG starts over.

GOAL: The goal of a TAG is to help improve a community’s understanding of the environmental conditions and cleanup activities at Superfund sites.

METHOD: The EPA will continue to provide TAG support. From 2013 to the present, the TAG has been held by the NY/NJ Baykeeper. (See [Appendix 10](#) – Stakeholder Groups for contact information.)

5.2.25 TECHNICAL ASSISTANCE SERVICES FOR COMMUNITIES (TASC) PROGRAM

DESCRIPTION: The national Technical Assistance Services for Communities (TASC) program provides independent assistance through an EPA contract to help communities better understand the science, regulations and policies of environmental issues and EPA actions. Under the TASC contract, a contractor provides scientists, engineers and other professionals to review and explain information to communities. The services are determined on a project-specific basis and provided at no cost to communities.

GOAL: To support community efforts to become more involved and work productively with the EPA to address environmental issues. The TASC program benefits communities by explaining technical findings and answering community questions, helping them understand complex environmental issues and supporting their active roles in protecting healthy communities and advancing environmental protection. The TASC program can also provide opportunities for environmental education, bring diverse groups together and help them get more involved and offer training and support environmental employment opportunities through the Superfund Job Training Initiative.

METHOD: Communities in the project areas may contact the EPA Region 2 TASC Coordinator. Requests are evaluated against a number of criteria to determine if technical assistance can be provided. More information on the TASC program and the criteria used to evaluate requests are available at EPA's website. (<https://www.epa.gov/superfund/technical-assistance-services-communities-tasc-program#map>)

EPA REGION 2 TASC COORDINATOR

Wanda Ayala
(212) 637-3676
ayala.wanda@epa.gov

5.2.26 TOLL-FREE HOTLINE

DESCRIPTION: The EPA may establish a toll-free hotline with recorded project information in both English and Spanish. The line will also provide connection to the appropriate agency representative.

GOAL: To provide the public with a direct method of communication with the EPA, which is particularly important for those individuals who may not have reliable Internet access.

METHOD: A toll-free hotline was created for the Tierra Removal with language options in English, Spanish, and Portuguese that is no longer in service. The EPA currently has a general Public Information Hotline that may be accessed toll-free at 1-877-251-4575.

5.3 Evaluation of Outreach

In order to assess the effectiveness of the community involvement and outreach efforts, the EPA may employ several tools to periodically evaluate messages, modes of communication, tools and outreach activities. Evaluations allow understanding of successes and weaknesses and enable the agency to retool strategies to better serve the public. This CIP will be reviewed and revised as necessary to reflect project progress and changes to community needs, concerns, issues and contacts.

Following interactive activities like public forums and poster sessions, the EPA may conduct a basic internal analysis, which involves assessing the ease of logistics, the number and representation of attendees and the appropriateness of information (i.e., was it sufficient to answer questions). The agency may also employ surveys and interviews to gauge public perceptions at various stages of cleanup. These may be conducted in person, via the Internet or over the phone.





APPENDIX 1: ACRONYMS & ABBREVIATIONS

ACS	American Community Survey
AOC	Administrative Order on Consent
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CIP	Community Involvement Plan
cm	Centimeter
COPCs	Contaminants of Potential Concern
CORPS	United States Army Corps of Engineers
CPG	Cooperating Parties Group
CSO	Combined Sewer Overflow
CSTAG	Contaminated Sediments Technical Advisory Group
cy	Cubic yard
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethylene
DDT	Dichlorodiphenyltrichloroethane
DDX	Dichlorodiphenyltrichloroethane
D/F	Dioxins/Furans
EJ	Environmental Justice
EPA	Environmental Protection Agency
ERA	Ecological Risk Assessment
FAQs	Frequently Asked Questions
FEMA	Federal Emergency Management Agency
FFS	Focused Feasibility Study

FS	Feasibility Study
ft	Feet
HRE	Hudson-Raritan Estuary Ecosystem Restoration Feasibility Study
HSRC	Hazardous Substance Research Centers
JTI	Jobs Training Initiative
NRDA	Natural Resource Damage Assessment
NRDAR	Natural Resource Damage Assessment and Restoration
NJDEP	New Jersey Department of Environmental Protection
NJDOT	New Jersey Department of Transportation
NJPDES	New Jersey Pollutant Discharge Elimination System
NOAA	National Oceanic and Atmospheric Administration
NPL	National Priorities List
NRRB	National Remedy Review Board
OMB	Office of Management and Budget
PAH	Polycyclic Aromatic Hydrocarbon
PANYNJ	Port Authority of New York and New Jersey
PCB	Polychlorinated Biphenyl
PCDD/F	Polychlorinated Dibenzodioxins and Furans
PDT	Project Delivery Team
PRPs	Potentially Responsible Parties
PSA	Public Service Announcement
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
RI/FS	Remedial Investigation and Feasibility Study
RM	River Mile
ROD	Record of Decision
TAG	Technical Assistance Grant
TASC	Technical Assistance Services for Communities
USFWS	United States Fish and Wildlife Service
UWFP	Urban Waters Federal Partnership
WRDA	Water Resources Development Act



APPENDIX 2: GLOSSARY

ADMINISTRATIVE RECORD:

The body of documents that “forms the basis” for the selection of a particular response at a Superfund site. For example, the Administrative Record for remedy selection includes all documents that were “considered or relied upon” to select the remedy through the record of decision.

ADVISORY: State-generated health warning regarding the consumption of contaminated animals (e.g., fish, waterfowl). These advisories include advice on how to reduce exposures to chemical contaminants in fish and game by avoiding or reducing consumption and by the use of filleting/trimming and cooking techniques to further reduce contaminant levels. NJDEP issues the fish consumption advisories in NJ.

BIOACCUMULATION: The process by which the chemical concentration in an aquatic organism achieves a level that exceeds that in the water, as a result of chemical uptake through all possible routes of exposure.

BROWNFIELDS: Abandoned, idled or under-used industrial and commercial properties where expansion or redevelopment is complicated by real or perceived environmental contamination.

CAPPING: A technology to address contaminated sediment which places clean sand or gravel over the contaminated sediment to isolate the contaminants from the surrounding environment.

CLEANUP: Actions taken to deal with a release or threat of release of a hazardous substance that could affect humans and/or the environment. The term “cleanup” is sometimes used interchangeably with the terms “remedial action,” “remediation,” “removal action,” “response action,” or “corrective action.”

COMMUNITY: An interacting population of various types of individuals (or species) in a common location; a neighborhood or specific area where people live.

COMMUNITY ADVISORY

GROUP (CAG): A committee, task force or board made up of residents affected by a Superfund or other hazardous waste site. A CAG provides a way for representatives of diverse community interests to present and discuss their needs and concerns related to the site and the site cleanup process. CAGs are a community initiative and responsibility. They function independently of the EPA and the other partner agencies.

COMMUNITY INVOLVEMENT

AND OUTREACH: The term used to identify the process for engaging in dialogue and collaboration with communities. Community involvement is founded on the belief that people have a right to know what the government is doing in their community and to have a say in it. Its purpose is to give people the opportunity to become involved in the government's activities and to help shape the decisions that are made.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA):

Commonly known as Superfund, CERCLA is intended to protect human health and the environment by investigating and cleaning up abandoned or uncontrolled hazardous waste sites. Under the program, the EPA either can pay for a site cleanup when parties responsible for the contamination cannot be located or are unwilling or unable to

perform the work, or take legal action to force parties responsible for site contamination to clean up the site or repay the federal government for the cleanup cost.

CONSENT DECREE: A legal document, approved by a judge, that formalizes an agreement reached between parties. For example, the EPA and potentially responsible parties (PRPs) may sign a consent decree through which PRPs will conduct all or part of a cleanup action at a Superfund site; cease or correct actions or processes that are polluting the environment; reimburse the EPA for monies expended in the course of an EPA-performed cleanup or otherwise comply with EPA-initiated regulatory enforcement actions to resolve the contamination at the Superfund site involved. The trustees may sign a consent decree with the PRPs regarding natural resource damages at a site. Or, the trustees and the EPA may sign one consent decree with the PRPs to resolve all the issues at the site. The consent decree describes the actions PRPs will take, is subject to a public comment period prior to its approval by a judge, and is enforceable as a final judgment by a court.

CLEAN WATER ACT (CWA):

A 1972 law that established the basic structure for regulating discharges of pollutants into the waters of the United States and regulates quality standards for surface waters.

CONTAMINANT: Any physical, chemical, biological or radiological substance or matter that has an adverse effect on air, water or soil.

DREDGING: The removal of material from the bottom of lakes, rivers, harbors and other bodies of water.

ECOSYSTEM: The complex of a community and its environment functioning as an ecological unit in nature.

ENVIRONMENTAL JUSTICE:

The fair treatment and meaningful involvement of all people regardless of race, color, national origin, culture, education or income with respect to the development, implementation, and enforcement of environmental laws, regulations and policies. Implies that no population of people should be forced to shoulder a disproportionate share of negative environmental impacts of pollution or environmental hazard due to a lack of political or economic strength levels.

FEASIBILITY STUDY (FS):

Evaluation of alternatives for cleanup and restoration, including overall protection of human health and the environment, ability to be implemented, and cost effectiveness, among others.

FLOODPLAIN: Low-lying lands near rivers that are submerged when the river overflows its banks.

HABITAT: A place where a plant or animal species naturally exists

HARBOR ESTUARY PROGRAM (HEP):

A multi-year effort to develop and implement a plan to protect, conserve and restore the NY/NJ Harbor Estuary. The NY/NJ Harbor Estuary includes the waters of New York Harbor and the tidally influenced portions of all rivers and streams that empty into the harbor, including the Passaic River and Newark Bay. Participants in the program include representatives from local, state, and federal environmental agencies, scientists, citizens, business interests, environmentalists and others. The EPA is coordinating with HEP participants to ensure that actions taken at the Lower Passaic River Restoration Project and Newark Bay Study consider the broader ecosystem and consider the results of HEP's modeling/monitoring efforts when selecting cleanup plans. For more information on HEP, please visit www.harborestuary.org.

HAZARDOUS SUBSTANCE:

(1) Any material that poses a threat to human health and/or the environment. Typical hazardous substances are toxic, corrosive, ignitable, explosive or chemically reactive. (2) Any substance designated by the EPA to be reported if a designated quantity of the substance is spilled into the waters of the United States or is otherwise released into the environment.

HAZARDOUS WASTE: By-products of society that can pose a substantial or potential hazard to human health or the environment when improperly handled. These wastes possess at least one of the following characteristics: toxicity, corrosivity, ignitability or reactivity.

HUDSON-RARITAN ESTUARY (HRE):

An area within the boundaries of the Port District of New York and New Jersey, and situated within a 25-mile radius of the Statue of Liberty National Monument. The HRE study area includes eight planning regions:

1. Jamaica Bay;
2. Lower Bay;
3. Lower Raritan River;
4. Arthur Kill/Kill Van Kull;
5. Newark Bay, Hackensack River Passaic River;
6. Lower Hudson River;
7. Harlem River, East River, and Western Long Island Sound; and
8. Upper Bay.

HUDSON-RARITAN**ESTUARY (HRE) Ecosystem**

Restoration Feasibility Study: A comprehensive program to restore and protect lost or degraded aquatic, wetland and terrestrial habitats within the HRE study area. These activities will be accomplished by implementing various site-specific ecosystem restoration projects formulated within the context of an overall strategic plan.

INFORMATION REPOSITORY: A file containing current information, technical reports and reference documents regarding a site. The information repository usually is located in a public building convenient for local residents such as a public school, town hall or library. See [Appendix 12](#) for locations.

MEMORANDUM OF

AGREEMENT: A Memorandum of Agreement ("MOA"), also known as a memorandum of understanding, is a formal business document used to outline an agreement made between two separate entities, groups or individuals. An MOA usually precedes a more detailed contract or agreement between the parties.

MEMORANDUM OF

UNDERSTANDING: See definition for Memorandum of Agreement.

MONITORING: Periodic or continuous surveillance or testing to determine the level of compliance with statutory requirements and/or pollutant levels in various media or in humans, plants and animals.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) OF 1969:

A law that requires federal agencies to integrate environmental values into their decision-making processes by considering the environmental impacts of, and reasonable alternatives to, their proposed actions.

NATIONAL PRIORITIES LIST

(NPL): EPA's list of serious uncontrolled or abandoned hazardous waste sites identified for possible long-term cleanup under Superfund. The list is based primarily on the score a site receives from the Hazard Ranking System. The EPA is required to update the NPL at least once a year.

NATIONAL RESPONSE

CENTER: The federal operations center that receives notifications of all releases of oil and hazardous substances.

NATURAL RESOURCE DAMAGE ASSESSMENT AND RESTORATION (NRDAR):

The process of collecting, compiling, and analyzing information, statistics or data to determine damages for injuries to and restoration of natural resources. Natural Resources: Land, fish, wildlife, air, water, groundwater, drinking water supplies, and other such resources belonging to, managed by, or controlled by the United States, a state or local government, any foreign government, any Indian Nation or any member of an Indian Nation.

PARTNER AGENCIES: The U.S. Environmental Protection Agency (EPA), U.S. Army Corps of Engineers (Corps), the State of New Jersey, the National Oceanic and Atmospheric Administration (NOAA), and the U.S. Fish and Wildlife Service (USFWS).

PESTICIDE: Substances or mixture thereof intended for preventing, destroying, repelling or mitigating any pest. Also, any substance or mixture for use as a plant regulator, defoliant or desiccant.

POLLUTION: Generally, the presence of matter or energy whose nature, location or quantity produces undesired environmental effects that adversely affect the usefulness of a resource or the health of humans, animals or ecosystems.

POTENTIALLY RESPONSIBLE PARTY (PRP):

An individual, company or other entity (i.e., owners, operators, transporters or generators of hazardous waste) potentially responsible for, or contributing to, the contamination problems at a Superfund site. When possible, the EPA requires a PRP, through administrative and legal actions, to clean up hazardous waste sites that it has contaminated.

PROPOSED PLAN: A plan for a Superfund site cleanup that is available to the public for comment.

PUBLIC COMMENT PERIOD: A formal opportunity for community members to review and contribute written comments on various documents or actions.

RECORD OF DECISION (ROD):

A decision document through which a cleanup is selected. It is often referred to in the context of Superfund sites, however, records of decision are also used at restoration sites under WRDA.

REMEDIAL ACTION (RA):

The actual construction or implementation phase that follows the remedial design of a Superfund site. Also referred to as site cleanup.

REMEDIAL DESIGN (RD): The phase that follows the remedial investigation/feasibility study (RI/FS) and the Record of Decision and includes development of engineering drawings and specifications for a Superfund site cleanup.

REMEDIAL INVESTIGATION (RI): An in-depth study designed to gather data needed to determine the nature and extent of contamination at a Superfund site, identify human health and ecological risks, and establish preliminary site cleanup criteria. The remedial investigation is usually concurrent with the feasibility study. Together they are usually referred to as the “RI/FS.”

REMEDIATION: Cleanup or other methods used to remove or contain a toxic spill or hazardous materials from a Superfund site.

RESTORATION: Actions undertaken to return an injured resource to its baseline condition, that is the condition of the resource had the release of hazardous substances not occurred. Restoration consists of two types of activities: primary

and compensatory. Primary restoration encompasses actions taken by trustees to accelerate the recovery of an injured resource to its baseline. Natural recovery is considered in the analysis of options for primary restoration. Compensatory restoration compensates for the interim loss of resources from the time the injury occurs until restoration is complete.

SEDIMENT: Topsoil, sand and minerals washed from the land into water, usually after rain or snow melt. Also used to indicate the material that forms the bottom of a waterbody, such as a river.

STAKEHOLDER: People, interest groups and other organizations or institutions that live in the project areas or closely identify with the issues associated with the project.

SUPERFUND: The program operated under the legislative authority of CERCLA that funds, oversees and carries out EPA solid waste emergency and long-term cleanup activities. These activities include establishing the National Priorities List, investigating sites for inclusion on the list, determining their priority for evaluation, and conducting and/or supervising a remedial investigation/feasibility study, cleanup and other remedial actions.

TECHNICAL ASSISTANCE

GRANT (TAG): A TAG provides money for activities that help communities participate in decision-making at eligible Superfund sites. An initial grant up to \$50,000 is available for any Superfund site that is on the EPA’s NPL or proposed for listing on the NPL and where a response action has begun. Additional funding may be provided by the EPA at complex sites.

TECHNICAL ASSISTANCE SERVICES FOR COMMUNITIES

(TASC): The national TASC program provides independent assistance through an EPA contract to help communities better understand the science, regulations, and policies of environmental issues and EPA actions. Under the TASC contract, a contractor provides scientists, engineers and other professionals to review and explain information to communities.

TOXICITY: A relative property of a chemical that refers to its potential to have a harmful effect on a living organism. It is a function of the concentration of the chemical and the duration of exposure.

**URBAN WATERS FEDERAL
PARTNERSHIP (UWFP):**

A partnership to reconnect urban communities, particularly those that are overburdened or economically distressed, with their waterways by improving coordination among federal agencies and collaborating with community-led revitalization efforts to improve our nation's water systems and promote their economic, environmental and social benefits. The EPA and Corps are co-leads for the Lower Passaic River UWFP location.

**WATER RESOURCES
DEVELOPMENT ACT (WRDA):**

A biennial piece of legislation that is the main vehicle for authorizing water resource projects to be studied, planned and developed by the Corps. It is also the legislative vehicle for implementing policy changes with respect to the Corps' water resource projects and programs.



APPENDIX 3: PARTNER AGENCY CONTACTS



Neried Boat Club launch along the Lower Passaic
Credit: Louis Berger, Inc.

**U.S. ENVIRONMENTAL
PROTECTION AGENCY**

Sophia Rini

Community Affairs Team Lead

290 Broadway

New York, NY 10007-1866

Phone: 212-637-3670

Email: Rini.Sophia@epa.gov

**U.S. ENVIRONMENTAL
PROTECTION AGENCY**

Alice Yeh

Project Manager – Lower 8.3

Miles of the Lower Passaic River

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**NEW JERSEY DEPARTMENT
OF ENVIRONMENTAL
PROTECTION**

Jay Nickerson

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**NATIONAL OCEANIC
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ADMINISTRATION**

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National Ocean Service-Office of

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**U.S. FISH AND WILDLIFE
SERVICE**

Clay Stern

4 East Jimmie Leeds Road

Galloway, NJ 08205

Phone: 609-382-5280

Email: Clay_Stern@fws.gov

**U.S. ARMY CORPS OF
ENGINEERS**

Lisa Baron

Programs and Project

Management Division

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New York, NY 10278-0900

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APPENDIX 4: COMMUNITY ADVISORY GROUP

ANA I. BAPTISTA, PH.D.

CAG Co-Chair

The New School, NYC and
Newark Resident

Baptista@newschool.edu

DEBBIE MANS

CAG Co-Chair

NY/NJ Baykeeper

debbie@nynjbaykeeper.org

KIRK R. BARRETT, PHD.

Manhattan College

ARNOLD COHEN

Newark Housing and
Community Development

BEN DELISLE

Passaic River Rowing
Association

MARCY S. DEPINA

Newark Riverfront Revival

ROBIN DOUGHERTY

Greater Newark Conservancy

SCOTT DVORAK

The Trust for Public Land

ROGER ELLIS

Heavy and General Construction
Laborers Local 472

**MASSIEL MEDINA FERRARA,
PP/AICP**

Hudson County Division of
Planning

MOLLY GREENBERG

Ironbound Community
Corporation

**MARIBEL JUSINO-
ITURRALDE**

The New Jersey Historical
Society

JAMES MACK

New Jersey Institute of Technology

JAY MEEGODA

New Jersey Institute of
Technology

CYNTHIA MELLON

Newark Environmental
Commission

**HARVEY MORGINSTIN, PE
(retired)**

Passaic River Boat Club

JOSEPH NARDONE

Newark, NJ Resident

JORGE C. SANTOS

Newark Community Economic
Development Corporation

LEONARD THOMAS

Newark, NJ Resident

DAVID YENNOR

Sierra Club, NJ Chapter



The Riverkeeper at the mouth of the Passaic River



APPENDIX 5: ELECTED OFFICIALS: FEDERAL

U.S. Senate

SENATOR CORY BOOKER

Washington, D.C. Office
359 Dirksen Senate Office Building
Washington, DC 20510
Phone: 202- 224-3224
Fax: 202 -224-8378
Email: www.booker.senate.gov

CAMDEN DISTRICT OFFICE

One Port Center
2 Riverside Drive, Suite 505
Camden, NJ 08101
Phone: 856-338-8922
Fax: 856- 338-8936

SENATOR BOB MENENDEZ

Washington, D.C. Office
528 Senate Hart Office Building
Washington, DC 20510
Phone: 202-224-4744
Fax: 202-228-2197
Email: www.menendez.senate.gov

NEWARK DISTRICT OFFICE

One Gateway Center
Suite 1100
Newark, NJ 07102
Phone: 973-645-3030
Fax: 973-645-0502

BARRINGTON DISTRICT OFFICE

208 White Horse Pike
Suite 18
Barrington, NJ 08007
Phone: 856-757-5353
Fax: 856-757-1526

U.S. House of Representatives

REP. RODNEY

FRELINGHUYSEN (11 CD)

Morris, Passaic, Essex, and Sussex Counties
Washington, D.C. Office
2306 Rayburn House Office Building
Washington, DC 20515-3011
Phone: 202-225-5034
Website: <https://frelinghuysen.house.gov/>

DISTRICT OFFICE

30 Schuyler Place, 2nd floor
Morristown, NJ 07960
Phone: 973-984-0711

REP. BILL PASCRELL, JR. (9 C.D.)

Bergen, Passaic, and Hudson Counties
Washington, D.C. Office
2320 Rayburn House Office Building
Washington, DC 20515
Phone: 202-225-5751
Fax: 202-225-5782
Website: <https://pascrell.house.gov/>

PASSAIC DISTRICT OFFICE

30 Schuyler Place, 2nd floor
Morristown, NJ 07960
Phone: 973-984-0711

PATERSON DISTRICT OFFICE

200 Federal Plaza
Suite 500
Robert A. Roe Federal Building
Paterson, NJ 07505
Phone: 973-523-5152
Fax: 973-523-0637

**REP. DONALD M. PAYNE, JR.
(10 C.D.)**

Essex, Union, and Hudson
Counties
Washington, DC Office
103 Cannon House Office
Building
Washington, DC 20515
Phone: 202-225-3436
Fax: 202-225-4169
Website: [https://payne.house.
gov/](https://payne.house.gov/)

**JERSEY CITY DISTRICT
OFFICE**

252 Martin Luther King Drive
Jersey City, NJ 07305
Phone: 201-369-0399
Fax: 201-369-0395

NEWARK DISTRICT OFFICE

60 Nelson Place, 14th Floor
LeRoy F. Smith Jr. Public Safety
Building
Newark, NJ 07102
Phone: 973-645-3213
Fax: 973-645-5902

**REP. ALBIO SIRES (8 C.D.)
Bergen, Essex, Hudson, and
Union Counties**

Washington, DC Office
2342 Rayburn House Office
Building
Washington, DC 20515
Phone: 202-225-7919
Fax: 202-226-0792
Website: <https://sires.house.gov/>

**ELIZABETH DISTRICT
OFFICE**

800 Anna Street
Elizabeth, NJ 07201
Phone: 908-820-0692
Fax: 908-820-0694

**JERSEY CITY DISTRICT
OFFICE**

121 Newark Avenue, Suite 200
Jersey City, NJ 07302
Phone: 201-309-0301
Fax: 201-309-0384



U.S. Capitol Building, Washington, DC



APPENDIX 6: ELECTED OFFICIALS: STATE

NJ State Senate

DISTRICT 20

Senator Raymond J. Lesniak

985 Stuyvesant Ave.
Union, NJ 07083
Phone: 908-624 0880
OR
65 Jefferson Ave., Suite B
Elizabeth, NJ 07201
Phone: 908-327-9119

DISTRICT 28

Senator Ronald L. Rice

1044 S. Orange Ave.
Newark, NJ 07106
Phone: 973-371-5665

DISTRICT 29

Senator M. Teresa Ruiz

166 Bloomfield Ave.
Newark, NJ 07104
Phone: 973-484-1000

DISTRICT 31

Senator Sandra B. Cunningham

1738 Kennedy Blvd.
Jersey City, NJ 07305
Phone: 201-451-5100
Fax: 201-451-0867

DISTRICT 32

Senator Nicholas J. Sacco

9060 Palisade Ave.
North Bergen, NJ 07047
Phone: 201-295-0200

DISTRICT 33

Senator Brian P. Stack

411 Palisades Ave.
Jersey City, NJ 07307
Phone: 201 721-5263

DISTRICT 34

Senator Nia H. Gill, Esquire

39 South Fullerton Ave., 2nd floor
Montclair, NJ 07047
Phone: 973-509-0388

DISTRICT 36

Senator Paul A. Sarlo

496 Columbia Blvd., 1st floor
Wood-Ridge, NJ 07075
Phone: 201-804-8118



NJ State Assembly

DISTRICT 20

Assemblyman Jamel C. Holley

985 Stuyvesant Ave.
Union, NJ 07083
Phone: 908-624-0880
Fax: 908-624-0587
OR
65 Jefferson Ave., Ste. B
Elizabeth, NJ 07201
Phone: 908-327-9119

Assemblywoman Annette Quijano

65 Jefferson Ave., Ste. B
Elizabeth, NJ 07201
Phone: 908-327-9119
OR
985 Stuyvesant Ave.
Union, NJ 07083
Phone: 908-624-0880

DISTRICT 28

Assemblyman Ralph R. Caputo

148-152 Franklin St.
Belleville, NJ 07109
Phone: 973-450-0484

Assemblywoman Cleopatra G. Tucker

400 Lyons Ave.
Newark, NJ 07112
Phone: 973-926-4320

DISTRICT 29

Assemblywoman Eliana Pintor Marin

263 Lafayette St., 1st floor
Newark, NJ 07105
Phone: 973-589-0713
Fax: 201-369-0395

Assemblywoman Blonnie R. Watson

223 Hawthorne Ave.
Newark, NJ 07112
Phone: 973-624-1730

DISTRICT 31

Assemblyman Nicholas Chiaravalloti

836 Broadway
Bayonne, NJ 07002
Phone: 201-471-2347

Assemblywoman Angela V. McKnight

2324 JFK Blvd.
Jersey City, NJ 07304
Phone: 201-360-2502

DISTRICT 32

Assemblywoman Angela M. Jimenez

5600 Kennedy Blvd., Ste. 104
West New York, NJ 07093
Phone: 201-223-4247

Assemblyman Vincent Prieto

121 Newark Avenue, Suite 200
Jersey City, NJ 07302
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Fax: 201-309-0384

DISTRICT 33

Assemblywoman Annette Chaparo

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Hoboken, NJ 07030
Phone: 201-683-7917
Fax: 201-683-7920

Assemblyman Raj Mukherji

433 Palisade Ave.
Jersey City, NJ 07307
Phone: 201-626-4000
Fax: 201-626-4001

DISTRICT 34

Assemblyman Thomas P. Gibilen

1333 Broad St.
Clifton, NJ 07013
Phone: 973-779-3125

Assemblywoman Sheila Y. Oliver

15-33 Halstead St., Ste. 202
E. Orange, NJ 07018
Phone: 973-395-1166

DISTRICT 36

Assemblywoman Marlene Caride

613 Bergen Blvd.
Ridgefield, NJ 07657
Phone: 201-943-0615
Fax: 201-943-0984

Assemblyman Gary S. Schaer

1 Howe Ave., Ste. 401
Passaic, NJ 07055
Phone: 973-249-3665



APPENDIX 7: ELECTED OFFICIALS: LOCAL

County Contacts

BERGEN COUNTY

James Tedesco III, County Executive
One Bergen County Plaza
Floor 5, Room 580
Hackensack, NJ 07601
Phone: 201-336-7300
Website: www.co.bergen.nj.us

ESSEX COUNTY

Joseph N. DiVincenzo, Jr., County Executive
425 Dr. Martin Luther King, Jr. Blvd.
Room 405
Newark, NJ 07102
Phone: 973-621-4400
Fax: 973-621-6343
Email: joedi@admin.ssexcountynj.org

HUDSON COUNTY

Thomas DeGise, County Executive
583 Newark Ave.
Jersey City, NJ 07306
Phone: 201-795-6000

PASSAIC COUNTY

Anthony DeNova, County Administrator
Administration Building
401 Grand St.
Paterson, NJ 07505
Phone: 973-881-4000
Fax: 973-881-2853
Website: www.passaiccountynj.org

UNION COUNTY

Alfred Faella, County Manager
10 Elizabethtown Plaza
Elizabeth, NJ 07207
Phone: 908-527-4200
Fax: 908-289-0180
Email: info@ucnj.org

Municipal Contacts

BAYONNE

Jimmy Davis, Mayor
City of Bayonne
630 Avenue C
Bayonne, NJ 07002
Phone: 201-858-6010
Email: mayors.office@baynj.org

BELLEVILLE

Mauro Tucci, Township Mgr.
Belleville Town Hall
152 Washington Ave.
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Phone: 973-450-3322
Fax: 973-759-8022

EAST NEWARK

Joseph R. Smith, Mayor
34 Sherman Ave.
East Newark, NJ 07029
Phone: 973-481-2902
Fax: 973-481-0627

ELIZABETH

J. Christian Bollwage, Mayor
City Hall
50 Winfield Scott Plaza
Elizabeth, NJ 07201
Phone: 908-820-4170
Fax: 908-820-8624

HARRISON

James A. Fife, Mayor
318 Harrison Ave. Harrison, NJ 07029
Phone: 973-268-2444

JERSEY CITY

Steven M. Fulop, Mayor
City Hall
280 Grove St.
Jersey City, NJ 07302
Phone 201- 547-5200
Fax: 201-547-4288

KEARNY

Alberto G. Santos, Mayor
Kearny Town Hall
402 Kearny Ave.
Kearny, NJ 07032
Phone: 201-955-7979
Fax: 201-998-6069
E-Mail: mayor@kearnynj.org

NEWARK

Ras J. Baraka, Mayor
Mayor's Office
Newark City Hall
920 Broad St., Room 200
Newark, NJ 07102
Phone: 973-733-6400



Passaic River near Dundee Dam



APPENDIX 8: COOPERATING PARTIES

Information obtained from <http://www.lowerpassaiccp.org/> web site,
as of June 13, 2017.

- | | | |
|---|---|---|
| 1. Arkema Inc. | 11. DII Industries, LLC | 21. Goodrich Corporation on behalf of itself and Kalama Specialty Chemicals, Inc. |
| 2. Atlantic Richfield Company | 12. DiLorenzo Properties Company on behalf of itself and the Goldman /Goldman/ DiLorenzo Properties Partnerships | 22. Hess Corporation, on its own behalf and on behalf of Atlantic Richfield Company |
| 3. BASF Corporation, on its own behalf and on behalf of BASF Catalysts LLC | 13. E. I. du Pont de Nemours and Company | 23. Hexcel Corporation |
| 4. Belleville Industrial Center | 14. Elan Chemical Company | 24. Hoffmann-La Roche Inc. on its own behalf, and on behalf of its affiliate Roche Diagnostics |
| 5. Celanese Ltd. | 15. EPEC Polymers, Inc. on behalf of itself and EPEC Oil Company Liquidating Trust | 25. Honeywell International Inc. |
| 6. Chevron Environmental Management Company, for itself and on behalf of Texaco, Inc. and TRMI –H LLC | 16. Essex Chemical Corporation | 26. Kao USA Inc. |
| 7. Coats & Clark, Inc. | 17. Essex County Improvement Authority | 27. Leemilt's Petroleum, Inc. (successor to Power Test of New Jersey, Inc.), on its behalf and on behalf of Power Test Realty Company Limited Partnership and Getty Properties Corp., the General Partner of Power Test Realty Company Limited Partnership |
| 8. Coltec Industries | 18. Flexon Industries Corp. | 28. Legacy Vulcan Corp. |
| 9. Conopco, Inc. d/b/a Unilever (as successor to CPC/ Bestfoods, former parent of the Penick Corporation [facility located at 540 New York Avenue, Lyndhurst, NJ]) | 19. Franklin-Burlington Plastics, Inc. | |
| 10. Cooper Industries LLC | 20. Garfield Molding Co., Inc. | |

- | | | |
|---|--|--|
| <p>29. Linde LLC on behalf of The BOC Group Inc.</p> <p>30. Lucent Technologies Inc. now known as Alcatel-Lucent USA Inc.</p> <p>31. Newell Rubbermaid Inc., on behalf of itself and its wholly-owned subsidiaries Goody Products, Inc. and Berol Corporation (as successor by merger to Faber-Castell Corporation)</p> <p>32. Novelis Corporation (f/k/a Alcan Aluminum Corporation)</p> <p>33. Otis Elevator Company</p> <p>34. Pfizer, Inc.</p> <p>35. Pharmacia Corporation (f/k/a Monsanto Company)</p> | <p>36. PPG Industries, Inc.</p> <p>37. Public Service Electric and Gas Company</p> <p>38. Purdue Pharma Technologies, Inc.</p> <p>39. Quality Carriers, Inc. as successor to Chemical Leaman Tank Lines, Inc. and Quality Carriers, Inc.'s corporate affiliates and parents</p> <p>40. Revere Smelting and Refining Corporation</p> <p>41. Safety-Kleen Envirosystems Company by McKesson, and McKesson Corporation for itself</p> <p>42. STWB Inc.</p> | <p>43. Sun Chemical Corporation</p> <p>44. Teva Pharmaceuticals USA, Inc. (f/k/a Biocraft Laboratories, Inc.)</p> <p>45. Textron Inc.</p> <p>46. The Hartz Consumer Group, Inc., on behalf of The Hartz Mountain Corporation</p> <p>47. The Newark Group</p> <p>48. The Sherwin-Williams Company</p> <p>49. Twenty-First Century Fox America (successor to Chris-Craft Industries)</p> <p>50. Stanley Black & Decker, Inc.</p> <p>51. Tiffany and Company</p> <p>52. Wyeth, on behalf of Shulton, Inc.</p> |
|---|--|--|



Scientists surveying the Passaic
Credit: CDMSmith



APPENDIX 9: REGIONAL AUTHORITIES

PASSAIC VALLEY SEWERAGE COMMISSIONERS (PVSC)

Brian Davenport, River
Restoration Manager

600 Wilson Avenue
Newark, NJ 07105
Phone: 973-466-2714

Bridget McKenna, Chief
Operating Officer, Plant
Operations

Phone: 973-817-5782

PORT AUTHORITY OF NY & NJ

4 World Trade Center
150 Greenwich Street
New York, NY 10007
Phone: 212-435-7000

NEW YORK-NEW JERSEY HARBOR & ESTUARY PROGRAM

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New York, NY 10004
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Email: info@harborestuary.org



Boating at the mouth of the Passaic River



APPENDIX 10: STAKEHOLDER GROUPS

AMERICAN LITTORAL SOCIETY

Tim Dillingham, Executive
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ASSOCIATION OF NEW JERSEY

Environmental Commissioners
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Email: info@anjec.org

CLEAN OCEAN ACTION

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PO Box 505
Sandy Hook, NJ 07732
Phone: 732-872-0111
Email: info@CleanOceanAction.org

CLEAN WATER ACTION

559 Bloomfield Avenue
Montclair, NJ 07042
Phone: 973-744-3005
Email: njcwa@cleanwater.org

COMMERCE AND INDUSTRY

Association of New Jersey
61 South Paramus Road
Mack-Cali Centre IV
Paramus, NJ 07652
Phone: 201-368-2100
Website: www.cianj.org

ENVIRONMENTAL DEFENSE FUND

Jim Tripp
New York Headquarters
257 Park Avenue South
New York, NY 10010
Phone: 212-505-2100
Fax: 212-505-2375
Website: www.edf.org

ESSEX COUNTY ENVIRONMENTAL CENTER

621-B Eagle Rock Avenue
Roseland, NJ 07068
Phone: 973-228-8776
Fax: 973-228-3793
Website: <https://www.essexcountyparks.org/facilities/environmental-center>

ESSEX COUNTY ENVIRONMENTAL COMMISSION

Tara M Casella, Essex County
Liaison/Environmental Coordinator
Phone: 973-228-8776
Email: tcasella@parks.essexcountynj.org

FAIR LAWN ENVIRONMENTAL COMMISSION

Wendy Dabney, Chairperson
P.O. Box 376
Fair Lawn, NJ 07410-0376
Phone: 201-398-0225

FUTURE CITY, INC.

Michele McBean, Exec. Director
1139 East Jersey St.
Elizabeth, NJ 07201
Phone: 908-659-0689
Fax: 908-353-1511
Email: info@futurecityinc.org

GREAT SWAMP WATERSHED ASSOCIATION

Sally Rubin, Executive Director
568 Tempe Wick Road
Morristown, NJ 07960
Phone: 973-538-3500
Email: srubin@greatswamp.org

GREEN FAITH

Rev. Fletcher Harper, Exec.
Director
101 South Third Ave., #12
Highland Park, NJ 08904
Phone: 732-565-7740
Fax: 732-565-7790
Email: revfharper@greenfaith.org

GREATER NEWARK CONSERVANCY

Robin L. Dougherty, Exec. Director
32 Prince St.
Newark, NJ 07103
Phone: 973-642-4646
Fax: 973-642-2218
Website: www.citybloom.org

HACKENSACK RIVERKEEPER

Bill Sheehan
231 Main St.
Hackensack, NJ 07601
Phone: 201-968-0808
Fax: 201-968-0336
Email: info@hackensackriverkeeper.org

HUDSON COUNTY CHAMBER OF COMMERCE

857 Bergen Avenue, 3rd Floor
Jersey City, NJ 07306
Phone: 201-386-0699
Email: info@hudsonchamber.org

HUDSON RIVER FISHERMAN'S ASSOCIATION

Website: <http://hrfanj.org/>

HUDSON RIVER FOUNDATION

Dennis Suszkowski
1 Battery Place, Ste. 915
New York, NY 10004
Phone: 212-483-7667
Fax: 212-924-8325
Email: info@hudsonriver.org

IMMIGRATION & AMERICAN

Citizenship Organization (IACO)
647 Main Ave., Ste. 205
Passaic, NJ 07024
Phone: 973-472-4648
Fax: 973-472-4889
Email: info@iacoimmigration@msn.com

INTEGRATED BENEFITS RESOURCES, LLC

333 Sylvan Avenue
Englewood Cliffs, NJ 07632
Phone: 201-541-1180
Fax: 201-541-1183
Email: www.inbenresources.com

IRONBOUND COMMUNITY CORPORATION

Joseph Della Fave, Executive
Director
317 Elm St.
Newark, NJ 07105
Phone: 973-465-0555
Fax: 973-465-0505
Website: www.ironboundcc.org

JERSEY COAST ANGLERS

Tom Fote
1594 Lakewood R.
Unit 13
Toms River, NJ 08755
Phone: 732-506-6565
Email: tfote@JCAA.org

LABORERS' INTERNATIONAL UNION OF NORTH AMERICA

905 16th Street, Northwest
Washington, DC 20006
Phone: 202-737-8320

LA CASA DE DON PEDRO

Raymond Ocasio
75 Park Ave.
Newark, NJ
Phone: 973-482-8312
Fax: 973-482-1883
Website: www.lacasanwk.org

**METROPOLITAN
REASSERTION COMMUNITY
DEVELOPMENT
CORPORATION**

149 Springfield Avenue
Newark, NJ 07102
Phone: 973-642-2267

**METROPOLITAN
WATERFRONT ALLIANCE**

241 Water Street, 3rd Floor
New York, NY 10038
Phone: 212-935-9831
Mt. Prospect Partnership
Mike Sheehan
643 Mt. Prospect Ave.
Newark, NJ 07104
Phone: 201-981-2667

**NATIONAL ASSOCIATION
FOR THE ADVANCEMENT OF
COLORED PEOPLE**

Oranges and Maplewood Unit
Tom Puryear, President
P.O. Box 1127
East Orange, NJ 07019
Phone: 973-675-5325
Email: [President@
OrangesMaplewoodNAACP.org](mailto:President@OrangesMaplewoodNAACP.org)

**NATURAL RESOURCES
DEFENSE COUNCIL**

Brad Sewell
40 W. 20 St.
New York, NY 10011
Phone: 212-727-2700
Email: nrdcinfo@nrdc.org

NEREID BOAT CLUB

3350 Riverside Ave.
Rutherford, NJ 07070
Phone: 201-438-3995
Email: nereidsec@Hotmail.com

**NEWARK COMMUNITY
ECONOMIC DEVELOPMENT
CORPORATION**

111 Mulberry Street, Lower Lobby
Newark, NJ 07102
Phone: 973-273-1040
Fax: 973-273-1070
Website: [www.newarkcedc.org/
location](http://www.newarkcedc.org/location)

**NEWARK RIVERFRONT
REVIVAL**

Marcy S. DePina, Program
Director
920 Broad Street, Room 113
Newark, NJ 07102
Phone: (201) 341-8311
Website: [www.newarkriverfront.
org](http://www.newarkriverfront.org)

**NEW JERSEY ALLIANCE FOR
ACTION, INC.**

P.O. Box 6438
Raritan Plaza II
Edison, NJ 08818-6438
Phone: 732-225-1180
Website: [www.allianceforaction.
com](http://www.allianceforaction.com)

**NEW JERSEY INSTITUTE OF
TECHNOLOGY (NJIT)**

Jay N. Meegoda, Ph.D., P.E.
Department of Civil &
Environmental
Engineering
Newark, NJ 07102
Phone: 973-596-2464
Fax: 973-596-5790
Email: jay.meegoda@njit.edu

**NEW JERSEY STATE
CHAMBER OF COMMERCE**

216 West State Street
Trenton, NJ 08608
Phone: 609-989-7888
Website: www.NJChamber.com

**NEW YORK/NEW JERSEY
HARBOR & ESTUARY
PROGRAM**

17 Battery Place, Suite 915
New York, NY 10004
Phone: 212-483-7667
Website: www.harborestuary.org

**NORTH SHORE WATER
CONSERVANCY OF STATEN
ISLAND**

P.O. Box 140502
Staten Island, NY 10314
Phone: 718-447-6880
Website: www.nswcsi.org

NY/NJ BAYKEEPER

Debbie Mans, Exec. Director
52 West Front St.
Keyport, NJ 07735
Phone: 732-888-9870
Fax: 732-888-9873
Email: debbie@nynjbaykeeper.org

PASSAIC RIVER BOAT CLUB

56 Hyde Road
Bloomfield, NJ 07003
Phone: 973-338-6408
Website: www.passaicriverboatclub.org

PASSAIC RIVER COALITION

Laurie Howard, Chair
330 Speedwell Ave.
Morristown, NJ 07960
Phone: 973-532-9830
Fax: 973-889-9172
Website: www.passaicriver.org

PASSAIC RIVER INSTITUTE (PRI)

Montclair State University
Meiyin S. Wu, Exec. Director
Montclair State University
Montclair, NJ
Phone: 973-655-7117
Email: wum@mail.montclair.edu

PASSAIC RIVER ROWING ASSOCIATION

PO Box 440
Lyndhurst, NJ 07071
Website: <http://prra.org/>

PASSAIC VALLEY SEWERAGE COMMISSIONERS (PVSC)

Brian Davenport, River Restoration Program Manager
600 Wilson Ave.
Newark, NJ 07105
Phone: 973-466-2714
Email: bdavenport@pvsc.nj.gov

RUTGERS UNIVERSITY BOB CHANT

Institute of Marine & Coastal Studies
New Brunswick, NJ 08903
Phone: 908-932-6555, x644
Email: chant@marine.rutgers.edu

SIERRA CLUB, NEW JERSEY GATEWAY GROUP

David Yennior, Chair
145 West Hanover Street
Trenton, NJ 08618
Phone: 609-656-7612
Website: <http://www.sierraclub.org/new-jersey/gateway>

SOUTHERN NEW JERSEY DEVELOPMENT COUNCIL

900 Route 168
Turnersville, NJ 08012
Email: snjdc@snjdc.org

STEVENS INSTITUTE OF TECHNOLOGY

Dr. K. Nadia Dimou
Research Professor
Hoboken, NJ 07030
Phone: 201-216-8551
Email: kdimou@stevens-tech.edu

WATERSHED MANAGEMENT AREA-4

Watershed Ambassador
PVSC
Phone: 973-817-5784
Email: ambassador@pvsc.nj.gov



APPENDIX 11:

POTENTIAL MEETING LOCATIONS

Belleville, NJ

BELLEVILLE SENIOR CITIZENS CENTER

125 Franklin Ave.
Belleville, NJ 07109
Phone: 973-450-3430

Elizabeth, NJ

BOYS & GIRLS CLUB OF ELIZABETH

513 Richmond St.
Elizabeth, NJ 07202
Phone: 908-351-3344

KNIGHTS OF COLUMBUS

328 Union Ave.
Elizabeth, NJ 07208
Phone: 908-355-2253

ST. ANTHONY'S YOUTH CENTER

219 High St.
Elizabeth, NJ 07202
Phone: 908-353-0177

Jersey City, NJ

BOYS CLUB OF JERSEY CITY

1 Canal St.
Jersey City, NJ 07302
Phone: 201-333-4100

FRIENDSHIP MASONIC LODGE

78 Summit Ave.
Jersey City, NJ 07304
Phone: 201-451-4604

Kearny, NJ

AMERICAN LEGION KEARNY FROBISHER

Post 99
314 Belgrove Drive
Kearny, NJ 07032
Phone: 201-991-6360

ELKS BPO LODGE 1050 KEARNY

601 Elm St.
Kearny, NJ 07032
Phone: 201-991-6360

FRANKLIN SCHOOL

100 Davis Ave.
Kearny, NJ 07032
Phone: 201-955-5020

PRESBYTERIAN BOYS AND GIRLS CLUB

663 Kearny Ave.
Kearny, NJ 07032
Phone: 201-991-9841

YMCA OF KEARNY

728 Kearny Ave.
Kearny, NJ 07032
Phone: 201-997-4651

Newark, NJ

BARRINGER HIGH SCHOOL

90 Parker St.
Newark, NJ 07014
Phone: 973-268-5125

EAST NEWARK PUBLIC

501-11 N. Third St.
East Newark, NJ 07029
Phone: 201-481-6800

EAST SIDE HIGH SCHOOL

238 Van Buren St.
Newark, NJ 07105
Phone: 973-465-4900

ELIZABETH AVE. COMMUNITY CENTER

54 Elizabeth Ave.
Newark, NJ 07108
Phone: 973-242-0531

IRONBOUND COMMUNITY CENTER

432 Lafayette St.
Newark, NJ 07105
Phone: 973-465-0947

NORTH JERSEY TRANSPORTATION PLANNING AUTHORITY (NJTPA)

One Newark Center, 17th floor
Newark, NJ 07102
Phone: 973-639-8400
Fax: 073-639-1953

PORTUGUESE SPORTS CLUB

55 Prospect St.
Newark, NJ 07105
Phone: 973-589-5078

SOCIETY HILL COMMUNITY CENTER 1

1 Cornerstone Lane
Newark, NJ 07103
Phone: 973-622-0256

ST. LUCY'S COMMUNITY CENTER

106 S. 7th St.
Newark, NJ 07107
Phone: 973-483-9003

WEST SIDE COMMUNITY CENTER

West Side Park & 13th
Newark, NJ 07102
Phone: 973-642-2015



Excerpt of "Along the Passaic River" historic postcard.
Credit: NJ Historical Society



APPENDIX 12: INFORMATION REPOSITORIES

U.S. EPA RECORDS CENTER

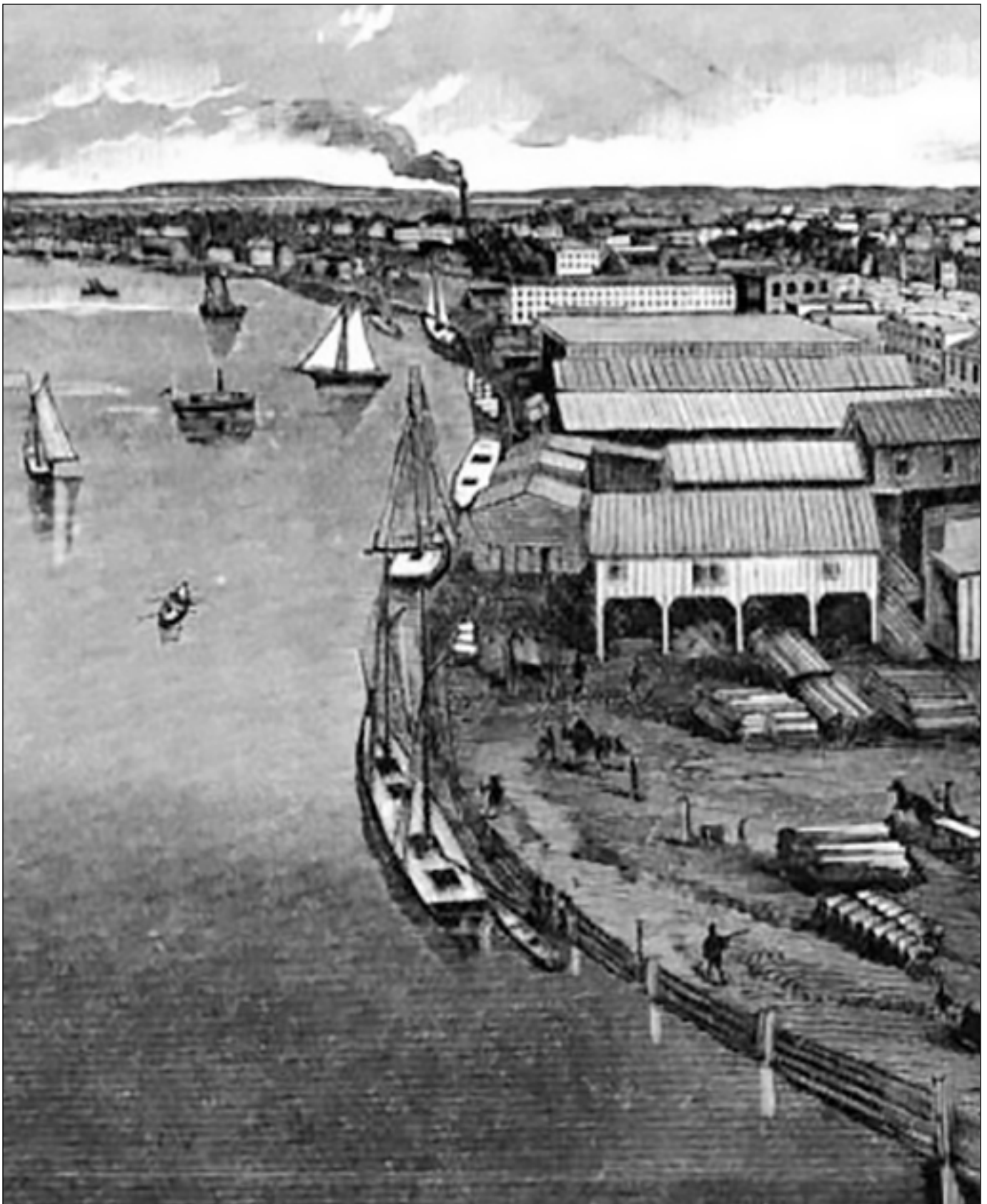
290 Broadway, 18th floor
New York, NY 10007
Hours: Mon – Fri: 9 a.m. – 4 p.m.
Phone: 212-637-3000

NEWARK PUBLIC LIBRARY

NJ Reference Section
5 Washington St.
Newark, NJ 07101
Phone: 973-733-7775

ELIZABETH PUBLIC LIBRARY

11 South Broad St.
Elizabeth, NJ 07202
Phone: 908-354-6060



Excerpt from "Passaic River below Pennsylvania Railroad Bridge" 1887
Credit: NJ Historical Society



APPENDIX 13: MEDIA LIST

NEWSPAPERS

EL NUEVO COQUI (SPANISH)

258 Clifton Ave.
Newark, NJ 07103
Phone: 973-481-3233

JERSEY JOURNAL

One Harmon Plaza
Ste. 1010
Secaucus, NJ 07094
Phone: 201-653-1000
Website: www.nj.com/jjournal/

JERSEY JOURNAL SPANISH EDITION

Same address as above

LUSO AMERICANO (PORTUGUESE)

88 Ferry Street
Newark, NJ 07105
Phone: 973-589-4600
Fax: 973-973-589-3848
Website:
www.lusoamericano.com

LUSO AMERICANO (PORTUGUESE)

Classified Section
66 Union St.
Newark, NJ 07105
Phone: 973-344-3200
Fax: 973-344-4201

THE OBSERVER

39 Seeley Ave.
Kearny, NJ 07032
Phone: 201-991-1600
Website: www.theobserver.com

THE RECORD

50 Walnut St.
Newark, NJ 07102
Phone: 973-643-0251
Website: www.northjersey.com

THE STAR LEDGER

1 Gateway Center, X1100
Newark, NJ 07102
Phone: 973-392-4141
Website: www.nj.com/starledger/

THE SOUTH BERGENITE

33 Lincoln Ave.
Rutherford, NJ 07070
Phone: 201-933-1166

TELEVISION STATIONS

NJN NETWORK – CHANNEL 50 (PUBLIC TV)

50 Park Place, Ste. 1041
Newark, NJ 07102
Phone: 973-648-3630
Website: www.njntvonline.org

NJTV PUBLIC TELEVISION

PO Box 5776
Englewood, NJ 07631
Phone: 609-777-0031
Toll-free: 1-800-882-6622

TELEMUNDO CHANNEL 47 (SPANISH) WNJU

2200 Fletcher Ave.
Fort Lee, NJ 07024
Phone: 201-969-4246
Website: www.telemunco47.com

UNIVISION CHANNEL 41 (SPANISH) WXTV

500 Frank w. Burr Blvd.
Teaneck, NJ 07666
Phone: 201-287-4141
Website: www.univision.com

WWOR-TV CHANNEL 9

9 Broadcast Plz
Secaucus, New Jersey 07094
Website: www.my9nj.com

RADIO

WABC-AM

2 Penn Plaza, #1700
New York, NY 10013
Phone: 212-268-5260
Station Phone: 212-613-3800
Website: www.wabcradio.com

WADO-AM (SPANISH)

Univision Radio Network
277 Paterson Plank Rd.
Carlstadt, NJ 07072
Phone: 201-804-1739
Website: www.univision.com

WBGO

Newark Public Radio, Inc.
54 Park Pl.
Newark, NJ 07102
Phone: 973-624-8880
Fax: 973-824-8888
Website: www.wbgo.org

1010 WINS-AM (ALL NEWS)

Website: www.newyork.cbslocal.com

WLIB-AM 1190 (URBAN)

Phone: 212-447-1000
Fax: 212-447-5211
General Email: info@wlib.com
Website: www.wlib.com

WNYC

New York Public Radio
160 Varick Street, 8th floor
New York, NY 10013
Phone: 646-829-4400
Website: www.wnyc.org

WPAT-AM 930 AM (MULTICULTURAL)

27 William St., 11 fl.
New York, NY 10005
Phone: 212-966-1059
Fax: 212-966-8580
Website: www.wpat930.com

WWRL – 1600 AM

Woodside, NY 11377
Phone: 718-355-1600
Website: www.aboutus.com/Wwrl1600.com

RADIO BRAZIL LEGAL (PORTUGUESE/BRAZILIAN)

350 Lafayette St.
Newark, NJ 07105
Phone: 973-351-4940
Website: www.radiolegal.fm.br

RADIO PORTUGAL 1430 AM

189-215 South St.
Newark, NJ 07114
Phone: 201-344-1155
Fax: 201-589-0022
Email: radioportugal@vivaportugal.com

RADIO VERITE (HAITIAN/CREOLE)

15 Prospect St.
E. Orange, NJ 07017
Phone: 973-676-1671



APPENDIX 14: SEASONAL EVENTS AND ACTIVITIES

The following appendix lists seasonal events in the Passaic River watershed, but it is not a complete list. For further information, please click on the relevant links below or visit www.ourpassaic.org.

CITY OF WATER DAY, sponsored by the Waterfront Alliance, includes free boat tours on all kinds of vessels, from tall ships to tugboats; free rowing, kayaking and paddle-boarding; and the Waterfront Activity Fair <http://waterfrontalliance.org/what-we-do/city-of-water-day/>

CLEAN OCEAN ACTION sponsored events, including beach cleanups <http://cleanoceanaction.org/index.php?id=611>

ESSEX COUNTY ENVIRONMENTAL CENTER sponsored activities, including a Memorial Day Paddle, Wilderness Skills Summer Camp, a Nature Explorers Summer Camp and a Butterfly Tent Safari <https://www.essexcountyparks.org/facilities/environmental-center/calendar>

GREAT SWAMP WATERSHED ASSOCIATION sponsored events, including the Great Swap Gala and Silent Auction, Annual Home and Garden Tour, Annual Great Swamp Scavenger Hunt and hikes <https://www.greatswamp.org/events>

HACKENSACK RIVERKEEPER sponsored activities, including: eco-walks, eco-cruises (guided river tours by canoe and kayak), canoe and kayak rentals and river cleanups <http://www.hackensackriverkeeper.org/calendar-of-events/> <http://www.hackensackriverkeeper.org/activities-and-events/cleanups/> <https://www.facebook.com/HackensackRiverkeeper>

HEAD OF THE PASSAIC REGATTA, sponsored in part by the Nereid Boat Club <http://www.hopr.org/>

HUDSON RIVER FISHERMAN'S ASSOCIATION'S ANNUAL FISHING CONTEST, which runs from January 1st to December 31st and is open to all paid members and their families <http://hrfanj.org/>

HUDSON RIVER FISHERMAN'S ASSOCIATION sponsored seasonal fishing trips <http://hrfanj.org/>

NATIONAL LEARN TO ROW DAY, sponsored by U.S. Rowing http://archive.usrowing.org/events_new/nltrd

NEWARK RIVERFRONT

REVIVAL sponsored events, including the Annual Walk to the Water and River Day, Zumba at the Park and Salsa on the River

<http://newarkriverfront.org/things-to-do/>

PASSAIC RIVER ROWING

ASSOCIATION sponsored activities, including rowing lessons

<http://prra.org/news-and-events/Regattas>, sponsored by multiple parties and searchable by state

<https://www.regattacentral.com/regattas>



Rowers enjoying the outdoors



APPENDIX 15: FISH AND SHELLFISH ADVISORIES

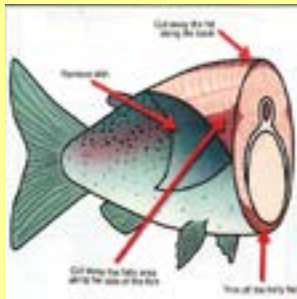
How can Contaminants in the fish be removed?

Mercury cannot be removed through cooking or cleaning.

However, by removing fat and organs when you clean and cook fish, you can help to reduce other contaminants like PCBs that concentrate here.

REMEMBER !

- Cut off and discard skin, fat and guts
- Bake or Broil the fish (without skin) on a rack so the fats can drain off



Three Safety Tips

- Do not eat:**
 - Shark
 - Swordfish
 - King Mackerel
 - Tilefish
 - Eel
 - Raw Fish
 - Bluefish
 - Striped Bass
 - Crabs from Newark Bay
 - Green gland of lobster & crab
- Eat a variety (up to 12oz. on average = 2 meals a week) of fish lower in mercury:**
 - Shrimp
 - Canned -Light Tuna
 - Salmon
 - Cooked (not raw) Shellfish
 - Fluke/Flounder
 - Pollack
 - Cod
 - Tilapia
 - Farm raised Catfish
- Eat a variety of fish and choose your fish wisely. Prepared and clean all fish correctly. Cook clams and oysters thoroughly.**

For more information please use contacts below:



New Jersey Department of Health and Senior Services
call (609) 588-3123
www.nj.gov/health/foodanddrugsafety/ssp_resources.shtml



New Jersey Department of Environmental Protection
call (609) 984-6070
www.fishsmarteatsmartnj.org

U.S. Food and Drug Administration
call 1-888-SAFEFOOD
www.fda.gov/Food/FoodSafety/

Fish 11-00007-revised

Your Baby Eats What You Eat

Special Advice for women who might become pregnant, women who are pregnant, nursing, and mothers of young children



Fish is a Healthy Food!

Fish and shellfish are an important part of a healthy diet. Fish and shellfish contain high quality protein and other essential nutrients, are low in saturated fat and contain omega-3 fatty acids. A well balanced diet includes a variety of fish and shellfish which can contribute to heart health and proper growth and development of your child.

Some fish contain high levels of environmental contaminants such as mercury and/or PCBs that can harm an unborn baby or young child's developing nervous system.

Small amounts of mercury may lead to:

- Damaging your baby's developing nervous system
- Learning and behavioral problems

Levels of exposure to PCBs can:

- Lead to a lower birth weight
- Reduce the ability to learn/delay physical development
- Exposure to PCBs may also cause cancer

Remember !

PCBs build up in the fat of the fish

Remember the following advice when eating fish:

1. Eat smaller and younger.
2. Eat a variety of cooked fish and seafood.
3. Trim skin and fat, especially belly fat. See picture on cleaning and cooking properly, (fatty fish, bluefish, salmon)
4. Follow the guidelines in this brochure to select safer types of fish to eat.

How to Choose Your Fish Wisely



DANGER !



DO NOT CATCH! DO NOT EAT !

**BLUE CLAW CRABS
IN LOWER PASSAIC RIVER AND
NEWARK BAY COMPLEX MAY CAUSE
CANCER**

**AND MAY HARM BRAIN DEVELOPMENT IN
UNBORN AND YOUNG CHILDREN**

Fines up to \$3,000 could be imposed (N.J.A.C. 7:25-14,18A)

For further information call toll free: 1-866-DEP-KNOW

New Jersey Department of Environmental Protection

New Jersey Department of Health



For more information GO TO: FishSmartEatSmartNJ.org

How to Properly Clean Carp

Proper fish cleaning and cooking techniques may reduce PCB levels by approximately 50 percent when compared to raw fish fillets. A meal size is considered to be an uncooked 8 ounce fillet.

Eat only the fillet portions.

- **Do not eat whole fish or steak portions.** Many chemical contaminants, like PCBs and pesticides (but not mercury), are stored in the fatty portions of fish.
- **Do**, skin the fish and trim any of the dark meat (lateral line), back strap and belly flap.
- **Do not eat the heads, guts, liver, or any reproductive parts such as eggs roe.** PCBs usually concentrate in those body parts.
- **Do not use heads, skin, trimmed fatty portions in soups, stews, chowders, boils, broth or for fish stock.** If you make stews or chowders, only use skinless fillet parts.

Fish Cooking Methods

- Bake, broil, fry, grill, or steam allowing the fats and juices to drain away from the fish.
- Cook the fish on an elevated rack that allows fats and juices to drain to the pan below.
- Avoid batter, breading or coatings that can hold in the juices that may contain contaminants.
- Throw away juices since they contain the PCBs and other chemicals that were in the fat.
- Do not pour these juices over the fish as a sauce or to moisten the fish.
- After cooking, **discard all liquids and frying oils.**

DO NOT EAT ANY FISH from the **Tidal Passaic River, downstream of the Dundee Dam.**

Limit eating carp from the **Passaic River** upstream of Dundee Dam to one meal a month for adult males and **Do Not Eat** for women who are pregnant or plan to become pregnant, breastfeeding women and young children.



GO TO: www.FishSmartEatSmartNJ.org

Fried Christmas Carp (Traditional Fried Carp recipe)

10% ounce carp
1¼ tsps. salt
Pinch of white pepper
1½ tbs. butter
1½ tsp. minced garlic
½ cup olive oil



* Debone, remove skin and clean the carp thoroughly (see inside)

* Salt and pepper the fillets, then brush with melted butter and mashed garlic.

* Fry slowly in hot oil until done.

Catch of the Day!



A HEALTHY WAY TO PROPERLY CLEAN AND COOK CARP

For more helpful fish consumption information go to:

www.FishSmartEatSmartNJ.org



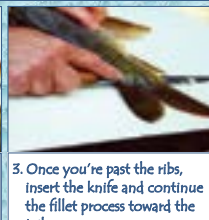
HOW TO PROPERLY CLEAN A CARP



1. Start fillet by slitting the area behind the gills. Take care not to puncture the organs.



2. Run the knife down the backbone. You'll feel the ribs with the tip of the knife.



3. Once you're past the ribs, insert the knife and continue the fillet process toward the tail.



4. Remove the fillet from the rib bones to the belly



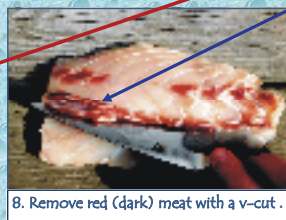
5. Cut off the belly meat and discard the guts or carcass.



6. Place the fillet on a flat surface and slice skin away



7. Remove mud line from the fillet.



8. Remove red (dark) meat with a v-cut.

DANGER

Dioxin, PCBs and mercury may pose greater risk to babies and young children. For this reason it is important for women who are pregnant, or might become pregnant, breastfeeding women and young children follow the recommendations found in this flyer to reduce exposure

WARNING

To prevent chemical contaminants from entering your body, clean carp thoroughly before cooking.

Remove "Mud Line"

Remove "Dark Meat" where chemicals concentrate.

Soaking carp in water will **NOT** remove chemical contaminants

Other Do's and Don'ts

- ❌ **DON'T** —Keeping carp in a tub or basin of water will remove the mud taste, it will **NOT** remove the chemical contaminants in the fish
- ✅ **DO EAT** smaller, younger fish.
- ❌ **DON'T EAT** older, larger fish because they typically contain high levels of chemical contaminants.

Mercury can NOT be removed from fish

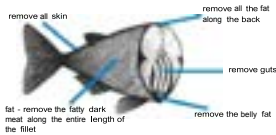
Reduce Exposure to Dioxin and PCBs

Eat only the fillet!



Do not eat the whole fish or steak portions.

Cleaning Fish:



Remove and throw away the head, guts, kidneys, and the liver. Remove the "backstrap meat" along with the skin, lateral line and belly meat.

Cut away the fat, skin and belly area before cooking.

Cooking Fish:

Bake, Broil, steam, fry or grill fish, and throw away the cooking juices.

Use only fish fillets when preparing soups, stews and chowders.



Go to: FishSmartEatSmartNJ.org

WARNING!

Dioxin, PCBs and mercury may pose greater risk to babies and young children. For this reason it is important for women who are pregnant, or might become pregnant, breastfeeding women and young children follow the recommendations found in this flyer to reduce exposure.

Where to get more information:

New Jersey Department of Environmental Protection, Office of Science. Additional copies of this brochure can be printed from the web site: FishSmartEatSmartNJ.org or by calling (609) 984-6070

New Jersey Department of Health Food and Drug Safety Program http://www.state.nj.us/health/foodanddrugsafety/sea_food.shtml or call (609)826-4935

Environmental Protection Agency Fish and Wildlife Contamination Program epa.gov/osl/fish

For information on Commercial Fish: Food and Drug Administration

<http://www.fda.gov/Food/FoodbornelnessContaminants/BuyStoreServeSafeFood/UCM2006759.htm>

1-888-SAFEFOOD
Development of this brochure was a cooperative project of the New Jersey Department of Environmental Protection and the New Jersey Department of Health



Cover photo of Ed Stevenson taken by Bruce Ruppel.

2016














Fish Smart Eat Smart

Eating fish is good for you, but some fish and crustacea caught in New Jersey are contaminated with Chemicals such as Dioxin, PCBs and Mercury.



FishSmartEatSmartNJ.org

Statewide & Regional Fish Consumption Recommendations to Reduce Exposure to Dioxin, PCBs and Mercury*

Fish / Crustacea Under Advisory		General Population	High Risk **
Newark Bay Complex			
Blue Claw Crab		Do Not Catch, Do Not Eat!	Do Not Catch, Do Not Eat!
Coast			
American Eel		4 meals / year	Do Not Eat!
Bluefish <u>greater than 6lbs/24"</u>		6 meals / <u>year</u>	Do Not Eat!
Bluefish <u>less than 6lbs/24"</u>	Striped Bass 	1 meal / <u>month</u>	Do Not Eat!
Largemouth Bass		Do Not Eat Green Gland (tomalley or hepatopancreas)	
Inland—Statewide			
American Lobster	Smallmouth Bass 	1 meal / week	1 meal / month
Chain Pickerel			
Sunfish (includes bluegill, pumpkinseed and redbreast sunfish)	Yellow Bullhead 	No Restrictions	1 meal / month
Brown Bullhead		No Restrictions	1 meal / week
Common Carp		1 meal / month	Do Not Eat!
Pinelands			
Largemouth Bass	Chain Pickerel 	1 meal / month	Do Not Eat!
Brown Bullhead	Yellow Bullhead 	1 meal / week	Do Not Eat!
Sunfish (includes bluegill, pumpkinseed and redbreast sunfish)		1 meal / week	1 meal / month



*There are additional warnings for those and other fish in specific watersheds. Check the contact information on the back of this flyer or visit www.hanfordenvironmental.org

**For all freshwater fish without specific advisories, eat no more than:

General Population: 1 meal / week High Risk **

1 meal / week 1 meal / month

**High Risk is defined as infants, children, pregnant women, nursing mothers and women of childbearing age.

NOTE: To reduce your exposure, eat those fish with the lowest meal restrictions. Do not combine meal restrictions. (For example, if you eat multiple fish species or catch fish from more than one area, the recommended guidelines for different species and different locations should not be combined.)



Lower Passaic River



APPENDIX 16: COMMUNITY INTERVIEW QUESTIONS (2005, 2016) AND INTERVIEW SUMMARY (2014)

2016 Questions

1. Do you live or work near the Lower Passaic River?
 - a. If yes to “live”, how long have you been a resident of the area?
 - b. If yes to “work”, how long have you worked in the area?
 - c. If no, are you affiliated with any organization that has an interest in the cleanup of the Lower Passaic River?
2. Do you own property or operate a business proximate to the Lower Passaic River?
3. Are you familiar with any environmental issues or human/ecological health concerns associated with the Lower Passaic River?
 - a. If yes, please summarize.
 - b. Are you aware of any of the contaminants of concern?
4. Can you describe your interest/your group’s interest with regard to the Lower Passaic River (i.e., recreation, conservation, research)?
5. Have you heard of the Lower Passaic River Restoration Project?
 - a. If yes, can you indicate your level of knowledge on a scale of 1-10 (lowest to highest)?
 - b. If yes, are you aware of any local, state or federal agencies involved in these efforts and their roles and/or how they coordinate with each other? If interviewee asks for examples:
 - i. U.S. Environmental Protection Agency (EPA) – Region II and HQ
 - ii. U.S. Army Corps of Engineers (Corps)
 - iii. N.J. Department of Transportation (NJDOT)
 - iv. N.J. Department of Environmental Protection (NJDEP)
 - v. If yes, have you had any contact with local, state or federal agencies regarding this project? Please specify.
 - c. Do you have specific concerns, information or ideas regarding the Lower Passaic River Restoration Project? If yes, please explain.
 - d. Are you aware that there is a community advisory group (CAG) for project?
 - e. Have you ever attended a public meeting or event associated with the Lower Passaic River Restoration Project?
 - i. If yes, what was the nature of the meeting/ event (e.g., CAG meeting)? When was it held (approximately)?

6. Are you aware that a proposed cleanup plan for the Lower Passaic River was recently adopted?
 - a. If yes, do you know any details about this plan?
 - b. If yes, do you have any questions/concerns related to the dredging and capping of contaminated sediments?
7. On a local level, is there a particular human health or environmental issue that is most important to you (i.e., water quality, contaminated sediments, fish and shellfish consumption advisories, wetlands, degraded ecological habitats)?
8. Do you have an interest in the future economic development in the Lower Passaic River area, and do you think environmental cleanup is essential to economic development?
9. In your opinion, what role (if any) should the general public play in the environmental cleanup and restoration process?
10. How do you typically receive information about your community (e.g. word of mouth, local newspapers, local radio stations, etc.)?
11. What are the most reliable sources of information about environmental issues in your community? (media, organizations, individuals?)
12. In general, do you think the members of your community/organization would feel comfortable using the Internet and electronic communications to learn about the Lower Passaic River Restoration Project?
13. Project information is posted on www.ourpassaic.org. Have you ever accessed this website?
14. Do you think the EPA has done a good job in communicating technical information to the community?
15. In your opinion, what strategies/tactics are most effective to inform the general public?
16. In your opinion, what strategies/tactics seem ineffective or lead to confusion?
17. Are there local TV/radio talk shows that EPA could use to disseminate information or solicit public comment?
18. Are there any existing local government councils, civic or property owners associations with whom we can partner with in our outreach and involvement efforts? If yes, who do you recommend?
19. Would you like to receive more information about the Lower Passaic River Restoration Project?
 - a. If yes, what topics are of greatest interest to you?
 - b. If yes, do you know whom to contact to ask questions or provide comments?
20. Are there particular sources of information about the project on which you currently rely?
21. Regarding the cleanup of the Lower Passaic River, who or what do you perceive to be a credible, trustworthy source of information?
22. Which type of meeting format do you think is most productive – “formal” public meetings or “informal” information sessions?
23. When EPA holds a public meeting or availability session, would you attend, and what day and time would be most convenient for you?
 - a. If yes, do you have any suggestions for places to hold meetings?
24. Are there any other people or groups you think we should talk to about the project either because they have unique information or would like to know more from EPA?
25. Are you aware of communities along the Lower Passaic River that speak a language other than English and for whom translation of materials may be needed?

1. Are you aware of any homeless populations that live along and/or use the Lower Passaic River?
2. Are you aware of anyone who fishes and or eats their catch from the Passaic River?
3. Are you aware of any redevelopment plans for the area, and how do you feel about their potential impact on your organization/ community?
4. What design and implementation issues are most important to you?
5. How would you like to be involved in the project decision-making process during project design and implementation?
6. Is there anything else you would like to tell us regarding public participation for this project? Do you have any questions or concerns (e.g., concerns about cleanup process, opinions about the dewatering facility location, quality of life issues, etc.)?

2004-2005 Questions

1. Are you aware of any environmental cleanup or restoration efforts on the Lower Passaic River and Newark Bay?
 - a. If yes, do you know of any federal or state agencies involved in these efforts and their roles and how they coordinate with each other? For example:
 - i. U.S. Environmental Protection Agency (EPA)
 - ii. U.S. Army Corps of Engineers (Corps)
 - iii. NJ Department of Transportation (NJDOT)
 - iv. NJ Department of Environmental Protection (NJDEP)
 - b. If aware of the Lower Passaic River Restoration Project: Do you know about the natural resource damage assessment and its role in the project?
 - c. If aware of the Lower Passaic River Restoration Project: Are you aware of the major activities and schedule associated with the project?
 - d. What areas of the Lower Passaic River and Newark Bay would benefit the most from restoration and cleanup?
2. Are you familiar with the Diamond Alkali Superfund Site? If yes, please summarize your knowledge.
 - a. In the past, have you received any information regarding the site? Are there aspects of past public participation that worked well?
 - b. What were its weaknesses or which aspects of past public participation should be changed in the future?
3. IF APPLICABLE: Has your group/organization ever conducted research on the Passaic River? If yes, please explain.
 - a. Have statistical data/findings been made available to any state or federal agencies? If yes, please explain. If no, could this information be made available in the future?

4. Do you have specific concerns, information or ideas regarding the Newark Bay Study or the Lower Passaic River Restoration Project? If yes, please explain.
 - a. Is there a particular human health or environmental issue that is most important to you? (i.e., water quality, contaminated sediments, fish and shellfish consumption advisories, wetlands, degraded ecological habitats.)
 - b. Are you aware of future economic development plans along the Lower Passaic River around Newark Bay?
 - c. How do you feel about?
 - i. environmental dredging?
 - ii. capping of contaminated sediments?
 - iii. monitored natural recovery?
5. How do you think federal and state agencies should inform the general public about environmental issues like the Newark Bay Study or the Lower Passaic River Restoration Project?
 - a. In your opinion, what strategies/tactics are effective to inform the general public?
 - b. What strategies/tactics seem ineffective or stand in the way of progress?
 - c. Are there local TV/radio talk shows EPA could use? Are there any existing local government councils, civic, or property owners associations with which we can partner in our outreach and involvement efforts? If so, which do you recommend?
 - d. Do you want more information about the Newark Bay Study or Lower Passaic River Restoration Project? If yes, on what do you want the most information?
 - e. Do you know where to get project documents?
 - f. Do you know who to contact to ask questions or provide comments?
- g. What sources of information about the project do you/would you rely on the most? Is EPA, the Corps or New Jersey viewed as credible, trustworthy sources of information?
- h. Which type of meeting format do you think is most productive – “formal” public meetings, or “informal” information sessions?
- i. Are there interests or organizations or individuals whom you feel are important to include in the decision-making process?
6. In your opinion, does your local community understand the scientific information it is receiving about the Lower Passaic River Restoration Project?
 - a. Does the local community have access to information sources (in particular, the Internet)?
 - b. Are you aware of communities along the Lower Passaic River or Newark Bay that speak a language other than English and for whom translation of materials may be needed?
 - c. Are you aware of homeless populations that live along and/or use the river?
 - d. What types of technical assistance is most needed to understand the various studies involved in the project?
7. In your opinion, what role (if any) should the general public play in the cleanup and restoration process?
8. How do you typically receive information about your community (e.g., word of mouth, local newspapers, local radio stations, etc.)?
9. Do you have any suggestions for places to hold meetings?
10. Is there anything else you would like to tell us regarding public participation for this project? Do you have any questions or concerns?

2014 Interview Summary

This summary is based on the results of 23 stakeholder interviews conducted by SRA staff from January to June 2014 as well as on public comments made during two EPA public meetings on the Proposed Cleanup Plan for the Lower Passaic River (Newark and Kearny, NJ, in May 2014). It is not in any way intended to be representative of the views of all Lower Passaic River community stakeholders. Rather, it is intended to report what we heard from respondents and commenters by summarizing and synthesizing their comments, not evaluating their merits or recommending specific strategies for conducting outreach or processes or mechanisms for obtaining community input. To that end we have grouped comments into two broad sections: 1) conducting outreach, and 2) issues of concern related to proposed cleanup activities that will require additional outreach and input. Each section is organized into broad themes, recognizing that some comments may fit into multiple themes and there may be overlap among themes.

SRA conducted the majority of the interviews during January and February, prior to the EPA's release of the Proposed Cleanup Plan for the Lower Passaic River. As a result, SRA was able to obtain much more focused comments on the EPA's outreach efforts (because the EPA had been conducting outreach for many years) than on concerns regarding planned cleanup activities.

Although the EPA had been sharing information about cleanup alternatives during the Focused Feasibility Study process and suggested that a remedy would involve significant amounts of dredging and capping, it still was not an official proposal when roughly 80% of the interviews were conducted. It was difficult for stakeholders to comment on something that at the time was still an abstraction; there was no formal proposal to which they could react.

With respect to conducting outreach related to Lower Passaic River cleanup activities, one overarching theme (mentioned by nearly all respondents) is that people who have not been regularly engaged with the cleanup or with the Community Advisory Group (CAG) do not understand the nuances of the cleanup process, the relationships between the various components of the Diamond Alkali site, and may in fact be unaware that there is a Superfund site near them. This fact combined with the area's large and diverse population underscores the importance of using multiple channels and venues to deliver information about proposed or planned cleanup activities and make the information relevant to diverse audiences. We recognize this is no small challenge, especially in a climate of limited Agency resources.

It is vital that the EPA continue to make use of existing organizations/networks and their distribution mechanisms as part of its effort to identify stakeholders

who are not currently engaged in or aware of the Superfund site and planned cleanup activities on the Lower Passaic. Prior to the release of the Lower Passaic River Proposed Plan, several respondents observed that the EPA had not done an effective job explaining and promoting its cleanup proposal, especially when compared to the aggressive outreach effort of the Cooperating Parties Group. Currently, the EPA is in the process of receiving public comment on the Lower Passaic River Proposed Plan. As part of this process, the EPA has held three public meetings to present and receive comments on the Proposed Plan and participated in two issue-specific forums hosted by the New Jersey Institute of Technology and the Passaic River Institute. These meetings and forums are good mechanisms for informing the public and getting a feel for community concerns; however, they tend to reach people who are already somewhat informed about the site and its cleanup efforts, not those that are unaware and who may yet be impacted.

The following summarizes responses to three topics related to Proposed Plan outreach:

1. Conducting outreach
2. Issues of concern requiring additional input

Conducting Outreach

This topic is divided into two sections: outreach mechanisms and outreach content.

OUTREACH MECHANISMS

Many respondents noted the area's diverse population (in terms of ethnic groups, number of languages spoken and educational levels) and the importance of sharing information in culturally competent and appropriate forms through meaningful community networks and associations as well as through local governments. They indicated it is not enough for the EPA to expect people to get meaningful information through the EPA's website (quotes include: "it's terrible"... "poorly organized"... "a treasure hunt"... "many people don't speak English or lack internet access") or EPA-sponsored public meetings (quotes include "too intimidating"... "too technical"... "not convenient").

Respondents suggested the EPA use the following outreach mechanisms to inform the public about cleanup activities on the Lower Passaic:

- Media:
 - › Publish notices in print media/newspapers, including Star Ledger and Record
 - › Work with local ethnic media outlets (including social media, TV and radio)

- › Meet with editorial boards to post announcements
- › Local cable network, including Cablevision
- Meet with impacted local government/officials/communities to explain planned cleanup activities (some noted the EPA's success briefing some municipalities over the past year as an example). When notifying local government about planned cleanup activities, be sure to notify staff members and not just elected officials, who may be term-limited. Attend town council meetings where appropriate.
 - › North Ward of Newark
 - › Cities of Newark and Corning
 - › Bergen County
 - › Essex County Environmental Commission (and other environmental commissions)
 - › Other County executive offices
 - › East Newark
 - › Harrison
 - › Kearney
 - › Belleville
- Piggyback on/tap into already existing community events (e.g., community meetings, Boy/Girl Scout meetings, weekend events, Passaic River boat tours).
- Partner with local organizations to spread information through their networks via their distribution mechanisms:
 - › Faith organizations (e.g., Green Faith, Faith River Coalition, individual churches)
 - › Baykeeper
 - › New Jersey Department of Environmental Protection
 - › Universities (e.g., Passaic River Institute at Montclair University, Rutgers, Seton Hall, New Jersey Institute of Technology)
 - › Association of New Jersey State Health Commissioners and State Environmental Commissions
 - › Block associations
 - › Rowing/crew communities and other recreational users
 - › Riverkeeper
 - › Lower Passaic Watershed Alliance
 - › Passaic River Coalition
 - › Metropolitan Watershed Alliance
 - › School districts (develop materials for younger audiences; they will share with their parents)
 - › Ironbound Community Corporation
 - › Brick City Development Corporation ("What's Happening on the River" newsletter)

- EPA meetings: These can be useful, but they need to be easily accessible to different communities (time and location important), must accommodate non-English speakers (Spanish at a minimum and ideally Portuguese also), and make the information more relevant to non-technical people (more on this in the section on Outreach Content below). People have neighborhood “comfort zones,” so it is best to bring meetings to communities where possible. Community-based organizations can advise the EPA on the best day and time to hold meetings. Hold them outside of Newark where possible. It would be great if the EPA could provide some food.
- EPA-sponsored site tours.
- Direct mailing: For example, use city-wide mailing to Newark. Alternative could be providing materials about planned activities in water bills.
- Information repositories: Work with community partners to establish information repositories in each of Newark’s five wards, and ensure that EPA materials are up to date and available in hard copy at the Newark Information Repository (Newark Library).
- Web: Ensure there is a good on-line mechanism for presenting information and allowing for comment. Our Passaic website could be used for this if the plan is displayed prominently and a comment function added.
- Phone: Have phone number to call to request a hard-copy of EPA documents.

OUTREACH CONTENT

Respondents shared the following suggestions in response to the question: “For you to understand the Proposed Plan, what kind of information should EPA communicate?” While these comments are focused on the Proposed Plan, the principles underlying these comments are generally applicable to the content of any outreach effort related to the Lower Passaic. Although not specifically asked the question, many respondents noted that outreach materials should be available in multiple languages (English, Spanish, Portuguese) and understandable to low-literacy and non-technical audiences.

- Information on community involvement: Materials should explain the goal of the outreach effort:
 - › Why public is being asked for input
 - › What they should provide input on
 - › How the EPA will use that input/what decisions it will help influence
 - › Future opportunities for input after remedy selection
- Context for the information: Provide basic information or brief history on the cleanup process to date (perhaps a simplified cleanup process map – de-jargonized if possible – with a “you are here” indicator). Explain how the EPA got “here” (e.g., EPA looked at four alternatives; we

think this one is best/we chose this one; this is why).

- Presentation of information: Develop a range of materials that meet the needs of diverse audiences. Materials should be “tiered” or “nested” – e.g., develop a basic fact sheet on the plan with links or references to supporting documents (e.g., map/flowchart of Superfund cleanup process, Executive Summary of Proposed Plan, Proposed Plan, Focused Feasibility Study). Include maps and other visuals.
- Framing of the cleanup proposal/effort: Develop a clear and consistent narrative on the contaminants in the river and their impacts, what is possible to achieve with the cleanup, the EPA’s cleanup goals, how the proposed plan best meets those goals, and the risks associated with the cleanup. Explain why it is the right thing to do; do not get bogged down in legalistic language of Superfund enforcement or the technical details of modeling.
- Make the information relevant to the average citizen:
 - › Why should I care?
 - › How will this benefit me? Will I be able to row, swim in the river, eat the fish? When?
 - › What will be the footprint of the cleanup? Where will the dredging occur? What are potential or anticipated disruptions to the community or quality of life impacts?

- › Use physical/geographic reference points of significance to the public – e.g., few people think in terms of river mile
- For the necessary technical details:
 - › Explain why the EPA is cleaning up the Lower 8 miles before the Lower 17 miles.
 - › Provide clear information on what constitutes success and how it will be measured.
 - › Provide risk-benefit and cost-benefit information/analyses.
 - › Address the potential for contaminant resuspension to other areas of the river and additional impact to wildlife.
 - › Provide information on the mechanics of dredging – e.g., How deep will you dredge/why? Are you going to cap/why? What are you going to do with/where will you put contaminants?
 - › Provide examples of where dredging on this scale has been successfully completed in similar river environments. Be candid about challenges faced and how the EPA handled them.
 - › Modeling should show what will happen in the river after the removal of contaminated sediment is completed.

ISSUES OF CONCERN REQUIRING ADDITIONAL INPUT

The Proposed Plan has likely addressed many of the public's questions about how the EPA intends to clean up the Lower 8 miles of the Passaic River. That is, it provides a big-picture sense of how and how much of the contaminated sediments the EPA will remove, how (in general) it plans to dispose of them, how it will address the problem of residuals (capping), and generally how long it will take and how much it will cost. However, the devil is in the details. Conducting an operation of this magnitude in densely-populated, heavily-developed, diverse urban environment is certain to be disruptive in ways much of the public cannot begin to imagine.

Once a remedy is selected and the Record of Decision is signed and finalized, as part of its outreach effort it will be important for the EPA to acknowledge the concerns below, if only to indicate that many of these topics will be addressed during remedy design.

- Flooding: What measures will the EPA take to ensure the remedy does not increase the likelihood of flooding if there's another Sandy-like event, either during dredging or after its completion?
- Potential health risks/re-contamination: How will the EPA manage the dredging operation to control for/minimize sediment resuspension and migration?

- Selection/siting of a de-watering facility:
 - › What criteria will be used to select a location for the de-watering facility?
 - › What will be the process for selecting a location?
 - › What role will the public have in selecting a location?
- Movement of contaminated sediments:
 - › How will the EPA select transportation routes for transporting de-watered yet contaminated sediments from the de-watering facility to their final destination?
 - › Will sediments be moved strictly by rail or also by truck?
 - › What measures will the EPA take to ensure the safe passage of contaminated sediments?
 - › What role will the public have in these decisions?

- Impact on river-use during and after dredging:
 - › How will the EPA manage schedule conflicts on the river during dredging? Will crew teams and other river users have an opportunity to meet with EPA/the dredging contractor to set up a schedule that minimizes the impact to crew teams?
 - › How will dredging impact the provision of emergency services on the river (e.g., rescue squad boats)?
 - › What kind of future use restrictions are anticipated on the river once dredging is completed so the cap is not compromised? For example, will improvements to bulkheads/piers/boat ramps be permitted?
 - › How will the cap/future use restrictions impact economic development along the river?
 - › What role with the public have in decisions related to scheduling of dredging and restrictions on future river use?

- Quality of life issues: What will the EPA do to minimize the impact to quality of life during dredging operations? For example:
 - › What will the EPA do to minimize bridge closures or other traffic disruptions?
 - › What will the EPA do to minimize noise from heavy equipment during dredging?
 - › What will the EPA do to minimize nuisance odors during dredging?
 - › What role will the public have in these design-related decisions?
- Positive economic impacts of the cleanup: Will there be cleanup-related jobs for locals (e.g., will there be another pilot similar to the river mile 10.9 removal action)?

Given the scale and cost of the proposed remedy, there will be a need for sustained community engagement during the design and implementation of whatever remedy the EPA ultimately selects. The EPA will no doubt learn many of the public's most pressing concerns during the public comment process for the proposed plan that is yet ongoing. In addition, once the EPA selects the remedy for the Lower Passaic, it would be beneficial to conduct another round of interviews focused on the topic of community involvement during remedy design and implementation. Prior to so doing, however, it would be helpful for the EPA to develop a fact sheet or guide on the design and implementation issues on which it will seek public input and an approximate timeframe for when decisions on those issues are likely to occur. This will help set expectations and create a framework for receiving focused input on the remedy design/implementation issues of greatest concern to Lower Passaic River stakeholders.



Passaic River Shoreline



APPENDIX 17: EXAMPLE FACT SHEETS

Click the front pages to view the
complete fact sheets.



Cleaning Up the Lower Passaic River

Preparing for the Design and Construction Phase | June 2016

Where Things Stand with the Cleanup

In March 2016, the EPA finalized a cleanup plan for the lower 8.3 miles of the Passaic River, from Newark Bay to the Belleville/Newark border. Contaminated sediment in the river bottom poses an unacceptable risk to people's health and the health of wildlife that live in or near the river. The EPA is negotiating an agreement to perform the design work for cleanup of the lower 8.3 miles of the Passaic River. This design work will take approximately four years to complete, during which the public will have opportunities to weigh in on key issues and decisions that are most important to the community. The EPA is committed to effective communication and involvement of all stakeholders.

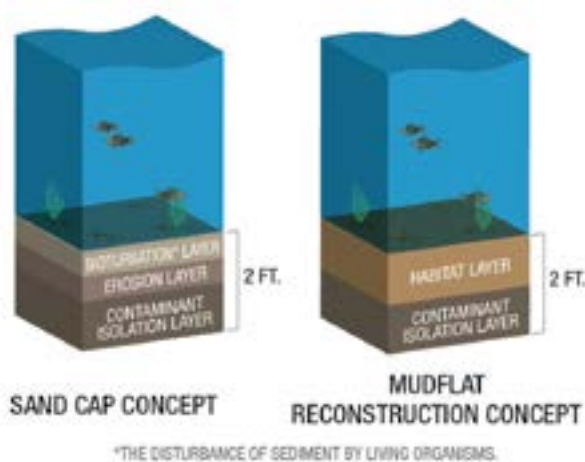
Key Ways to Get Involved

- Give feedback to the EPA anytime through written communication and/or informal discussion. Contact information is provided below.
- Get on the EPA's email group list to receive emails about upcoming meetings and project milestones. Send an email to: rini.sophia@epa.gov
- Provide comments on the draft Community Involvement Plan.
- Attend public meetings as the project progresses through the design and construction stages.
- Provide input on potential locations for the sediment processing facility.
- Give feedback on community health and safety plans as well as the quality of life performance standards for air quality, noise, odors and other issues that may impact communities during construction.
- Attend the Passaic River Community Advisory Group (CAG) meetings. The CAG meets regularly and serves to facilitate communication between the diverse interests of the community and the EPA so that community concerns and viewpoints can inform the EPA's decision-making process.

Find out more at: www.ourpassaic.org

Major Components of the Cleanup Plan

- Capping the entire lower 8.3 miles of the river bank-to-bank to isolate the contamination and prevent it from entering the food chain.



- Dredging 3.5 million cubic yards of contaminated sediment to ensure that the cap does not cause additional flooding and to allow continued use of the navigation channel in the 1.7 miles closest to Newark Bay.
- Barging or pumping dredged materials to a sediment processing facility in the vicinity of the Lower Passaic River/Newark Bay shoreline.
- Transporting dewatered materials from the sediment processing facility to permitted treatment facilities and landfills in the U.S. or Canada.
- Long-term monitoring and maintenance of the engineered cap. Long-term monitoring of fish, crab, river water and sediment quality.

EPA Project Contacts

Alice Yeh - Project Manager
Phone: (212) 637-4427
Email: yeh.alice@epa.gov

Sophia Rini - Public Affairs
Phone: (212) 637-3670
Email: rini.sophia@epa.gov

Cleaning Up the Lower Passaic River

EPA's Plan to Clean Up the Lower Eight Miles | March 2016

The Plan to Clean the Passaic River

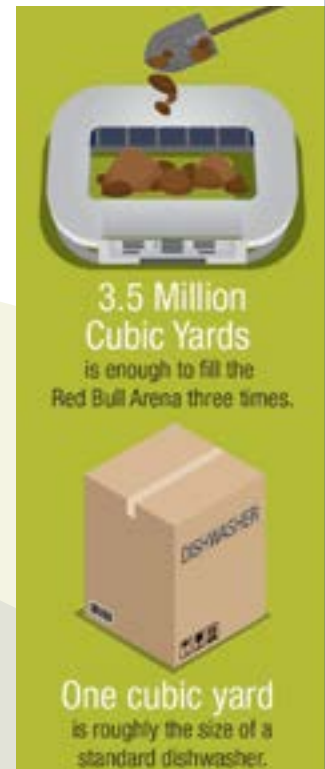
A century of industrialization throughout the Passaic River watershed has left behind toxic muck on the bottom and banks of the river. Many chemical products, including the herbicide Agent Orange, were manufactured in facilities located adjacent to the Passaic River. Approximately 90 percent of the volume of contaminated sediments is located in the river's lower eight miles. Concentrations of contaminants have declined minimally in the last 20 years. No one should eat fish or crab caught from the Lower Passaic River.

On April 11, 2014, the EPA proposed a cleanup plan for the lower eight miles of the river. The proposed plan was released for public review and a four-month comment period. EPA received and reviewed more than a thousand comments from a diverse cross section of the public. After carefully considering these comments, EPA has finalized its decision on a cleanup plan. EPA's final plan will protect communities along the Passaic River by reducing the contaminants in fish and crab that pose unacceptable risks to human health and the environment.



What is included in the cleanup plan?

- The entire lower eight miles of the river will be capped bank-to-bank. With the cap in place, the contamination in the sediment will be prevented from entering the food chain, thereby decreasing health risks to people who eat fish and crab from the lower eight miles of the river. The cap will isolate the contaminated sediment, effectively eliminating the movement of a major source of contamination to the rest of the river and Newark Bay.
- Before the cap is placed, 3.5 million cubic yards of contaminated sediment will be removed, bank-to-bank, by dredging the river bottom from Newark Bay to the Belleville/Newark border.
- This will result in the permanent removal from the river of approximately 13 pounds of highly toxic and persistent dioxin (2,3,7,8- TCDD), 24,000 pounds of mercury, 6,600 pounds of PCBs, and 1,300 pounds of DDT (a pesticide).
- Sediment will be dewatered locally and transported off-site for disposal.
- The estimated cost of the remedy is \$1.38 billion.



THE COMPLETE RECORD OF DECISION INCLUDING ALL OF
EPA'S RESPONSES TO COMMENTS IS AVAILABLE AT WWW.OURPASSAIC.ORG



Cleaning Up the

Lower Passaic River

An Overview of the Options for Cleaning up Contaminated Sediment
in the Lower Eight Miles

May 2014



The EPA conducted a multi-year “Focused Feasibility Study” of an eight mile section of the Lower Passaic River. The study evaluated three cleanup options (also referred to as “Remedial Alternatives”) to address contaminated sediment in this area of the river, as well as a fourth option of taking no action. Information

The Passaic River’s Polluted Past fact sheet contains an overview of the problems and the Remedial Investigation Report for the lower eight miles provides details on the history and nature and extent of contamination.

collected during a larger study of the entire 17-mile stretch of the Lower Passaic River, from Newark Bay to the Dundee Dam in Garfield, which is ongoing, showed that contaminated sediment in the lower eight miles, as deep as 15 feet, is a major source of contamination to the rest of the river and Newark Bay.

On April 11, 2014, the EPA issued for public review and comment a “Proposed

Plan” outlining the Agency’s preferred cleanup plan for the lower eight miles of the river. The EPA’s preferred cleanup plan is “Capping with Dredging for Flooding & Navigation” with “Off-Site Disposal of Dredged Materials”, described in the Focused Feasibility Study and Proposed Plan as “Alternative 3 with Dredged Materials Management Scenario B.”

The Proposed Plan and the Focused Feasibility Study report have a considerable amount of detail on the cleanup options that were considered.
They are available at www.ourpassaic.org

In early 2015 the EPA expects to make a decision about how to clean up the sediment of the lower eight miles of the Passaic after considering public comments on the Proposed Plan. After completion of the on-going study of the 17-mile, tidal stretch of the Lower Passaic the EPA expects to propose a plan that addresses the entire Lower Passaic River.

Evaluating Cleanup Options

Cleanups under Superfund must protect human health and the environment. A cleanup option is considered protective if it reduces current and potential future risks associated with the pathways by which people and wildlife are, or will be, exposed to site contaminants to acceptable levels.

The EPA uses nine criteria to evaluate cleanup options.
Page 26 of the Proposed Plan provides more details about these criteria

Superfund Remedy Evaluation Criteria

1	Overall Protection of Human Health and the Environment
2	Compliance with Applicable or Relevant and Appropriate Requirements
3	Long-term Effectiveness and Permanence
4	Reduction of Toxicity, Mobility, or Volume of Contaminants through Treatment
5	Short-term Effectiveness
6	Implementability
7	Cost
8	State Acceptance
9	Community Acceptance

The Passaic River's Polluted Past

April 2014

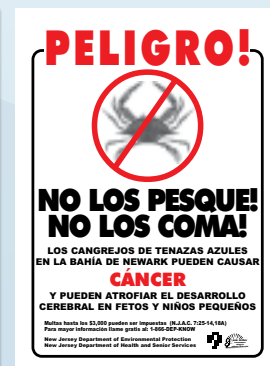
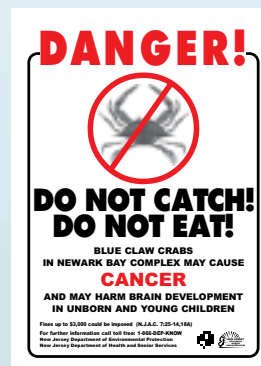
The Problems

A century of industrialization and development throughout the Passaic River watershed have left behind toxic muck on the bottom and banks of the Passaic River. From Newark Bay to the Dundee Dam in Garfield, New Jersey, a section of the river referred to as the Lower Passaic River, the sediment is severely contaminated with dioxins, polychlorinated biphenyls (PCBs), mercury, lead and other metals, as well as pesticides and other harmful chemicals. Contaminated sediment of the Lower Passaic River poses a significant threat to people's health and the health of wildlife that live in and along the river. The primary risks are from eating contaminated fish and shellfish from the river.

Mercury, PCBs and dioxins are among the major contaminants found in fish and shellfish in the Lower Passaic River, its tributaries and Newark Bay. Fisheries have long been closed. It is prohibited to catch blue crab in these waters because they are so heavily contaminated. The state of New Jersey has for decades issued advisories warning against eating any fish caught from the Lower Passaic River because of high contaminant levels in fish tissue. These contaminants can be especially harmful to women considering pregnancy, pregnant women and nursing mothers. Children are also at risk of developmental and neurological problems if exposed to these chemicals.

Local plans for riverfront development have been obstructed because of sediment contamination. In most cases, navigational dredging has ceased altogether in the Lower Passaic, in part because contaminant levels in the sediment made treatment and disposal of dredged materials prohibitively expensive.

The majority of the contamination is located in the lower eight miles of the river, where there is up to 15 feet of accumulated sediment totaling 9.7 million cubic yards (a cubic yard is about the size of a dishwasher) that spans bank-to-bank along the river bottom. The sediment contamination found here is highly concentrated, persistent and continues to move as the river flows, adding to the pollution in the rest of the river, Newark Bay and beyond.



Wildlife at risk of exposure to contaminants include:

- Invertebrates such as the blue crab,
- Forage fish such as mummichogs,
- Predatory fish such as white perch and American eel,
- Water-dependent birds such as the great blue heron, and
- Water-dependent mammals such as mink.

Cleaning Up the Lower Passaic River

An Overview of EPA's Proposal for the Lower Eight Miles

THE PASSAIC RIVER'S POLLUTED PAST

A century of industrialization and development throughout the Passaic River watershed have left behind toxic muck on the bottom and banks of the Passaic River. From Newark Bay to the Dundee Dam in Garfield, New Jersey, a section of the river referred to as the Lower Passaic River, the sediment is severely contaminated with dioxins, polychlorinated biphenyls (PCBs), mercury, lead and other metals, as well as pesticides and other harmful chemicals. Contaminated sediment in the river bottom poses a significant threat to people's health and the health of wildlife that live in and along the river. The primary risks are from eating contaminated fish and shellfish from the river.

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persistent and continues to move as the river flows, adding to the pollution in the rest of the river, Newark Bay and beyond.

THE PROPOSAL TO CLEAN THE PASSAIC

The EPA conducted a multi-year study of an eight mile section of the Lower Passaic River. The study, referred to as the Focused Feasibility Study, evaluated three cleanup options to address contaminated sediment in this area of the river, as well as a fourth option of taking no action. A larger study of the entire 17-mile stretch of the Lower Passaic River is ongoing.

Both the cleanup proposal for the lower eight miles and the comprehensive 17-mile study of the Lower Passaic River are part of a federal government cleanup of the Diamond Alkali Superfund site located at 80-120 Lister Avenue in Newark, New Jersey.

On April 11, 2014, the EPA proposed a cleanup plan for the lower eight miles of the river. The proposed plan was released for public review and comment. Of the cleanup alternatives evaluated, the EPA is proposing "Capping with Dredging for Flooding & Navigation" with "Off-Site Disposal of Dredged Materials", described in the Focused Feasibility Study and Proposed Plan as "Alternative 3 with Dredged Materials Management Scenario B." These documents and the Remedial Investigation report, which details the nature and extent of contamination in the lower eight miles, are available in the information repositories and on the project website: <http://www.ourpassaic.org/>

CAPPING WITH DREDGING FOR FLOODING & NAVIGATION WITH OFF-SITE DISPOSAL OF DREDGED MATERIALS

Under this cleanup plan:

- 4.3 million cubic yards of contaminated sediment (enough to fill Giants Stadium two times) would be removed, bank-to-bank, by dredging the river bottom from Newark Bay to the Belleville/Newark border. This would result in the permanent removal from the environment of nearly 18 pounds of highly toxic and persistent dioxin (2,3,7,8-TCDD), more than 35,000 pounds of mercury, more than 15,000 pounds of PCBs and nearly 2,000 pounds of DDT (a pesticide).
- Sediment would be dewatered locally and prepared for transport by rail for incineration and/or disposal in landfills.
- 5.4 million cubic yards of contaminated sediment would remain in the river bottom protected by an engineered cap, effectively eliminating the movement of sediment and its availability to contaminate the food chain. The engineered cap (a physical barrier constructed primarily of sand and stone) would be placed over the dredged areas bank-to-bank to protect against erosion or other physical disturbances. The cap would not contribute to additional flooding and would be placed to accommodate the ongoing and projected future use of the federal navigation channel in the 2.2 miles of the river closest to Newark Bay.



APPENDIX 18:

LEGAL AUTHORITIES

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)

Congress enacted CERCLA on December 11, 1980. The Superfund law (as it is commonly known) provided broad federal authority for a government program to identify, investigate and clean up hazardous waste sites. The law also created a tax on the chemical and petroleum industries to fund a trust fund to be used to address abandoned or uncontrolled hazardous waste sites. This tax expired in 1995. On October 17, 1986, Congress enacted the Superfund Amendments and Reauthorization Act (SARA), amending the original law.

When cleaning up sites under the Superfund law, the EPA follows the “polluter pays” principle, looking to the parties responsible for the pollution, rather than the general public, to pay for the cleanup. The EPA

identifies potentially responsible parties (PRPs), including individuals, companies, or other entities (i.e., owners or operators of facilities at or from which there has been a release of a hazardous substance), transporters, or generators of hazardous substances) potentially responsible for, or contributing to, the contamination at a Superfund site. The EPA seeks to have PRPs perform work at Superfund sites, and/or to pay the costs that the EPA incurs in performing work. If the EPA is not able to identify financially viable PRPs, the cost of the cleanup may be paid from the Superfund, which is financed through taxpayer dollars.

Under Superfund law, the EPA’s goal is to reduce unacceptable risks to human health and the environment from exposure to releases of hazardous substances by cleaning up to target concentrations defined in the law and EPA guidance documents or developed specifically for a particular site. An important component of the Superfund program is community

involvement in decisions about how to clean up contaminated sites. Superfund law requires specific community involvement activities be undertaken at certain points throughout the cleanup process. The primary steps in Superfund projects are remedial investigations, feasibility studies, proposed plans, records of decision and remedial actions. While the EPA is the lead agency for developing and implementing community relations activities at Superfund sites, other federal, state and local agencies frequently assume a supporting role.

SUPERFUND STEPS

- » Preliminary Assessment
- » Remedial Investigation
- » Feasibility Study
- » Proposed Plan
- » Record of Decision
- » Remedial Action

Natural Resource Damage Assessment and Restoration (NRDAR)

CERCLA authorizes designated state, federal and tribal Natural Resource Trustees to assess and recover damages for injury to natural resources from releases of hazardous substances and use the damages for the restoration, rehabilitation, replacement or acquisition of equivalent natural resources. An injury to a natural resource is a measurable adverse change in the chemical or physical quality or viability of that resource. The process by which the trustees evaluate the injuries associated with hazardous substance contamination in natural resources is known as a NRDA. The ultimate objective of an NRDA is to restore natural resources and their services that have been injured by hazardous substance contamination to baseline, or the condition that would have existed if the hazardous substances were not released. Natural resources held in trust include fish, wildlife, and other biota, the habitats that support them, as well as water, air and protected lands. In the matter of the Lower Passaic River restoration, the Natural Resource Trustees are the National Oceanic and Atmospheric Administration (NOAA), the U.S. Fish and Wildlife Service (USFWS) and New Jersey Department of Environmental Protection (NJDEP). Trusteeship is derived from federal and tribal treaties, federal and state statutes, other laws and regulations.

The National Resource Trustees act on behalf of the public to assess and restore natural resources injured by hazardous substances. Compensation for natural resource injuries provides a means to restore the injured public resources to the condition they would have been in but for the release, and to compensate the public for the loss of services that should have been provided by those resources.

The NRDA process involves injury assessment, damage determination and resource restoration. The Natural Resource Damage Assessment and Restoration Plan is one step in the damage assessment process. It serves to document injuries to natural resources and their services caused by exposure to hazardous substance releases, to identify how these injuries will be evaluated and to outline alternative restoration proposals

WATER RESOURCE DEVELOPMENT ACT (WRDA)

The Water Resources Development Act is a biennial piece of legislation that is the main vehicle for authorizing water resource projects to be studied, planned and developed by the U.S. Army Corps of Engineers (Corps). It is also the legislative vehicle for implementing policy changes with respect to the Corps' water resource projects and programs.

NRDA PROCESS

- » Injury assessment
- » Damage determination
- » Resource restoration

For more information on NRDA, visit:

<https://darrp.noaa.gov/hazardous-waste/lower-passaic-river-and-greater-newark-bay>

Section 312, WRDA of 1990 as amended, provides for the removal and remediation of contaminated sediments as: 1) part of operation and maintenance of a navigation project or outside the boundaries of and adjacent to the navigation channel; and 2) from navigable waters of the United States for the purpose of environmental enhancement and water quality improvement. This removal and remediation is requested by a non-federal sponsor and the sponsor agrees to pay 35 percent of the cost of such removal and remediation. This authority does not negate the rights and responsibilities of any person under CERCLA of 1980.

WRDA and the Corps implementation guidance outlines the restoration planning process for ecosystem restoration feasibility studies. It requires a Feasibility Study (FS) that contains a cost-benefit analysis of potential restoration solutions. For the Lower Passaic River Restoration Project, restoration goals may include benthic habitat restoration, tidal wetland restoration, vegetative buffer creation, shoreline stabilization and aquatic habitat improvement. Since 2003, the Corps has lead responsibility for the WRDA portion of the feasibility study. WRDA requires that the Corps cost-share equally all of its FS effort with a non-federal sponsor. Congress provides the Corps with its share of funds on an annual basis in the Energy and Water Appropriations Act.

Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low- Income Populations

On February 11, 1994, President Clinton issued Executive Order 12898. This order directs agencies to address environmental and human health conditions in minority and low-income communities to avoid the disproportionate placement of any adverse effects from federal policies and actions on these populations. Conditions giving rise to environmental justice concerns are specific to individual communities and their histories. Urban communities typically face pollution from multiple sources, including toxic waste sites, industrial plants as well as heavy city and port traffic. Environmental justice populations may also struggle with economic divestment, aging infrastructure, and the presence of underutilized properties that, while not Superfund sites, are also not free of contamination.



Participants in a Superfund Job Training Initiative, the EPA's environmental remediation job readiness program.



APPENDIX 19: WORKS CONSULTED

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