



# Fresh Kills Park

by James Corner Field Operations

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# Fresh Kills History

- Indigenous tribes inhabited the area from the Paleo-Indian period (10,000BC - 8000BC) until around 1670.
- During the Archaic Period (8000-1000BC), there was a shift from hunting large animals to small game and fish/shellfish.
- Between the years 1000BC-1600AD, horticulture began to establish alongside hunting/gathering and shellfish harvesting.
- Dutch colonialists occupied the area beginning in the early 1600s, pushing out the Lenape tribe, naming the area Fresh Kille (*kille* means “riverbed” or “water channel”) for all the freshwater estuary streams and tidal marshes in the area.
- Staten Island (and Fresh Kills) became a British landing spot during the American Revolution.
- From the Industrial Revolution to the early 1900s, the area was a manufacturing hub, industrialization took over the shores, and several immigrant villages and farms began to appear.

# Fresh Kills Timeline

**1948:** Fresh Kills 450-acre Landfill Opens



**1961:** Fresh Kills Landfill grows to 1,284 acres



**1971:** Fresh Kills Landfill collects *half* of NYC trash



**1991:** Fresh Kills Landfill collects *all* of NYC trash



**1996:** South Mound capped  
**1997:** North Mound capped

**2001:** Fresh Kills Landfill closes. 9/11 debris is the last to be accepted. Design competition opens.



**2023:** North Park Phase 1 opens

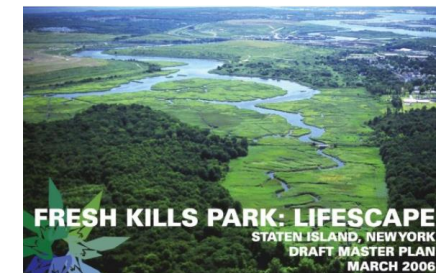


**2017:** North Park groundbreaking



**2013:** Main Creek Wetland restoration complete

**2014:** West Mound capping begins



**2006:** Draft Master Plan

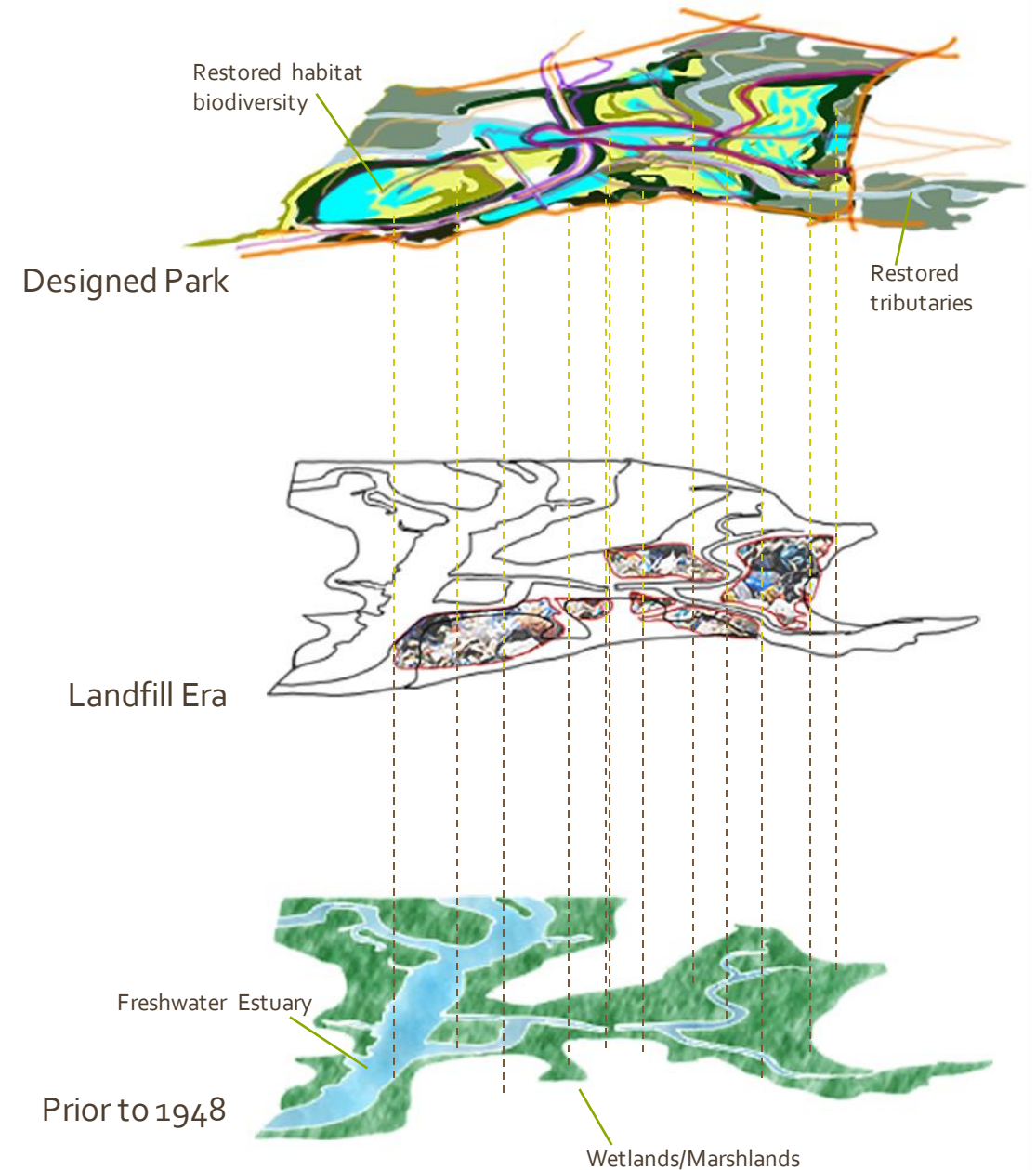
**2007:** East Mound capped

**2003:** Field Operations wins design contest.



# Wetlands > Landfill > Park

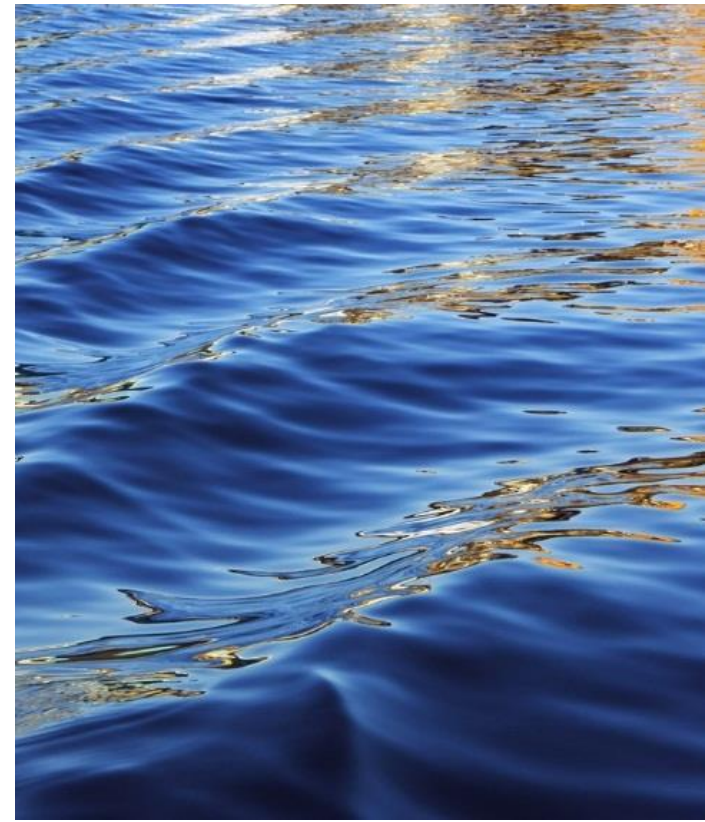
- 2,315 acres – three times the size of Central Park
- Once the largest landfill in the world.
- 45% landfill, 55% is made up of wetlands, creeks and tidal flats, open meadows, and woodlands
- Reengineered into a self-sustaining ecosystem creating wildlife habitats
- State-of-the-art environmental reclamation practices, landfill infrastructure, monitoring operations, etc.
- Three 10-year phases to create three primary landscape types, creating highly diverse ecosystems.



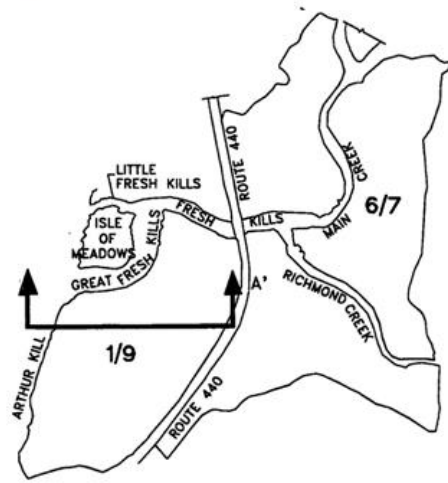
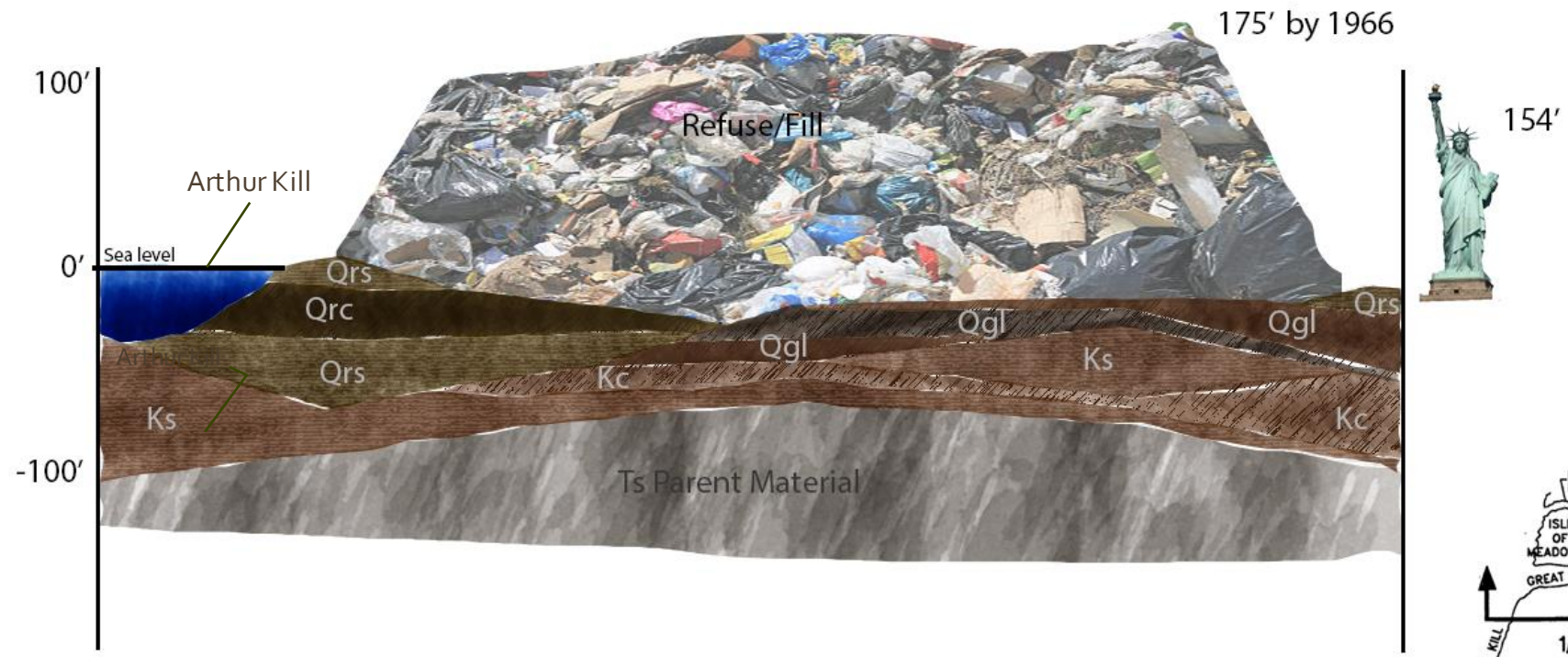


# Cleaning up

How to restore the ecosystem post landfill



# Geologic Cross Section – West Mound



## Leaching properties

Qrc	Recent silt and clay	Ks	Cretaceous sand
Qrs	Recent sand	Kc	Cretaceous silt/clay
Qgl	Glaciolacustrine silt/clay	Ts	Triassic stockton shale and siltstone bedrock
Qgt	Glacial till		

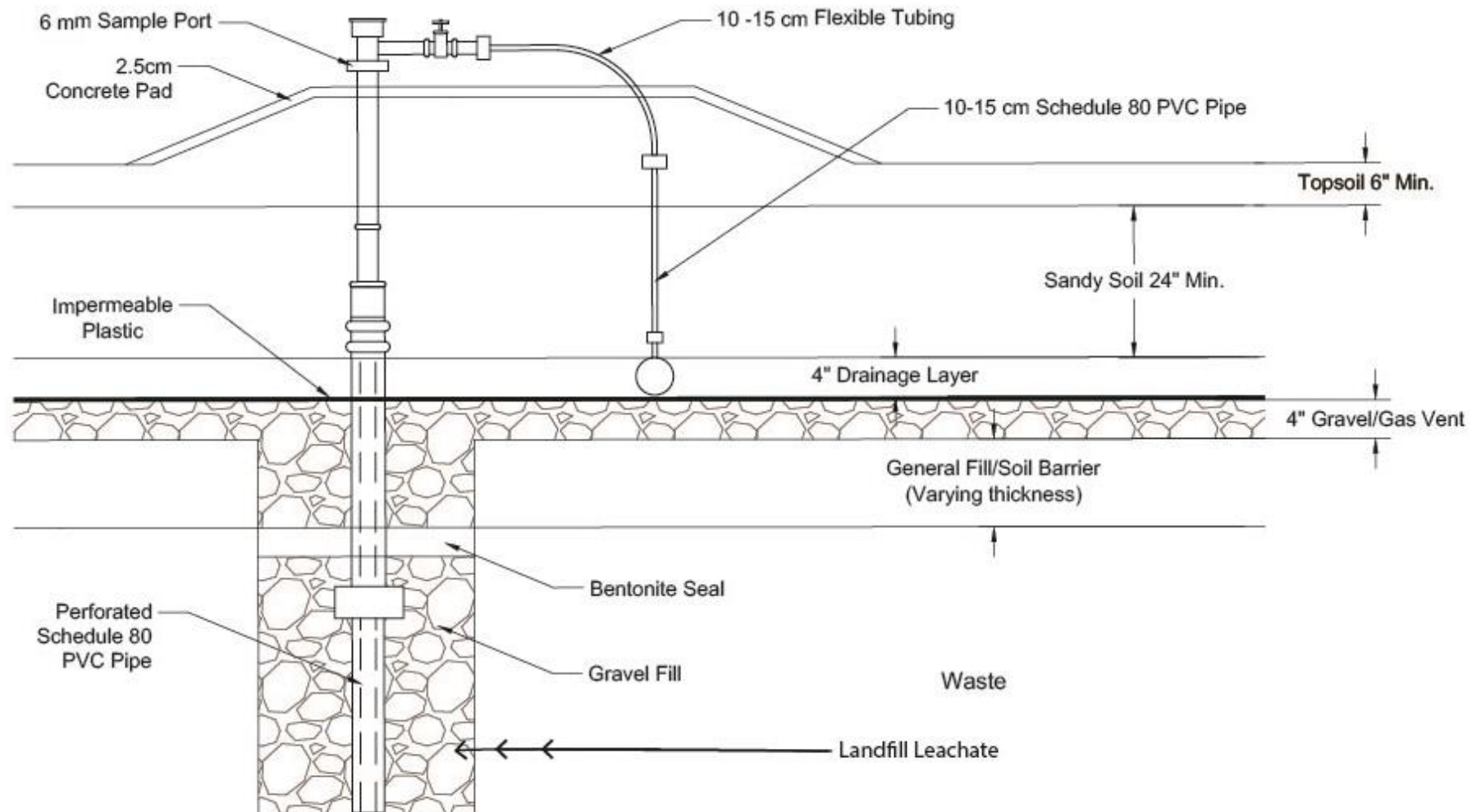
Low permeability (silt/clay)  
 High permeability (sand)

# Rebuilding from the ground up





# Preventing Landfill Leachate with a Gas Vent



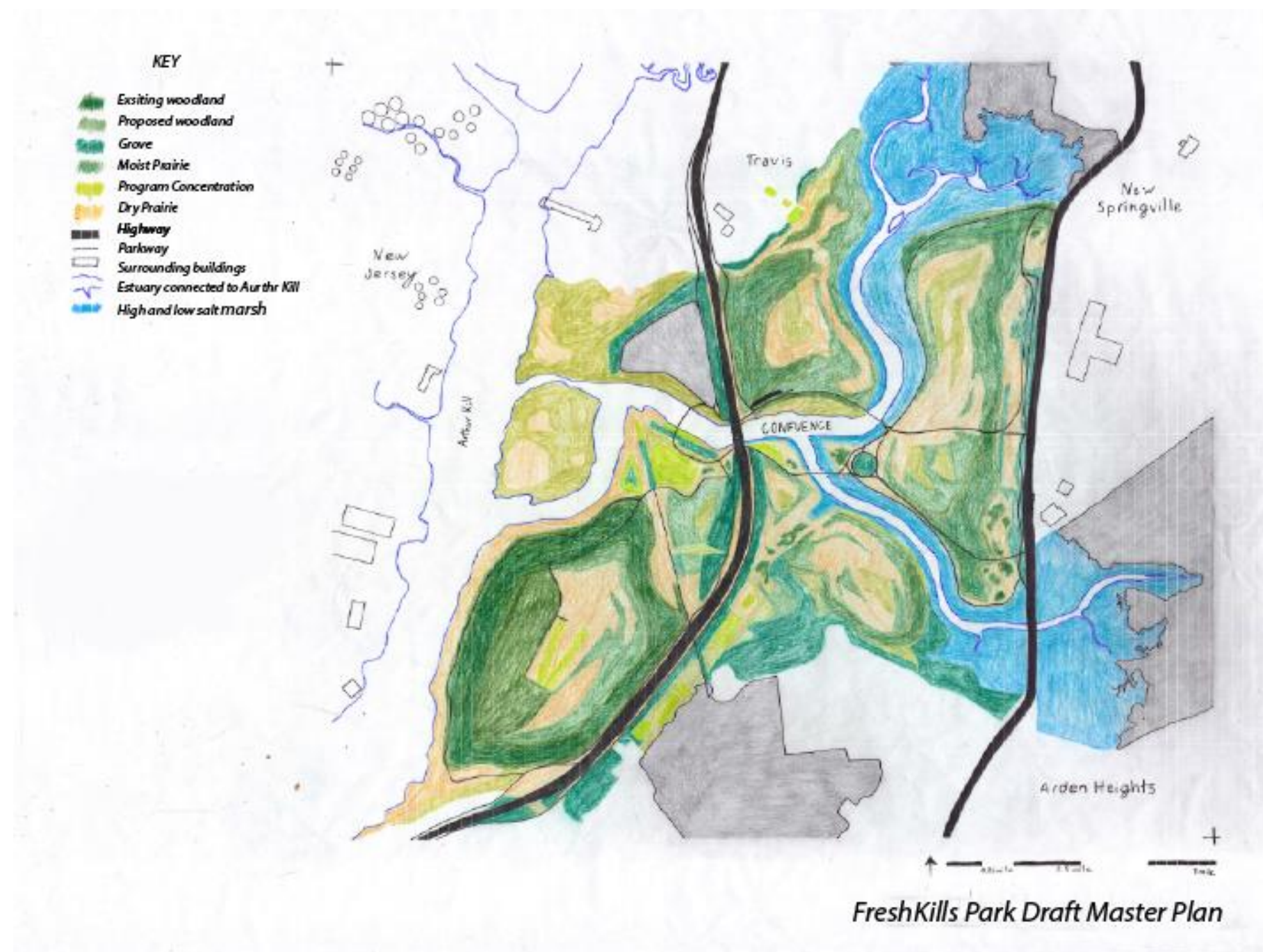




# Fresh Kills Park

Field Operations Proposed Master Plan





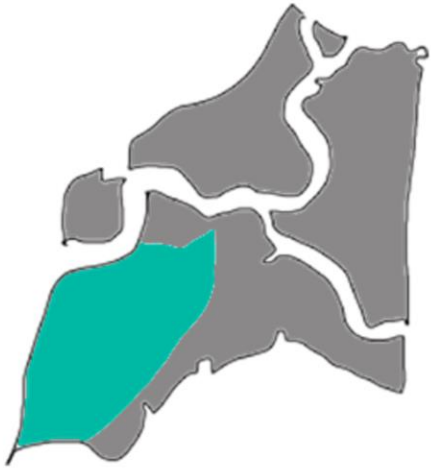


# Field Operations illustrative aerial view of park



# Five Areas of the Park

West Park



- 545 acres
- home of the largest mound
- wildflower hilltop meadow
- 9/11 monument
- 360-degree view

North Park



- 233 acres
- adjacent to Travis neighborhood
- simple natural settings (meadows, wetlands, creek, etc)
- vast network of multi-use trails

Confluence



- 100 acres
- recreational core
- 20-acre Creek Landing
- 50-acre Point Terrace, Marsh, Sunken Forest

South Park



- 425 acres
- adjacent to Arden Heights
- large natural settings
- active recreational spaces
- hilltop views

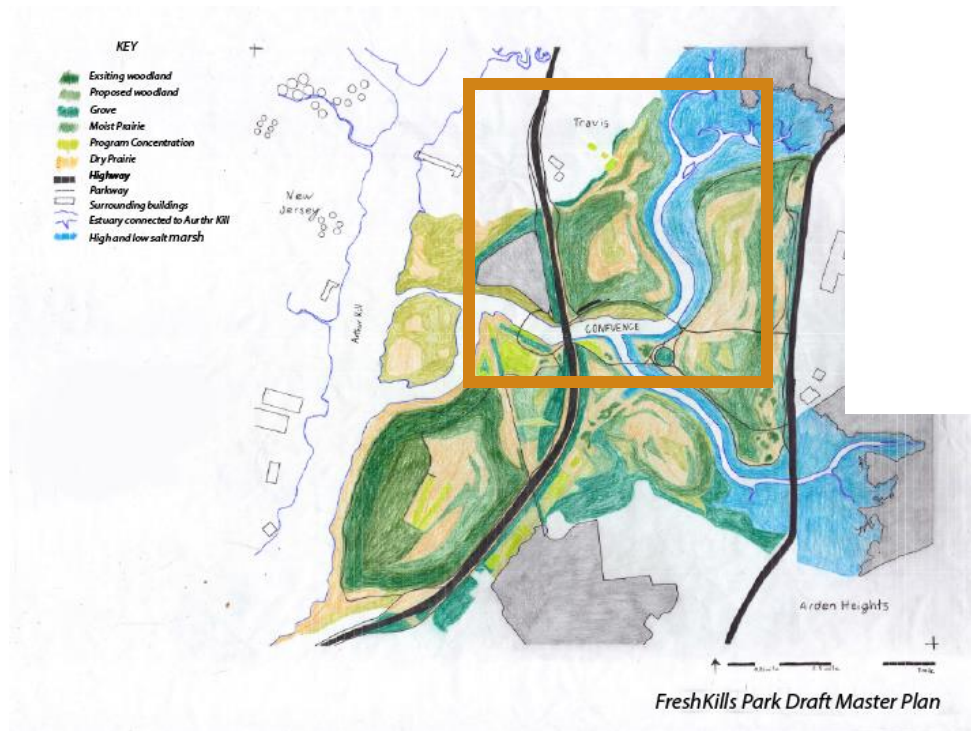
East Park



- 428 acres
- drive connecting Richmond Ave to the park center
- big vegetated spaces
- educational center, boardwalk, exhibits, etc



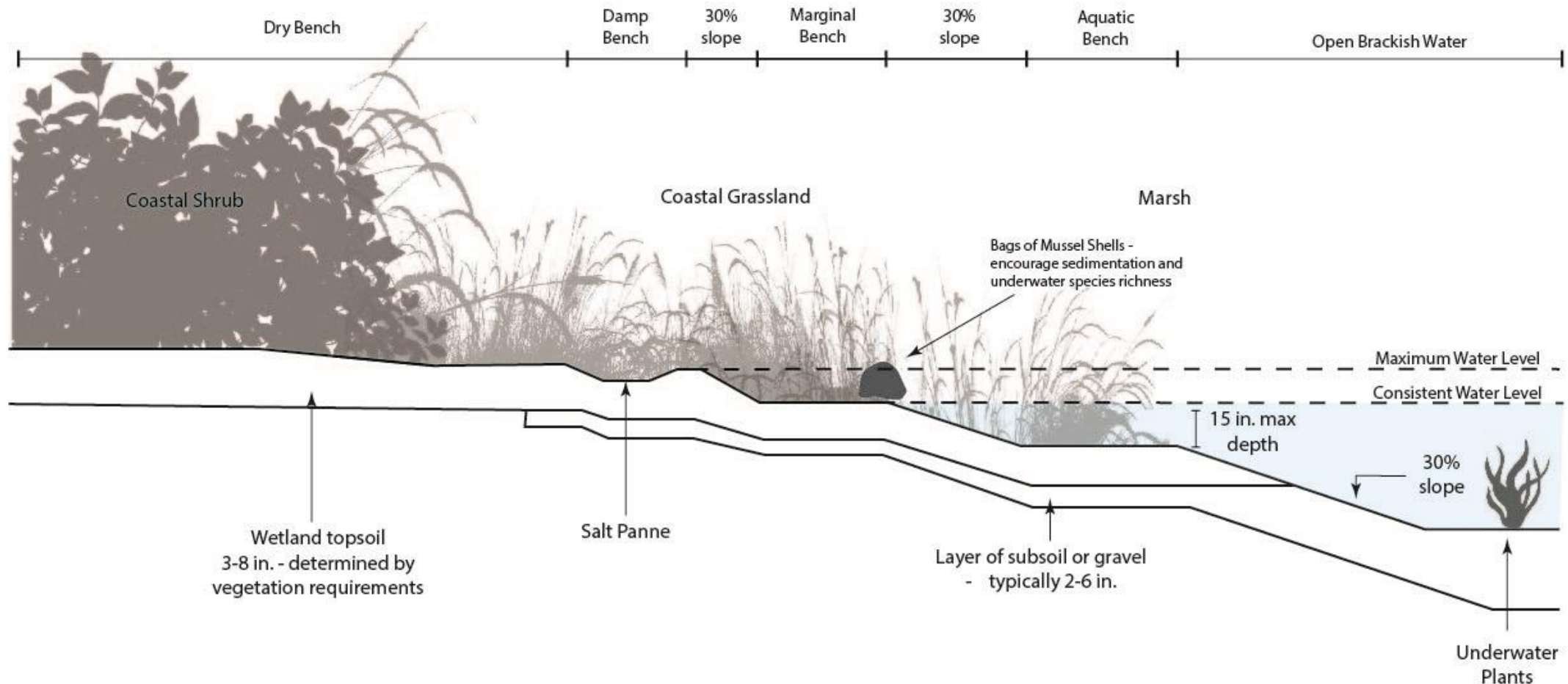
# North Park- Phase 1 opened in October 2023



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FreshKills Park- North Park

# Wetland Restoration

Combat invasive plant species and encourage biodiversity



# Habitat Succession



## Start of Reclamation

- Existing habitats were limited to coastal edges
- Consists of mostly:
  1. salt marshes
  2. fens
  3. morainal forests

## Years 1 to 8

1. Strip cropping on North and South Mounds
2. Planting native saplings in lowland forests overlapping swamp forests
3. Native prairies begin to appear around year 4, thanks to strip cropping

## Years 9 to 16

1. Strip cropping continues over North & South Mounds
2. Planting native saplings in lowland forests overlapping swamp forests of East & West Mounds
3. Native prairies establish on East and West Mounds
4. Allowing successional woodlands on wet prairie; mowing dry every 3 years

## Years 17 to 24

1. North & South Mound prairies are well-established and maintained
2. Strip cropping continues on East and West Mounds
3. Planting native saplings to establish woodlands on East and West Mounds
4. Woodland spread continues on North and South mounds

## Years 25 to 32

1. North & South Mound prairies are well-established and maintained
2. Strip cropping continues on East and West Mounds
3. Planting native saplings to fill in woodlands on East and West Mounds
4. Woodland spread continues on North and South mounds; begins on East and West Mounds
5. East & West Mound prairie maintenance begins

## Years 32 to 40+

1. All Mound prairies are well-established and maintained
2. Mound woodlands are well established and maintained
3. Lowland forests are well established and maintained



# Wildlife returns

macaulay honors college

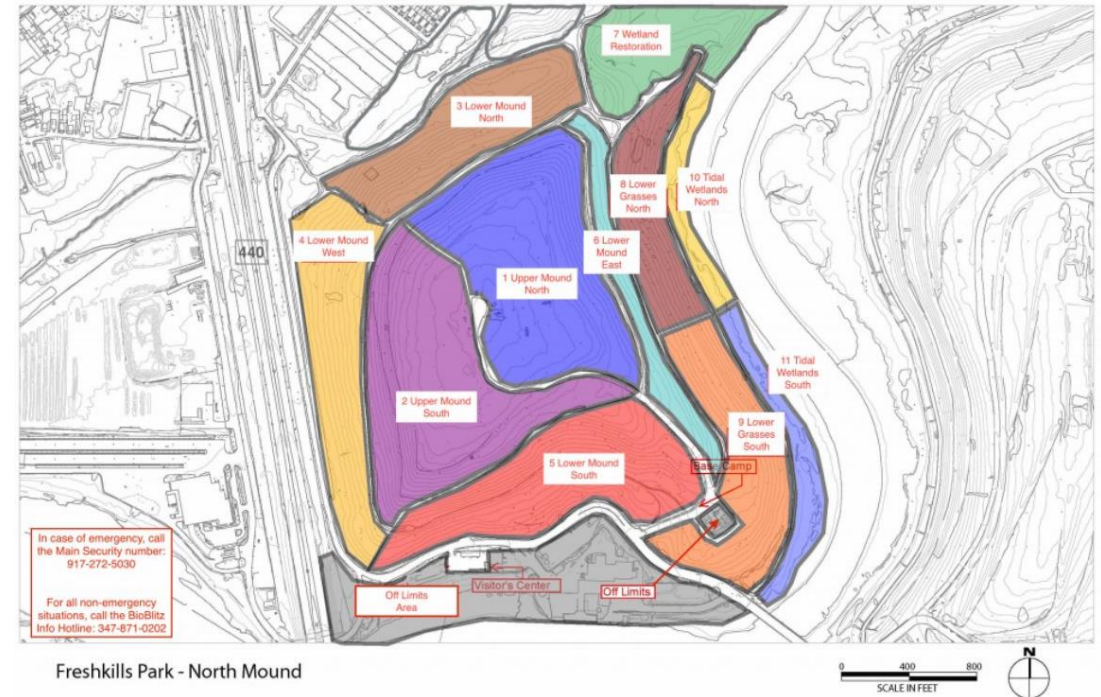


FreshkillsPark 

In 2015, Fresh Kills North Park was the focus of the annual BioBlitz by Macaulay Honors College. The eleven teams recorded over 300 species of plants and animals within a 24-hour period.

Population monitoring continues throughout the site, as well as bird banding, bat population monitoring, and grassland habitat characterization.

Today, Fresh Kills Park has welcomed home over 200 species of birds and is home to the largest colony of Grasshopper Sparrow in New York.





# References

- <https://freshkillspark.org/>
- <https://2015bioblitz.sched.com/2015-08-30/overview>
- [New York City records](#)