

Natural Resources Damage Assessment and Restoration East Newark Riverfront Park Interim Settlement and Crediting Agreement



What we will be covering

- Passaic River and Berry's Creek Status
- Natural Resource Damage Assessment
- Early Restoration Opportunity
- Park Details
- Crediting Agreement
- Questions / Comments



The Passaic River/Berry's Creek Area

Map 1: Former Diamond Alkali Facility Location and Federal Trustee Assessment Area



- The lower 17-mile stretch of the Passaic River and greater Newark Bay area in New Jersey has a history of industrial contamination. The area is collectively known as the Diamond Alkali Assessment Area.
- More than 70 facilities have released contaminants, including dioxins/furans, PAHs, PCBs, pesticides, and heavy metals into the River and environment.
- There are multiple Potentially Responsible Parties involved with this Site.

The Passaic River/Berry's Creek Area

Map 1: Former Diamond Alkali Facility Location and Federal Trustee Assessment Area



- The Berry's Creek Study Area (BCSA) is located in Bergen County, New Jersey. Berry's Creek is an approximately 6.5-mile-long tributary of the Hackensack River.
- The primary contaminants that have accumulated in the sediments and the surrounding wetlands are mercury, methyl mercury, and PCBs. Contamination has also affected floodplain soils and groundwater.
- There are multiple Potentially Responsible Parties involved with this Site.

The Process for Cleanup and Restoration

Federal and State environmental regulatory processes are underway in both of these closely located areas, focused on contamination....

A two-part process

- Remedial process (Cleanup) – EPA led
- Natural Resource Damage Assessment and Restoration (NRDAR) -- Led by the Trustees

Cleanup v. NRDAR

EPA – Cleanup (Remediation)

- Reduce or eliminate present and future threats to human health and/or the environment from release of a hazardous substance
 - Often directed at the substance itself (e.g., removal via dredging) and the risk of exposure
- Doesn't address losses to resources and/or resource uses over time (i.e., past and future)

Trustees – Restoration

- Act on behalf of the public to restore natural resources injured by releases of hazardous substances, and obtain compensation for both lost natural resource functions and the public's lost uses of the resources over time (past, present, and future)
- Accounts for any cleanup actions that could cause injury too

EPA Remedial Work

Passaic River

- **Lower 8.3 miles (River mouth up to Belleville/Newark border)**

Record of Decision issued March 2016. Remedy: Bank-to-bank dredging and cap.

- **Upper 9 miles (Up to Dundee Dam)**

Record of Decision issued Sept. 2021. Remedy: Dredge and cap areas of the riverbed between RM 8.3 and 15, and areas at depth that may become exposed.

Berry's Creek Study Area

Record of Decision issued Sept. 2018. Remedy: Bank-to-bank dredging and cap in upper and middle Berry's Creek. Upper Peach Island Creek marsh sediment removal and capping.

Natural Resource Damage Assessment (NRDA)

What is it?

- A process to determine:
 - Natural resource injuries and service losses; and
 - Appropriate amount and type of restoration needed.
- Goal is to “make public whole” following release of hazardous substances.
- “Trustees” act on behalf of public (*Here, DOI/FWS and NOAA*).
- Compensation must restore, replace, or acquire the equivalent of lost resources/ resource services (restoration).
- Compensation is measured as damages, calculated in projects or dollars necessary to implement restoration.



NRDA Process

Getting to Restoration via a **Natural Resources Damage Assessment**



Natural Resources

- Natural resources include land, fish, wildlife, biota, air, water, ground water, and drinking water supplies.
- These natural resources have been categorized into the following five groups:
 - surface water resources
 - ground water resources
 - air resources
 - geologic resources
 - biological resources.

Biological Resources being studied

Estuarine habitat, supporting both in-water species and species that use the creek for feeding, breeding, and resting. Examples:

- Benthic invertebrates (crabs, mussels, aquatic insects)
- Fish (mummichog, striped bass/white perch, menhaden)
- Birds (wading birds, song birds, waterfowl)



The NRDA process can be lengthy...

Injury Determination: Establish Pathway: demonstrate the connection between the release of hazardous substances and exposure of a resource to a hazardous substance.

Injury Quantification: Determine baseline condition, Quantify reduction in services, Determine time required for restoration to return injured resources back to baseline.

Damage Determination: Link benefits provided by compensation/restoration to losses resulting from injury. Then we have to scale the benefits and losses to ensure equivalency, as well as determine the costs of restoration.

Restoration Planning and Implementation

- Restoration Plan required
- All restoration must be related to the actual injuries (nexus).
- Public involvement in restoration planning.
 - Informal briefings and restoration scoping.
 - Public review and comment on Restoration Plan.
- Trustees remain the final decision maker.

Achieving Restoration

Typical examples:

- Increase amount of quality habitat for species by restoration or acquisition.
- Enhance or restore quality of existing habitat.
- Increase access to recreational opportunities.



Early Restoration



Projects that take place before remediation (cleanup) is completed or before litigation and/or settlement resolves the liabilities of all parties concerning the site.

Applicable here because:

- The clean-up is not complete at either of the locations.
- The United States has not filed a complaint against any potentially responsible party at either location for the recovery of natural resource damages (with the exception of claims the Trustees have made in various bankruptcy cases).
- There has been no settlement resolving the liability of all the parties at the two Sites.
- The longer an ecosystem is polluted or unrestored, the greater the environmental impacts.

Early Restoration Project Location

Passaic River



- Proposed project is in-kind and in-place -- with a direct connection to injury (ecological and human use)
- Surrounding urban area currently has no practical access to riverfront greenspace (ecological and human use)
- Underserved community with no connection to the Passaic River
- One property was already owned by BASF and the adjacent was available for repurposing, and both properties can meet clean-up standards relatively easily

East Newark Riverfront Park Project

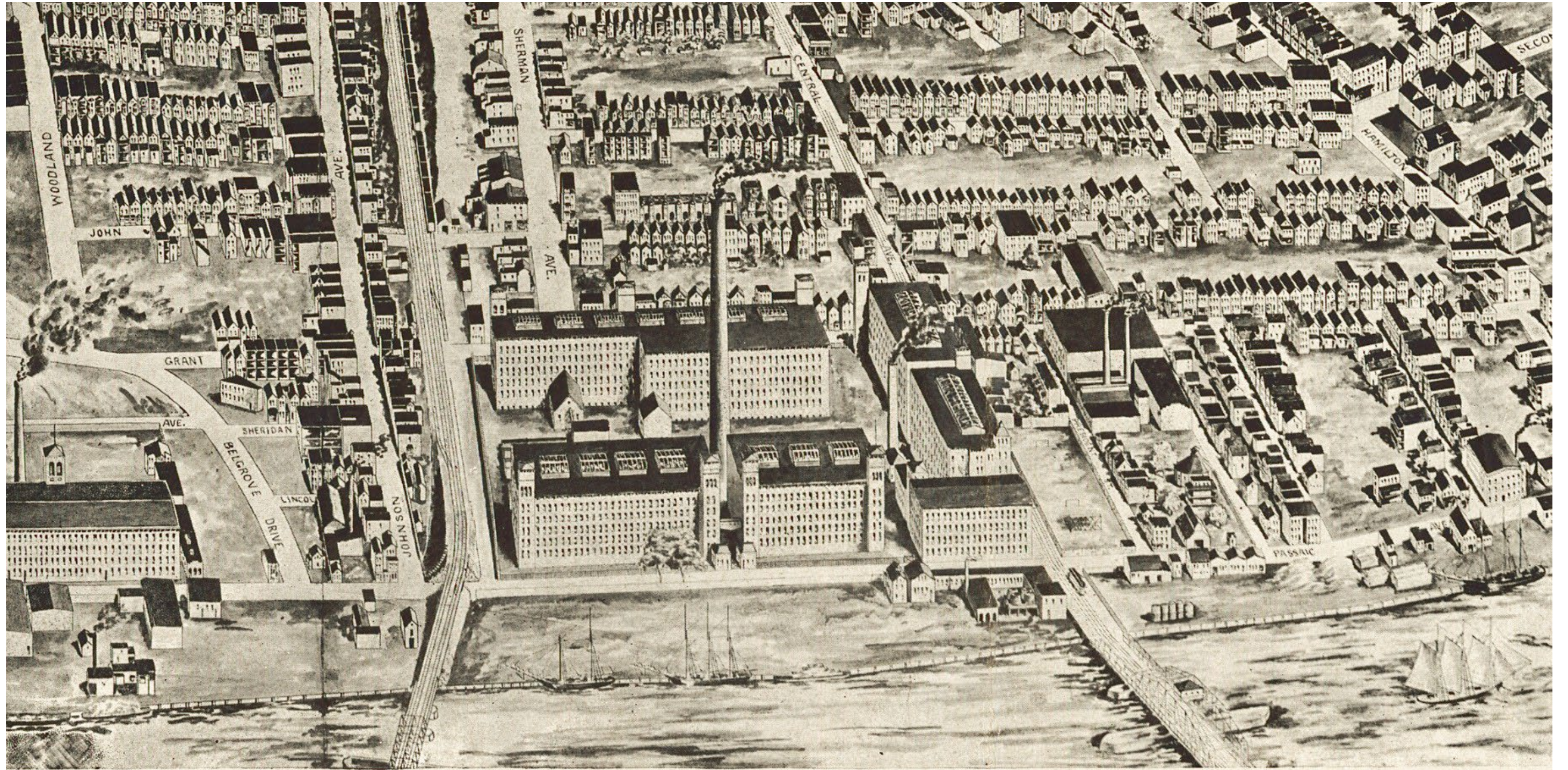


- The Trustees provided BASF with defined parameters and limits on what components within a proposed park could be counted towards NRDA crediting (example: habitat types/goals, human use features).
- The Trustees' legal requirements for restoration help ensure the park has multiple habitat types and features for the public.
- Certain features were required to be included in park planning, limiting what can be “fit” into the footprint of this park.

EAST NEWARK RIVERFRONT PARK

KEY PARK FEATURES

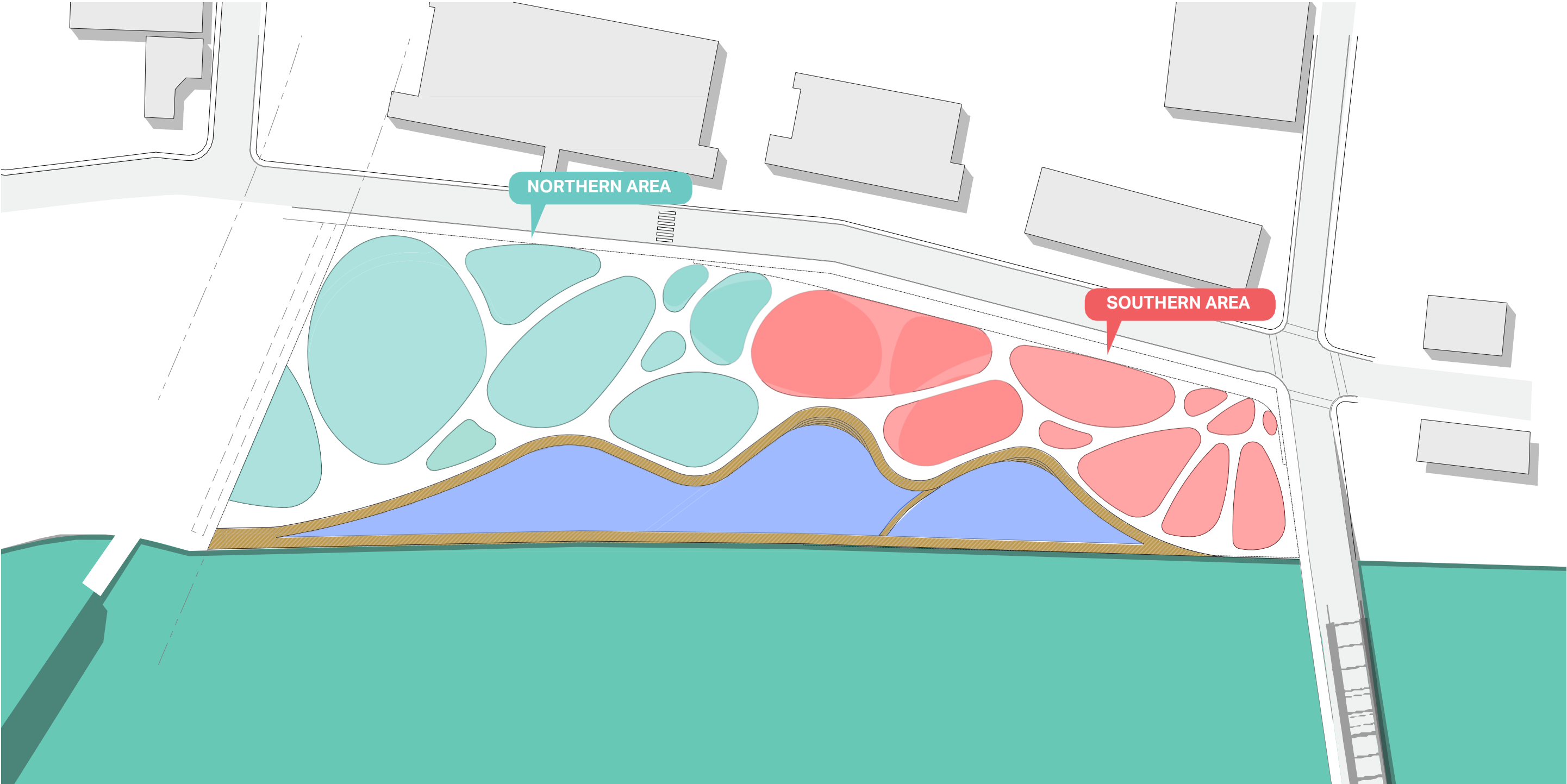
SITE HISTORY



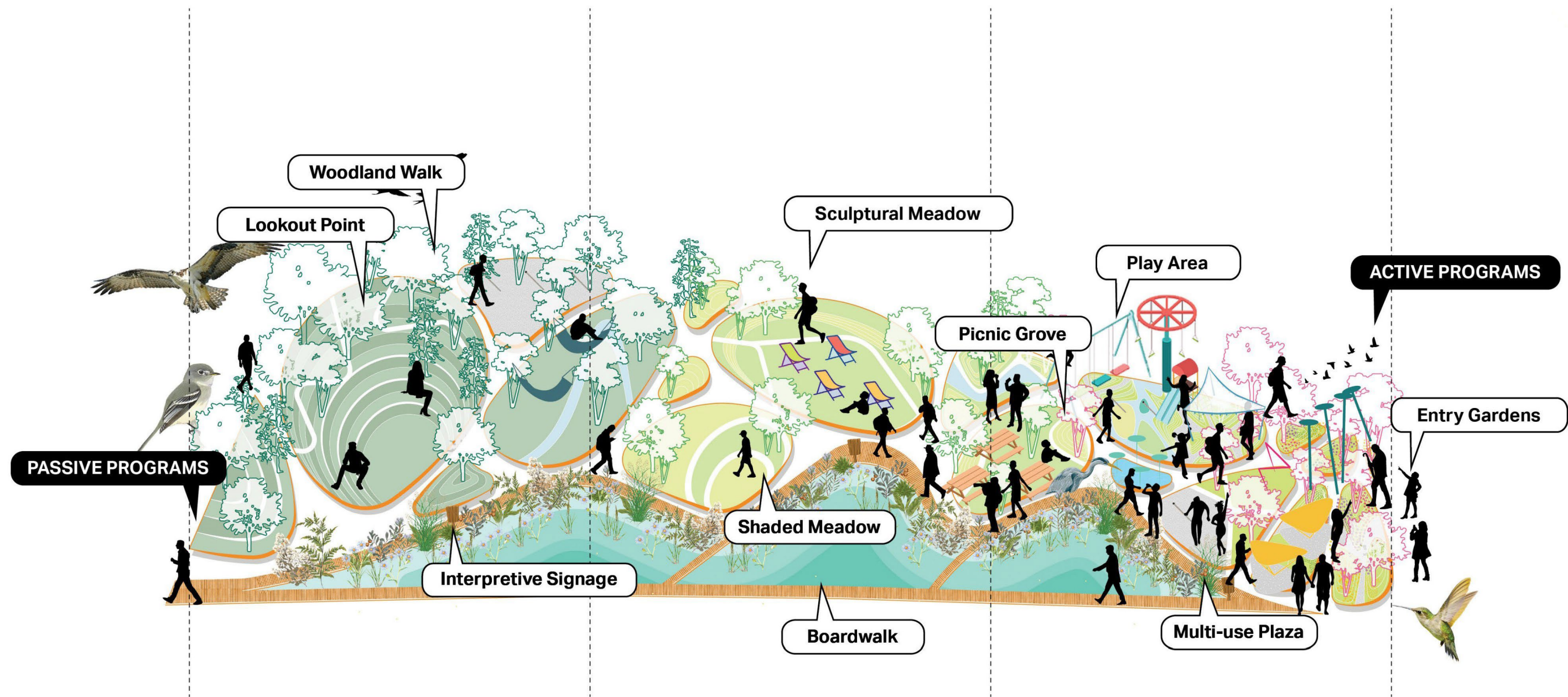
CURRENT SITE AREA



SITE ORGANIZATION | PROGRAMS

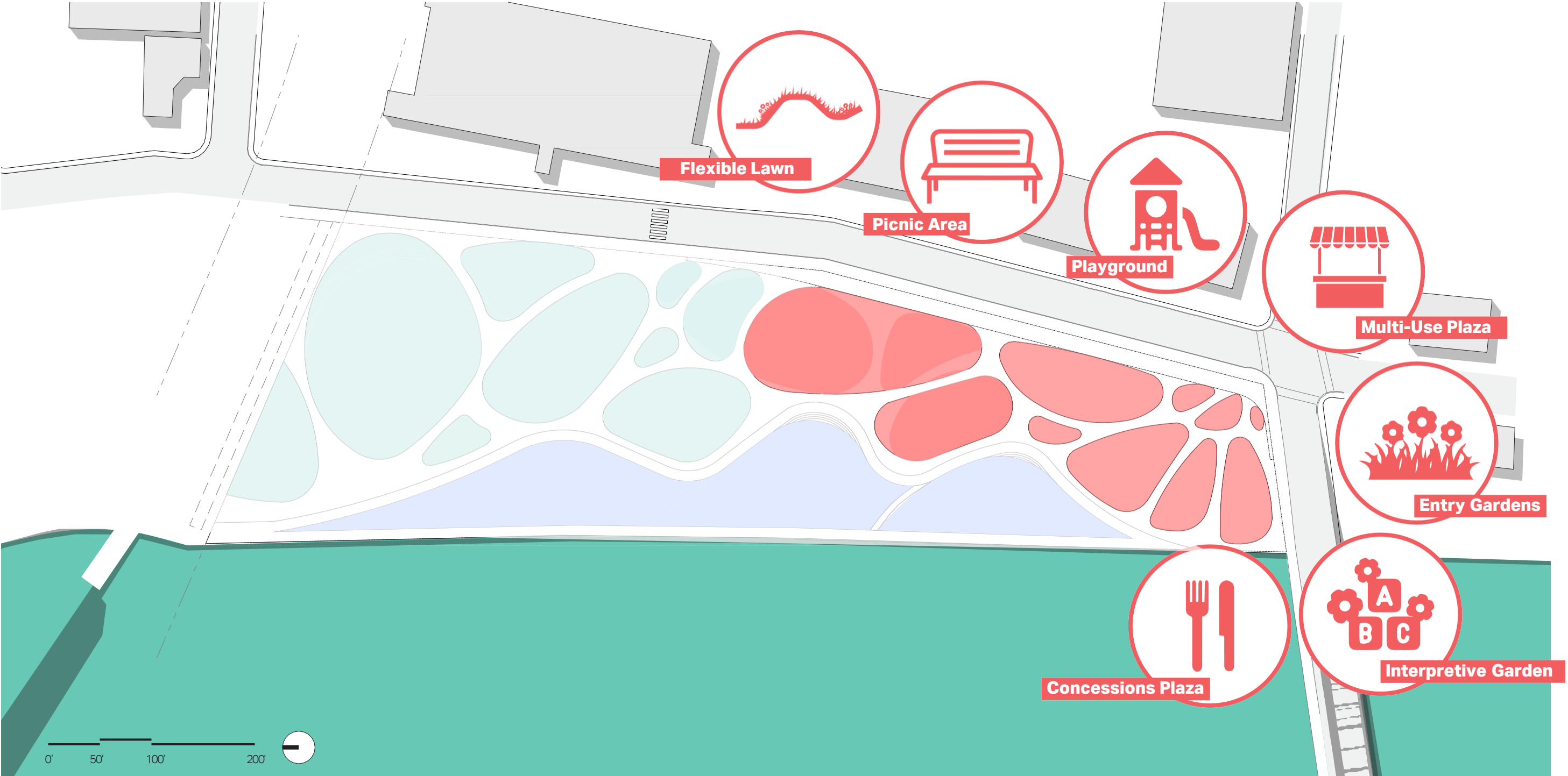


SITE ORGANIZATION | HUMAN FEATURES

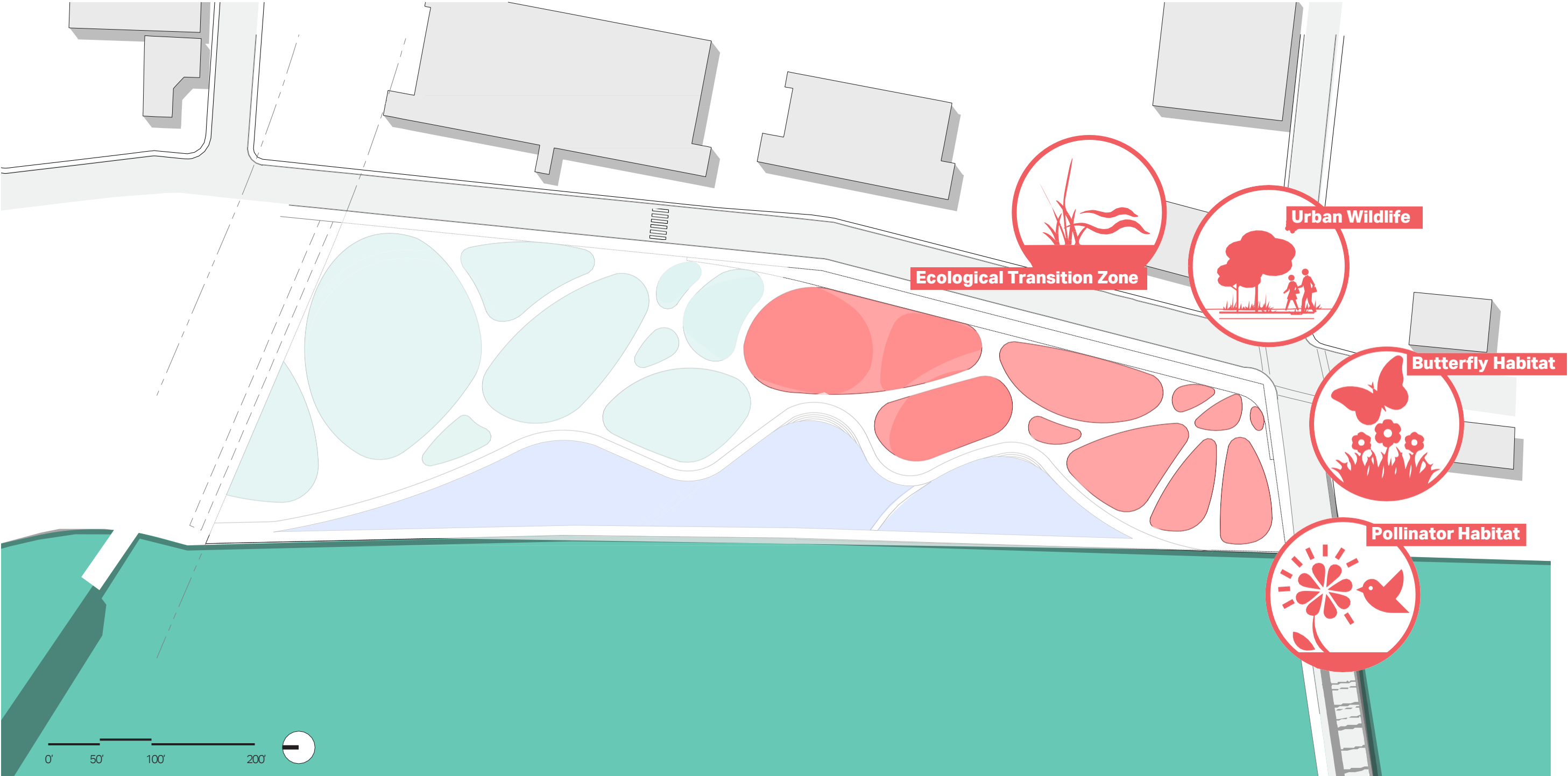


SOUTHERN PARK FEATURES

SOUTHERN AREA | PROGRAM FEATURES



SOUTHERN AREA | ECOLOGICAL FEATURES



SOUTHERN AREA | PLAZA OPPORTUNITIES



FARMER'S MARKET



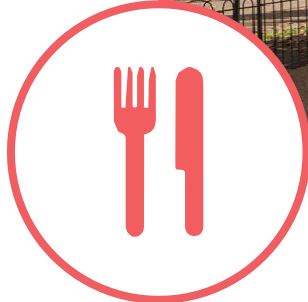
MUSIC



CRAFT FAIRS



KIOSKS



SOUTHERN AREA | GARDEN OPPORTUNITIES



SOUTHERN AREA | FLEXIBLE LAWN OPPORTUNITIES



OUTDOOR CINEMA



SLOPED LAWN



FRISBEE AREAS



SPORTS



SOUTHERN AREA | PICNIC AREA OPPORTUNITIES



FURNITURE



SHARED PICNIC SEATING



PICNIC DECK

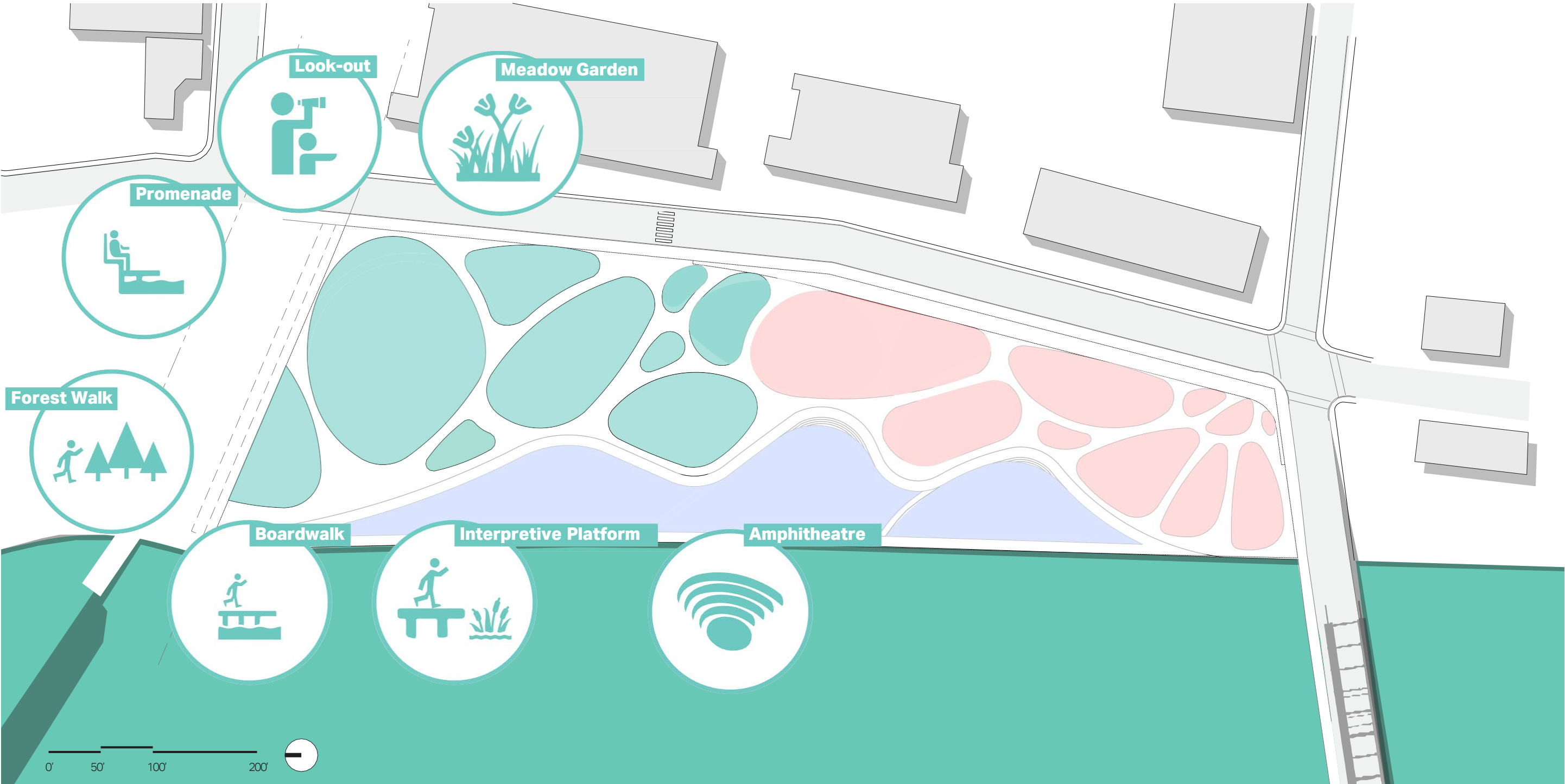


BIRTHDAY CELEBRATION

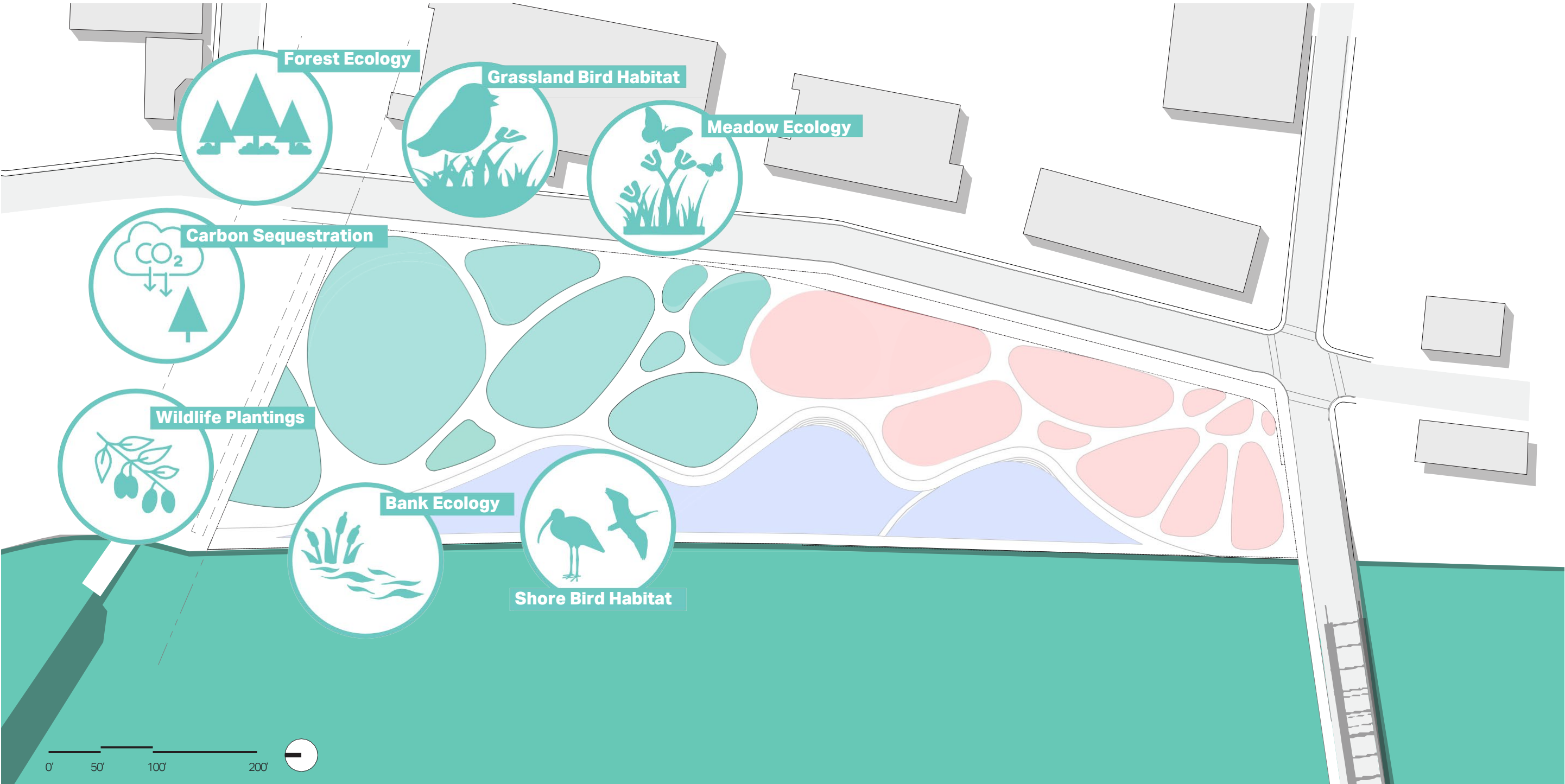


NORTHERN PARK FEATURES

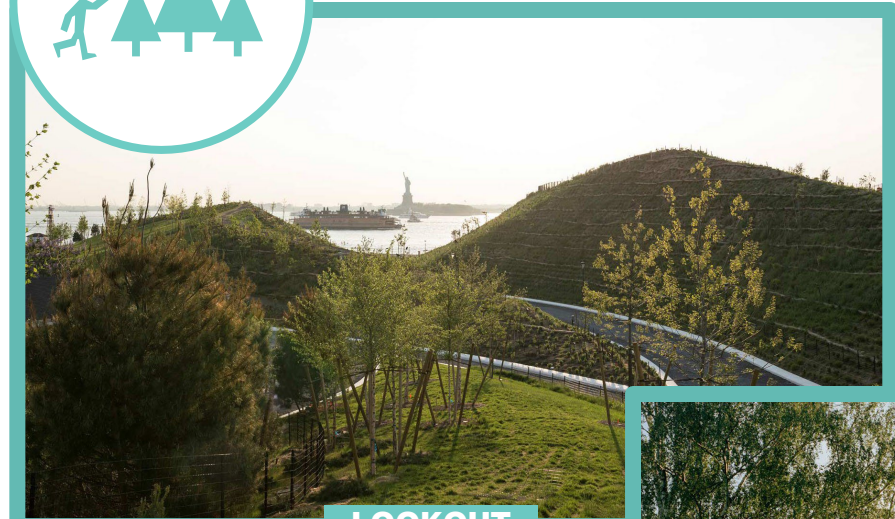
NORTHERN AREA | PROGRAM FEATURES



NORTHERN AREA | ECOLOGICAL FEATURES



NORTHERN AREA | LOOKOUT OPPORTUNITIES



LOOKOUT



VIEW SHED



SEATING



TRAILS

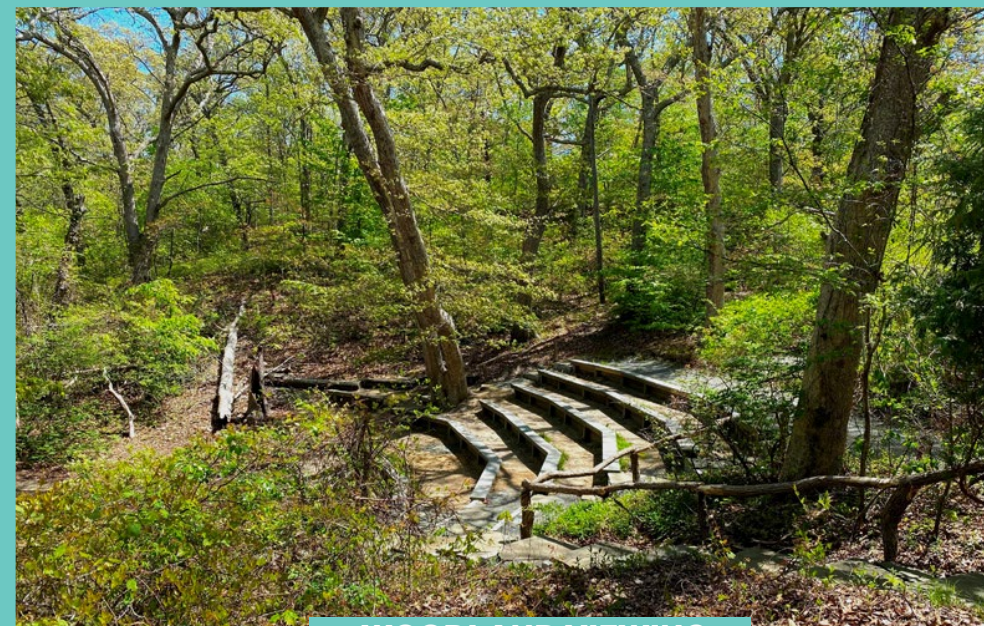
NORTHERN AREA | AMPHITHEATRE OPPORTUNITIES



SEATING



PASSIVE GATHERINGS



WOODLAND VIEWING

NORTHERN AREA | NATURE PODS OPPORTUNITIES



OUTDOOR CLASSROOMS



NATURE EXPLORATION



WILDLIFE VIEWING



SEATING

NORTHERN AREA | BOARDWALK OPPORTUNITIES



ACCESSIBILITY



SEATING



PEDESTRIAN SAFETY



REST AREAS



RENDERED VIEW



If approved, the Crediting Agreement will transform the current property into a natural resources park and may serve as a model for similar projects around the country



First – Provide Written Comment on the Proposed Agreement

- The proposed Agreement is open for written public comment now through July 7.
- Your comments help us to see if the Agreement is in the public interest.
- We will read every comment and respond to it.
- If the Agreement is not approved, the Park project is unlikely to happen.
- Share your opinion of the Agreement. Should the Agreement be approved?



Second – how the Agreement works

BASF agrees to design and build a 5-acre natural resources park project with specific features.

The Trustees review and approve milestone steps in the process, such as design plans and project construction.

BASF must coordinate with local, state and federal regulators at every step.

BASF must meet all the requirements of the agreement, and then BASF will earn a credit against liability and the public will have a park.

The park is designed to last for at least 30 years.



Third– the Agreement provides for the Park to last at least 30 years

A deed restriction will be recorded on the property to permanently preserve the property as a natural resources park.

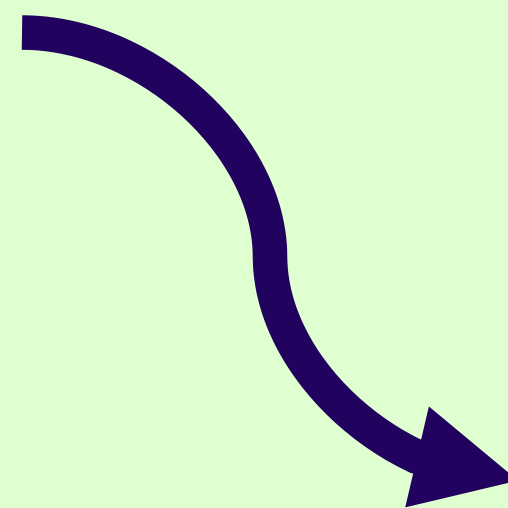
After completion of the park, BASF expects to transfer ownership of the property to East Newark.

BASF will work with the new owner of the park property to arrange for funding for maintenance and insurance for the park for at least 30 years.



Fourth – the Agreement provides a credit towards offsetting liability for injury to natural resources

The Agreement offers BASF a \$73.5 million credit towards offsetting future liability for injuries to natural resources.



Fifth – the proposed Agreement is one of the first of its kind

- The Agreement provides a head start for natural resource restoration without waiting for litigation or a resolution of all the potential defendants' liability.
- We hope this type of crediting agreement will become a model for other sites.



Sixth – The Public Comment Period Closes July 7

Please share your opinion of the proposed Agreement.

We will consider your written comments and respond.

Information on where to submit your comments is available at:

<https://darrp.noaa.gov/EastNewarkRiverfrontPark>

Thank you!

