



**Historic Infill**

- ..... 1781 Shoreline
- Infilled Areas






**Historic Wetlands**

- Major Wetland Boundaries
- 1886
- 1949
- 2020

0 0.25 0.5 1 Miles



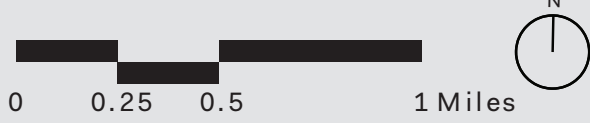


**Coastal Erosion**

- Accreting
- Eroding

**High Water Line**

- Present
- ..... 2009
- ..... 1994
- ..... 1982
- ..... 1969
- ..... 1938
- ..... 1897

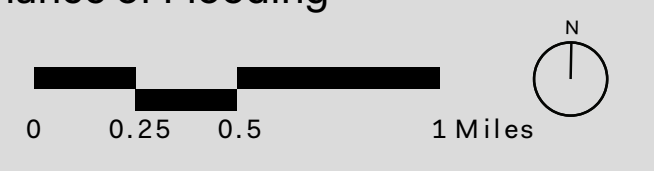






**FEMA Flood Zones**

- A 1% Annual Chance of Flooding, no BFE
- AE 1% Annual Chance of Flooding, with BFE
- AO 1% Annual Chance of 1-3ft Sheet Flow Flooding
- VE High Risk Coastal Area
- X 0.2% Annual Chance of Flooding

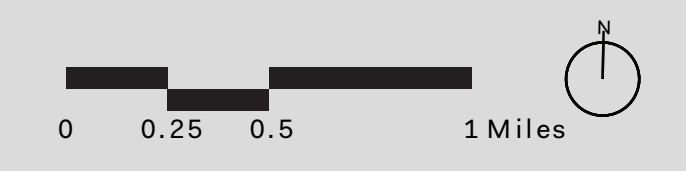






**2030 Storm Surge  
Inundation**

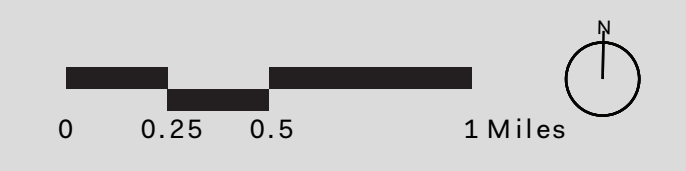
1% Probability Model, 2030,  
Woods Hole Group MA  
Coastal Flood Risk Model





**2070 Design Flood  
Elevation**

1% Probability Model, 2070,  
Woods Hole Group MA  
Coastal Flood Risk Model





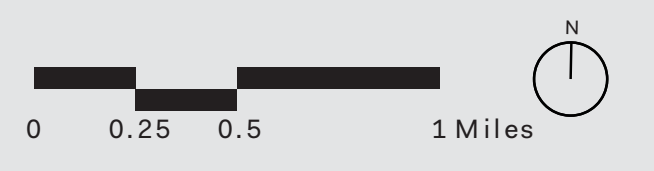
**Essex**  
Total Property Value  
Floodplain Parcels:  
\$321,007,343  
  
162 Resi. Structures in Floodplain

**Rockport**  
Total Property Value  
Floodplain Parcels:  
\$532,158,000  
  
201 Resi. Structures in Floodplain

**Gloucester**  
Total Property Value  
Floodplain Parcels:  
\$1,898,993,100  
  
870 Resi. Structures in Floodplain

**Manchester-by-the-Sea**  
Total Property Value  
Floodplain Parcels:  
\$906,947,746  
  
159 Resi. Structures in Floodplain

**Residential Structures and FEMA National Flood Hazard (NFHL)**  
■ FEMA NFLH (all categories)  
■ Resi. Structures in Floodplain





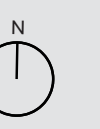
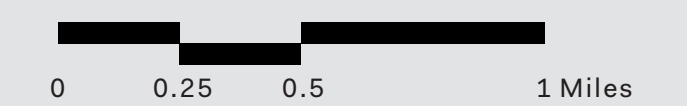


### Gloucester Residential Parcels and FEMA National Flood Hazard

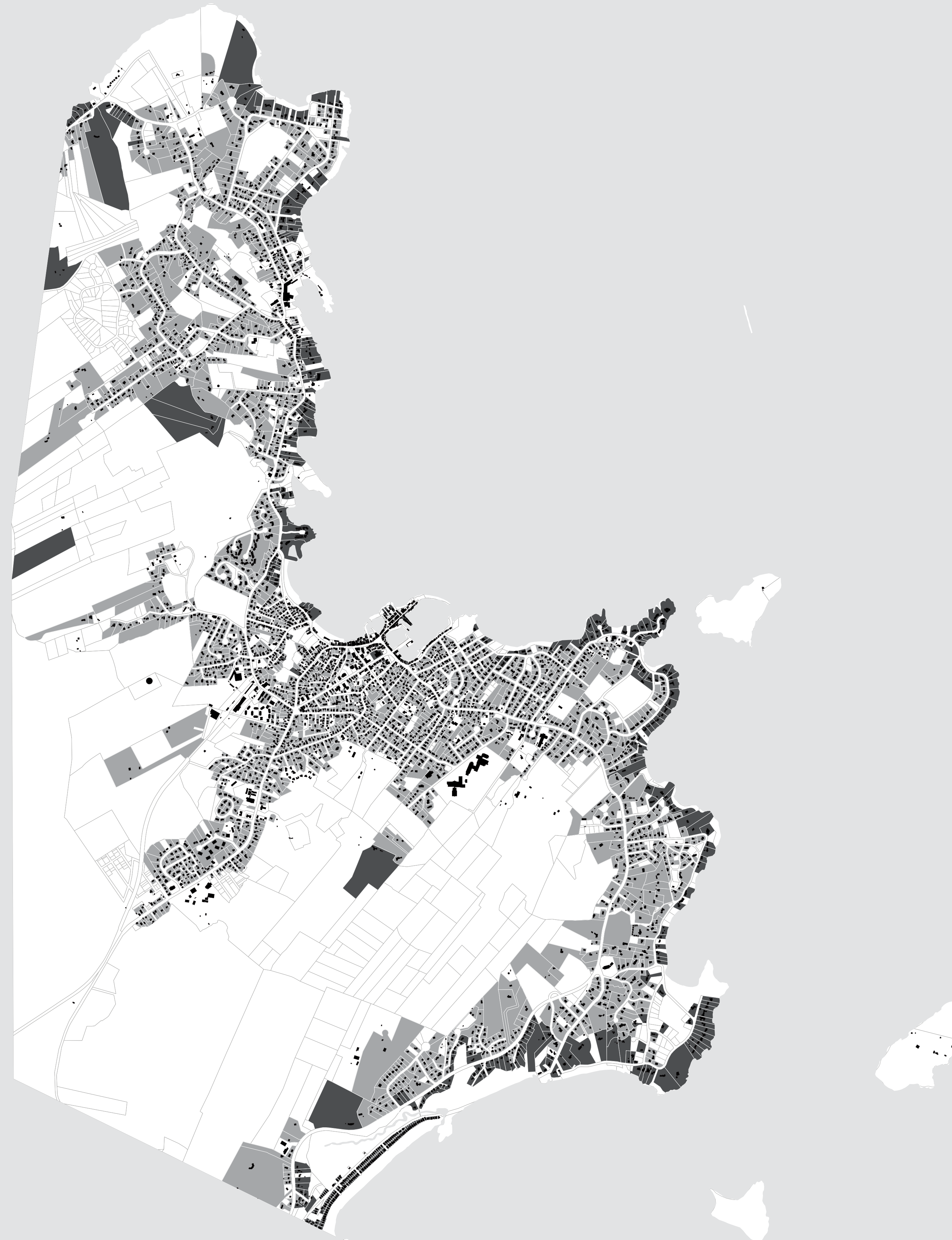
Total Value of Residential Parcels in Floodplain:  
\$1,898,993,100

1769 Residential Parcels in Floodplain  
18% of Residential Parcels in Floodplain

Residential Parcels  
■ Out of Floodplain (NFHL)  
■ In Floodplain (NFHL, all categories)





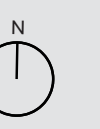
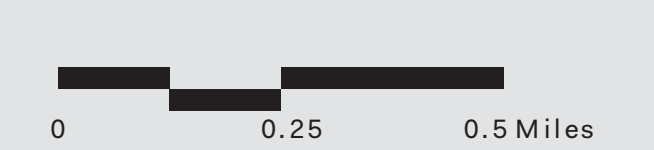


### Rockport Residential Parcels and FEMA National Flood Hazard

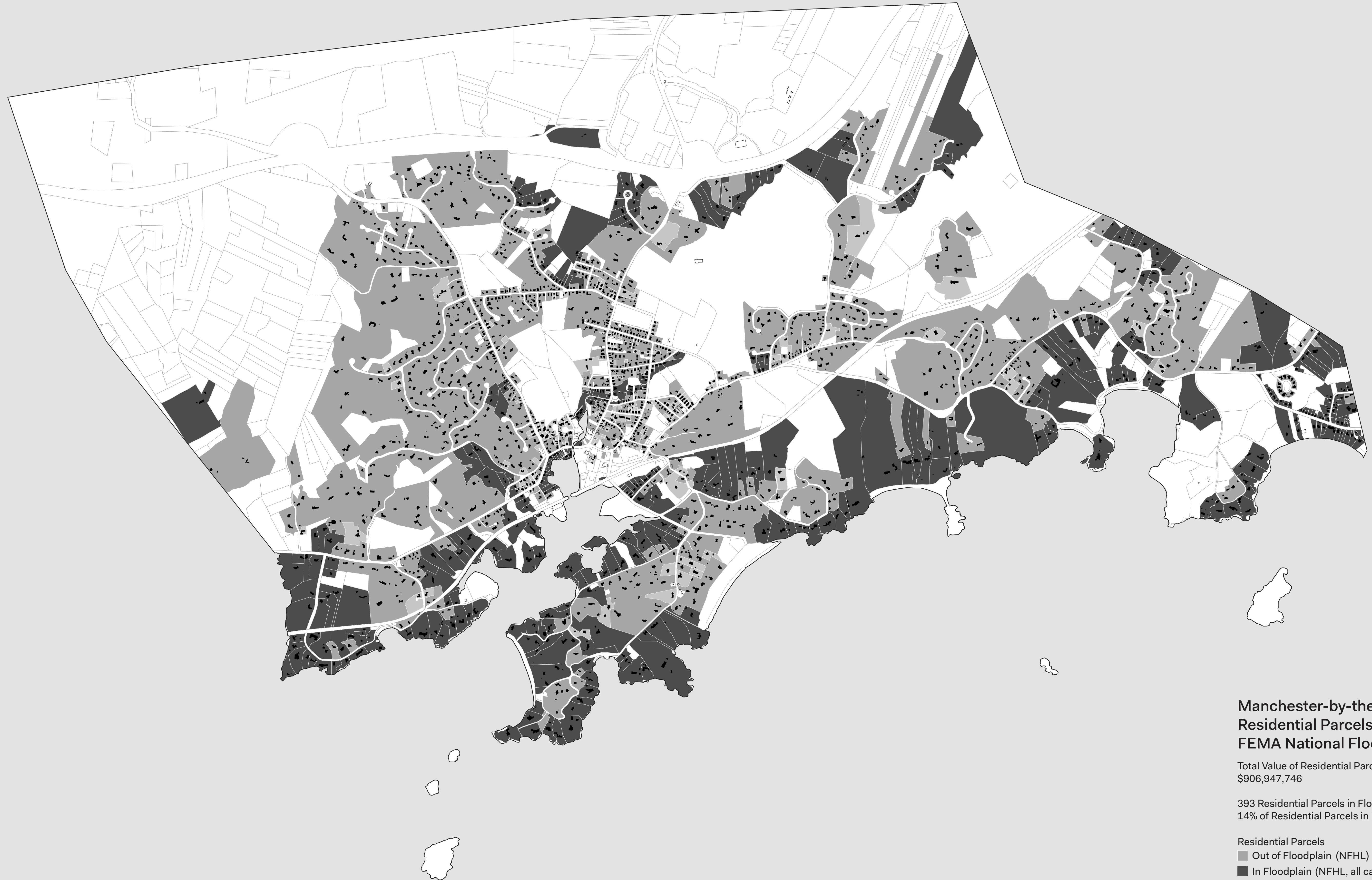
Total Value of Residential Parcels in Floodplain:  
\$532,158,000

497 Residential Parcels in Floodplain  
16% of Residential Parcels in Floodplain

- Residential Parcels
- Out of Floodplain (NFHL)
  - In Floodplain (NFHL, all categories)





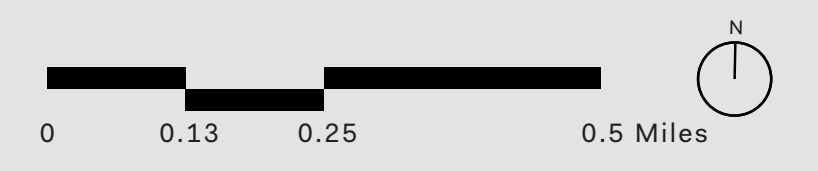


**Manchester-by-the-Sea  
Residential Parcels and  
FEMA National Flood Hazard**

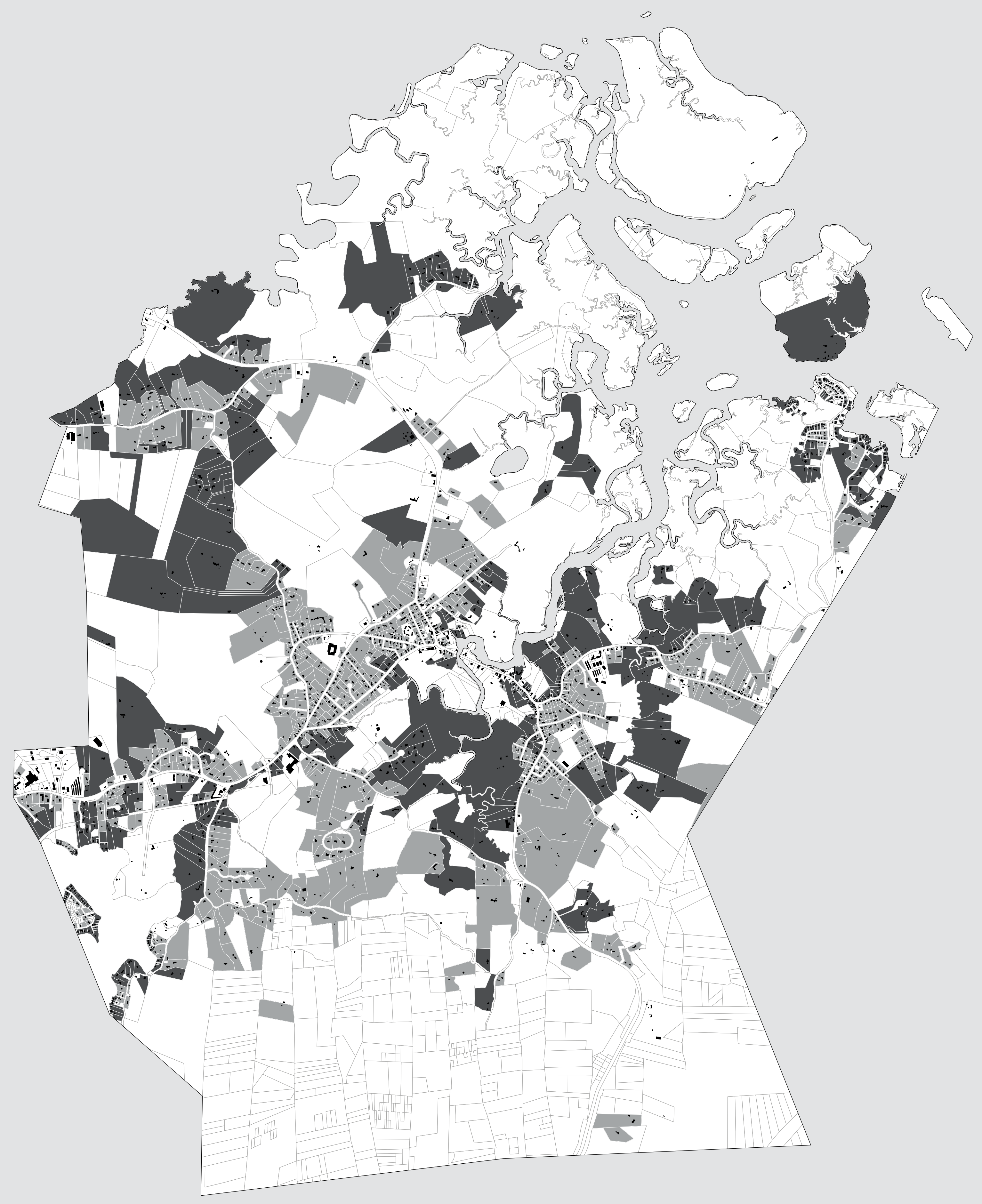
Total Value of Residential Parcels in Floodplain:  
\$906,947,746

393 Residential Parcels in Floodplain  
14% of Residential Parcels in Floodplain

- Residential Parcels
- Out of Floodplain (NFHL)
  - In Floodplain (NFHL, all categories)







**Essex  
Residential Parcels and  
FEMA National Flood Hazard**

Total Value of Residential Parcels in Floodplain:  
\$321,007,343

420 Residential Parcels in Floodplain  
33% of Residential Parcels in Floodplain

Residential Parcels  
■ Out of Floodplain (NFHL)  
■ In Floodplain (NFHL, all categories)

