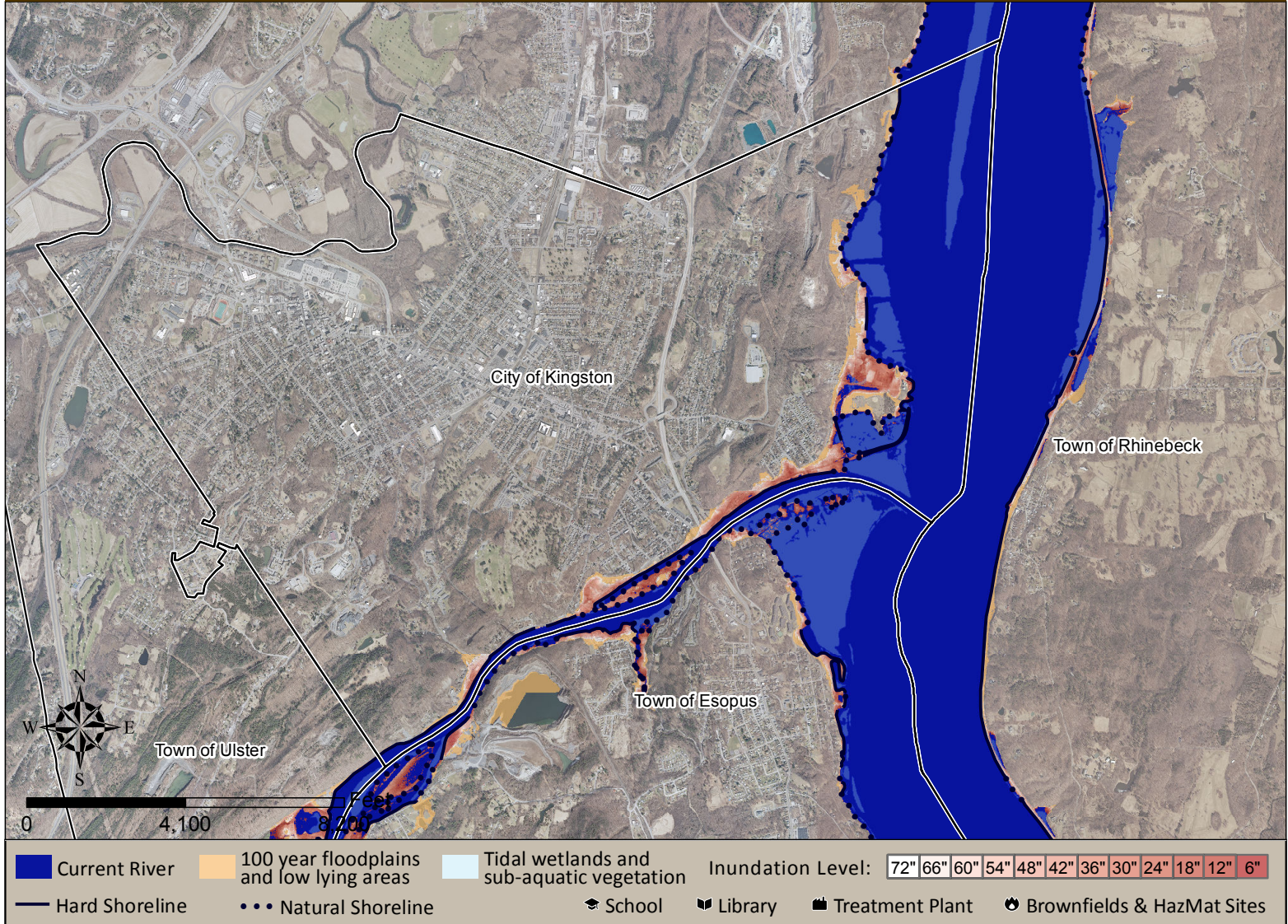




Hudson River Sea Level Rise City of Kingston



The Hudson Is Rising

The Hudson River Estuary is an arm of the Atlantic Ocean. Its water levels reflect tidal action and global sea-level increases. Over the past century, local river elevations have risen about 12", a rate of increase greater than the global average. The best data available indicates Hudson River water levels may rise as much as six additional feet by 2100.

Sea Level Rise Time Frame

Sea level rise projection data are based on figures from the New York State 2100 Commission Report.

Hudson River Sea Level Rise Projections (in.)

	2020's	2050's	2080's	2100
Central Range:	2-5	7-12	12-23	15-30
Rapid Ice Melt:	5-10	19-29	41-55	56-72

Inundation Modeling

Sea-level rise will create a "new normal" for elevation and extent of the river. Scenic Hudson has used GIS to model future high tide lines and floodplains for various sea level rise scenarios, then used those areas to identify resources, infrastructure and people at risk.

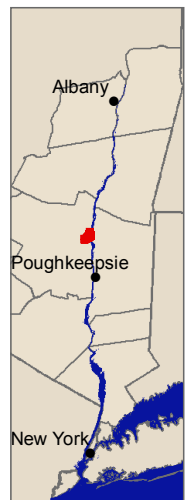
How Will It Impact Your Community?

Summary of City of Kingston

Resources at risk under 72" of sea level rise

	Inundation	Flooding*
Households:	91	52
People:	143	98
Tidal Wetlands (acres):	150.34	N/A
Railroad (miles):	1.96	2.02
Treatment Plants:	1	1
Hazardous Facilities:	3	9
Brownfields:	3	4
Schools:	0	0

*Inundation refers to areas underwater at high tide. Flooding refers to 1% risk coastal flood zones; flood statistics include only areas outside of inundation zones.



FOR MORE INFORMATION, VISIT WWW.SCENICHUDSON.ORG/SLR

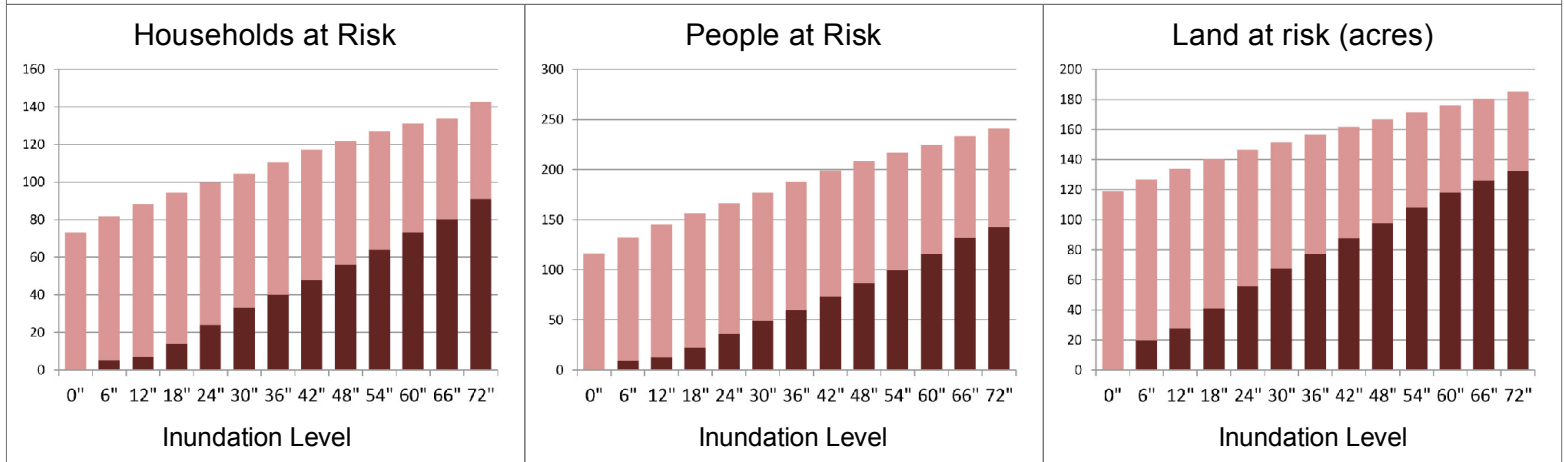
Hudson River Sea Level Rise City of Kingston



Planning for Resilience: With significant challenges ahead, communities have an opportunity to begin planning and implementing long-range solutions that will increase resilience and maintain the vitality of Hudson River waterfronts. A range of innovative approaches to planning, architecture, infrastructure, and natural resource conservation are available to create locally-appropriate solutions that reduce risk to people, property and nature while opening up new possibilities for taking advantage of our region's greatest asset - the Hudson River.

City of Kingston

At risk of flooding At risk of inundation

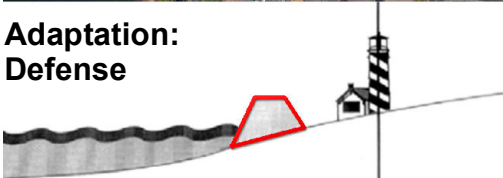


Adaptation Options: We must find solutions that protect critical infrastructure and ensure the viability of important natural resources. The best plans will provide locally specific tactics that balance options for coastal defense, strategic accommodation and managed relocation.

Coastal defense: Solutions that protect existing critical infrastructure - including sea walls, rip rap, levies and hardened shorelines



**Adaptation:
Defense**



Strategic accommodation: Solutions that permit flooding - including raised infrastructure, adaptive design strategies and compatible land uses



**Adaptation:
Accommodate**



Managed relocation: Solutions that allow for inundation and flooding while promoting the migration of tidal wetlands and other important natural resources



**Adaptation:
Relocate**



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