Rutgers NJ Inland Design Flood Elevation Layer

FEMA 1% Chance Annual Flood Plus 3 Feet

The NJ Department of Environmental Protection (NJDEP) recently adopted its Inland Flood Rule which, among other actions, establishes a new Design Flood Elevation (DFE) standard for specific types of new construction and redevelopment. The new DFE is 3 feet above the elevation of the 1% Chance Annual Flood zone (also known as the 100-year flood zone) or, where NJDEP flood mapping is available, 2 feet above NJDEP’s flood hazard area design flood elevation, if higher than FEMA’s 1% flood plus 3 feet. In consultation with the NJDEP, the NJ Climate Change Resource Center at Rutgers University prepared a new data layer consistent with the new 2023 DFE standard (1% Chance Annual Flood Plus 3 Feet) for inclusion in its NJADAPT suite of data visualization and mapping tools.

An analysis by the NJ Climate Change Resource Center shows a glimpse of who and what are potentially impacted within this new data layer:

- **1.34 million** people, about **14.6%** of the total population
- **15%** of people residing in overburdened communities
- **35%** of power plants statewide. That’s 27 out of 77.
- **27%** of wastewater facilities statewide – 4,869 out of 17,964
- **20%** of major roadways (by area)

Some part of every evacuation route in New Jersey is within the new Inland Design Flood Elevation Dataset.

- **38** Hospitals (about 16%)
- **242** Fire/EMS stations (about 19%)
- **329** Schools (about 9%)
- **35,330** Historic sites (about 25%)

The new data layer is meant to be used as a high-level screening tool for planning reference only and should not be relied upon for site-specific flood impact analyses, permitting, or other legal purposes. The accuracy of this dataset is limited by the data and methods available to create it. This dataset is not based on survey quality data and must not be used in replacement of survey data.