

CLEANUP OF THE LOWER PASSAIC RIVER

Diamond Alkali Superfund Site

APRIL 2026





Diamond Alkali Site

Divided into parts called Operable Units (OUs):

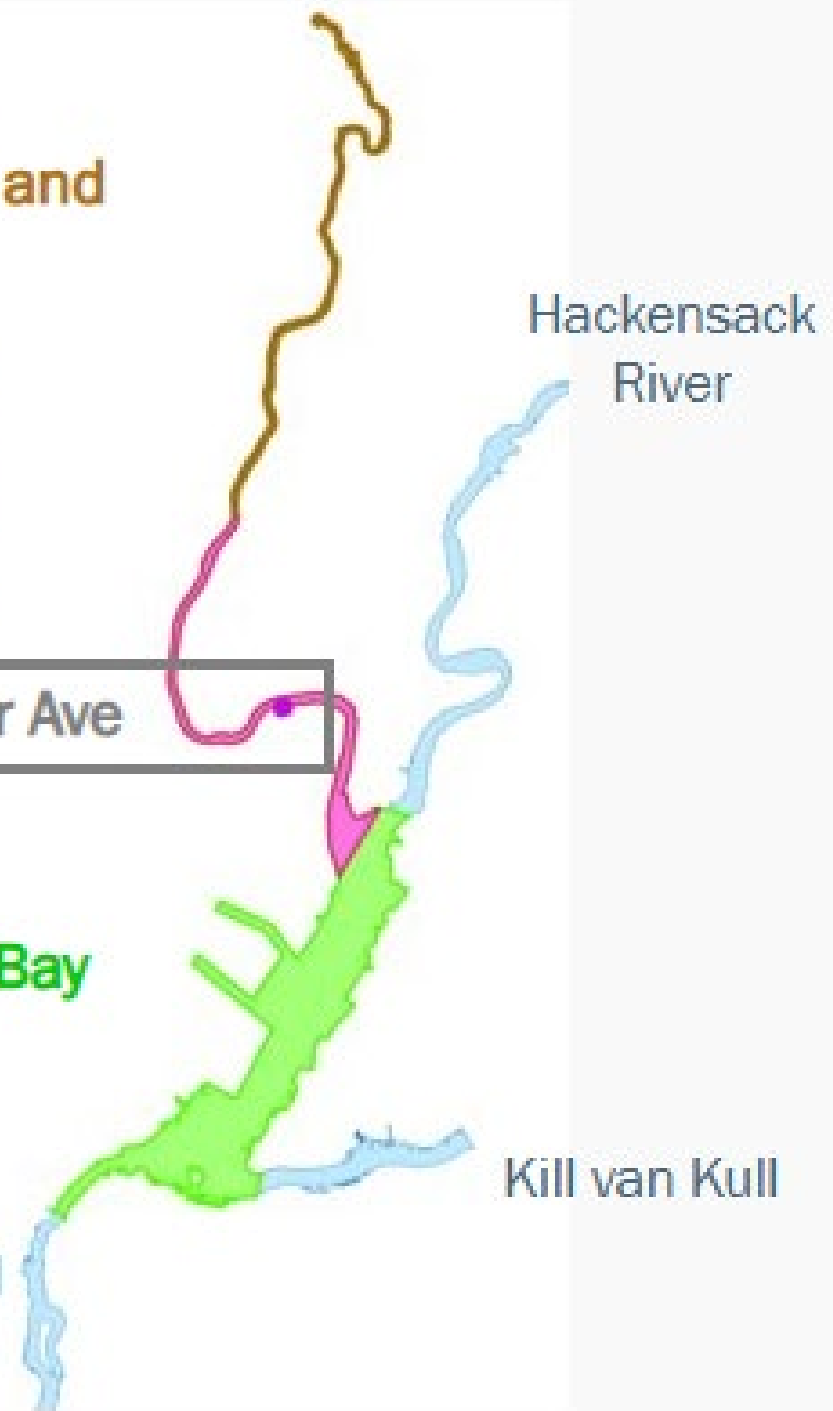
- OU1: 80-120 Lister Avenue, Newark
- OU2: Lower 8.3 miles of lower Passaic River
- OU3: Newark Bay Study Area
- OU4: 17-Mile Lower Passaic River (includes OU2 and upper 9-miles of lower Passaic River)

OU4: Upper 9 and Lower 8

OU2: Lower 8 of the Lower Passaic River

OU1: Lister Ave

OU3: Newark Bay





Lower Passaic River Contaminants of Concern

Dioxin

PCBs

Metals

Pesticides

PAHs

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

PELIGRO!



**NO LOS PESQUE!
NO LOS COMA!**

LOS CANGREJOS DE TENAZAS AZULES
LOWER PASSAIC RIVER EN LA BAHÍA
DE NEWARK PUEDEN CAUSAR

CÁNCER

Y PUEDEN ATROFIAR EL DESARROLLO
CEREBRAL EN FETOS Y NIÑOS PEQUEÑOS

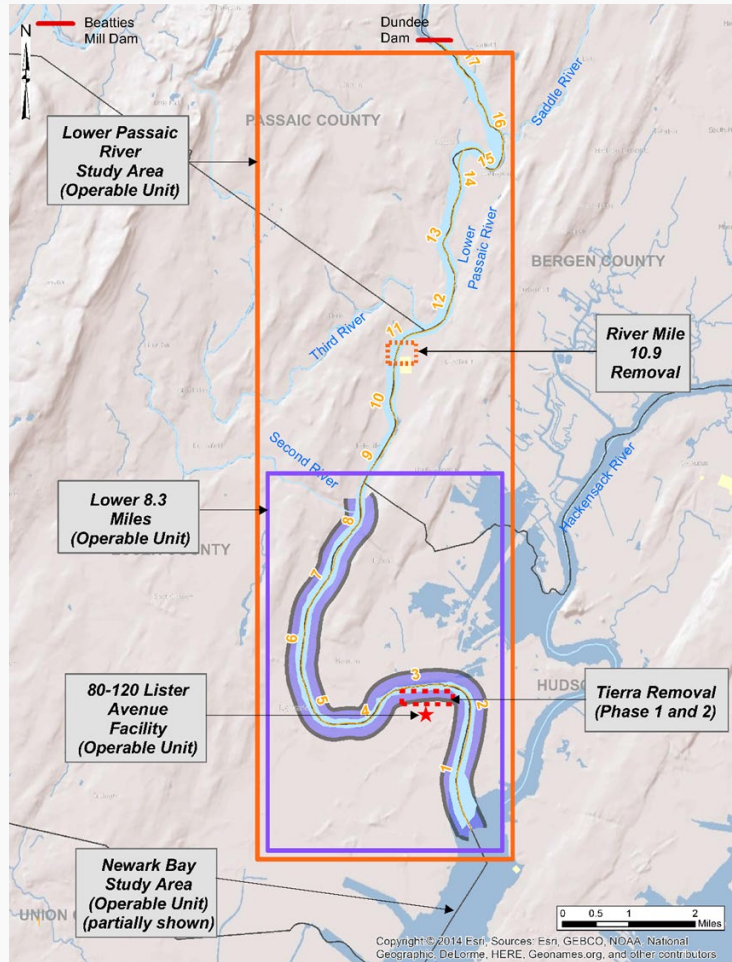
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Cancer and
non-cancer
illnesses
from eating
fish and crab
long-term

Operable Unit One

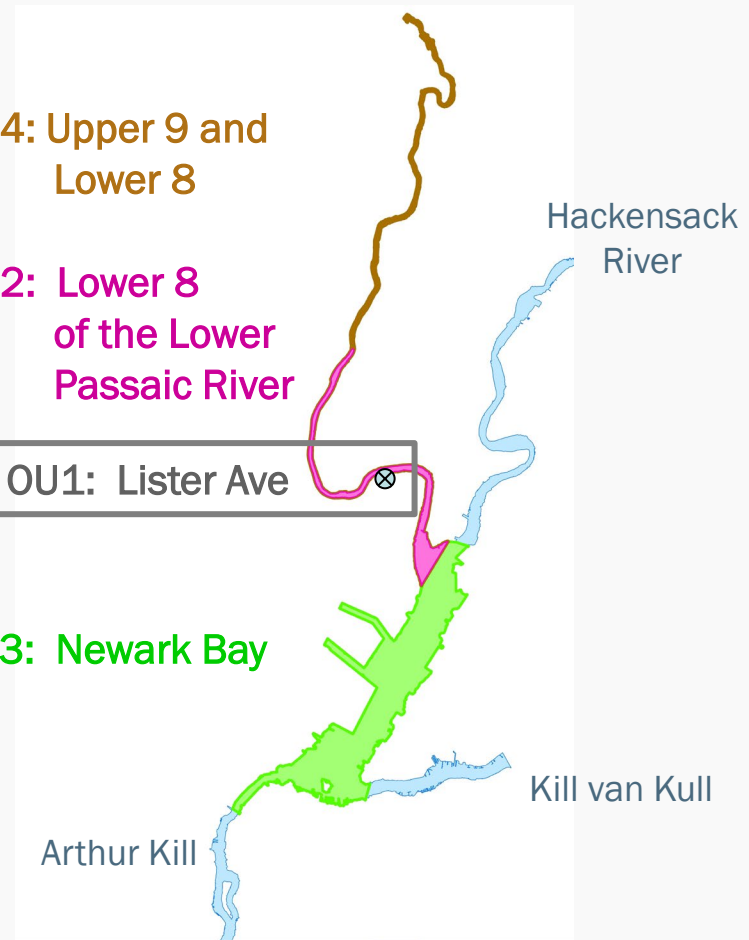


OU4: Upper 9 and Lower 8

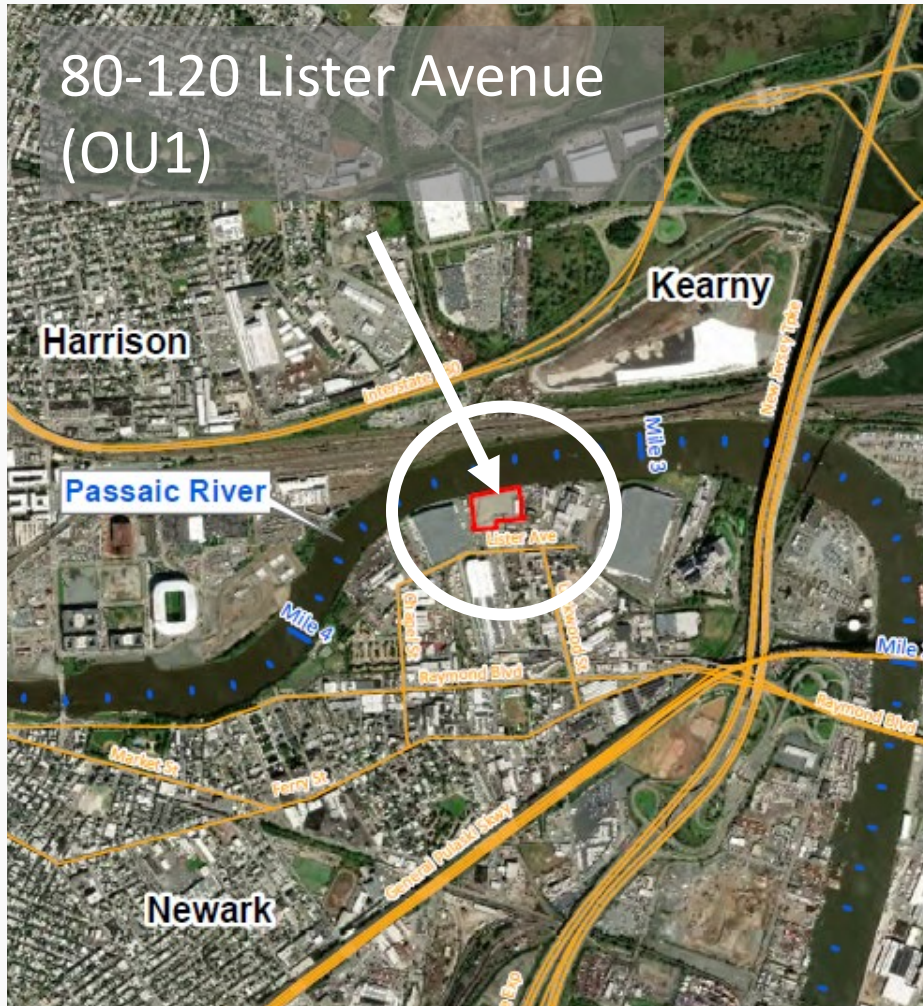
OU2: Lower 8 of the Lower Passaic River

OU1: Lister Ave

OU3: Newark Bay



Where is OU1? 80 and 120 Lister Avenue



- Adjacent to the Lower Passaic River
- Ironbound neighborhood, Newark, NJ
- Nearby neighborhoods contain industrial properties and residences





Description of Current Remedy At 80 Lister Avenue

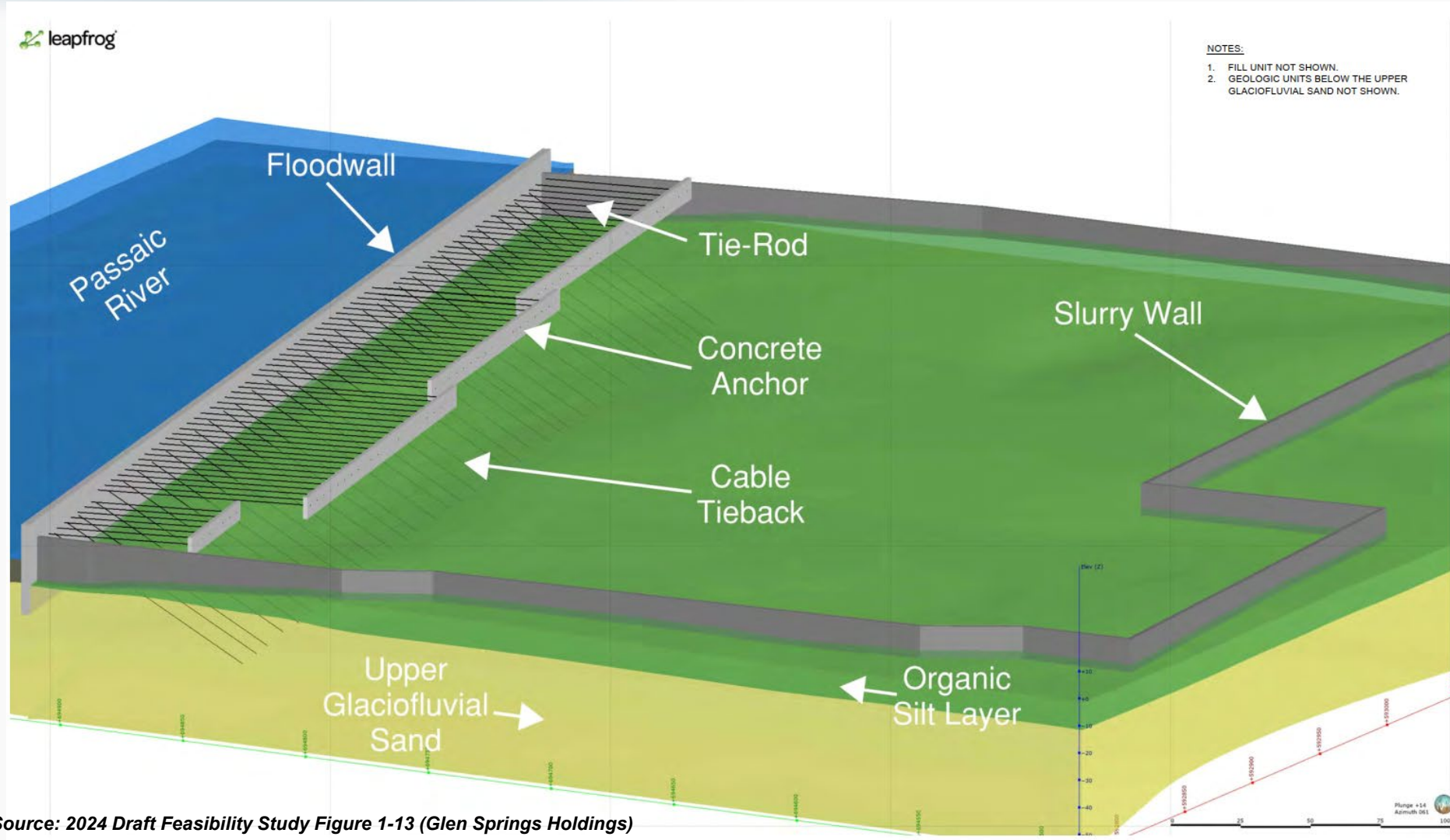


Interim Remedy Scope:

*To “install, operate, and maintain a groundwater withdrawal system designed to maintain a hydraulic gradient preventing the migration of groundwater from the volume contained within the slurry wall”
(USEPA, 1987)*

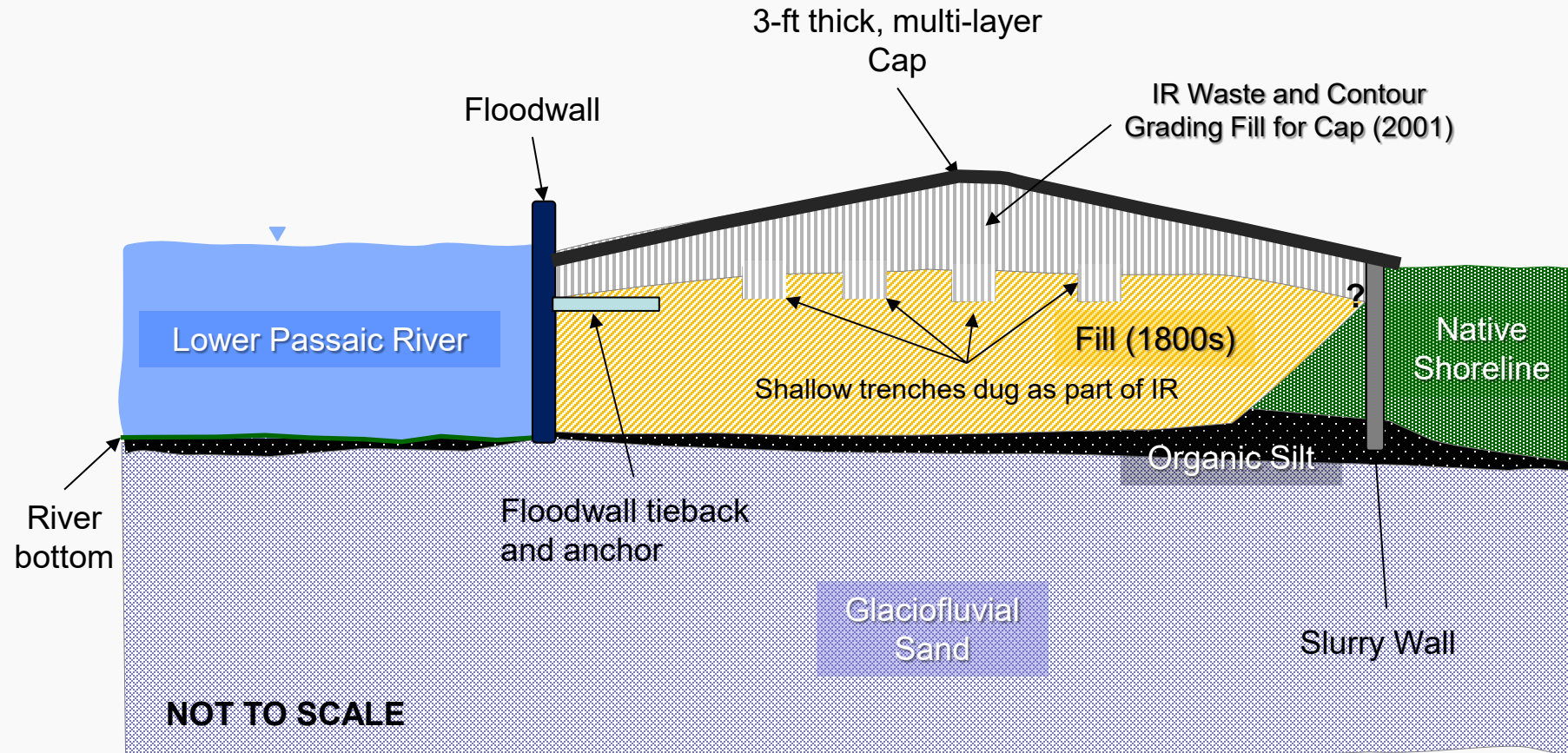
- Multi-layer, impermeable site cap and stormwater control system
- Floodwall along Lower Passaic River at northern site boundary
- Slurry walls ~15 feet inside eastern, western and southern site boundaries
- Groundwater Withdrawal System (GWWS) and Groundwater Treatment System (GWTS)
- Site fencing and security measures

Description of Containment Cell



Source: 2024 Draft Feasibility Study Figure 1-13 (Glen Springs Holdings)

Description of Current Remedy OU1 Cross-Section





EPA regularly reviews the remedy to ensure protectiveness, by answering the questions below:

- A. Is the remedy functioning as intended by the decision documents?
- B. Are the exposure assumptions, toxicity data, clean-up levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid?
- C. Has any other information come to light that could call into question the protectiveness of the remedy?

The 2025 FYR Report is publicly available at: www.ourpassaic.org



Cleanup of OU1: 80-120 Lister Avenue is Farthest Along the Superfund Process

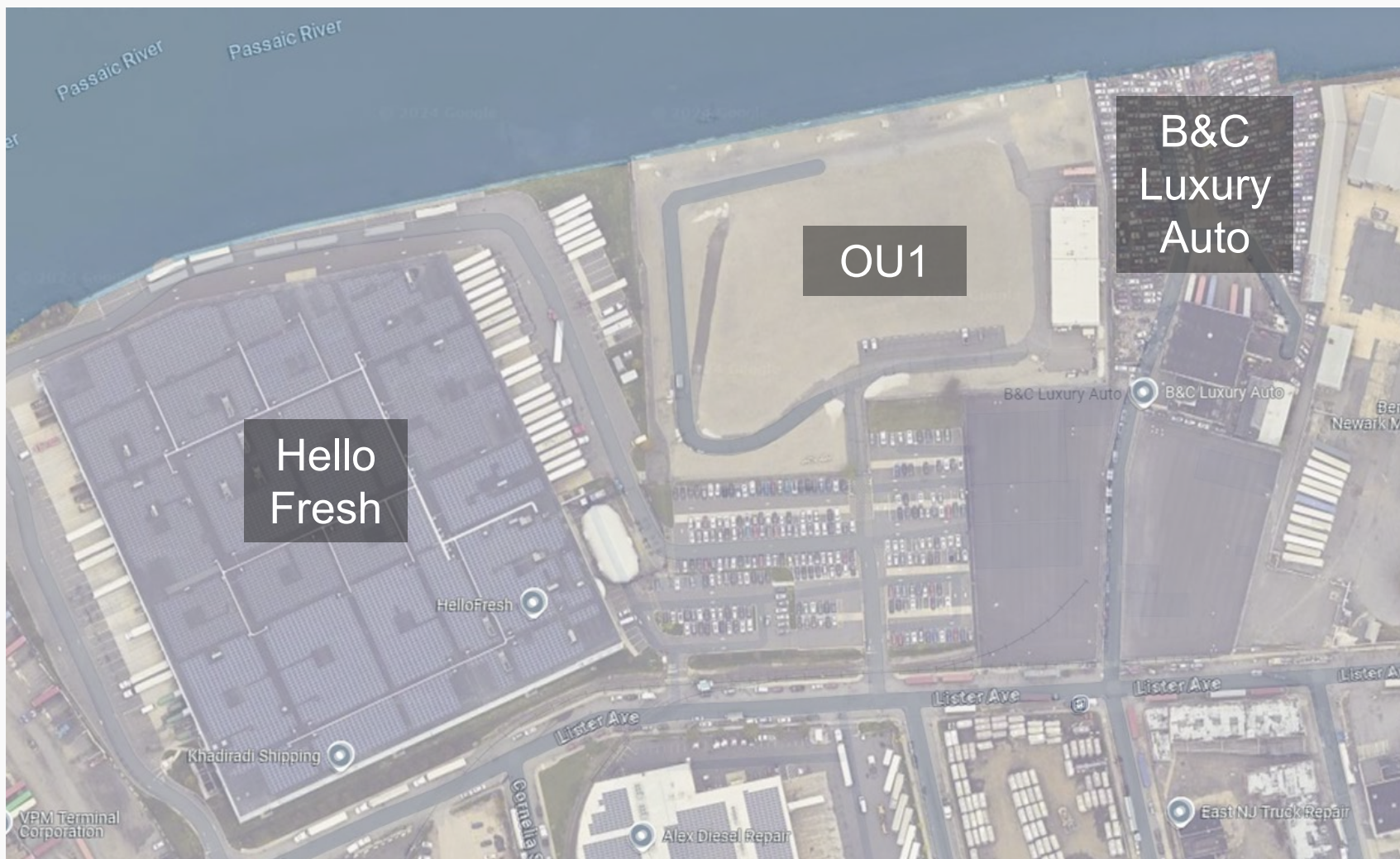
- 1987: Interim containment remedy selected
- 2001: Interim containment remedy constructed
- 2025: Record of Decision with Final remedy
 - Reinstall/reactivate 6 groundwater extraction wells
 - Upgrade groundwater treatment system
 - Assess cap – make any repairs needed
- 2025: 6th Five Year Review



What to Expect Next:



- Final remedy moves forward once administrative agreements are complete
- Construction and system upgrades will begin
- EPA will provide regular updates
- The community will be informed of any onsite activity





Diamond Alkali Site

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Hackensack River

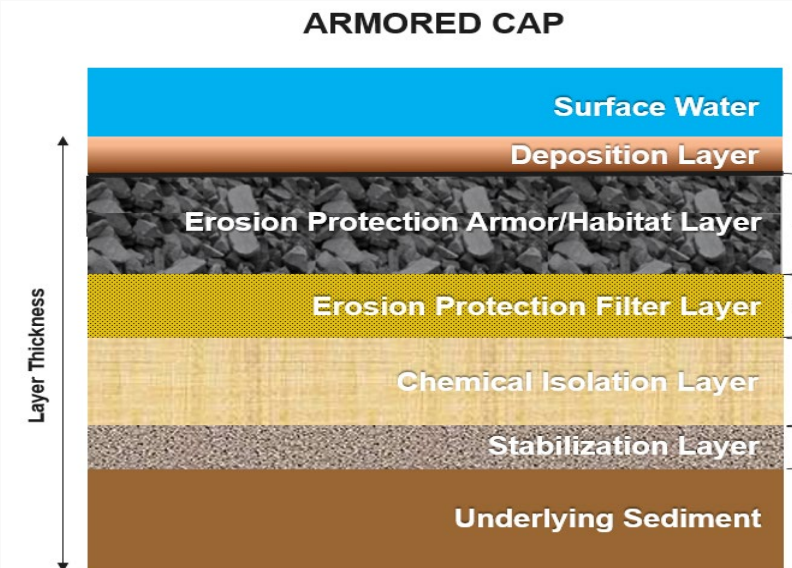
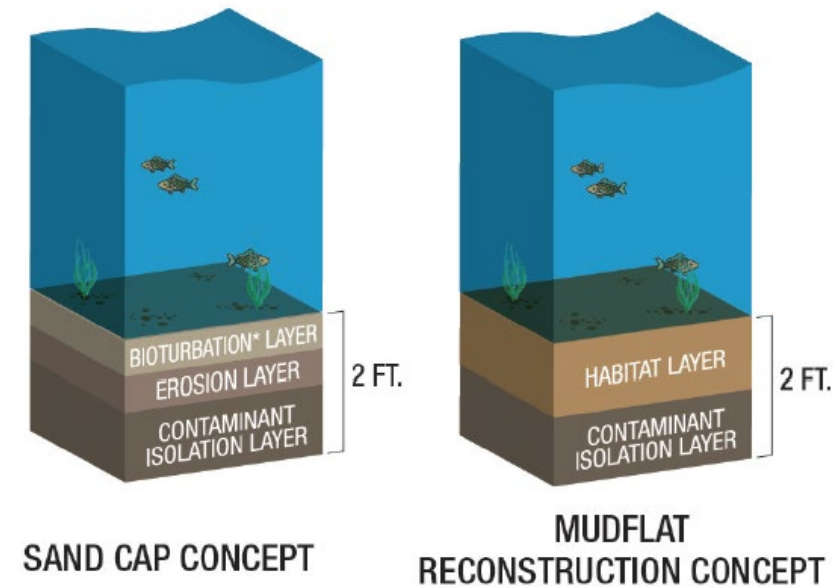
Kill van Kull

Arthur Kill



Lower 8.3-Miles: Engineered Cap

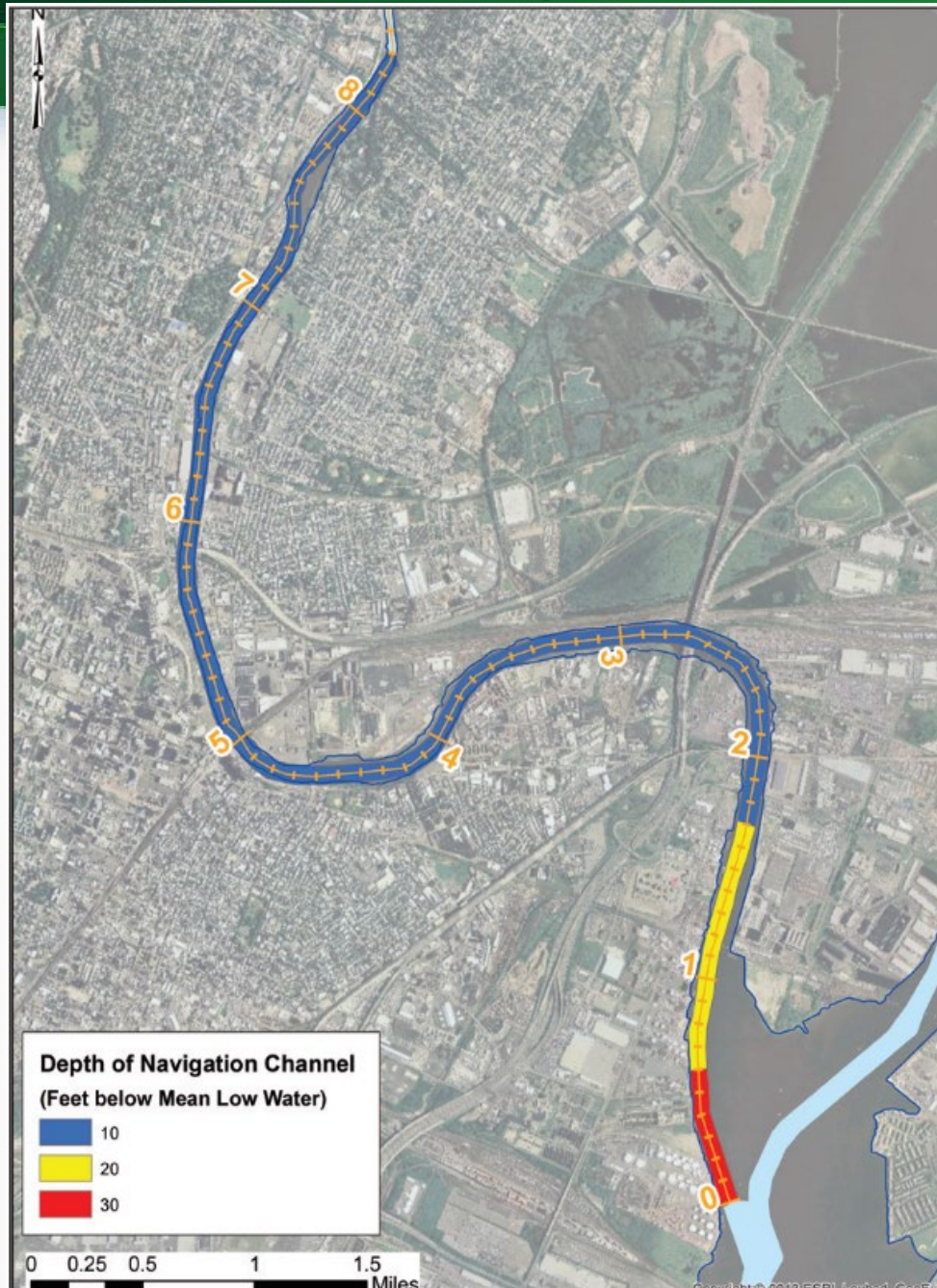
- Bank to bank, to isolate contaminated sediment from river ecosystem
- Made of sand with carbon particles in it
 - Layer of stone over the sand where needed
- Generally 15 inches thick
 - Varies from 4-inch specialty caps to 60-inch multi-layer caps
- Mudflats restored, wetlands replanted (30% more mudflats, 65% more wetlands)





Lower 8.3-Mile Cleanup: Dredging

- **Dredging before installing the cap**
 - So cap doesn't make flooding worse
 - In Congressionally-authorized navigation channel (1.7 mi closest to Newark Bay)
- Approx. 2.5 million cubic yards
- Dredging Depth: average 3.5 ft (varies from 0.5 ft to 25 ft)



DREDGING & CAPPING EQUIPMENT



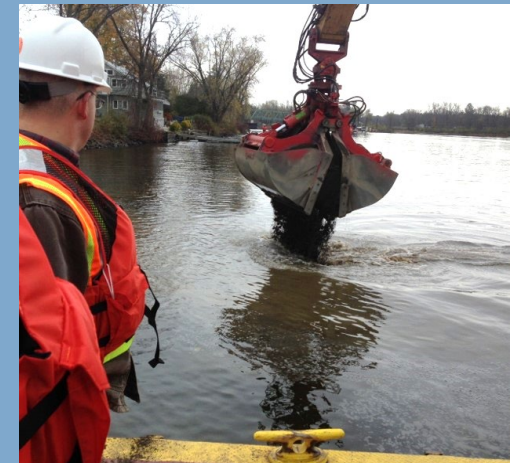
Hydraulic dredging and transport pipeline



Mechanical dredging and barge transport



Capping operations





Sediment Processing Facility



Sediment dewatering



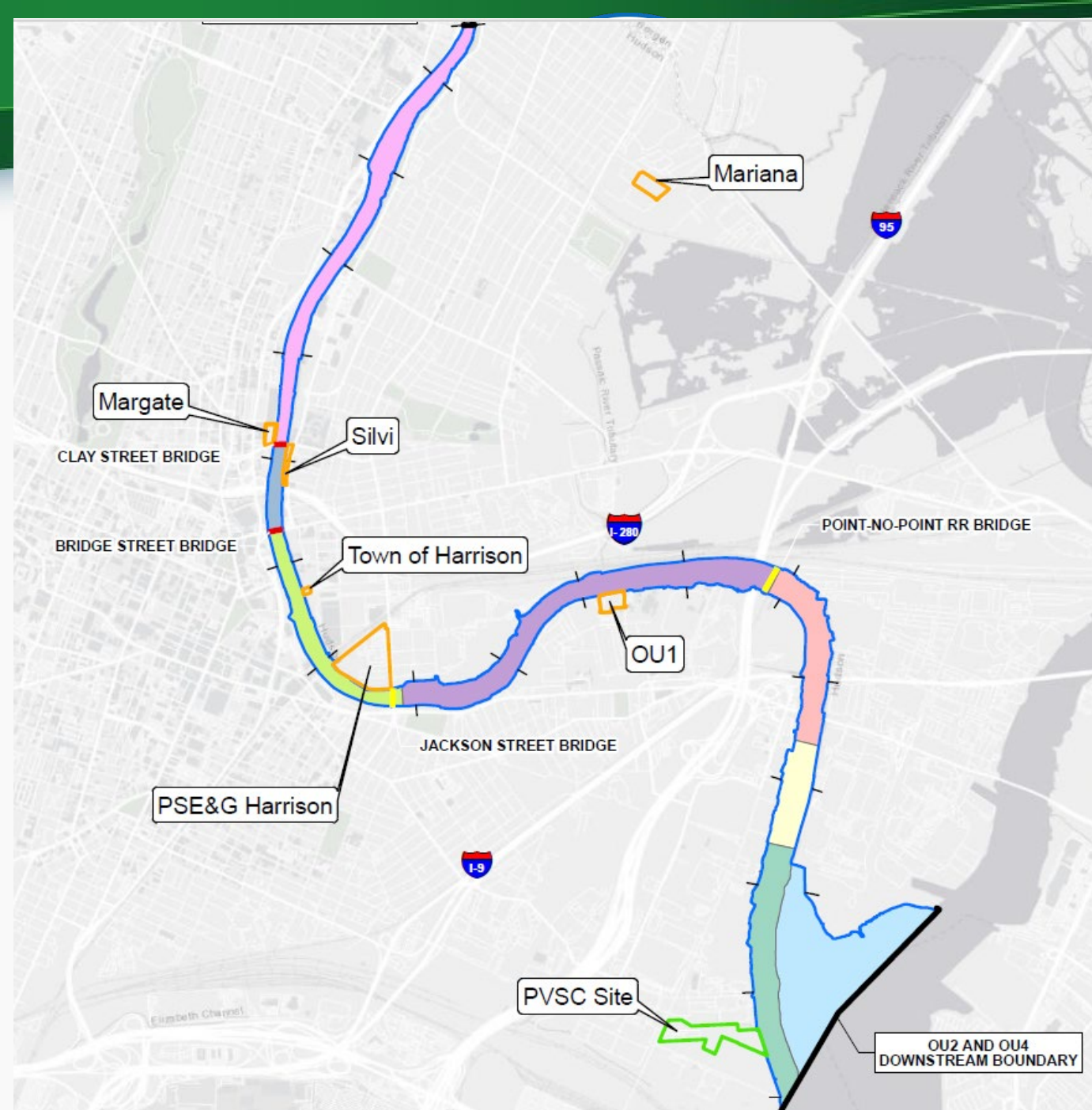
Sediment Filter Presses

Support Facilities

Main sediment processing facility at PVSC (Newark)

Support facilities in every municipality:

- East Newark
- Harrison
- Kearny
- Newark



Support Facilities



Used to support the work:

- Store capping material
- Store construction equipment
- Site work crew trailers
- Sort debris
- Manage sediment and debris contaminated with oily substance (NAPL, non-aqueous phase liquid)

Community Health and Safety Plan



ENVIRONMENTAL
MONITORING

- ✓ Monitoring around in-river work and on-land facilities
- ✓ Air monitoring — particulates, concentrations of chemicals, objectionable odors
- ✓ Noise levels from construction activities and machinery
- ✓ Light levels from safety lighting during night work

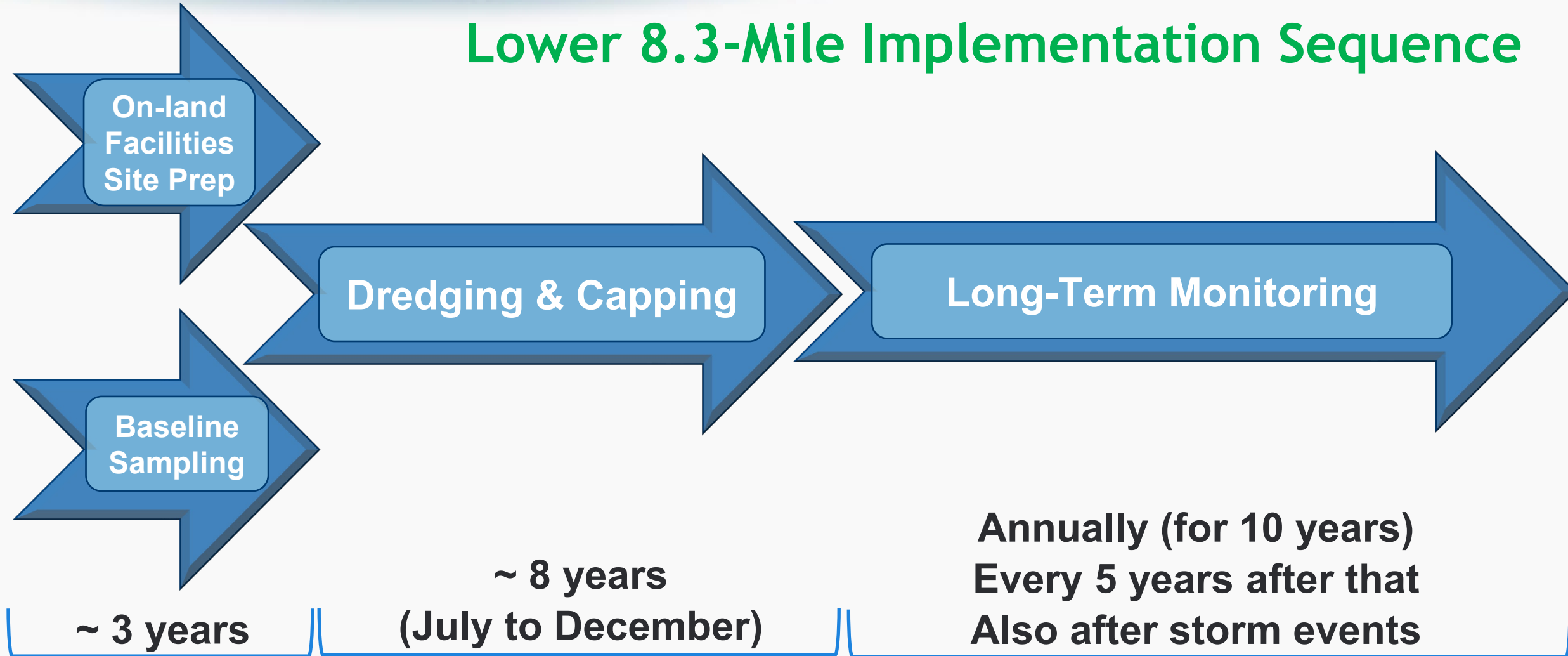


PROJECT SAFETY
MANAGEMENT

- ✓ Fencing to limit trespass into work areas
- ✓ Buoys, signs, and lights to warn boaters away from on-water operations
- ✓ Traffic control, selecting truck routes to minimize potential for incidents/risk to public
- ✓ Other measures including emergency preparedness



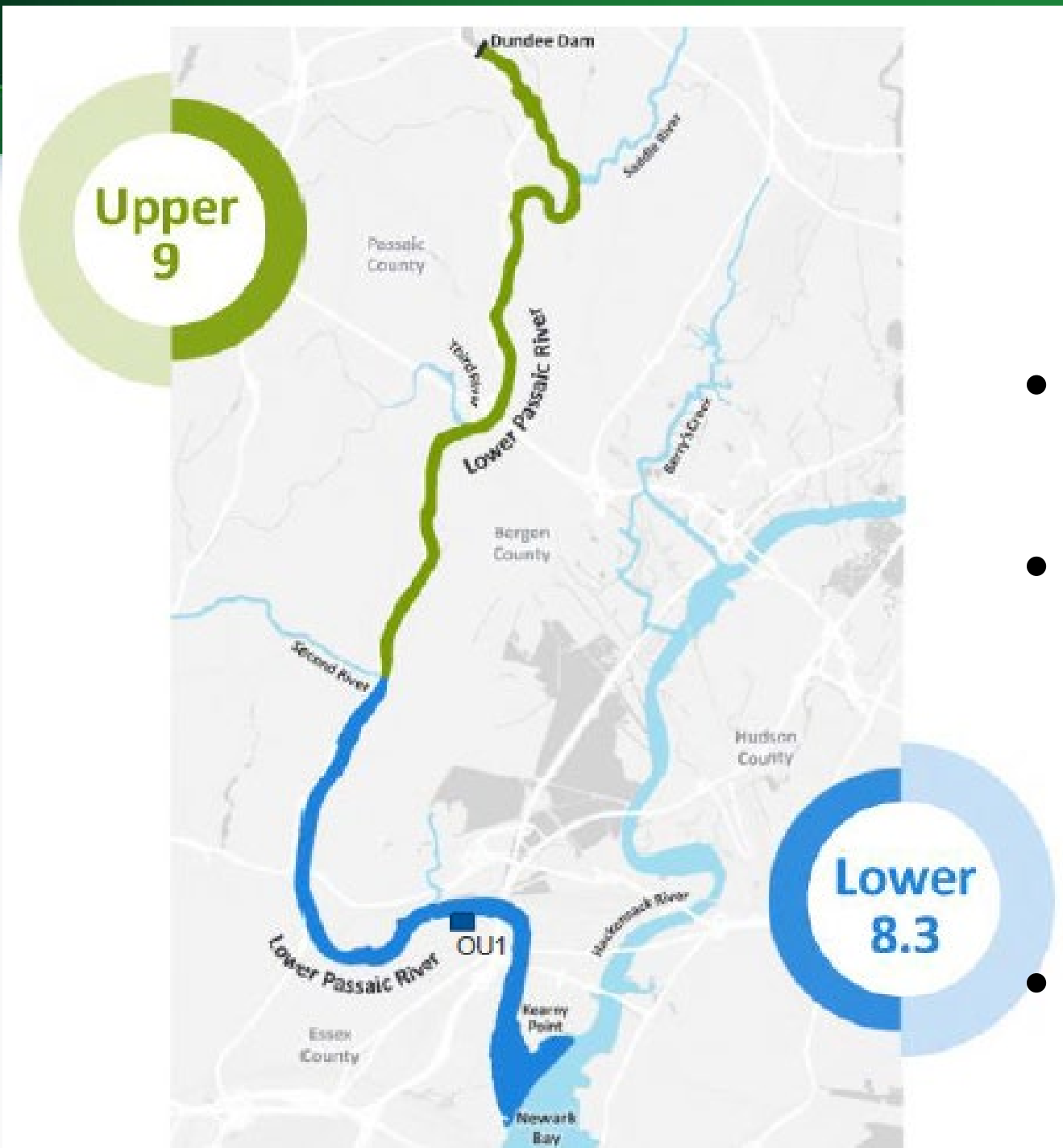
Lower 8.3-Mile Implementation Sequence





Upper 9-Mile Cleanup

- Pockets of fine silt = Pockets of contamination
- Cleanup Plan selected in 2021
 - Targeted dredging and capping of source areas of dioxins and PCBs
 - Adaptive management
- Pre-Design sampling started





Presented by:



Passaic River Community Advisory Group (CAG)

What is a Community Advisory Group (CAG)?



Focal point for the exchange of information among the local community and the EPA, the state regulatory agency, and other pertinent federal agencies involved in cleanup of a Superfund site.

Provide a public forum for community members to present and discuss their needs and concerns related to the Superfund decision-making process.

Assist the EPA in making better decisions on how to clean up a site.



HI! MY NAME IS Q.R.

Community
Advisory
Group
Guidance



SCAN ME



What is a Community Advisory Group (CAG)?

1

Made up of diverse community interests

2

Facilitates communication between the EPA and community at Superfund sites

3

Brings together stakeholders for meaningful discussions about the site



CAG Membership

Members should reflect the community:

- Residents or homeowners near a site
- Anyone potentially affected by site releases
- Local medical professionals
- Tribes and communities
- Representative of the community
- Environmental or public interest groups
- Facility owners
- Local business community members
- Diverse points of view
- Local officials



Member Roles and Responsibilities

Attend	Attend meetings
Represent	Represent views of the community
Express	Express community preferences
Review	Review technical information
Disseminate	Disseminate information about the site to community members
Work	Work with CAG members to reach agreement when needed



EPA roles and responsibilities



Attend	Attend meetings to provide information and technical expertise
Discuss	Discuss issues related to Superfund actions
Listen and respond	Listen and respond to CAG members' questions and concerns
Assist	Assist with logistical and administrative support
Provide	Provide technical assistance for communities



Get Involved!

<https://www.passaiccag.org/>

CAG Co-Chairs:

Ana Baptista

Baptista@newschool.edu

Michele Langa

michele@nynjbaykeeper.org

EPA Contact:

Drew Curtis

Community Engagement Coordinator

Curtis.Malcolm@epa.gov



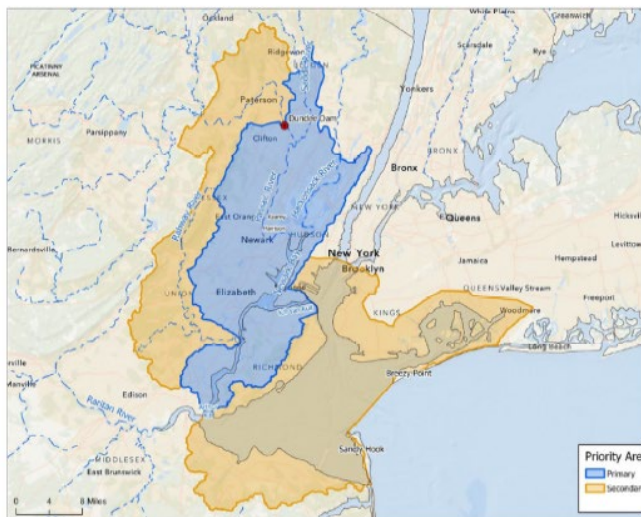
DIAMOND ALKALI SUPERFUND SITE RESTORATION PROJECT SUBMISSION WEBPORTAL COMMUNITY MEETING



The Federal Natural Resource Trustees for the Diamond Alkali Superfund Site — NOAA and the U.S. Department of the Interior — are excited to announce the launch of a new Restoration Project Submission Webportal.

We are looking for your input. This portal allows community members to suggest restoration ideas that will help shape a formal plan to restore natural resources in the following areas:

- Lower Passaic River & Hackensack River
- Newark Bay
- Arthur Kill & Kill van Kull
- Associated Watersheds



SUBMIT A PROJECT IDEA!

New Deadline: May 17, 2026



SUBMIT A PROJECT IDEA!

New Deadline: May 17, 2026

<https://darrp.noaa.gov/hazardous-waste/suggest-project-diamond-alkali> or scan this QR code:



Questions? Contact

- nmfs.lowerpassaicnewarkbay@noaa.gov
- Jack Szczepanski, john.szczepanski@noaa.gov
- Ryan Braham, ryan_braham@fws.gov



QUESTIONS?

www.ourPassaic.org

www.epa.gov/superfund/diamond-alkali

www.passaiccag.org