

Rockland County, NY

Risk-assessment baseline packet

County FIPS: 36087 Release: 2026-10 Data as of: 2026-09-30 Storm Events data through: 2026-06-30

Hazard Plain is an independent product built from public federal data. It is not a FEMA document and is not reviewed or endorsed by FEMA or any state agency.

Summary

Plan status as of 2026-09-30: Approved, expires 2029-10-02. Plan: Rockland County 2024 (FEMA plan 109879), approved 2024-10-03.

Since the plan was approved on 2024-10-03: no new hazard declaration and 22 NOAA Storm Events records; details under "What changed since your last plan".

Highest expected annual loss (FEMA National Risk Index, modeled total; see B1-a): Inland Flooding (\$38,004,399 a year), Cold Wave (\$4,481,540) and Earthquake (\$3,508,672).

The tables that follow are organized by the items of FEMA's Local Mitigation Plan Review Tool, Element B (B1-a to B2-c); each heading says which item its tables support.

TERMS USED

EAL: expected annual loss: FEMA's modeled average yearly loss from a hazard.

NRI: FEMA's National Risk Index (version 1.20, December 2025).

NFIP: National Flood Insurance Program.

RL, SRL: repetitive loss and severe repetitive loss: flood-insured properties with repeated claims (definitions in B2-c).

FMA, HMGP: Flood Mitigation Assistance and Hazard Mitigation Grant Program, FEMA mitigation grants.

PA: FEMA Public Assistance: disaster aid to governments and some nonprofits.

Zone-level: NOAA logged the event for a National Weather Service forecast zone, which may include parts of neighboring counties.

County-coded: NOAA logged the event to this county.

FIPS: the federal code for a place; 36087 is this area.

D0 to D4: U.S. Drought Monitor categories, from abnormally dry (D0) to exceptional drought (D4).

F/EF, EFU: Fujita and Enhanced Fujita tornado ratings; EFU is an unrated tornado.

kt, CONUS: knots (1 kt is about 1.15 mph); the contiguous United States.

CFR: Code of Federal Regulations.

A4-a, E1-a: other items of FEMA's Local Mitigation Plan Review Tool (sources, and changes since the last plan).

Dollars: nominal (as reported, labeled with the year), not adjusted for inflation.

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Plan clock

Status:	Approved, expires 2029-10-02	Plan:	Rockland County 2024 (FEMA plan 109879)
Approved:	2024-10-03	Days to expiry:	1,098
What changed since your last plan (approved 2024-10-03)			
New federal declarations:	none	Storm Events records since approval:	22 records (data through 2026-06-30)
Repetitive loss now:	FMA RL 12, SRL 42 (44 CFR 77.2); any definition: 308	Repeat-flood change:	this release sets the baseline count.
Sources: 1, 2, 4, 6 (numbered list at the end)			

Plan status for every jurisdiction listed in this county: 24 rows, in the section "Plan clock: Plan status for every jurisdiction listed in this county" on the following pages.

State plan status and tribal plans in this state: see the state page.

Plan clock

Plan status for every jurisdiction listed in this county

Source: 1

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry negative = days since expiry	Notes
Rockland County	County	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	this jurisdiction approved 2024-12-05
Airmont village	Village	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	this jurisdiction approved 2024-12-12
Chestnut Ridge village	Village	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	this jurisdiction approved 2024-12-04
Grand View-on-Hudson village	Village	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	this jurisdiction approved 2024-12-19
Haverstraw village	Village	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	this jurisdiction approved 2024-10-29
Hillburn village	Village	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	this jurisdiction approved 2024-10-29
Kaser village	Village	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	this jurisdiction approved 2025-04-11
Montebello village	Village	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	
New Hempstead village	Village	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	this jurisdiction approved 2025-04-11
New Square village	Village	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	this jurisdiction approved 2025-04-11
Nyack village	Village	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	this jurisdiction approved 2024-10-29
Piermont village	Village	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	
Pomona village	Village	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	this jurisdiction approved 2024-12-17
Sloatsburg village	Village	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	
Spring Valley village	Village	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	this jurisdiction approved 2024-12-09
Suffern village	Village	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	this jurisdiction approved 2025-01-13
Upper Nyack village	Village	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	this jurisdiction approved 2025-04-11
Wesley Hills village	Village	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	
West Haverstraw village	Village	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	
Clarkstown town	Town	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	this jurisdiction approved 2024-10-15
Haverstraw town	Town	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Notes
Orangetown town	Town	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	this jurisdiction approved 2024-10-29
Ramapo town	Town	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	this jurisdiction approved 2024-12-05
Stony Point town	Town	Approved, expires 2029-10-02	Rockland County 2024 (FEMA plan 109879)	2024-10-03	2029-10-02	1,098	

Supports FEMA checklist item B1-a: hazard identification

Hazards NRI does not cover (local data needed)

- dam failure (incl. upstream dams)
- levee failure
- flash flood as its own subtype
- ice jams
- debris flows
- erosion (riverine and coastal)
- land subsidence and sinkholes
- expansive soils

The 18 National Risk Index hazards, ranked by expected annual loss (EAL)

Sources: 5, 6

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records, 1996 to 2026-06-30 <i>count</i>	Storm Events coverage note
1	Inland Flooding	Relatively Moderate	Relatively Moderate	\$36,331,326	\$34	\$1,673,038	\$38,004,399	123	
2	Cold Wave	Relatively Moderate	Relatively High	\$244	\$369	\$4,480,927	\$4,481,540	4	
3	Earthquake	Relatively Low	Relatively Moderate	\$2,996,406	n/a	\$512,266	\$3,508,672		Storm Events does not record earthquakes.
4	Hurricane	Relatively Moderate	Relatively Moderate	\$3,261,282	\$11,791	\$132,181	\$3,405,255	3	
5	Strong Wind	Relatively High	Relatively High	\$511,032	\$38	\$2,652,442	\$3,163,513	142	Includes 21 High Wind and 6 Strong Wind records (NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition).
6	Tornado	Relatively Moderate	Relatively Moderate	\$1,274,285	\$18	\$1,545,758	\$2,820,061	2	

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records, 1996 to 2026-06-30 <i>count</i>	Storm Events coverage note
7	Heat Wave	Relatively Moderate	Relatively Moderate	under \$1	\$391	\$2,555,461	\$2,555,852	7	
8	Lightning	Relatively High	Relatively High	\$62,369	n/a	\$1,025,275	\$1,087,644	12	
9	Coastal Flooding	Relatively Moderate	Relatively Moderate	\$579,489	n/a	\$17,278	\$596,767	5	
10	Winter Weather	Relatively High	Relatively High	\$69,950	\$1	\$466,558	\$536,509	89	
11	Ice Storm	Relatively Moderate	Relatively Moderate	\$118,167	n/a	\$167,707	\$285,875	3	
12	Hail	Very Low	Very Low	\$7,924	\$1,051	\$32,268	\$41,243	33	
13	Drought	Very Low	Very Low	n/a	\$4,969	n/a	\$4,969	10	
14	Wildfire	Very Low	Very Low	\$3,461	under \$1	\$563	\$4,024	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).
15	Landslide	Very Low	Very Low	\$2,118	n/a	\$297	\$2,415	0	Declared 1 time; no Storm Events record of this type.
16	Avalanche	Very Low	Very Low	\$0	n/a	\$138	\$138	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).
	Tsunami	Insufficient Data	Insufficient Data	n/a	n/a	n/a	n/a	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).

Total = buildings + agriculture + population equivalence; FEMA values each expected death (or 10 injuries) at \$13.7 million (2024 dollars).

NRI risk rating combines expected annual loss with social vulnerability and community resilience; EAL rating rates expected annual loss alone. Both compare this county with all U.S. counties.

Local data needed: state and local wildfire, landslide and tsunami records (Storm Events records these hazards only in part).

Not applicable to this county per NRI, with no federal declaration and no Storm Events record since 1996: volcanic activity. That is the evidence for leaving them out of the plan.

The state hazard mitigation plan also lists hazards for this county; FEMA asks the plan to explain any hazard it leaves out.

Supports FEMA checklist item B1-b: hazard location

Affects the whole county (national data give no location within it): Cold Wave, Drought, Hail, Heat Wave, Ice Storm, Lightning, Strong Wind and Winter Weather.

Coastal Flooding and Inland Flooding: The FEMA Flood Insurance Rate Map (FIRM) is the required location source for flooding. See the FEMA Flood Map Service Center (<https://msc.fema.gov>) for this county.

Hazards that vary within the county: highest-rated census tracts

Source: 5

Hazard	Highest-rated census tracts <i>NRI risk rating, score 0 to 100</i>
Avalanche	tract 105.03 (Very Low, 19.8); tract 101.01 (Very Low, 15.3); tract 116.01 (Very Low, 15.3)
Earthquake	tract 116.02 (Relatively Moderate, 79.1); tract 130.02 (Relatively Low, 76.7); tract 131.02 (Relatively Low, 74.8)
Hurricane	tract 128 (Relatively Moderate, 79.2); tract 112 (Relatively Low, 78.2); tract 130.02 (Relatively Low, 78.1)
Landslide	tract 101.01 (Relatively Low, 92.0); tract 105.03 (Relatively Low, 87.0); tract 116.01 (Relatively Low, 86.0)
Tornado	tract 116.02 (Relatively Moderate, 55.4); tract 105.04 (Relatively Low, 52.7); tract 116.03 (Relatively Low, 52.4)
Tsunami	no tract has a National Risk Index rating for this hazard
Wildfire	tract 107.01 (Very Low, 61.4); tract 111.02 (Very Low, 59.8); tract 116.02 (Very Low, 55.7)

Up to 3 census tracts per hazard, highest National Risk Index rating first, then highest score; a tract number is the Census tract number (for example 105.03 is Census Tract 105.03). FEMA's Resilience Analysis and Planning Tool maps the National Risk Index for every tract: <https://www.fema.gov/emergency-managers/practitioners/resilience-analysis-and-planning-tool>

Supports FEMA checklist item B1-c: hazard extent

Extent: scale, observed range and worst recorded event per hazard

Sources: 6, 7

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Avalanche	none (count and damage only)	0					
Coastal Flood, Storm Surge/ Tide	none in data (flood depth: FIRM)	5 records, 1996 to 2024 (5 zone-level)		No damage reported in 5 records.		Countywide (zone-level records).	Flood depth: see the FEMA Flood Insurance Rate Map.
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	4 records, 2000 to 2004 (4 zone-level)	1 day to 2 days (median 2 days); 4 with a recorded value	2 consecutive days, 2004-01-15 to 2004-01-16, zone-level		Countywide (zone-level records).	
Frost/Freeze (outside NRI's Cold Wave definition)	crop damage	0					

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Drought	U.S. Drought Monitor scale (D0 to D4)	10 records, 2001 to 2002 (10 zone-level)	92 days to 214 days (median 153 days); 2 with a recorded value	214 days (7 months), 2002-04-01 to 2002-10-31, a run of 7 consecutive Storm Events drought records, zone-level		Countywide (zone-level records).	Storm Events enters a drought at D2 or worse east of the Rockies and D3 or worse from the Rockies west (NWS Instruction 10-1605); NRI drought counts D3 and D4 only.
Earthquake	Modified Mercalli (local data)	0					Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	hail size (inches)	37 records, 1985 to 2024	0.75 in to 2 in (median 1 in); 37 with a recorded value	2 in hail, 2010-07-21		Event records naming jurisdictions in the plan: Nyack village (2 records), Upper Nyack village (2 records), West Haverstraw village (2 records), Stony Point town (1 record), Suffern village (1 record).	
Excessive Heat, Heat	heat index (in event narratives)	7 records, 1999 to 2012 (7 zone-level)	1 day to 3 days (median 3 days); 7 with a recorded value	3 consecutive days, 2006-08-01 to 2006-08-03, zone-level		Countywide (zone-level records).	
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	3 records, 2008 to 2020 (3 zone-level)		Strongest recorded: Tropical Storm record, 2008-09-06 to 2008-09-07, \$4,000 property; crops not reported (2008 dollars); NWS zone NYZ069		Countywide (zone-level records).	Storm Events files every zone of a storm's episode under the storm's type; flooding from the storm is filed as Flood or Flash Flood records.
Ice Storm	Sperry-Piltz ice scale (local data)	3 records, 1998 to 2011 (3 zone-level)		No damage reported in 3 records.		Countywide (zone-level records).	
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	123 records, 1996 to 2025 (9 zone-level)		Flash Flood, 1999-09-16, \$4,400,000 property; crops not reported (1999 dollars), 1 direct death		Event records naming jurisdictions in the plan: Suffern village (15 records), Piermont village (4 records), West Haverstraw village (3 records), Hillburn village (2 records), Nyack village (2 records), Pomona village (2 records), Airmont village (1 record), Grand View-on-Hudson village (1 record), New Hempstead village (1 record), Ramapo town (1 record); and 1 more jurisdiction (see the Excel file). Zone-level records (9) apply countywide.	Flood depth: see the FEMA Flood Insurance Rate Map. Storm Events damage is often \$0 or blank for floods, major ones included; FEMA Public Assistance by declaration (B1-d) shows which floods cost the most.
Debris Flow	none (count and damage only)	0					
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	12 records, 1997 to 2021		Lightning, 2010-07-19, \$10,000 property; crops not reported (2010 dollars)		Event records naming jurisdictions in the plan: Haverstraw town (1 record), Haverstraw village (1 record), Nyack village (1 record), Suffern village (1 record), Upper Nyack village (1 record).	Storm Events lists lightning with damage or casualties.

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
High Wind and Strong Wind (outside NRI's Strong Wind definition)	wind speed (kt and mph)	27 records, 1996 to 2025 (27 zone-level)	30 kt (35 mph) to 56 kt (64 mph) (median 50 kt (58 mph)); 21 with a recorded value	56 kt (64 mph) estimated gust, High Wind, 2012-10-29, 1 direct death, 1 direct injury (reported for the zone); NWS zone NYZ069	High Wind, 2020-04-13, \$200,000 property; \$0 crops (zone total, 2020 dollars)	Countywide (zone-level records).	
Thunderstorm Wind	wind speed (kt and mph)	136 records, 1965 to 2025	50 kt (58 mph) to 70 kt (81 mph) (median 52 kt (60 mph)); 113 with a recorded value	70 kt (81 mph) estimated gust, Thunderstorm Wind, 2010-07-19	Thunderstorm Wind, 2009-08-10, \$25,000 property; crops not reported (2009 dollars)	Event records naming jurisdictions in the plan: West Haverstraw village (8 records), Suffern village (5 records), Upper Nyack village (3 records), Nyack village (2 records), Pomona village (2 records), Haverstraw town (1 record), Haverstraw village (1 record), Hillburn village (1 record), Piermont village (1 record), Ramapo town (1 record).	
Tornado	Enhanced Fujita (Fujita before Feb 2007)	3 records, 1990 to 2018	F/EF0 to F/EF1 (median F/EF1); 3 with a recorded value	EF1 tornado, 2018-10-02, 2.12 mi within this county, 100 yd wide, \$25,000 property; crops not reported (2018 dollars)		Event records naming jurisdictions in the plan: Grand View-on-Hudson village (1 record).	Before 1996 a tornado is listed once, under the county where it began, with its whole path's rating and length; from 1996 on, each county lists its own segment. Length is not used to rank tornadoes (see Methods).
Tsunami	none (count and damage only)	0					
Wildfire	acres burned (local data)	0					
Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet	none in data (snowfall: local data)	89 records, 1996 to 2026 (88 zone-level)		No damage reported in 89 records.		No event record names a jurisdiction in the plan. Zone-level records (88) apply countywide.	

Where a hazard names more than 10 jurisdictions, the table lists the 10 with the most records; every one is in the Excel file, sheet "B1-c Extent".

In event narratives only (local data needed): wind chill, temperature, heat index, ice thickness, acres burned and snow depth; any physical measure of avalanche, debris flow, lightning and tsunami.

Storm Events records are more complete after 1996; before 1996 only Tornado (from 1950), Hail and Thunderstorm Wind (from 1955) exist. Zone-level records from zones that no NWS zone-county file places in this county (mostly before 2020) are not counted here (the Methods page explains the zone matching).

Dollars are nominal (as reported), labeled with the year; not adjusted for inflation.

Supports FEMA checklist item B1-d: previous occurrences

Federal declarations for this county: 30 declarations covering 19 separate hazard incidents counted in this packet (declarations for the same incident count once; non-natural and evacuation-only declarations are not counted).

Federal disaster declarations for this county

Sources: 1, 2, 3

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2023-07-22	2023-07-09	DR-4723-NY	Major disaster	Severe Storms and Flooding	Inland Flooding	\$1,749,145.24	within last 5 years	
2021-09-05	2021-09-01	DR-4615-NY	Major disaster	Remnants of Hurricane Ida	Hurricane	\$6,429,130.19		
2021-09-02	2021-09-01	EM-3572-NY	Emergency	Remnants of Hurricane Ida	Hurricane	no Public Assistance recorded		same incident as DR-4615
2021-08-22	2021-08-21	EM-3565-NY	Emergency	Hurricane Henri	Hurricane	no Public Assistance recorded		
2020-10-02	2020-08-04	DR-4567-NY	Major disaster	Tropical Storm Isaias	Hurricane	\$2,225,459.32		
2020-03-20	2020-01-20	DR-4480-NY	Major disaster	COVID-19 Pandemic	Non-natural, not counted	\$19,729,379.49		
2020-03-13	2020-01-20	EM-3434-NY	Emergency	COVID-19	Non-natural, not counted	no Public Assistance recorded		same incident as DR-4480
2012-10-30	2012-10-27	DR-4085-NY	Major disaster	Hurricane Sandy	Hurricane	\$23,711,147.45		
2012-10-28	2012-10-27	EM-3351-NY	Emergency	Hurricane Sandy	Hurricane	no Public Assistance recorded		same incident as DR-4085
2011-08-31	2011-08-26	DR-4020-NY	Major disaster	Hurricane Irene	Hurricane	\$9,673,297.66		
2011-08-26	2011-08-25	EM-3328-NY	Emergency	Hurricane Irene	Hurricane	no Public Assistance recorded		same incident as DR-4020
2011-02-18	2010-12-26	DR-1957-NY	Major disaster	Severe Winter Storm and Snowstorm	Winter Weather	\$1,401,722.76		
2010-04-16	2010-03-13	DR-1899-NY	Major disaster	Severe Storms and Flooding	Inland Flooding	\$887,463.09		
2007-04-24	2007-04-14	DR-1692-NY	Major disaster	Severe Storms and Inland and Coastal Flooding	Coastal Flooding	\$4,144,311.84		
2005-09-30	2005-08-29	EM-3262-NY	Emergency	Hurricane Katrina Evacuation	Hurricane: evacuation support, not a local hazard event; not counted	no Public Assistance recorded		
2004-08-03	2004-05-13	DR-1534-NY	Major disaster	Severe Storms and Flooding	Inland Flooding: designated for Hazard Mitigation only (no Public or Individual Assistance for this county); not counted	PA not declared for this county		
2003-08-23	2003-08-14	EM-3186-NY	Emergency	Power Outage	Non-natural, not counted	\$14,099.24		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
2003-03-27	2003-02-17	EM-3184-NY	Emergency	Snow	Winter Weather	\$1,067,264.84		
2001-09-11	2001-09-11	DR-1391-NY	Major disaster	Fires and Explosions	Non-natural, not counted	\$295,233.15		
2000-10-11	2000-05-22	EM-3155-NY	Emergency	West Nile Virus	Non-natural, not counted	no Public Assistance recorded		
1999-09-19	1999-09-16	DR-1296-NY	Major disaster	Hurricane Floyd Major Disaster Declarations	Hurricane	\$7,424,670.25		
1999-09-18	1999-09-16	EM-3149-NY	Emergency	Hurricane Floyd Emergency Declarations	Hurricane	no Public Assistance recorded		same incident as DR-1296
1996-01-12	1996-01-06	DR-1083-NY	Major disaster	Blizzard of 96 (Severe Snow Storm)	Winter Weather	no Public Assistance recorded		
1993-03-17	1993-03-13	EM-3107-NY	Emergency	Severe Blizzard	Winter Weather	no Public Assistance recorded		
1992-12-21	1992-12-10	DR-974-NY	Major disaster	Coastal Storm, High Tides, Heavy Rain, & Flooding	Coastal Flooding	no Public Assistance recorded		
1984-04-17	1984-03-28	DR-702-NY	Major disaster	Coastal Storms & Flooding	Coastal Flooding	no Public Assistance recorded		
1975-10-02	1975-10-02	DR-487-NY	Major disaster	Storms, Rains, Landslides & Flooding	Inland Flooding (primary); also designated: Landslide	no Public Assistance recorded		
1972-06-23	1972-06-23	DR-338-NY	Major disaster	Tropical Storm Agnes	Inland Flooding (primary); also designated: Hurricane	no Public Assistance recorded		
1971-09-13	1971-09-13	DR-311-NY	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded		
1965-08-18	1965-08-18	DR-204-NY	Major disaster	Water Shortage	Drought	no Public Assistance recorded		

County Public Assistance: applicants the FEMA record places in this county, including any state agencies FEMA files there; statewide rows are listed on the state page; federal share obligated, nominal dollars.

Statewide declarations

Source: 2

Declared	Incident began	FEMA number	Type	Title	Mapped hazard
1963-08-23	1963-08-23	DR-158-NY	Major disaster	Heavy Rains & Flooding	Inland Flooding
1962-03-16	1962-03-16	DR-129-NY	Major disaster	Severe Storm, High Tides & Flooding	Inland Flooding (primary); also designated: Coastal Flooding
1956-03-29	1956-03-29	DR-52-NY	Major disaster	Flood	Inland Flooding
1955-08-22	1955-08-22	DR-45-NY	Major disaster	Hurricane & Floods	Hurricane (primary); also designated: Inland Flooding
1954-10-07	1954-10-07	DR-26-NY	Major disaster	Hurricanes	Hurricane (primary); also designated: Inland Flooding

FEMA recorded these with designated area Statewide and no county, so they are listed on every county page in the state and not counted with county rows. Local data needed: whether each one affected this county.

1 Fire Management declaration (1995-08-25 to 1995-08-25) FEMA filed as Statewide with no county; each names one local fire. Listed on the state page.

Previous occurrences by hazard, with explicit no-event rows

Sources: 2, 6, 7

Hazard	Storm Events records, all years on file <i>(years in the Period column)</i>	Since plan approval <i>records</i>	In the 12 months before plan approval <i>records</i>	Last 5 years <i>records</i>	Declared incidents, all years <i>separate disasters</i>	Declared since approval <i>separate disasters</i>	Period	Statement
Avalanche	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Coastal Flooding	5	0	2	2	3	0	1996 to 2026-06-30	
Cold Wave	4	0	0	0	0	0	1996 to 2026-06-30	
Drought	10	0	0	0	1	0	1996 to 2026-06-30	
Earthquake	0	0	0	0	0	0		Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	37	0	3	5	0	0	1955 to 2026-06-30	
Heat Wave	7	0	0	0	0	0	1996 to 2026-06-30	
Hurricane	3	0	0	0	7	0	1996 to 2026-06-30	
Ice Storm	3	0	0	0	0	0	1996 to 2026-06-30	
Inland Flooding	123	10	3	26	5	0	1996 to 2026-06-30	
Landslide	0	0	0	0	1	0	1996 to 2026-06-30	No Storm Events records of this type; 1 federal declared incident (see declarations table)
Lightning	12	0	0	0	0	0	1996 to 2026-06-30	
Strong Wind	163	5	12	20	0	0	1955 to 2026-06-30	Includes 21 High Wind and 6 Strong Wind records.
Tornado	3	0	0	0	0	0	1950 to 2026-06-30	
Tsunami	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Wildfire	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Winter Weather	89	7	2	15	4	0	1996 to 2026-06-30	

Notable Storm Events records

Sources: 1, 6, 7

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Deaths, injuries <i>direct only</i>	Location	Why listed
2018-10-02	Tornado	EF1, 2.12 mi within this county, 100 yd wide	\$25,000 property; crops not reported (2018 dollars)	0, 0	WILLOW GROVE to CEDAR FLATS	B1-c worst recorded: Tornado
2018-05-15	Thunderstorm Wind	61 kt (70 mph) estimated gust	\$5,000 property; \$0 crops (2018 dollars)	1, 0	NANUET	deaths or injuries recorded
2018-03-07	Winter Storm		\$0 property; \$0 crops (zone total, 2018 dollars)	1, 0	NWS zone NYZ069 (ROCKLAND), zone-level	deaths or injuries recorded
2012-10-29	High Wind	56 kt (64 mph) estimated gust	\$0 property; \$0 crops (zone total, 2012 dollars)	1, 1	NWS zone NYZ069 (ROCKLAND), zone-level	deaths or injuries recorded
2010-07-21	Hail	2 in	damage not reported	0, 0	TOMKINS COVE	B1-c worst recorded: Hail
2010-07-19	Lightning		\$10,000 property; crops not reported (2010 dollars)	0, 0	PEARL RIVER	B1-c worst recorded: Lightning
2010-07-19	Thunderstorm Wind	70 kt (81 mph) estimated gust	\$10,000 property; crops not reported (2010 dollars)	0, 0	ORANGEBURG	B1-c worst recorded: Thunderstorm Wind
2008-09-06	Tropical Storm		\$4,000 property; crops not reported (zone total, 2008 dollars)	0, 0	NWS zone NYZ069 (ROCKLAND), zone-level	B1-c worst recorded: Hurricane, Tropical Storm, Tropical Depression
2006-08-01	Heat		damage not reported	0, 0	NWS zone NYZ069 (ROCKLAND), zone-level	B1-c worst recorded: Excessive Heat, Heat
2004-01-15	Cold/Wind Chill		damage not reported	0, 0	NWS zone NYZ069 (ROCKLAND), zone-level	B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill
2002-04-01	Drought		damage not reported	0, 0	NWS zone NYZ069 (ROCKLAND), zone-level	B1-c worst recorded: Drought
1999-09-16	Flash Flood		\$4,400,000 property; crops not reported (1999 dollars)	1, 0	COUNTYWIDE	B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood

The full list is in the Excel file, sheet "B1-d Storm Events history" (459 rows).

Location is the place NOAA recorded, as written in its data; it need not be a jurisdiction in this plan.

Local data needed: state-declared emergencies, from your state emergency management agency (federal data do not include them).

Tribal and special-area declarations in this state are listed on the state page.

Supports FEMA checklist item B1-e: probability of future events

Probability: FEMA annualized frequency and descriptor per hazard

Sources: 5, 6

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Avalanche	0.01	events per year	about 1 in 100 years	Possible	FEMA annualized frequency (modeled)	0	1994 to 2023 (30 years)	see B1-f	0.01 is NRI's minimum avalanche frequency for a county in an avalanche susceptibility zone; NRI records no avalanche here, so the descriptor reflects the floor, not local events.
Coastal Flooding	3.72	events per year at a location (modeled)	about 3.7 per year at a given location in the county	Highly likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	Descriptor from NRI: the rate at a location is 1 or more a year, so the county rate is at least that.
Cold Wave	1.05	event-days per year	about 1.05 days per year	Possible	Storm Events event-days in 2 of 30 years, 1996 to 2025 (6.67%)	20	2005-11-12 to 2024-11-12 (19 years)	countywide	
Drought	0.79	event-days per year	about 0.79 days per year	Possible	Storm Events event-days in 2 of 30 years, 1996 to 2025 (6.67%)	35	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	
Earthquake	0.00166	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 0.166%			not shown	modeled	see B1-f	No descriptor (Storm Events does not record earthquakes).
Hail	2.34	events per year	about 2.34 per year	Highly likely	FEMA annualized frequency (modeled)	99.0 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	6.18	event-days per year	about 6.18 days per year	Likely	Storm Events event-days in 6 of 30 years, 1996 to 2025 (20%)	97.4	2005-11-12 to 2024-11-12 (19 years)	countywide	
Hurricane	0.107	events per year	about 1 in 9 years	Likely	FEMA annualized frequency (modeled)	22	1851 to 2024 (Atlantic)	see B1-f	NRI counts hurricane and tropical storm tracks passing within storm-force wind range; federal declarations are in B1-d.
Ice Storm	1.09	event-days per year	about 1.09 days per year	Likely	Storm Events event-days in 3 of 30 years, 1996 to 2025 (10%)	75	1946-12-31 to 2014-02-12 (67 years)	countywide	

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Inland Flooding	2.93	event-days per year	about 2.93 days per year	Highly likely	Storm Events event-days in 28 of 30 years, 1996 to 2025 (93.3%)	82	1996 to 2023 (28 years)	see B1-f	
Landslide	0.192	events per year (modeled)	about 1 in 5 years	Likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	29.7	days per year with a strike	about 29.7 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	5.06	events per year	about 5.06 per year	Highly likely	FEMA annualized frequency (modeled)	192	1986 to 2023 (38 years)	countywide	
Tornado	0.0635	events per year	about 1 in 16 years	Possible	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Tsunami		annual probability at the most exposed location (used in place of a county value)			Storm Events records in 0 of 30 years, 1996 to 2025 (0%)	not shown	modeled	see B1-f	No descriptor: no Storm Events record 1996 to 2025
Wildfire	0.0000698	annual probability at a location	chance a given location in the county burns in a year: 0.00698%		Storm Events records in 0 of 30 years, 1996 to 2025 (0%)	not shown	modeled	see B1-f	No descriptor: no Storm Events record 1996 to 2025
Winter Weather	13.1	event-days per year	about 13.1 days per year	Highly likely	Storm Events event-days in 30 of 30 years, 1996 to 2025 (100%)	249	2005-11-12 to 2024-11-12 (19 years)	countywide	

FEMA annualized frequency (modeled) is the National Risk Index v1.20 (December 2025) estimate of how often a hazard affects this county in a year; it is not recorded events divided by years, and its unit differs by hazard (events, event-days, or days with a lightning strike per year). For earthquake, wildfire, coastal flooding and tsunami the value is the chance (or number of events) at a location in the county, not across the county, so no "1 in N years" is given and the descriptor comes from Storm Events where it has a record (none for earthquake). The Methods page gives each hazard's method, from FEMA's National Risk Index Technical Documentation v1.20.

Where NRI gives event-days, the descriptor comes from the share of years with a Storm Events record; NRI's source records more events, so the two differ.

Descriptor scale used in this packet (defined per unit)

Sources: 5, 6

Unit	Descriptor	Definition
events per year	Highly likely	1 or more per year
events per year	Likely	about once in 1 to 10 years
events per year	Possible	about once in 10 to 100 years
events per year	Unlikely	less than once in 100 years
annual probability	Likely	10% to under 100% chance in a given year
annual probability	Possible	1% to under 10% chance in a given year
annual probability	Unlikely	under 1% chance in a given year
event-days (share of years)	Highly likely	event-days recorded in 90% or more of years
event-days (share of years)	Likely	event-days recorded in 10% to under 90% of years
event-days (share of years)	Possible	event-days recorded in some years but under 10% of years
lightning strike-days	Highly likely	cloud-to-ground strikes on 1 or more days per year

Intensity bands: historical frequency (Storm Events)

Source: 6

Hazard	Band	Years	Events <i>county-coded records</i>	Years in period	Events per year <i>events / years</i>
Hail	1.00-1.99 in	1996 to 2025	22	30	0.733
Hail	2.00 in+	1996 to 2025	1	30	0.0333
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	111	30	3.7
Thunderstorm Wind (counted as NRI Strong Wind)	65 kt+	1996 to 2025	1	30	0.0333
Thunderstorm Wind (counted as NRI Strong Wind)	unmeasured or below 50 kt	1996 to 2025	3	30	0.1
Tornado	EF0-1	1996 to 2025	2	30	0.0667
Tornado	EF2-3	1996 to 2025	0	30	0
Tornado	EF4-5	1996 to 2025	0	30	0
Tornado	unrated (EFU)	1996 to 2025	0	30	0

The bands show how often events of each severity were recorded in this county, to profile how severe events have been (FEMA's probability item asks for the range of intensities).

Hail smaller than 1 inch is not counted: on 2010-01-05 the National Weather Service raised its severe-hail threshold from 3/4 inch to 1 inch, so smaller reports became less common after 2009 (NWS Service Change Notice 09-52). NRI hail frequency uses a 0.75 inch threshold.

Optional: future conditions. Not a required item in the 2025 FEMA Local Mitigation Planning Policy Guide; some states ask for it. The federal Climate Mapping for Resilience and Adaptation (CMRA) site gives county exposure to future climate conditions (<https://resilience.climate.gov/>).

Supports FEMA checklist item B1-f: hazards that vary across jurisdictions

Range of census tract risk within the county

Source: 5

Hazard	Tracts <i>rated of all</i>	NRI risk score, 0 to 100			Tracts by rating
		Min	Median	Max	
Avalanche	3 of 80	15.3	15.3	19.8	Very Low 3, Not Applicable 77
Coastal Flooding	13 of 80	70.6	90.1	97.6	Relatively High 1, Relatively Moderate 7, Relatively Low 2, Very Low 3, No Rating 67
Cold Wave	80 of 80	23.2	51.5	76.0	Relatively Moderate 58, Relatively Low 22
Drought	2 of 80	72.1	79.4	86.6	Relatively Low 1, Very Low 1, No Rating 78
Earthquake	80 of 80	21.9	53.6	79.1	Relatively Moderate 1, Relatively Low 69, Very Low 10
Hail	80 of 80	1.9	13.6	23.4	Very Low 80
Heat Wave	80 of 80	5.9	42.6	74.1	Relatively Moderate 15, Relatively Low 63, Very Low 2
Hurricane	80 of 80	48.2	64.6	79.2	Relatively Moderate 1, Relatively Low 75, Very Low 4
Ice Storm	80 of 80	5.7	41.5	63.2	Relatively Low 57, Very Low 23
Inland Flooding	80 of 80	1.2	28.8	81.7	Relatively High 5, Relatively Moderate 19, Relatively Low 32, Very Low 24
Landslide	80 of 80	10.8	34.3	92.0	Relatively Low 4, Very Low 76
Lightning	80 of 80	13.6	53.8	83.7	Relatively High 4, Relatively Moderate 51, Relatively Low 24, Very Low 1
Strong Wind	80 of 80	26.9	72.8	89.7	Relatively High 10, Relatively Moderate 68, Relatively Low 2
Tornado	80 of 80	14.7	38.8	55.4	Relatively Moderate 1, Relatively Low 74, Very Low 5
Tsunami	0 of 80				Insufficient Data 80
Wildfire	51 of 80	19.0	27.1	61.4	Very Low 51, No Rating 29
Winter Weather	80 of 80	33.0	72.5	89.9	Relatively High 22, Relatively Moderate 56, Relatively Low 2

Drought: Agriculture is all of NRI's expected annual loss for this hazard in the county, so the tract range mostly reflects where crop and livestock value is.

Rated tracts only: No Rating (score 0.0), Not Applicable and Insufficient Data tracts are counted but not used for the minimum, median and maximum.

The score ranks a tract against all U.S. tracts (100 = highest). The rating is FEMA's category for the tract's risk value, computed differently, so the two can disagree.

Frequency data for cold wave, drought, hail, heat wave, ice storm, lightning, strong wind and winter weather are county-wide or coarse (49 km grid or NWS zone), the same for every jurisdiction; the tract range mostly reflects where buildings and people are (crop and livestock value where a line above names agriculture).

Each jurisdiction (starting figures from federal data)

Sources: 1, 3, 4, 6

Jurisdiction	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	Public Assistance to this jurisdiction <i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since its plan</i>	Notes
Rockland County	County	Approved, expires 2029-10-02		\$5,870,136.42	0 total; 0 since its plan	No NFIP community ID on this jurisdiction's plan row. Includes \$712,063.40 for declarations not counted as hazard incidents (DR-1391-NY, DR-4480-NY, EM-3186-NY).
Airmont village	Village	Approved, expires 2029-10-02	FMA RL 0, SRL 0; any 0	\$96,055.62	1 total; 1 since its plan	
Chestnut Ridge village	Village	Approved, expires 2029-10-02	FMA RL 0, SRL 0; any 1	\$327,772.15	0 total; 0 since its plan	
Grand View-on-Hudson village	Village	Approved, expires 2029-10-02	FMA RL 0, SRL 1; any 4	\$3,821,401.18	2 total; 0 since its plan	
Haverstraw village	Village	Approved, expires 2029-10-02	FMA RL 0, SRL 0; any 0	\$1,366,438.03	2 total; 0 since its plan	
Hillburn village	Village	Approved, expires 2029-10-02	FMA RL 0, SRL 1; any 2	\$812,390.18	3 total; 0 since its plan	
Kaser village	Village	Approved, expires 2029-10-02	FMA RL 0, SRL 0; any 0	\$49,401.62	0 total; 0 since its plan	
Montebello village	Village	Approved, expires 2029-10-02	FMA RL 1, SRL 1; any 7	\$98,989.09	0 total; 0 since its plan	
New Hempstead village	Village	Approved, expires 2029-10-02	FMA RL 0, SRL 0; any 1	no Public Assistance recorded	1 total; 0 since its plan	
New Square village	Village	Approved, expires 2029-10-02	FMA RL 0, SRL 0; any 1	\$142,538.14	0 total; 0 since its plan	
Nyack village	Village	Approved, expires 2029-10-02	FMA RL 0, SRL 1; any 9	\$5,502,969.31	7 total; 0 since its plan	Includes \$29,263.40 for declarations not counted as hazard incidents (DR-4480-NY).
Piermont village	Village	Approved, expires 2029-10-02	FMA RL 3, SRL 4; any 15	\$927,650.76	5 total; 0 since its plan	Includes \$3,570.02 for declarations not counted as hazard incidents (DR-4480-NY).
Pomona village	Village	Approved, expires 2029-10-02	FMA RL 0, SRL 0; any 4	\$177,809.38	4 total; 0 since its plan	
Sloatsburg village	Village	Approved, expires 2029-10-02	FMA RL 1, SRL 1; any 8	\$570,985.92	0 total; 0 since its plan	Includes \$5,884.38 for declarations not counted as hazard incidents (DR-4480-NY).
Spring Valley village	Village	Approved, expires 2029-10-02	FMA RL 0, SRL 4; any 29	\$1,365,080.94	0 total; 0 since its plan	
Suffern village	Village	Approved, expires 2029-10-02	FMA RL 0, SRL 4; any 30	\$1,430,420.27	22 total; 2 since its plan	
Upper Nyack village	Village	Approved, expires 2029-10-02	FMA RL 1, SRL 1; any 1	\$195,352.26	7 total; 0 since its plan	

Jurisdiction	Type	Plan status	Repetitive loss	Public Assistance to this jurisdiction	Event records naming this place	Notes
			<i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	<i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	<i>all years; since its plan</i>	
Wesley Hills village	Village	Approved, expires 2029-10-02	FMA RL 0, SRL 0; any 1	\$1,983	0 total; 0 since its plan	
West Haverstraw village	Village	Approved, expires 2029-10-02	FMA RL 0, SRL 0; any 0	\$340,766.90	13 total; 0 since its plan	Includes \$8,925 for declarations not counted as hazard incidents (DR-4480-NY).
Clarkstown town	Town	Approved, expires 2029-10-02	FMA RL 1, SRL 18; any 103	\$10,441,061.51	0 total; 0 since its plan	Includes \$236,029.21 for declarations not counted as hazard incidents (DR-4480-NY).
Haverstraw town	Town	Approved, expires 2029-10-02	FMA RL 0, SRL 0; any 4	\$1,575,387.77	2 total; 0 since its plan	Includes \$68,422.08 for declarations not counted as hazard incidents (DR-4480-NY).
Orangetown town	Town	Approved, expires 2029-10-02	FMA RL 3, SRL 5; any 36	\$4,629,770.09	0 total; 0 since its plan	Includes \$63,058.36 for declarations not counted as hazard incidents (DR-4480-NY).
Ramapo town	Town	Approved, expires 2029-10-02	FMA RL 0, SRL 0; any 40	\$6,716,649.24	2 total; 0 since its plan	Includes \$675,111.70 for declarations not counted as hazard incidents (DR-4480-NY).
Stony Point town	Town	Approved, expires 2029-10-02	FMA RL 2, SRL 0; any 5	\$3,076,552.38	1 total; 0 since its plan	

Repetitive-loss counts are for whole NFIP communities, which can extend beyond this county (see the note in B2-c).

County Public Assistance in B1-d also includes applicants filed under the county that are not jurisdictions in this plan (for example state agencies, special districts and nonprofits), so the jurisdiction rows add up to less.

Supports FEMA checklist items B2-a and B2-b: vulnerability and potential impacts

Local data needed

The table below gives county-level starting figures; the plan describes impacts for each jurisdiction and its own assets.

- Critical facilities and lifelines per hazard
- A problem statement per jurisdiction per hazard
- Changes in development in hazard-prone areas since the last approval, or a statement of none (E1-a)
- Future assets

County-level starter: exposure, expected annual loss and damage since the plan

Sources: 1, 2, 3, 5, 6, 7

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2024-10-03 <i>county-coded records, property plus crops, nominal dollars</i>	Zone-level damage since plan <i>property plus crops, reported for the zone</i>	Public Assistance since plan <i>nominal dollars; see note</i>	Note
Avalanche	\$0	n/a	under 1	\$0	n/a	\$138					building exposure is 0 in NRI
Coastal Flooding	\$2,385,175,622	n/a	9,841	\$579,489	n/a	\$17,278	0.0243%				
Cold Wave	\$58,021,463,549	\$2,759,398	338,294	\$244	\$369	\$4,480,927	under 0.0001%				
Drought	n/a	\$933,846	n/a	n/a	\$4,969	n/a	0.532% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$97,741,735,165	n/a	338,329	\$2,996,406	n/a	\$512,266	0.00307%				
Hail	\$58,021,463,549	\$2,759,398	338,294	\$7,924	\$1,051	\$32,268	under 0.0001%				
Heat Wave	\$58,021,463,549	\$2,759,398	338,294	under \$1	\$391	\$2,555,461	under 0.0001%				
Hurricane	\$58,019,027,892	\$2,759,398	338,260	\$3,261,282	\$11,791	\$132,181	0.00562%				
Ice Storm	\$58,014,273,314	n/a	338,244	\$118,167	n/a	\$167,707	0.000204%				
Inland Flooding	\$57,947,080,590	\$1,770	5,046	\$36,331,326	\$34	\$1,673,038	n/a (see note)	\$0			NRI counts the full building value of any census block with some flood loss; this is not the value of buildings in the floodplain. Use local FIRM overlays for B2-a/B2-b.
Landslide	\$2,187,340,408	n/a	10,920	\$2,118	n/a	\$297	under 0.0001%				
Lightning	\$58,021,463,549	n/a	338,294	\$62,369	n/a	\$1,025,275	0.000107%				
Strong Wind	\$58,021,463,549	\$2,759,398	338,294	\$511,032	\$38	\$2,652,442	0.000881%	\$18,000	\$0		
Tornado	\$58,021,463,549	\$2,759,398	338,294	\$1,274,285	\$18	\$1,545,758	0.0022%				

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2024-10-03 <i>county-coded records, property plus crops, nominal dollars</i>	Zone-level damage since plan <i>property plus crops, reported for the zone</i>	Public Assistance since plan <i>nominal dollars; see note</i>	Note
Tsunami	n/a	n/a	n/a	n/a	n/a	n/a					NRI publishes no building exposure for this county
Wildfire	\$803,832,221	\$8,833	6,580	\$3,461	under \$1	\$563	0.000431%				
Winter Weather	\$58,021,463,549	\$2,759,398	338,294	\$69,950	\$1	\$466,558	0.000121%		\$0		

Totals since 2024-10-03 (Storm Events through 2026-06-30): 14 county-coded records, 14 with a damage value recorded (including \$0), \$18,000; 8 zone-level records, 8 with a damage value recorded (including \$0), \$0 reported for the zone; Public Assistance: no counted declaration since the plan.

FEMA does not split Public Assistance by hazard. A declaration mapped to several hazards is listed under each of them with its full amount, so the per-hazard column does not add up to the total; the unit total counts each declaration once.

NRI computes earthquake exposure on its own basis, so it exceeds the county building value in B2-a.

Supports FEMA checklist item B2-a: vulnerability (county context)

County context

Source: 5

Measure	Value
Population	338,294
Building value (total, not at risk)	\$58,021,463,549
Agriculture value (total, not at risk)	\$2,759,398
NRI risk rating (all hazards)	Relatively Moderate
Expected annual loss, buildings and agriculture, all hazards	\$45,236,718
Expected annual loss, population equivalence, all hazards (NRI values each statistical life at \$13.7M; a modeled value of expected deaths and injuries, not property damage)	\$15,262,157
Social vulnerability rating	Relatively High
Community resilience rating	Relatively High
NRI version	December 2025

FEMA's all-hazard expected annual loss adds buildings, agriculture and population equivalence; this table gives the property part and the population-equivalence part as separate rows.

Social vulnerability: higher means people are more likely to be harmed and slower to recover. Community resilience: lower means the community is less able to recover. High social vulnerability and low resilience both raise the NRI risk rating.

Supports FEMA checklist item B2-c: repetitive loss properties

Repetitive loss in this county, both definitions

Sources: 1, 4

Definition	Properties	Severe repetitive loss	Properties
Repetitive loss, FMA definition (44 CFR 77.2)	12	Severe repetitive loss, FMA definition (44 CFR 77.2)	42
Repetitive loss, NFIP insurance definition	303	Severe repetitive loss, NFIP insurance definition	39

The state NFIP coordinator's list, the source FEMA's Handbook names, often uses the NFIP insurance definition (second row).

Repeat-flood properties: county and state-level rows

Sources: 1, 4

Scope	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
County total	12	42	303	39	308	2	67
of which: New York city (plan jurisdiction listed on the Bronx County and Kings County and New York County and Queens County and Richmond County page)	0	0	4	0	4	0	0
of which: Clarkstown town	1	18	102	17	103	1	21
of which: Grand View-on-Hudson village	0	1	4	1	4	0	2
of which: Haverstraw town	0	0	4	0	4	0	0
of which: Hillburn village	0	1	2	1	2	0	0
of which: New Square village	0	0	1	0	1	0	0
of which: Nyack village	0	1	9	1	9	0	4
of which: Orangetown town	3	5	35	5	36	0	12
of which: Piermont village	3	4	14	3	15	1	6
of which: Pomona village	0	0	4	0	4	0	0
of which: Sloatsburg village	1	1	8	1	8	0	1
of which: South Nyack village (community ID not in plan data)	0	1	3	1	3	0	3
of which: Stony Point town	2	0	5	0	5	0	1
of which: Suffern village	0	4	29	3	30	0	8
of which: Upper Nyack village	1	1	1	1	1	0	0
of which: Chestnut Ridge village	0	0	1	0	1	0	0
of which: Wesley Hills village	0	0	1	0	1	0	1
of which: Montebello village	1	1	6	1	7	0	6
of which: New Hempstead village	0	0	1	0	1	0	0
of which: Ramapo town	0	0	40	0	40	0	0

Scope	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
of which: Spring Valley village	0	4	29	4	29	0	2
Statewide, no county in FEMA's file	0	0	19	0	19	0	3

4 of the county's repeat-flood properties belong to NFIP communities whose plan jurisdiction is not listed on this page (the community rows above name the page that lists it).

The statewide row counts properties FEMA's file gives with no county in this state; they are listed for reference and are not in this county's counts.

Repeat-flood properties by jurisdiction in the plan (NFIP community)

Sources: 1, 4

Jurisdiction	NFIP community ID	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
Airmont village	360140	0	0	0	0	0	0	0
Chestnut Ridge village	361615	0	0	1	0	1	0	0
Grand View-on-Hudson village	360680	0	1	4	1	4	0	2
Haverstraw village	360682	0	0	0	0	0	0	0
Hillburn village	360683	0	1	2	1	2	0	0
Kaser village	365376	0	0	0	0	0	0	0
Montebello village	361617	1	1	6	1	7	0	6
New Hempstead village	361618	0	0	1	0	1	0	0
New Square village	360684	0	0	1	0	1	0	0
Nyack village	360685	0	1	9	1	9	0	4
Piermont village	360687	3	4	14	3	15	1	6
Pomona village	360688	0	0	4	0	4	0	0
Sloatsburg village	360690	1	1	8	1	8	0	1
Spring Valley village	365344	0	4	29	4	29	0	2
Suffern village	360694	0	4	29	3	30	0	8
Upper Nyack village	360695	1	1	1	1	1	0	0
Wesley Hills village	361616	0	0	1	0	1	0	1
West Haverstraw village	360696	0	0	0	0	0	0	0
Clarkstown town	360679	1	18	102	17	103	1	21
Haverstraw town	360681	0	0	4	0	4	0	0
Orangetown town	360686	3	5	35	5	36	0	12
Ramapo town	365340	0	0	40	0	40	0	0
Stony Point town	360693	2	0	5	0	5	0	1

Counts by occupancy group for each jurisdiction are in the Excel file, sheet "B2-c Jurisdictions".

Jurisdiction rows are whole NFIP communities and need not add up to the county total: a community that extends into another county is counted in full on each jurisdiction row, while the county table counts only its part in this county.

County repeat-flood properties by occupancy group

Sources: 1, 4

Occupancy group	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
single-family residential	10	35	261	34	264	0	54
2 to 4 unit residential	2	1	14	0	15	1	5
other residential	0	0	9	0	9	0	6
non-residential	0	6	19	5	20	1	2
not reported	0	0	0	0	0	0	0

FEMA's occupancy groups have no institutional class; institutional properties are counted in non-residential or other residential in the table by occupancy group.

FMA RL and FMA SRL are the Flood Mitigation Assistance definitions (44 CFR 77.2), the ones the FEMA Local Mitigation Planning Policy Guide cites. NFIP repetitive loss (the FEMA insurance definition) is 2 or more claims over \$1,000 in 10 years, and a property can leave that group once it is mitigated. Also shown: NFIP severe repetitive loss, any category, mitigated and currently insured. The Methods page gives the OpenFEMA field details.

Counts are aggregates of FEMA's public NFIP Multiple Loss Properties file (FEMA's data date 2026-08-02; file version 2026-08-04). No property is identified. County assignment is FEMA's geocode.

In this county 3 properties are FMA repetitive loss but not NFIP repetitive loss, and 294 properties are NFIP repetitive loss but not FMA repetitive loss.

Exact counts; no count suppression.

Sources

Tables cite these sources by number. The full list, for the plan's bibliography (FEMA review item A4-a):

1. FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-29T134039Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)
2. FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-29T162832Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)
3. FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-29T150754Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
4. FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)
5. FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-30, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
6. NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-30, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>
7. NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-30, <https://www.weather.gov/gis/ZoneCounty>
8. U.S. Census Bureau, Census 2024 Gazetteer, 2020 place by county, CT county-to-cousub crosswalk, version 2024-gazetteer, pulled 2026-09-30, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_counties_national.zip, [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_cousubs_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_cousubs_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_place_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_place_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_unsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_unsd_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_elsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_elsd_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_scsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_scsd_national.zip), https://www2.census.gov/geo/docs/reference/codes2020/national_place_by_county2020.txt, https://www2.census.gov/geo/docs/reference/ct_change/ct_cou_to_cousub_crosswalk.xlsx (used to match place names and codes; no table prints its values)

What this packet is and what the plan adds

This packet is the federal data for the plan's risk assessment (the summary on page 1 says how it is organized); the plan and FEMA's review decide whether each item is met.

The plan adds what only the community has: local data on assets, critical facilities, development and each jurisdiction's impacts; local hazard history, including state-declared emergencies; the mitigation strategy; and adoption.

How the federal data are built: National Risk Index values are FEMA's model, not counts of events. Storm Events is more complete from 1996; zone-level records are placed by forecast zone, not by location in the county. Public Assistance for a jurisdiction is matched by applicant name. The Methods page gives every rule and the known edge cases.

OpenFEMA disclaimer

This product uses the Federal Emergency Management Agency's OpenFEMA API, but is not endorsed by FEMA. The Federal Government or FEMA cannot vouch for the data or analyses derived from these data after the data have been retrieved from the Agency's website(s).

Reuse, citation and corrections

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Cite this: Hazard Plain (2026). Rockland County, NY: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-30; County FIPS 36087). Automated baseline. <https://hazardplain.org/ny/36087/> Built from FEMA OpenFEMA, the FEMA National Risk Index and NOAA NCEI Storm Events; source versions in the packet's Sources list.

Corrections: to report an error, name the packet, the table and what your records show. Contact: contact@hazardplain.org