

Sea Level Rise & Inundation Risk Zone

NJPACT - Resilient Environments and Landscapes



REAL will modernize New Jersey's environmental land use rules to respond to climate change by considering risks such as sea-level rise and chronic flooding, and to facilitate climate resilience by supporting green infrastructure and renewable energy.

New Jersey is particularly susceptible to the adverse impacts of climate change as the coast serves as a significant population center, a critical element of the State's economy and a hallmark of its culture

REAL Stats: Sea Level Rise

- 98% of our coastline is projected at medium, or very high risk, to sea level rise, threatening residents, economy, natural resources and wildlife who rely on the coastal zone.
- Current projections indicate as much as 5.1 feet of sea-level rise is likely by 2100.
- More than half a million acres of New Jersey land is highly vulnerable to coastal hazards.
- New Jersey has already been disproportionately affected by climate change and sea level rise, at a rate that is more than two times the global average due to regional factors such as land subsidence (Kopp et al., 2019).
- Over the last 50 years, storms that resulted in extreme rain increased by 71% in New Jersey, which is a faster rate of increase than anywhere else in the United States (Huang et al., 2017).
- Roughly 16% of NJ lies in a FEMA-mapped floodplain. REAL adds 1.5% more land area into the tidal regulatory floodplain.

REAL Science

- REAL is based on the sea level rise projections from "New Jersey's Rising Seas and Changing Coastal Storms: Report of the 2019 Science and Technical Advisory Panel (2019 STAP Report).
- The Science and Technical Advisory Panel (STAP) was convened by Rutgers University and represents the collective expertise of nineteen authors from research universities, federal institutions, professional associations and consulting firms.
- The STAP Report presents New Jersey specific observations and projections that synthesized the most recent climate science needed to inform efforts to increase the resilience of New Jersey's people, places and assets to regional sea level rise and changing coastal storms and resulting flood risk.

REAL Action

- Redefine the extent of tidal flood hazard areas through the proposed “climate adjusted flood elevation” which is calculated by adding five feet to FEMA’s 100-year flood elevation in tidal flood hazard areas.
- Align the State’s floodplain management efforts with FEMA’s National Flood Insurance Program (NFIP) minimum standards to ensure permit standards and authorizations are no less protective than the NFIP minimum standards, as established in each community’s rule or floodplain ordinance.
- Create an “Inundation Risk Zone” within tidal flood hazard areas.

Inundation Risk Zone (IRZ)

The portion of a tidal flood hazard area that has been determined to be at significant risk for future permanent or daily inundation and which therefore represents a high level of hazard for existing or proposed development or habitation. Standards for proposed new or improved residential buildings, critical buildings, and critical infrastructure within the IRZ are proposed to account for the increased flood risk that people and property are exposed to due to expected sea level rise and more intense storm events.

Applies to:

- Residential buildings
- Critical buildings & infrastructure

Requires:

- Inundation risk assessment
- On-site alternatives analysis
- Risk acknowledgment

Exceptions for certain maintenance-related activities

- Safety or state of good repair improvements to roads
- Public roadway projects that reach a “preferred alternative” before adoption of new standards
- Minor drainage improvements