

## Appendix G Severe Repetitive Flood Loss Mitigation Strategy

## G.1. Background

### G.1.A. Federal Requirements for Repetitive Loss Strategy

To be eligible to receive an increased Federal cost share of up to 90 percent for project grants related to reducing losses to severe repetitive loss properties, mitigation plans must specifically address such. States may address the repetitive loss strategy through an amendment to their existing FEMA-approved State Mitigation Plans, or they may accomplish this as part of a cyclical update, as New Jersey is doing. The present Background section of this appendix paraphrases FEMA guidance on the subject of severe repetitive loss in the context of a State mitigation plan.

In order to be eligible for an increased Federal cost share of up to 90 percent under the SRL program, the FEMA-approved State or Tribal Standard Mitigation Plan must also meet all of the requirements described below:

a) Repetitive Loss Strategy - 44 CFR § 201.4(c)(3)(v): A State may request the reduced cost share authorized under Sec. 79.4(c)(2) of this chapter for the FMA and SRL programs, if it has an approved State Mitigation Plan meeting the requirements of this section that also identifies specific actions the State has taken to reduce the number of repetitive loss properties (which must include severe repetitive loss properties), and specifies how the State intends to reduce the number of such repetitive loss properties. This requirement supplements the risk assessment and mitigation strategy portions of the plan required under §§ 201.4(c)(2) and (3) by specifically identifying goals, capabilities, and actions that will reduce the number of repetitive loss properties, including severe repetitive loss properties.

The mitigation strategy is based on the State's Risk Assessment as required under § 201.4(c)(3)(ii). Therefore, the State must address repetitive loss structures in its risk assessment, where applicable. For example, in its overview of Estimating Potential Losses by Jurisdiction under §201.4(c) (2)(iii), the State may analyze potential losses to identified repetitive loss properties based on estimates provided in local risk assessments. The Plan should refer generally to geographic areas where concentrations of repetitive loss properties are located for the purpose of identifying and prioritizing areas for mitigation projects, or the plan may list the number of repetitive loss properties with aggregate repetitive loss data.

The State Hazard Mitigation Goals under § 201.4(c)(3)(i) must support the selection of activities to mitigate and reduce potential losses to structures susceptible to flood damage, including repetitive loss properties. In addition, the State and Local Capability Assessments required under § 201.4(c)(3)(ii) must include an evaluation of policies, programs, and capabilities that allow the mitigation of repetitive losses from flood damage.

The State must describe specific actions that it has implemented to mitigate repetitive loss properties, and specifically actions taken to reduce the number of severe repetitive loss properties as a subset of all repetitive loss properties in the State. If the State cannot show that any action has ever been taken to reduce the number of such properties, this criteria cannot be met.



## Appendix G Severe Repetitive Flood Loss Mitigation Strategy

Based on the findings of the risk assessment, the State must identify actions in the statewide mitigation strategy that specifically address repetitive loss properties, including those that are severe repetitive loss properties. This supplements the mitigation actions requirement under § 201.4(c)(3)(iii). Mitigation actions should be tied to goals and objectives and provide the means to achieve them. Actions should have been identified in the planning process, and local plans should be consistent with state-wide actions. As part of the mitigation strategy, the plan must also describe the current funding sources as well as potential sources that will be pursued to fund proposed mitigation actions for repetitive loss properties. This supplements the identification of funding requirement under § 201.4(c)(3)(iv)

b) Coordination With Repetitive Loss Jurisdictions - 44 CFR § 201.4(c)(3)(v): ...In addition, the plan must describe the strategy the State has to ensure that local jurisdictions with severe repetitive loss properties take actions to reduce the number of these properties, including the development of local mitigation plans.

The State is required to identify strategies that encourage local communities to mitigate severe repetitive loss properties, including the development of local mitigation plans. This supplements the Coordination of Local Mitigation Planning portion of the plan under § 201.4(c)(4). At a minimum, the State must include severe repetitive loss in the description of its process for providing funding and technical assistance to prepare mitigation plans (§201.4(c)(4)(i)), and in its criteria for prioritizing communities that have such properties for planning and project grant assistance (§201.4(c)(4)(iii)). Other strategies for encouraging local communities to mitigate severe repetitive loss properties should be demonstrated through specific actions identified in the Mitigation Strategy.

For the purpose of this strategy, the following definitions apply:

An SRL property is defined as a residential property that is covered under an NFIP flood insurance policy and:

- (a) That has at least four NFIP claim payments (including building and contents) over \$5,000 each, and the cumulative amount of such claims payments exceeds \$20,000; or
- (b) For which at least two separate claims payments (building payments only) have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building.

For both (a) and (b) above, at least two of the referenced claims must have occurred within any ten-year period, and must be greater than 10 days apart.

A RL property is defined as a property that has sustained two or more flood losses within a period of ten years, with each loss resulting in a flood insurance claim payment exceeding \$1,000.00.

For the purpose of this strategy statement the information on NFIP policies, number of claims made, dollars paid out and cumulative total were compiled for a specific point in time. Those total change daily and the tables present should be used for illustrative purposes.



## Appendix G Severe Repetitive Flood Loss Mitigation Strategy

## G.2. New Jersey's Repetitive Loss Mitigation Strategy

## G.2.A. Specific Actions the State has taken to reduce the number of Repetitive Loss Properties

Table G-1 lists New Jersey SRL properties that have been elevated or acquired and demolished in prior mitigation projects.

Table G.2-1
Mitigated Severe Repetitive Loss Properties in New Jersey to 2008

Street Address	Community Name	Community Number	Property Locator Number	NFIP Paid Claims	Cumulative NFIP Claims Paid	Comment E – Elevation A/D – Acquisition and Demolition
2952 Hutchinson River Road	Harmony Twp	340485	81150	5	\$455,816	Е
2973 Hutchinson River Road	Harmony Twp	340485	132810	4	\$340,186	E
10 South River Terrace	Harmony Twp	340485	129584	4	\$200,627	A/D
12 South River Terrace	Harmony Twp	340485	81124	5	\$517,626	A/D
5 Goat Farm Road	Harmony Twp	340485	132792	4	\$401,576	A/D
7 Goat Farm Road	Harmony Twp	340485	129118	4	\$288,257	A/D
9 Goat Farm Road	Harmony Twp	340485	130259	4	\$338,601	A/D
2965 Hutchinson River Road	Harmony Twp	340485	138746	4	\$266,880	A/D
4 River Road	Wayne Twp	345327	18913	11	\$122,458	A/D
9 River Road	Wayne Twp	345327	5311	15	\$289,906	A/D
57 River Road	Wayne Twp	345327	52521	5	\$183,912	A/D
79 River Road	Wayne Twp	345327	28967	12	\$140,922	A/D
84 River Road	Wayne Twp	345327	21707	6	\$105,363	A/D
Total				83	\$3,652,129	



## Appendix G Severe Repetitive Flood Loss Mitigation Strategy

Table G.2-1 B
Mitigated Severe Repetitive Loss Properties in New Jersey to 2010

\* Previously reported **Block and Lot Total Acquisition** Acquisition Community Community **Street Address** Designation Cost under FEMA Name Number **Program** \$390,000 340234 B52/L7 RFC @ 100% 23 Trenton Ave Frenchtown RFC @ 100% \$303,900 7 South Washington St Frenchtown 34234 B60/L1 B48/L14 12 South River Terrace Harmony 340485 B48/L15 10 South River Terrace\* Harmony 340485 B48/L23 \$2,161,040 Federal Share 1 Goat Farm Road Harmony 340485 FMA @ 75%/25% \$2,881,386 total 5 Goat Farm Road \* B48/L27 340485 Harmony 7 Goat Farm Road 7 B48/1L8 340485 Harmony 9 Goat Farm Road \* B48/L29 Harmony 340485 13 Goat Farm Road B48/L31 Harmony 340485 96 Harmony Station Rd B49/L46 Harmony 340485 3077 Hutchinson River B5/I8 Harmony 340485 Road 340401 B68/L35-02 29 Louis Street Little Falls \$1,506,600 Total \$21,506,600 Federal Share 32 Louis Street Little Falls B69/L10 340401 33 Louis Street Little Falls 340401 B68/L33 Little Falls 340401 B81L46 2 Roselle Street



# Appendix G Severe Repetitive Flood Loss Mitigation Strategy

01 River Road	Wayne	345327			
04 River Road *	Wayne	345327			
08 River Road	Wayne	345327			
09 River Road 9	Wayne	345327			
11 River Road	Wayne	345327			
11 River Road	Wayne	345327			
15 River Road	Wayne	345327			
19 River Road	Wayne	345327			
26 River Road	Wayne	345327			
31 River Road	Wayne	345327			%5
41 River Road	Wayne	345327		nare	@ 75%/25%
54 River Road	Wayne	345327	Total	\$4,509,072Federal Share	@ 75
56 River Road	Wayne	345327	\$6,012,096 Total	2Fed6	
57 River Road *	Wayne	345327	\$6,01	09,07	DR-1694-HMGP
57 River Road	Wayne	345327		\$4,5	-169
58 River Road	Wayne	345327			DR
63 River Road	Wayne	345327			
65 River Road	Wayne	345327			
86 River Road	Wayne	345327			
88 River Road	Wayne	345327			
9 Main Road	Wayne	345327			
15 Main Road	Wayne	345327			
16 Main Road	Wayne	345327			
18 West Road	Wayne	345327			
23 West Road	Wayne	345327			



# Appendix G Severe Repetitive Flood Loss Mitigation Strategy

		1	¥	
27 West Road	Wayne	345327		
31 West Road	Wayne	345327		
34 West Road	Wayne	345327		
35 West Road	Wayne	345327		
39 West Road	Wayne	345327		
10 Brookside Road	Wayne	345327		
12 Brookside Road	Wayne	345327		
13 Brookside Road	Wayne	345327		
14 Brookside Road	Wayne	345327		
18 Brookside Road	Wayne	345327		
20 Brookside Road	Wayne	345327		
23 Brookside Road	Wayne	345327		
10 Spring Road	Wayne	345327		
12 Spring Road	Wayne	345327		
17 North Road	Wayne	345327		
4 North Road	Wayne	345327		
11 North Road				
12 North Road	Wayne	345327		
13 North Road	Wayne	345327		
1 Northwest Road	Wayne	345327		
2 Northwest Road	Wayne	345327		
3 Northwest Road	Wayne	345327		
5 Northwest Road	Wayne	345327		



# Appendix G Severe Repetitive Flood Loss Mitigation Strategy

Table G-2 shows the numbers of repetitive loss (RL) properties that have been mitigated in New Jersey. This data were obtained from FEMA's repetitive loss list. This list indicates whether a property on the list has been mitigated but does not detail the type of mitigation. Therefore, the type of mitigation is not included on this list.

Table G.2-2
Numbers of New Jersey Repetitive Loss Properties that have been Mitigated

County	# Properties Mitigated
Cape May	189
Atlantic	84
Ocean	79
Morris	52
Cumberland	32
Passaic	28
Monmouth	17
Union	12
Warren	12
Middlesex	7
Somerset	6
Mercer	6
Bergen	5
Essex	4
Burlington	2
Camden	2
Hunterdon	1
Hudson	1
Gloucester	1
Salem	1
Total	541

## G.2.B. How New Jersey intends to reduce the Number of Repetitive Loss Properties

Reducing the number of RL and SRL properties is a top priority for the State of New Jersey. In conjunction with FEMA initiating the SRL program, the State is re-emphasizing its commitment to mitigating losses to floodprone properties through a range of actions, including:

Promulgating guidance and requirements to local municipalities. The guidance includes plan review criteria
so that jurisdictions with RL and SRL properties clearly understand the importance of having an approved
plan, with regard to qualifying for FEMA mitigation grant program funding.



# Appendix G Severe Repetitive Flood Loss Mitigation Strategy

- Assigning a high priority to mitigating severe repetitive loss and repetitive loss properties in the State hazard mitigation plan
- Using the sub-grant application scoring methodology to prioritize project applications (see below)
- Performing detailed study of risks and costs of mitigating properties and identifying the most at risk and most cost effective to mitigate.
- Delivering training and technical assistance to the jurisdictions with the greatest numbers of RL and SRL properties. This effort includes providing the same level of training to the top SRL/RL Counties in the State that FEMA provided to New Jersey when the Agency initiated the SRL program. The State will incorporate FEMA guidance and training when it delivers training and assistance.
- Providing local and regional jurisdictions with annual updates to SRL and RL lists, and FEMA actuarial calculations of the potential benefits of mitigation actions for SRL and RL properties.

### G.2.C. Using Loss Estimates in Local Mitigation Plans

As of January 2008 only a handful of jurisdictions in the State have FEMA approved mitigation plans. However, every County in the State is either already developing plans or will soon begin (in some cases these are part of multi-jurisdictional plans; there are also several smaller jurisdictions also developing local mitigation plans). The following table lists the status of plan development for all New Jersey Counties. The information is current as of January, 2008.



## Appendix G Severe Repetitive Flood Loss Mitigation Strategy

**Table G.2-3**Status of New Jersey County Hazard Mitigation Plans, as of March 2010

Indicates FEMA approved County All Hazards Plan
Plan preparation awaiting HMGP funding approval

County	Funding Source	FEMA Funds	Other Funds	Total	Hazard Mitigation Plan Status as of March 31, 2010	Plan Approval & Recert Date
Atlantic	PDM	165,000	55,000	220,000	NJOEM review completed. Pending FEMA review	
Bergen	Self funde	d.			FEMA approved	2008 / 2013
Burlington	FMA HMGP	63,700 71,899	21,233 23,966	84,933 95,865	FEMA approved	2008 / 2013
Camden	PDM *	115,750*	38,583*	154,333*	NJOEM review completed. Pending FEMA review.	
Cape May	PDM	474,000	158,000	632,000	NJOEM revisions requested prior to FEMA review.	
Cumberland	PDM *	115,750*	38,583*	154,333*	NJOEM review completed. Pending FEMA review.	
Essex	PDM	1,176,187	392,062	1,568,250	FEMA approved.	2008 / 2013
Gloucester	PDM *	115,750*	38,583*	154,333*	NJOEM review completed. Pending FEMA review.	Open
Hudson	PDM	879,999	303,600	1,183,600	FEMA approved.	2009 / 2014
Hunterdon	PDM *	115,750*	38,583*	154,333*		
Mercer	PDM *	115,750*	38,583*	154,333*	FEMA funded. No draft submitted	
Middlesex	PDM	200,000	66,000	266,000	NJOEM review completed. FEMA revisions required.	
Monmouth	PDM	345,375	103,615	448,990	FEMA approved.	2009 / 2014
Morris	PDM	300,000	100,000	400,000	FEMA approved pending adoption	2010/2015
Ocean	HMGP	TBD	TBD	TBD	Awaiting FEMA 2010 funding. No draft submitted.	
Passaic	PDM	225,000	75,000	300,000	FEMA approved pending adoption	2010/2015
Salem	PDM *	115,750*	38,583*	154,333*	NJOEM review completed. FEMA review pending.	
Somerset	PDM	199,000	59,700	258,700	FEMA approved.	2008 / 2013
Sussex	PDM *	115,750*	38,583*	154,333*	FEMA funded. No draft submitted	
Union	HMGP	375,000	125,000	500,000	NJOEM review completed. FEMA review pending.	
Warren	PDM *	115,750*	38,583*	154,333*	FEMA funded. No draft submitted	
Total		5,100,561	1,692,977	6,793,540		

<sup>\*</sup> Grant information for 4 Southern Delaware River Counties listed and 4 Northern Delaware River are shown as equally divided between the participating counties. Actual proportional shares are not calculated.

As the mitigation plans are developed, the State is issuing guidance requiring local and regional plans to include detailed loss estimates for RL and SRL properties. To facilitate this, the State is providing each



## Appendix G Severe Repetitive Flood Loss Mitigation Strategy

jurisdiction the most current RL and SRL lists at the onset of the planning process. The SRL list provided by the State also includes the most recent FEMA calculation of avoided damages for 30-year and 100-year time horizons.

- During the local and regional plan development, the State will attend kickoff meetings and will offer technical assistance to local and regional jurisdictions in developing plans to ensure cross-jurisdictional consistency
- The updated State plan will include guidance and data references to assist locals in identifying properties and actions for mitigating RL and SRL properties.

### G.2.D. Geographic Areas with Concentrations of SRL and RL Properties

The following two tables show SRL and RL properties at the County level. Due to the large number of properties and the need to maintain privacy, individual property addresses are not provided. The State or FEMA Region II will provide Counties and local jurisdictions detailed, current RL and SRL lists that include addresses and claims histories. County or local mitigation plans may include more specific descriptions of SRL and RL properties. Also note that the column labeled "Total \$ Claims" shows the total of flood insurance claims for building and contents damages inflated to present-day value by the NFIP, so the historic claims records will not total to this amount.

Table G.2-4
State of New Jersey Severe Repetitive Flood Loss Properties,
Ordered alphabetically by County

County	Number of SRL Properties	Number of Claims	% of Claims	Total \$ Claims
Atlantic	33	234	4.16%	\$3,883,453
Bergen	27	144	4.84%	\$4,518,894
Camden	3	18	0.25%	\$236,843
Cape May	141	837	18.89%	\$17,631,173
Cumberland	1	13	0.30%	\$280,261
Essex	6	51	1.13%	\$1,059,508
Gloucester	1	13	0.11%	\$102,804
Hudson	2	8	0.16%	\$153,549
Hunterdon	10	33	3.27%	\$3,050,297
Mercer	3	16	0.30%	\$284,018
Middlesex	6	33	0.52%	\$481,237
Monmouth	11	51	2.15%	\$2,010,354
Morris	66	456	11.27%	\$10,520,713
Ocean	30	179	3.72%	\$3,475,353
Passaic	199	1,278	35.74%	\$33,367,945
Somerset	13	58	3.41%	\$3,179,228
Union	2	10	0.24%	\$222,367
Warren	40	152	9.53%	\$8,898,507
Total	594	3,584	100.00%	\$93,356,504



## Appendix G Severe Repetitive Flood Loss Mitigation Strategy

The following map highlights the number of Severe Repetitive Loss (SRL) properties in each County and the total NFIP payments made to these SRL properties. This map was developed by Princeton Hydro.

NEW JERSEY STATE HAZARD MITIGATION PLAN **NEW JERSEY SEVERE** REPETITIVE LOSSES SUSSEX 0 \$0 **Number of Severe Repetitive Losses** 0 1 - 20 20 - 50 50 -100 100 - 1278 \$3,050,297 MONMOUTH 51 \$2,010,354 BURLINGTON 0 \$0 GLOUCESTER 13 \$102,804 SALEM 0 \$0 CUMBERLAND 1 inch equals 16 miles

Figure G.2-1
New Jersey Severe Repetitive Loss Properties Statewide



## Appendix G Severe Repetitive Flood Loss Mitigation Strategy

Table G-5 shows the numbers of repetitive flood loss properties and other County-level metrics, ordered alphabetically. The table is based on a query of NFIP records in Spring, 2008. Data about flood losses to individual properties may be obtained through NJOEM.

Table G.2-5 New Jersey Repetitive Flood Loss Properties, ordered alphabetically by County

Community	Number of Properties	Claims	% of Claims	Building Claims	Contents Claims	Total Claims	Average Claim
Atlantic	863	2,674	7.30%	\$24,011,041	\$7,516,285	\$31,527,326	\$11,790
Bergen	779	2,052	0.83%	\$38,827,049	\$16,982,439	\$55,809,489	\$27,198
Burlington	93	233	0.47%	\$5,336,998	\$1,226,264	\$6,563,262	\$28,169
Camden	52	131	24.14%	\$897,299	\$200,469	\$1,097,767	\$8,380
Cape May	2,039	6,789	0.64%	\$54,313,817	\$22,200,342	\$76,514,160	\$11,270
Cumberland	76	181	2.28%	\$1,812,830	\$363,249	\$2,176,079	\$12,023
Essex	216	641	0.15%	\$7,562,124	\$5,112,172	\$12,674,297	\$19,773
Gloucester	17	43	1.03%	\$326,464	\$78,160	\$404,623	\$9,410
Hudson	87	289	1.79%	\$2,178,603	\$8,543,120	\$10,721,723	\$37,099
Hunterdon	187	503	2.66%	\$13,619,425	\$1,163,395	\$14,782,820	\$29,389
Mercer	261	747	1.82%	\$8,910,454	\$7,509,236	\$16,419,690	\$21,981
Middlesex	203	513	5.67%	\$8,743,091	\$1,322,837	\$10,065,928	\$19,622
Monmouth	614	1,594	7.60%	\$24,640,920	\$6,743,930	\$31,384,850	\$19,689
Morris	581	2,139	7.52%	\$23,811,714	\$8,205,304	\$32,017,018	\$14,968
Ocean	799	2,114	14.73%	\$21,948,907	\$5,887,929	\$27,836,836	\$13,168
Passaic	1,054	4,144	0.14%	\$50,670,584	\$22,885,695	\$73,556,279	\$17,750
Salem	15	39	5.43%	\$314,369	\$69,063	\$383,432	\$9,832
Somerset	614	1,528	0.04%	\$43,511,943	\$9,570,936	\$53,082,879	\$34,740
Sussex	5	11	3.91%	\$238,087	\$4,953	\$243,040	\$22,095
Union	445	1,099	2.36%	\$12,804,483	\$8,347,824	\$21,152,307	\$19,247
Warren	239	664	100.00%	\$21,791,035	\$3,713,488	\$25,504,523	\$38,410
Total	9,239	28,128	9.51%	\$366,271,236	\$137,647,091	\$503,918,327	\$17,915

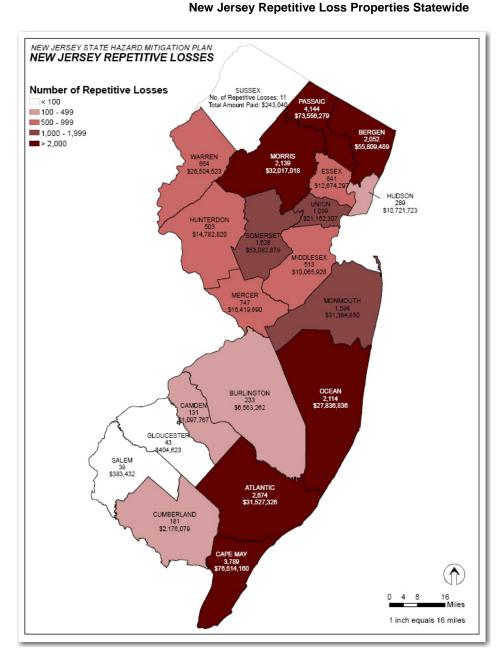


## Appendix G Severe Repetitive Flood Loss Mitigation Strategy

payments made to these RL properties. This map was developed by Princeton Hydro.

The following map highlights the number of Repetitive Loss (RL) properties in each County and the total NFIP

Figure G.2-2





## Appendix G Severe Repetitive Flood Loss Mitigation Strategy

### G.2.E. County-Level Loss Estimates for SRL and RL Properties

The following two tables (G-6 and G-7) provide County-level loss estimates for severe repetitive loss and repetitive loss properties, respectively. Table G-6 is a compressed version of a calculation provided by FEMA, which provides loss estimates over 30- and 100-year planning horizons. The columns labeled "30-year Risk/County" are projections of the expected future flood claims on a County-wide basis. The columns labeled "30-year Risk/Property" and "100-year Risk/Property" are the same calculations on the basis of the average property in the sample. NJOEM has the NFIP risk calculations at the level of individual properties, but they cannot be included in this plan for reasons of confidentiality, although they can be obtained from the Agency on a need-to-know basis.

It should be noted that this methodology may not express all possible losses to the properties because past flood coverage may not have completely compensated for losses, and because certain categories of loss are not typically covered by NFIP insurance. Also note that the column labeled "Total \$ Claims" shows the total of flood insurance claims for building and contents damages *inflated* to present-day value by the NFIP, so the historic claims records will not total to this amount.

Table G.2-6
FEMA NFIP Actuarial Calculation of Potential Maximum Benefits
for Mitigating SRL Properties, ordered alphabetically by New Jersey County

County	Number of SRL Properties	Number of Claims	Total \$ Claims	% of Claims	30-year Risk/County	30-year Risk/Property	100-year Risk/County	100-year Risk/Property
Atlantic	33	234	\$3,883,453	4.16%	\$1,886,369	\$57,163	\$2,169,150	\$65,732
Bergen	27	144	\$4,518,894	4.84%	\$2,670,403	\$98,904	\$3,070,717	\$113,730
Camden	3	18	\$236,843	0.25%	\$180,069	\$60,023	\$207,063	\$69,021
Cape May	141	837	\$17,631,173	18.89%	\$9,376,381	\$66,499	\$10,781,971	\$76,468
Cumberland	1	13	\$280,261	0.30%	\$121,919	\$121,919	\$140,196	\$140,196
Essex	6	51	\$1,059,508	1.13%	\$465,346	\$77,558	\$535,105	\$89,184
Gloucester	1	13	\$102,804	0.11%	\$74,308	\$74,308	\$85,447	\$85,447
Hudson	2	8	\$153,549	0.16%	\$197,304	\$98,652	\$226,881	\$113,441
Hunterdon	10	33	\$3,050,297	3.27%	\$2,737,566	\$273,757	\$3,147,948	\$314,795
Mercer	3	16	\$284,018	0.30%	\$189,456	\$63,152	\$217,856	\$72,619
Middlesex	6	33	\$481,237	0.52%	\$309,908	\$51,651	\$356,366	\$59,394
Monmouth	11	51	\$2,010,354	2.15%	\$1,213,278	\$110,298	\$1,395,158	\$126,833
Morris	66	456	\$10,520,713	11.27%	\$4,956,735	\$75,102	\$5,699,788	\$86,360
Ocean	30	179	\$3,475,353	3.72%	\$2,268,795	\$75,626	\$2,608,904	\$86,963
Passaic	199	1,278	\$33,367,945	35.74%	\$15,920,245	\$80,001	\$18,306,811	\$91,994
Somerset	13	58	\$3,179,228	3.41%	\$1,925,061	\$148,082	\$2,213,643	\$170,280
Union	2	10	\$222,367	0.24%	\$142,397	\$71,198	\$163,743	\$81,871
Warren	40	152	\$8,898,507	9.53%	\$6,908,711	\$172,718	\$7,944,379	\$198,609
Total	594	3,584	\$93,356,504	100.00%	\$51,544,251	\$86,775	\$59,271,126	\$99,783



## Appendix G Severe Repetitive Flood Loss Mitigation Strategy

Table G-7 provides summary data and loss estimations for repetitive loss properties, based on past NFIP losses. The risk projections are displayed on both a County and an individual policy basis. Note that data and loss estimations for individual properties are available from NJOEM. They are not included in this Plan because of federal requirements related to information privacy.

Table G.2-7
Estimated Future Flood Losses to FEMA Repetitive Loss Properties, based on NFIP claims records,
With 30- and 100-year Loss Projections on Countywide and Individual Policy Basis, ordered alphabetically
by County

County	Number of Claims	Number of Policies	Total \$ Claims	% of Claims	\$ Annual Claims	30-year Risk/County	30-year Risk/Policy	100-year Risk/County	100-year Risk/Policy
Atlantic	2,674	863	\$31,527,326	6.26%	\$1,050,911	\$14,502,570	\$16,805	\$14,996,498	\$17,377
Bergen	2,052	779	\$55,809,489	11.08%	\$1,860,316	\$25,672,365	\$32,956	\$26,546,713	\$34,078
Burlington	233	93	\$6,563,262	1.30%	\$218,775	\$3,019,101	\$32,463	\$3,121,925	\$33,569
Camden	131	52	\$1,097,767	0.22%	\$36,592	\$504,973	\$9,711	\$522,171	\$10,042
Cape May	6,789	2,039	\$76,514,160	15.18%	\$2,550,472	\$35,196,513	\$17,262	\$36,395,235	\$17,850
Cumberland	181	76	\$2,176,079	0.43%	\$72,536	\$1,000,996	\$13,171	\$1,035,088	\$13,620
Essex	641	216	\$12,674,297	2.52%	\$422,477	\$5,830,176	\$26,992	\$6,028,740	\$27,911
Gloucester	43	17	\$404,623	0.08%	\$13,487	\$186,127	\$10,949	\$192,466	\$11,322
Hudson	289	87	\$10,721,723	2.13%	\$357,391	\$4,931,993	\$56,690	\$5,099,966	\$58,620
Hunterdon	503	187	\$14,782,820	2.93%	\$492,761	\$6,800,097	\$36,364	\$7,031,695	\$37,603
Mercer	747	261	\$16,419,690	3.26%	\$547,323	\$7,553,057	\$28,939	\$7,810,299	\$29,925
Middlesex	513	203	\$10,065,928	2.00%	\$335,531	\$4,630,327	\$22,809	\$4,788,026	\$23,586
Monmouth	1,594	614	\$31,384,850	6.23%	\$1,046,162	\$14,437,031	\$23,513	\$14,928,727	\$24,314
Morris	2,139	581	\$32,017,018	6.35%	\$1,067,234	\$14,727,828	\$25,349	\$15,229,428	\$26,212
Ocean	2,114	799	\$27,836,836	5.52%	\$927,895	\$12,804,945	\$16,026	\$13,241,055	\$16,572
Passaic	4,144	1,054	\$73,556,279	14.60%	\$2,451,876	\$33,835,888	\$32,102	\$34,988,270	\$33,196
Salem	39	15	\$383,432	0.08%	\$12,781	\$176,379	\$11,759	\$182,386	\$12,159
Somerset	1,528	614	\$53,082,879	10.53%	\$1,769,429	\$24,418,124	\$39,769	\$25,249,756	\$41,123
Sussex	11	5	\$243,040	0.05%	\$8,101	\$111,798	\$22,360	\$115,606	\$23,121
Union	1,099	445	\$21,152,307	4.20%	\$705,077	\$9,730,061	\$21,865	\$10,061,448	\$22,610
Warren	664	239	\$25,504,523	5.06%	\$850,151	\$11,732,081	\$49,088	\$12,131,652	\$50,760
Total	28,128	9,239	\$503,918,327	100.00%	\$16,797,278	\$231,802,431	\$25,090	\$239,697,151	\$25,944



## Appendix G Severe Repetitive Flood Loss Mitigation Strategy

## G.2.F. State and Local Capabilities for Funding and Implementing Mitigation Actions for Severe Repetitive Loss and Repetitive Loss Properties

The following table overviews the State and Local Capabilities, programs, policies, practices, funding, or regulations that are integral to the mitigation of RL and SRL properties.

Table G-8
State and Local Capabilities, Programs, Policies, etc., for Initiating Flood Mitigation Activities

	New Jersey Office of Emergency Management (NJOEM) responsible for oversight and management of state and local hazard mitigation plan preparation process; identification and evaluation of mitigation planning programs and opportunities; coordination of mitigation planning with preparedness, response and recovery planning, and event management
Program	Planning Grant Program: Helps Counties compete for federal funding to pursue Mitigation Plans
Effect on Loss Reduction	Help
Funding Available	Yes
Effectiveness	17 Counties and four local municipalities in New Jersey have been awarded federal grants, matched with local funds to prepare All Hazard Mitigation Plans.
Program	The Preparedness / Mitigation Unit, Emergency Management Section, New Jersey State Police: Provides technical resources, contacts to other expert agencies, and guidance for County Mitigation plans and projects
Effect on Loss Reduction	Help
Funding Available	Yes
Effectiveness	The Preparedness / Mitigation Unit, with a full time staff of 4 employees have been working to offer workshops and provide technical expertise, either by them or with an expert agency. It would be most effective to have more expertise on staff, or to procure expert support, however it not feasible due to budget cuts at the State level.
Dragram	
- Profitam	Mitigation Crant Administration Drogram (Managod by the Dronarodness / Mitigation Linit)
Program	Mitigation Grant Administration Program (Managed by the Preparedness / Mitigation Unit): The Unit administers and assists in the implementation of all Federal mitigation grants awarded to Counties and Municipalities.
Effect on Loss Reduction	The Unit administers and assists in the implementation of all Federal mitigation grants awarded to
· ·	The Unit administers and assists in the implementation of all Federal mitigation grants awarded to Counties and Municipalities.
Effect on Loss Reduction	The Unit administers and assists in the implementation of all Federal mitigation grants awarded to Counties and Municipalities.  Help
Effect on Loss Reduction Funding Available	The Unit administers and assists in the implementation of all Federal mitigation grants awarded to Counties and Municipalities.  Help  Yes
Effect on Loss Reduction Funding Available Effectiveness Program Effect on Loss Reduction	The Unit administers and assists in the implementation of all Federal mitigation grants awarded to Counties and Municipalities.  Help  Yes  13 projects have been federally funded since the original plan was approved.  Public Assistance (PA) This program, available after a Presidential disaster declaration, allows mitigation measures to be designed into projects to repair or restore public facilities damaged by the
Effect on Loss Reduction Funding Available Effectiveness Program	The Unit administers and assists in the implementation of all Federal mitigation grants awarded to Counties and Municipalities.  Help  Yes  13 projects have been federally funded since the original plan was approved.  Public Assistance (PA) This program, available after a Presidential disaster declaration, allows mitigation measures to be designed into projects to repair or restore public facilities damaged by the disaster event.
Effect on Loss Reduction Funding Available Effectiveness Program Effect on Loss Reduction	The Unit administers and assists in the implementation of all Federal mitigation grants awarded to Counties and Municipalities.  Help  Yes  13 projects have been federally funded since the original plan was approved.  Public Assistance (PA) This program, available after a Presidential disaster declaration, allows mitigation measures to be designed into projects to repair or restore public facilities damaged by the disaster event.  Help
Effect on Loss Reduction Funding Available Effectiveness  Program  Effect on Loss Reduction Funding Available Effectiveness  Program	The Unit administers and assists in the implementation of all Federal mitigation grants awarded to Counties and Municipalities.  Help  Yes  13 projects have been federally funded since the original plan was approved.  Public Assistance (PA) This program, available after a Presidential disaster declaration, allows mitigation measures to be designed into projects to repair or restore public facilities damaged by the disaster event.  Help  Yes  PA grants have been awarded to multiple jurisdictions throughout the State following every disaster
Effect on Loss Reduction Funding Available Effectiveness Program  Effect on Loss Reduction Funding Available Effectiveness	The Unit administers and assists in the implementation of all Federal mitigation grants awarded to Counties and Municipalities.  Help  Yes  13 projects have been federally funded since the original plan was approved.  Public Assistance (PA) This program, available after a Presidential disaster declaration, allows mitigation measures to be designed into projects to repair or restore public facilities damaged by the disaster event.  Help  Yes  PA grants have been awarded to multiple jurisdictions throughout the State following every disaster declaration.  Pre-Disaster Mitigation Program (PDM) This annual, nationally competitive program funds hazard mitigation plans and cost-effective projects that reduce or eliminate the effects of hazards and/or
Effect on Loss Reduction Funding Available Effectiveness  Program  Effect on Loss Reduction Funding Available Effectiveness  Program	The Unit administers and assists in the implementation of all Federal mitigation grants awarded to Counties and Municipalities.  Help  Yes  13 projects have been federally funded since the original plan was approved.  Public Assistance (PA) This program, available after a Presidential disaster declaration, allows mitigation measures to be designed into projects to repair or restore public facilities damaged by the disaster event.  Help  Yes  PA grants have been awarded to multiple jurisdictions throughout the State following every disaster declaration.  Pre-Disaster Mitigation Program (PDM) This annual, nationally competitive program funds hazard mitigation plans and cost-effective projects that reduce or eliminate the effects of hazards and/or vulnerability to future disaster damage.



# Appendix G Severe Repetitive Flood Loss Mitigation Strategy

Effectiveness	2 Projects awarded and 10 Planning Grants awarded in 2005-2007
Program	<b>Flood Mitigation Assistance Program (FMA)</b> This program funds flood mitigation plans, provides technical assistance, and funds construction projects that reduce flood risk to insured, repetitive loss properties.
Effect on Loss Reduction	Help
Funding Available	Yes
Effectiveness	4 Projects awarded in 2006-2007 and 3 Planning Grants awarded in 2005-2007.
Program	Hazard Mitigation Grant Program (HMGP) This program, available after a Presidential disaster declaration, funds hazard mitigation plans and cost-effective projects that reduce or eliminate the effects of hazards and/or vulnerability to future disaster damage. Typically, the state provides a portion of the required non-federal match.
Effect on Loss Reduction	Help
Funding Available	Yes
Effectiveness	5 Projects awarded in 2005-2007 and 3 Planning Grants awarded in 2005-2007
Program	Severe Repetitive Loss Program (SRL) Program provides funds to assist States, Indian Tribal governments, and local governments participating in the NFIP in reducing or eliminating the long-term flood risks to severe repetitive loss properties, thus reducing outlays from the NFIF.
Effect on Loss Reduction	Help
Funding Available	Yes
Effectiveness	New program – effectiveness is to be determined.
Program	Repetitive Flood Claims (RFC) The Repetitive Flood Claims (RFC) grant program provides mitigation funding for structures insured under the National Flood Insurance Program (NFIP) located in a State or community that cannot meet the requirements of the Flood Mitigation Assistance (FMA) program. The long-term goal of the RFC program is to reduce or eliminate claims under the NFIP through mitigation activities that are in the best interest of the National Flood Insurance Fund (NFIF).
Effect on Loss Reduction	Help
Funding Available	Yes
Effectiveness	3 Projects awarded in 2007
Agency	NJ Department of Environmental Protection (NJDEP) supports mitigation efforts through analysis of assessment of natural hazards, identification and management of grant programs; leads State Coordination for the National Flood Insurance Program, the Office of Land Use Regulation, Forest Fire Service, Geologic Survey and coordination with state and federal programs affecting natural hazard mitigation including open space conservation, historic preservation, water resources management, dam safety and shore protection.
Program	The NJDEP, Flood Control Section leads the State's efforts as the State NFIP Coordinator and Community Rating System (CRS) support.
Effect on Loss Reduction	Help
Funding Available	No
Effectiveness	45 of the 566 total municipalities in NJ participate in the CRS program. 9 communities with a Class 9 rating (5% premium reduction); 23 with a Class 8 rating (10% premium reduction); 11 with a Class 7 rating (15% premium reduction) and 2 with a Class 6 rating (20% premium reduction). The avg. savings per policy holder is about \$87.00 per year or a total community savings of about \$9,384,397 per year. The NJ Dam Safety program, new state stormwater management requirements, and the development of all hazard mitigation plans, are some of the efforts at the State level that are



## Appendix G Severe Repetitive Flood Loss Mitigation Strategy

	available to provide CRS credits for all NJ municipalities. Communities are encouraged to adopt freeboard elevation requirements, which also provide CRS credits. Many municipalities in New Jersey are small and lack the professional support to fill out a CRS application, or do not have the flood insurance policy base to make it worth their while. However, we do reach out to communities during Community Assistance Visits (CAVs), Community Assistance Contacts (CACs), technical assistance contacts and workshops to promote the CRS program.
-	
Program	The Green Acres Program works with landowners, municipal governments, county governments, nonprofit organizations, and other conservation partnerships to protect land of statewide significance. This is done through direct purchase or conservation easements. The program also awards matching grants and loans to municipal and county governments, and matching grants to nonprofit conservation organizations, to acquire open space and develop outdoor recreation facilities.
Effect on Loss Reduction	Help
Funding Available	The Green Acres Program assists municipalities, counties, and nonprofit conservation organizations in the acquisition of open space for recreation and conservation purposes, and the development of outdoor recreational facilities. Each year, Green Acres provides matching grant and low-interest loan funding from the Garden State Preservation Trust.
Effectiveness	Potential Funding Sources for Acquisition and Other Projects

# G.2.G. Current and Potential Sources of Federal, State, local, or Private Funding to implement Mitigation Activities for repetitive loss properties for Severe Repetitive Loss and Repetitive Loss Properties

The following are the FEMA mitigation programs available for the mitigation of RL and SRL programs. The State priority for mitigating RL and SRL properties and the scoring methodology for evaluating competing sub-grant applications, ensures that mitigation funds in New Jersey are targeted toward RL and SRL properties.

FUNDING SOURCE				
	FEDERAL HAZARD MITIGATION GRANTS			
FMA	Availability: Pre Disaster			
	Description: To implement cost-effective measures that reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insured under the National Flood Insurance Program (NFIP).			
	Funding: In FY 2007, there was \$31 Million available in a nationwide competition.			
HMGP	Availability: Post-Disaster			
	Description: To provide funds to States, territories, Indian Tribal governments, and communities to significantly reduce or permanently eliminate future risk to lives and property from natural hazards. HMGP funds projects in accordance with priorities identified in State, Tribal or local hazard mitigation plans, and enables mitigation measures to be implemented during the recovery from a disaster.			
	Funding: a State has a FEMA-approved <i>Standard</i> State Mitigation plan, HMGP funds are available based on up to 15% for amounts not more than \$2 Billion.			



# Appendix G Severe Repetitive Flood Loss Mitigation Strategy

FUNDING SOURCE				
PDM	Availability: Pre-Disaster			
	Description: To provide funds to states, territories, Indian Tribal governments, and communities for hazard mitigation planning and the implementation of mitigation projects prior to a disaster event. Funding these plans and projects reduces overall risks to the population and structures, while also reducing reliance on funding from actual disaster declarations.			
	Funding: Nationwide competition, total funding available – FY 2007 was \$100 Million.			
SRL	Availability: Pre Disaster			
	Description: To reduce or eliminate the long-term risk of flood damage to severe repetitive loss residential properties and the associated drain on the National Flood Insurance Fund (NFIF) from such properties.			
	Funding: FEMA is combining the \$40 million FY 2006, \$40 million FY 2007, and \$80 million FY 08 funds for a total of \$160 million available.			
RFC	Availability: Pre Disaster			
	Description: To reduce or eliminate the long-term risk of flood damage to structures insured under the National Flood Insurance Program (NFIP) that have had one or more claim payment(s) for flood damages.			
	Funding: Nationwide competition for a total of \$10 million			

## G.2.H. Strategy to Encourage Local Communities to Mitigate RL and SRL Properties

- Ensure that local jurisdictions with severe repetitive loss properties take actions to reduce the number of these properties
- Include severe repetitive loss in the description of process for providing funding and technical assistance to prepare mitigation plans
- Prioritize project and planning grants for communities that have RL/SRL properties. The following is the description of our prioritization process.
  - The State uses a score card to rank projects. This score sheet gives substantial additional points for projects that address the mitigation of SRL and RL properties. As structured, if the jurisdiction has an action in their plan that is specifically to mitigate a SRL property(s), and the application is for the mitigation of a SRL property(s), the scoring ensures this project would get a top score, thus virtually ensuring it will be recommended for funding about other projects that do not protect SRL properties. See score sheet below.

GENERAL INFORMATION (max 85 )	POINTS	SCORE
Is this project specifically identified in the State/Local Plan?	35	
OR - Is this type of project identified in the applicants State/Local Plan?	20	
Was local plan FEMA approved prior to the declaration (HMGP)	10	
Is this project in the declared area?	20	



## Appendix G Severe Repetitive Flood Loss Mitigation Strategy

Is this project in a CRS community?	20	
ENVIRONMENTAL (max 5)		
CATEX eligible?	5	
Assessment required?	3	
Requires Full Environmental Impact Statement	1	
COST EFFECTIVE (max 15)		
Good BC study provided	5	
Plan update project (no BC required)	5	
Planning project - updates (no BC required)	5	
Weak BC study provided – no back up documentation	-5	
BC analysis required but not provided	-10	
Engineering feasibility score (1-20)		
STATE STRATEGY POINTS (max 65)		
Is the property on the SRL list	50	
Is the structure a repetitive loss structure	30	
Is the structure within a floodplain	5	
Is the structure required to have NFIP coverage but does NOT	YES	
Residential elevation	10	
Residential acquisition	10	
Flood water management	7	
Retrofit projects	5	
Warning and Public Information Systems	5	

## G.2.I. Actions in the Statewide Mitigation Strategy that specifically address Repetitive Loss Properties

The following actions specific to reducing the number of severe repetitive loss and repetitive loss properties Statewide were added by the Mitigation Core Team during the State Plan update process, and are being incorporated into this Appendix for inclusion in the current approved plan. The final updated State plan may have additional actions added prior to its adoption that will be in addition to those shown below.

Goal: Protect Property and Ensure Continuity of Operations

Objective: Reduce the number severe repetitive loss and repetitive loss properties Statewide

Action Inventory flood damage structures

Priority High

Responsible Agency NJOEM, NJDEP, NJ Treasury

Projected Timeline Ongoing

Projected Resources Existing State Assets and Federal Grants



## Appendix G Severe Repetitive Flood Loss Mitigation Strategy

Rationale for Action and Priority

How Action Contributes to Mitigation Strategy

Identifying repetitive loss areas and properties helps communities develop a strategy to reduce future hazard losses Retrofitting, elevating or removing repetitive loss properties from known hazard areas protect property and lives as well as preserve personal, state and federal financial resources

Action Conduct yearly workshops related to FEMA hazard mitigation

grant programs

Priority High
Responsible Agency NJOEM

Projected Timeline Ongoing Projected Resources Existing

Projected Resources Existing State Assets and Federal grants
Rationale for Action and Priority Making local officials aware of FMA increases participation.

How Action Contributes to Mitigation Strategy

FMA contributes to the mitigations strategy to reduce future

flood losses.

Responsible Agency

Action Develop and implement a detailed severe repetitive loss mitigation strategy that will qualify the State for 90-10 cost

share under the FEMA SRL program

Priority High Responsible Agency NJOEM

Projected Timeline Ongoing (1st phase complete with this submittal)

Projected Resources Existing State resources, in context of State Mitigation Plan

update (which used FEMA grant funds)
Rationale for Action and Priority
First step in the State implementing a clear, long-term program

of mitigating properties that constitute the most significant

losses to the National Flood Insurance Program

How Action Contributes to Mitigation Strategy Protects property

Action Promote acquisition and elevation of repetitive loss structures

Priority High
Responsible Agency NJOEM
Projected Timeline Ongoing
Projected Resources Federal Grants

Rationale for Action and Priority

To eliminate repetitive loss structures

How Action Contributes to Mitigation Strategy Structures will no longer be flooded thereby reducing repetitive

loss claims

Action Conduct community outreach, workshops and training to

increase NFIP participation

Priority High NJOEM Ongoing

Projected Timeline Ongoing
Projected Resources Existing State Resources

Rationale for Action and Priority Encourages participation in the program so that losses will be

covered and allows eligibility in the FMA program



## Appendix G Severe Repetitive Flood Loss Mitigation Strategy

How Action Contributes to Mitigation Strategy

Allows for people to receive flood insurance claims and maintains eligibility in the FMA program of which flood

insurance is a requirement

Action

Provide updated SRL and RL lists to Communities in advance of grant application windows. Included FEMA calculated avoided damages for SRL properties and any State calculated avoided damages for RL properties

Priority
Responsible Agency
Projected Timeline
Projected Resources

High NJOEM Ongoing

Rationale for Action and Priority Identi

Existing State Assets Identifying candidates the strongest potential to meet Benefit

Cost requirements allows communities to focus mitigation alternatives and applications on SRL and RL properties Retrofitting, elevating or removing repetitive loss properties from known hazard areas protect property and lives as well as preserve personal, state and federal financial resources

How Action Contributes to Mitigation Strategy



## Appendix G Severe Repetitive Flood Loss Mitigation Strategy

## G.2.J. State process for Providing Funding and Technical Assistance to Prepare Mitigation Plans

As indicated in the above section over viewing the status of plans in the State, the State has ensured there is funding for all plan development efforts. The process now is for the State to continue to offer technical assistance. When prioritizing workload and funding to provide technical assistance, the State will prioritize its efforts and toward those ongoing planning efforts in areas with the highest concentration of RL and SRL properties.