

About the Lower Passaic River: Environmental Challenges and Opportunities

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Urban Waters Federal Partnership**



New York-New Jersey
Harbor Estuary Program

HUDSON RIVER FOUNDATION
for Science & Environmental Research, Inc.

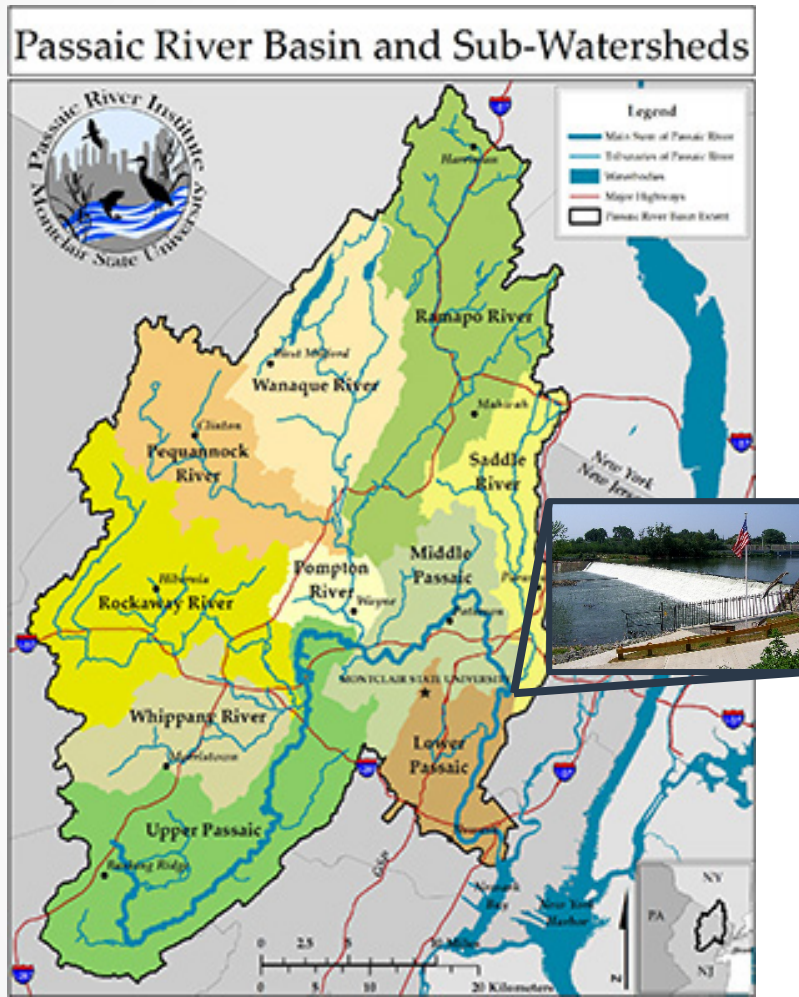


About the Urban Waters Federal Partnership

- Ambassador role: identifying community needs with respect to urban waterways, finding appropriate partners in the interagency partnership
- Working to share some of the best practices developed through the Superfund community engagement process to other government agencies active on the Lower Passaic River.
- One of 19 pilot locations, the Lower Passaic River UWFP is a collaboration of federal and state agencies, municipalities, and community-based organizations advancing **cleanup, restoration, and stewardship** of the Lower Passaic River and **equitable, sustainable development** along its banks.



Geography



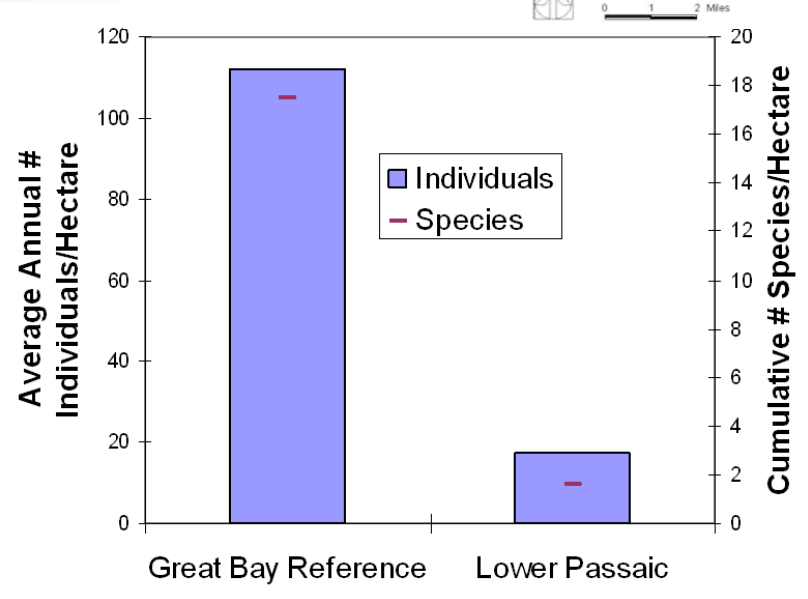
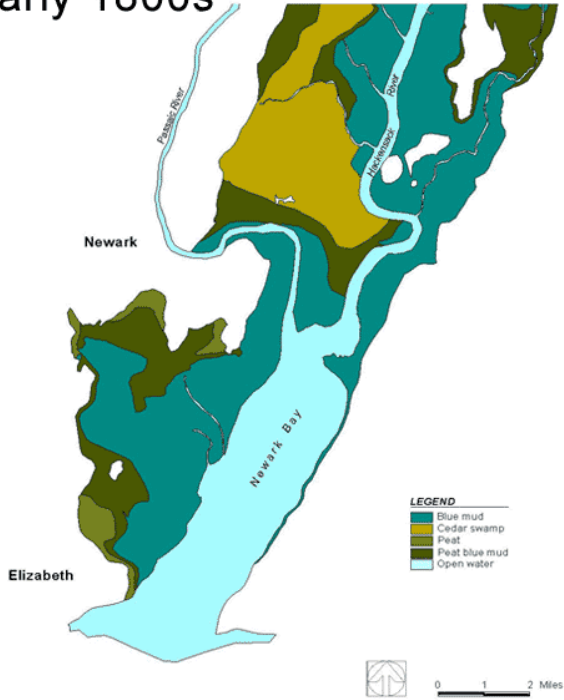
Headwater of the Passaic in Mendham Township



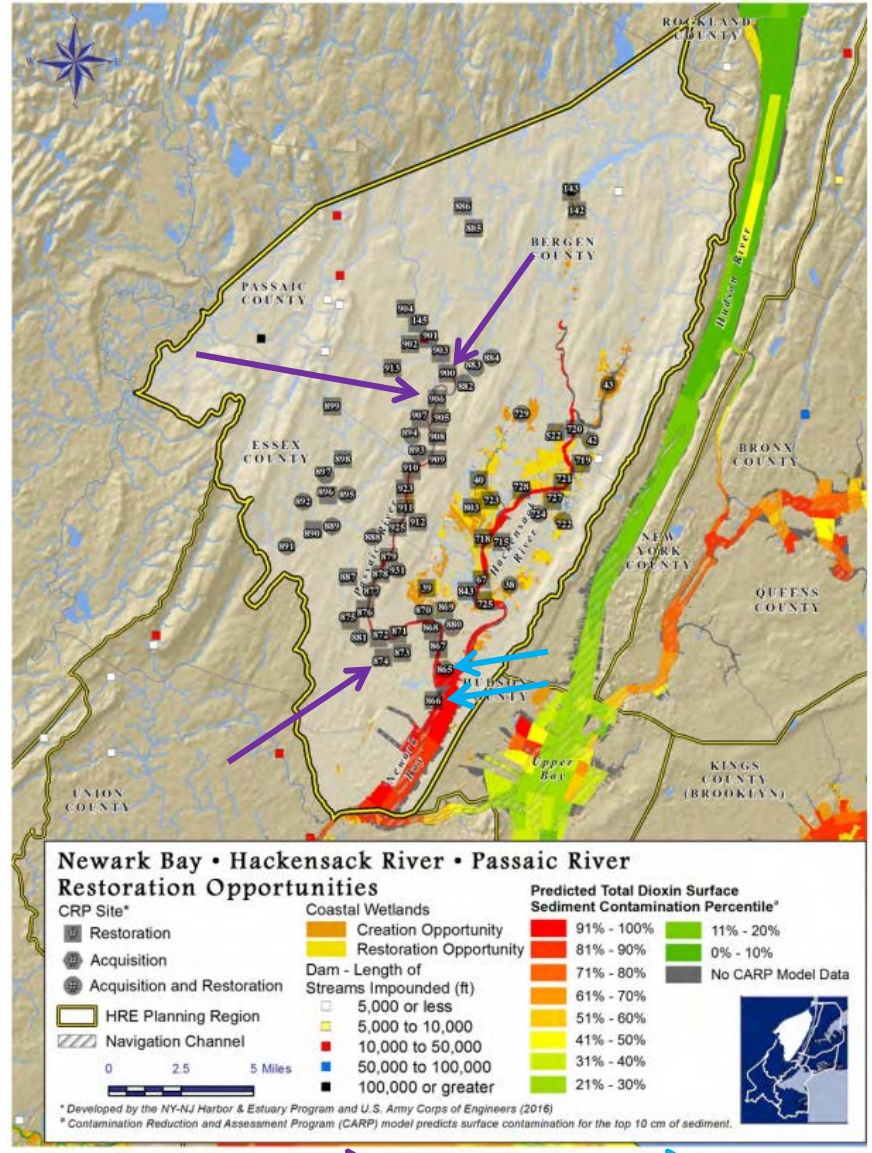
The tidal stretch in Newark, NJ

Habitat

Early 1800s



(Iannuzzi et al., 2004)



Near-Term Sites

Deferred Sites

Newark Bay • Hackensack River • Passaic River
Restoration Opportunities

<ul style="list-style-type: none"> CRP Site* Restoration Acquisition Acquisition and Restoration HRE Planning Region Navigation Channel 	<ul style="list-style-type: none"> Coastal Wetlands Creation Opportunity Restoration Opportunity Dam - Length of Streams Impounded (ft) 5,000 or less 5,000 to 10,000 10,000 to 50,000 50,000 to 100,000 100,000 or greater 	<ul style="list-style-type: none"> Predicted Total Dioxin Surface Sediment Contamination Percentile* 91% - 100% 81% - 90% 71% - 80% 61% - 70% 51% - 60% 41% - 50% 31% - 40% 21% - 30% 11% - 20% 0% - 10% No CARP Model Data
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* Developed by the NY-NJ Harbor & Estuary Program and U.S. Army Corps of Engineers (2016)
 * Contamination Reduction and Assessment Program (CARP) model predicts surface contamination for the top 10 cm of sediment.

Public Access

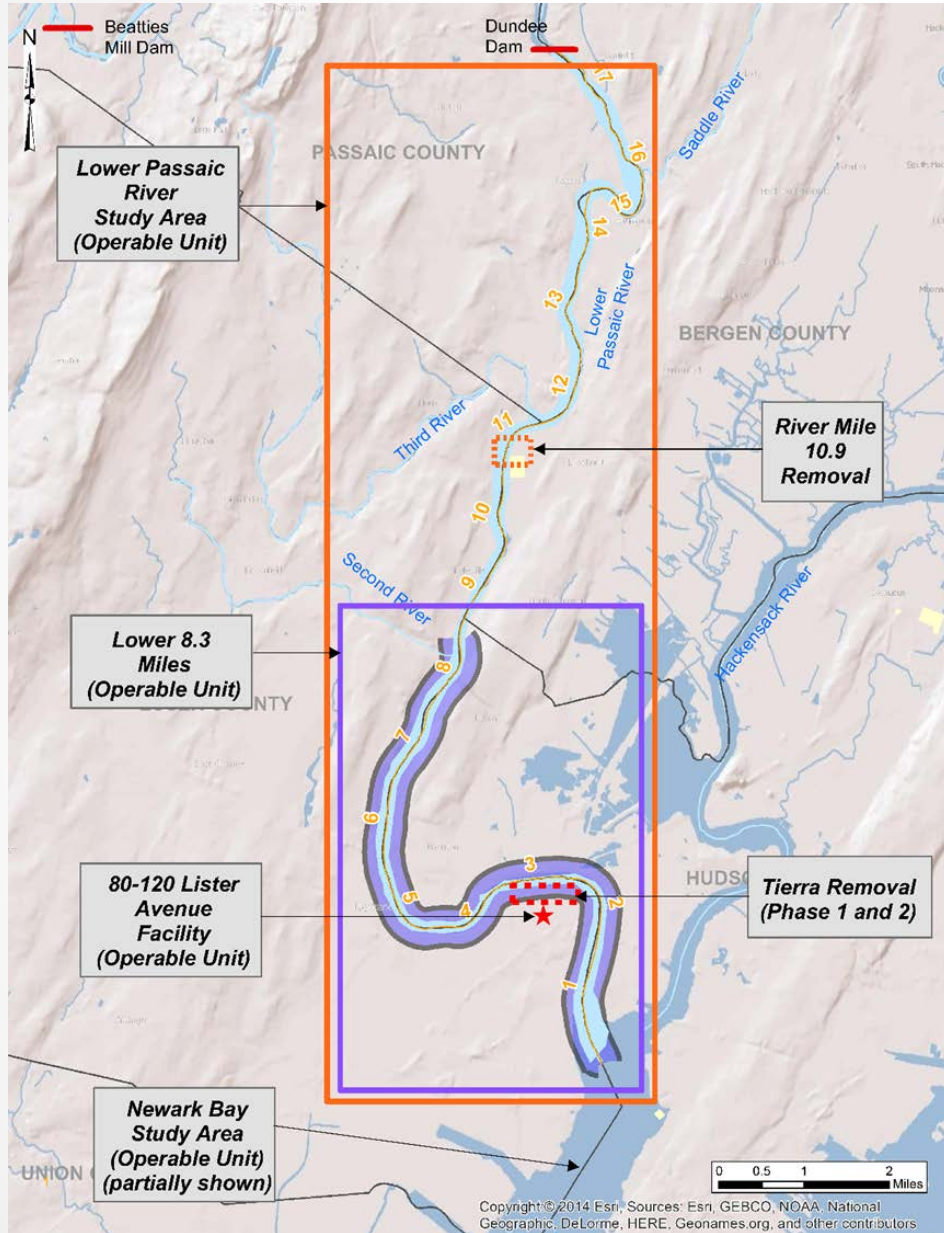
3.5% of the Lower Passaic River is accessible in comparison to a harbor-wide average of **37.4%**

--NY-NJ Harbor & Estuary Program
Public Access Report (2017)

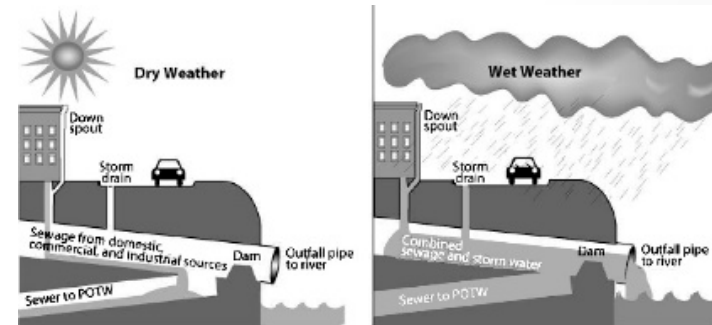
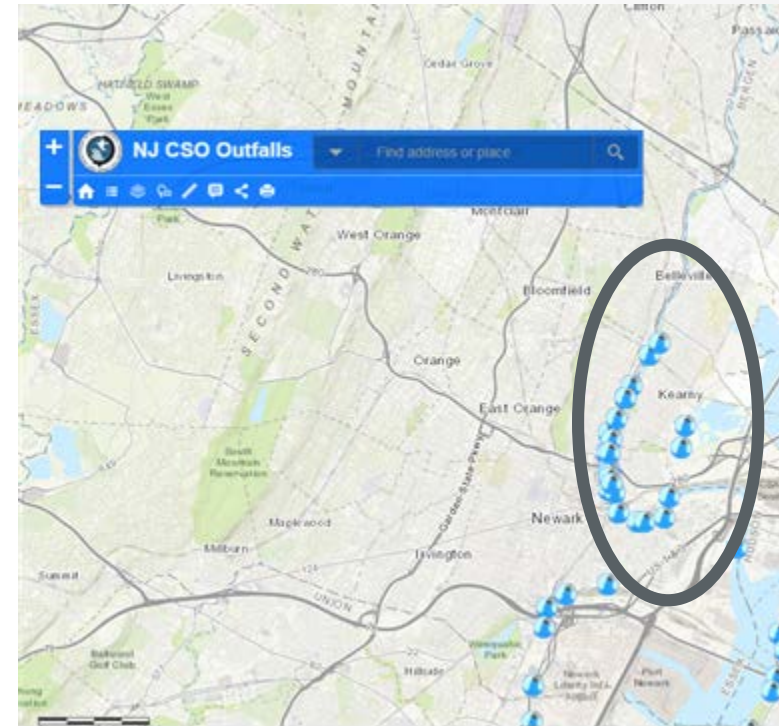
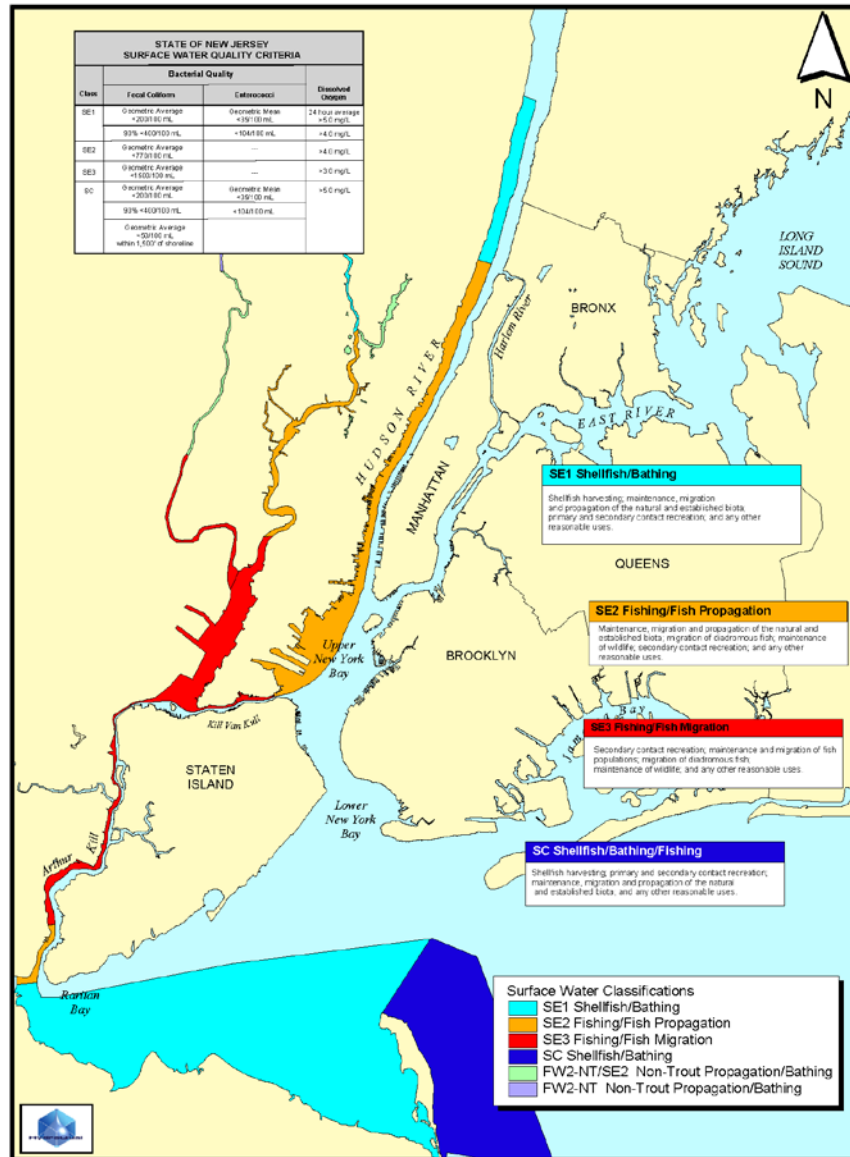


Location and Amount	Description
Newark CEDC \$17m	Expansion of Riverfront Park
Essex County \$5m	Boathouse at Newark RP
Town of Harrison \$1.8m	Create Passaic River Waterfront
City of Garfield \$1.73m	Create Riverwalk
Passaic County & City \$5m	Dundee Island Waterfront Park

Contaminated Sites

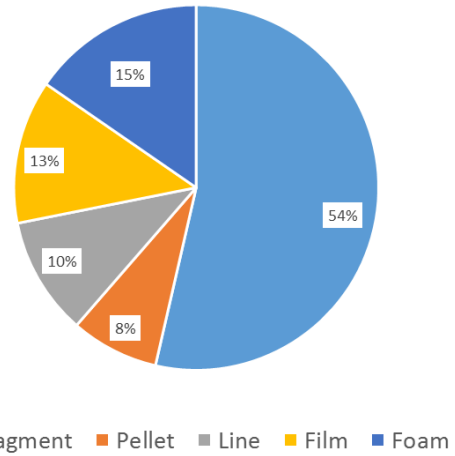


Surface Water Quality



Floatables and Plastics

Comparitive Abundance of Plastic Categories - The Passaic River



NY/NJ Baykeeper (2014)



Berths and Navigation

Berths Available for Commercial Navigation (1997-2006)



Dredging locations	Most recent dredge
Kearny Point (RM 0-1.2)	1983 (30 feet)
Point-No-Point (1.2-2.5)	1983 (30 feet)
Harrison Reach (2.5-4.6)	1937 (20 feet)
Newark Reach (4.6-6.1)	1950 (16 feet)
Kearny Reach (6.1-7.1)	1950 (16 feet)
Arlington Reach (7.1-8.1)	1930 (10 feet)
Belleville Reach (8.1-8.3)	1932 (10 feet)
Montclair Greenwood Lake Railroad Bridge (8.3-15.4)	1976 (10 feet)

Flooding and Resiliency

"The Passaic River Basin has a land-use problem, not a flooding problem"

--John Miller (2014), New Jersey Association for Floodplain Management

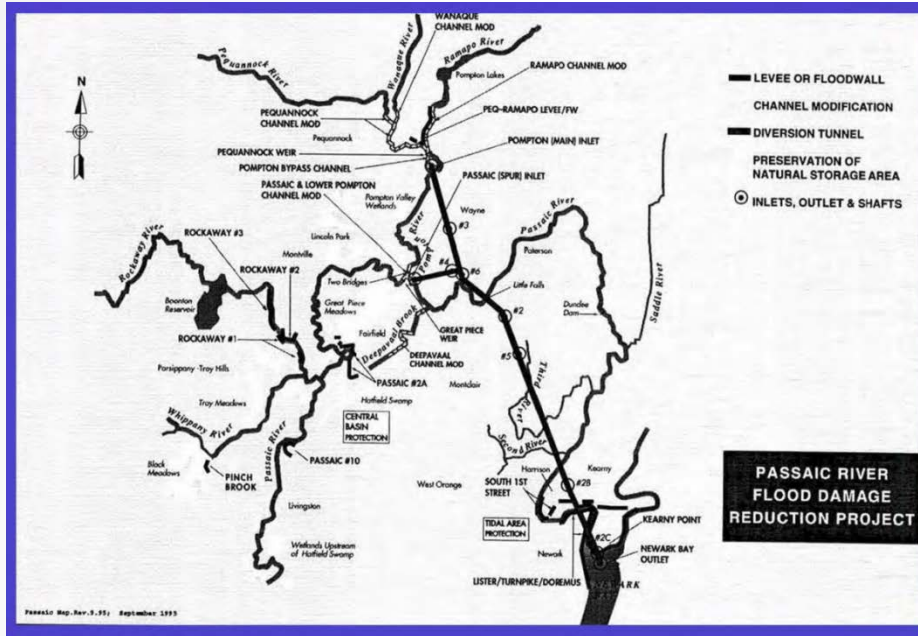


2014 FEMA Preliminary
Flood Insurance Maps

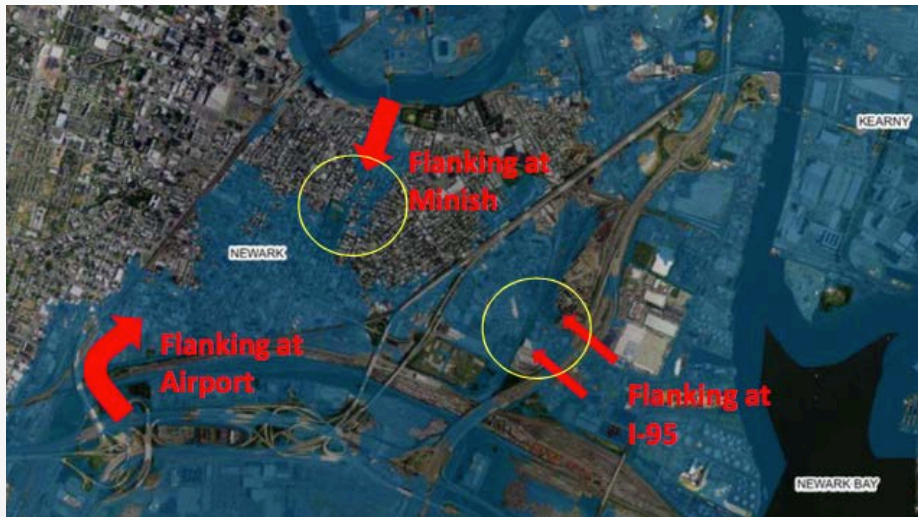
Total National Flood Insurance Program Payments in Lower Passaic Riverfront Cities Since 1978, by County

Bergen County	\$39,841,231.23
Essex County	\$26,705,886.10
Passaic County	\$15,303,506.84
Hudson County	\$29,460,571.67
Grand total	\$111,311,195.84

Flood Risk Management



- Historic Corps of Engineers study authorized in 1976 would have involved a 20-mile diversion tunnel, with floodwalls and levees along the southern reach in Newark, Harrison, and Kearny
- Tunnel project was halted in 1995 at the request of State of New Jersey, and Act of Congress
- Project was split into a Passaic “Mainstem” study, and a Passaic “Tidal” study, but construction was never funded by Congress



- Corps received influx of funds after Sandy to re-examine the “Tidal” project, part of which was incorporated into the design of Newark Riverfront park,
- smaller “Newark Flanking” project near Newark Airport
- Passaic Mainstem still under study.

Passaic River Community Involvement Guide: Improving Public Involvement in Federal Projects