



Memorandum

To: File

From: Mark N. Page Jr, BEPA

Date: August 17, 2015 *MP*

Subject: Modifications to Extended Watershed Land Acquisition Program
CEQR No. 10DEP046U

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The New York City Department of Environmental Protection (DEP) Bureau of Environmental Planning and Analysis (BEPA) has reviewed the proposed changes to the Extended New York City Watershed Land Acquisition Program (LAP) to include the New York City Funded Flood Buy-Out Program (NYCFFBO). The details of the proposed program and potential incremental impacts of the proposed modification to the Extended LAP are discussed below.

Background

The Final Environmental Impact Statement (EIS) for the Extended New York City Watershed Land Acquisition Program (LAP) (CEQR No. 10DEP046U) was issued on December 10, 2010 in support of the renewal of the Water Supply Permit (WSP) issued by the New York State Department of Environmental Conservation on December 24, 2010. The 2010 EIS and 2010 WSP discussed the inclusion of lands participating in federal and/or state flood buy-out programs in NYC's LAP program. The 2010 WSP has been amended several times, including, in January 2014, to address several issues raised by the federal and state flood buy-out program following Hurricane Irene.

Eligibility for lands participating in federal and/or State flood buy-out programs differ from the general LAP eligibility requirements in that they need neither be vacant, as defined in Special Condition 8 of the WSP, nor meet the size and natural features criteria, as set forth in Special Condition 9 of the WSP, nor are such parcels subject to the acquisition exclusions ("Designated Hamlets and Village Areas") in Special Condition 10 of WSP.

As part of the Revised 2007 Filtration Avoidance Determination (FAD) issued in 2014 and DEP's Revised Long-term Watershed Protection Program, New York City is committing to creating the New York City-Funded Flood Buy-Out Program (NYCFFBO). The intent of this program, as explained in the FAD, is "to acquire high-priority parcels that are important from a flood-mitigation and water-quality

perspective, but which did not participate or necessarily qualify for a federal and/or State buy-out program. Properties purchased through this NYCFFBO program may have existing structures and other potential sources of water contamination; such structures or other sources would be removed, and the properties would then be maintained in accordance with local flood hazard mitigation goals.”

Like the federal (FEMA) or State FBO programs, properties in the NYCFFBO would not need to meet the minimum size criteria or natural features criteria which are otherwise required under the Extended LAP. Accordingly, this program would require a modification of the WSP to exempt it from the categorical prohibitions identified in the previous paragraph as related to the acquisitions in the federal and State flood buyout programs.

Proposed New York City Funded Flood Buy-Out Program

There are five distinct categories of properties that may be eligible for acquisition under the NYCFFBO which are listed below and summarized in Table 1:

- 1. Hydraulic Study Properties** –properties identified from an engineering analysis conducted under Local Flood Analysis (“LFA”), New York Rising, or another such program which is typically conducted on a defined area within a town.
- 2. Catskill Watershed Corporation’s (CWC) Flood Hazard Mitigation Implementation Program (“FHMIP”)** –properties eligible for Relocation Assistance under CWC’s FHMIP.
- 3. Individual Buyout Properties – Stream Project** - properties that need to be acquired for completion of a planned community-approved Stream Management Project (“SMP”) managed by DEP and often undertaken by a local soil and water conservation district.
- 4. Individual Buyout Properties – Erosion Hazard** - properties with verified erosion threats where a structure is (a) near the edge of a high eroding bank or terrace or (b) on the floodplain inside the meander belt and the topography indicates a high risk of imminent shift in the stream alignment that could damage or destroy the structure.
- 5. Individual Buyout Properties – Inundation Hazard** - properties located in the floodway, 100- or 500-year floodplains that have sustained damage from flood waters during storm events.

Solicitation and technical assessment of properties for eligibility would be managed by local municipalities similar to the federal or State FBO programs. Title to properties acquired through the NYCFFBO may be held by the City, County or applicable municipality, as in the federal or State FBO programs. NYC, under the NYCFFBO, would be able to purchase properties in hamlets and acquire habitable structures, subject to town approval, similar to the federal or State FBO program. The entity acquiring the property would convey a conservation easement to the New York State Department of Environmental Conservation which would prevent future development but allow for flood-control and other stipulated public projects that would each go through SEQRA before implementation.

The NYCFFBO would not allow for the acquisition of any property unless such acquisition is supported by the municipality (Town or Village) within which it is located. Additionally, the

LAP requirements of willing buyer / willing seller and fair market value purchase price (excepting any damages from prior floods) would apply. The decision of a community to participate in the NYCFFBO requires the weighing of a variety of factors and competing interests that are central its long-term local sustainability planning.

Table 1: Categories eligible for NYCFFBO

Category	Origination	Examples	Comment
1: Hydraulic Study Properties	From a municipally-managed LFA or similar planning analysis; each buyout is associated with a project that mitigates flood hazards	<ul style="list-style-type: none"> To facilitate raising or relocating a bridge; To facilitate restoring or lowering a floodplain 	LFA or NY Rising analyses likely would result in few recommendations for buyouts, and buyouts in this category may emerge slowly over time
2: CWC's Flood Hazard Mitigation Implementation Program	Business or Municipality applies to CWC, which organization determines eligibility and refers to NYCFFBO	<ul style="list-style-type: none"> Anchor Business such as supermarket, hardware store/lumberyard; Critical Community Facility such as firehouse, school, library 	FHMIP acquisitions would always be associated with a relocation within the same town (though not necessarily the same village or hamlet)
3: Individual Buyout - Stream Project	Municipality and/or Soil and Water District identifies site as part of planning for a stream management project	<ul style="list-style-type: none"> In order to implement the stream BMP(s) it is necessary to remove a structure Landowner willing to sell land (vacant or improved), allowing stream project to be built 	Stream management plans or programs would be subject to individual SEQRA reviews by local towns or conservation districts adopting these plans or programs.
4: Individual Buyout - Erosion Risk	Typically landowner, with initial outreach and assessment for eligibility conducted by the county and/or town/village	<ul style="list-style-type: none"> Improvement is in close proximity of an eroding stream bank with imminent risk of failure 	These would most typically be located in more remote portions of the town and are expected to represent a moderate percentage of potential buyouts
5: Individual Buyout - Inundation Risk	Typically landowner, with initial outreach and assessment for eligibility conducted by the county and/or town/village	<ul style="list-style-type: none"> Home or business is located in a floodway Home or business is located in a 100-year flood zone with a history of damage 	These may occur in any part of the town/village and may include clusters of structures in populated areas. This category would likely have the largest number of buyouts

Incremental Impact of Proposed Amendments to WSP

The following analysis was conducted in support of the modification to the WSP to authorize the NYCFFBO and prepared in accordance with Article 8 of the Environmental Conservation Law establishing the State Environmental Quality Review Act (SEQRA) and its implementing regulations as set forth in 6 NYCRR Part 617, and the New York City Environmental Quality Review (CEQR) process, as set forth in 62 RCNY Chapter 5 and Executive Order 91 of 1977 and its amendments.

It is not anticipated that the proposed NYCFFBO would have any incremental impacts on traffic, noise, air quality, solid waste, and energy. The analysis below focuses on socioeconomic conditions, hazardous materials, cultural resources, community facilities, neighborhood character, water quality and public health.

To better understand the universe of properties that could potentially be acquired under the NYCFFBO, the percentage of structures within each town in the NYC watershed that are located within the 100-year floodplain was examined and presented in the map in Attachment 1. Attachment 2 presents a table with the percentage of structures within both the 100-year floodplain and the floodway. The floodway as defined by FEMA is the portion of the floodplain that is most effective in carrying flow, (i.e. channel of watercourse and the adjacent land areas). It is the area where the flood hazard is generally highest and where water depths and velocities are the greatest.

Overall, about 8.1 percent of 48,293 structures in NYC West of Hudson Watershed are within the 100-year floodplain and 2.1 percent of structures are in the floodway. Certain towns like Shandaken in Ulster County and Prattsville in Greene County have a higher percentage of structures—22.6 and 26.3 percent, respectively-- within the 100 year flood plain. The percentage of structures in the floodway for these towns is much smaller at 6.8 percent and 1.5 percent for Shandaken and Prattsville, respectively. Note the portion of the Town of Deposit in the NYC Watershed has 38.5 percent (5 out of the 13 structures) in the 100-year flood plain; however this area represents only 8 percent of the town, which lies mostly outside the watershed.

Attachment 3 provides a tally of the previous acquisitions completed or anticipated under FEMA/State FBO programs after the January 1996 Flood and after Hurricanes Irene/Lee in 2011. Eighty-eight properties were or are being acquired under these previous buyout programs.

For purposes of this environmental review, it is assumed that only a fraction of the universe of properties in the 100-year flood zone or floodway are anticipated to be acquired through the NYCFFBO, based on a qualitative evaluation of past flood buyout activity. Acquisitions would be spread throughout the NYC west of Hudson watershed, particularly those in Categories One (Hydraulic Study), Three (Individual Stream Project) and Four (Erosion Risk). Category Five (Inundation Risk) properties are also expected to occur throughout the watershed, but the attachments referenced above show that many flood-prone structures are clustered in a relatively small number of communities, such as the Villages of Margaretville and Fleischmanns, as well as the hamlet of Arkville in the Town of Middletown (Delaware

County), the Town of Shandaken (Ulster County), Town of Prattsville (Greene County) and Town and Village of Walton (Delaware County).

Socioeconomic Conditions

The proposed NYCFFBO would have the potential to displace residential populations. Like State and federal buyouts programs, the NYCFFBO would enable the acquisition by the City of individual properties in hamlets, deviating from some of the special conditions of the Extended LAP under the WSP.

It is important to note that properties acquired under the NYCFFBO, as described above, include properties that have been subject to flooding and/or are vulnerable to erosion risks (i.e. these properties/structures are by definition subject to destruction by floods). There are potential socioeconomic benefits to property owners under the NYCFFBO in that they would be able to sell their properties at pre-flood values instead of at significantly diminished value either now, under the stigma of being in harm's way, or after a damaging storm. Also for structures that are in imminent danger of erosion and inundation, the ability to sell the property to the City for water quality protection provides an option to sell that may otherwise be absent. All properties acquired under the NYCFFBO require local approval.

In some cases a community facility or anchor business, if located in a vulnerable area, would be eligible for a buyout under the NYCFFBO. This could occur under Category 2: CWC's FHMIP. As for all buyouts, Category 2 projects would require landowner and local approval, but these projects would also be tied to relocation of the enterprise within the same town, though not necessarily the same village or hamlet, and the facility or business would be rebuilt outside of the 100 year floodplain.

It is not anticipated that the acquisition of properties under the NYCFFBO would have significant impacts on the supply of developable land. The properties acquired under the NYCFFBO will be in areas vulnerable to flooding and erosion risk and not suitable for new development. Total acreage acquired under the NYCFFBO is expected to be small – likely less than 200 acres in total – and, cumulatively, with other properties acquired under the Extended LAP, would not exceed the acreage cap of 105,043 acres West of Hudson, as established under the current WSP.

The loss of residential properties could have some impact on the tax base for the local area, because the removal of structures will in many cases reduce the property's assessed value and hence reduce future taxes paid. However, for several reasons, this incremental reduction would be limited. The small number of acquisitions anticipated, and the fact that they will be spread across the watershed, will limit the loss of tax base in any given community. In addition, many of the properties to be acquired will have already been flood-damaged which would also reduce the assessed value. Finally, the decision by a town or village to opt into the NYCFFBO, and to approve specific transactions, will be made with an understanding of the potential loss of tax base, indicating that the community feels any potential tax impacts are manageable. Relocations of community facilities as part of CWC's FMHIP would occur in the same town with a plan for continuity of services. Anchor businesses relocated within the same town, would pay taxes on the new improved property, which would not generally impact the tax base. Little or no incremental tax difference is anticipated associated with

acquisition and relocation of critical public facilities (most of which may already be exempt from real estate taxes).

The NYCFFBO may result in the loss of towns' population in some towns, but it is unlikely to result in a significant loss in population in any one community. Moreover, such losses would occur only with the community's approval and, where applicable, such loss could be offset by relocations under CWC's FHMIP. It is possible that the properties acquired under the NYCFFBO would in any event be damaged or abandoned in a future flood event.

Therefore it is not anticipated that the NYCFFBO would result in any adverse socioeconomic conditions.

Community Facilities

As discussed above, under the NYCFFBO, there is a possibility that a community facility, if located in a vulnerable area, would be eligible for a buyout under the NYCFFBO. This could occur under Category 2: CWC's FHMIP. These facilities could be an anchor business, or critical community facility. These buyouts would always require local approval and the enterprises would be necessarily tied to relocation within in the same town, though not necessarily the same village or hamlet. Since these facilities would be relocated outside the 100-year floodplain, it is not anticipated that the NYCFFBO would have any adverse or significant impacts on Community Facilities.

Cultural Resources

As part of the Revised 2007 FAD, existing structures on properties acquired under the NYCFFBO would have to be removed. Prior to acquisition under the NYCFFBO, DEP would determine if the structure is subject to State and local regulations regarding historic resources. Where historic structures are identified, DEP would either not acquire the property or coordinate with the State Office of Parks, Recreation and Historic Preservation (OPRHP) regarding proper protocol for demolishing structures. Where requested by OPRHP, consistent with its general practice under the LAP, DEP staff would generate comprehensive photo documentation of the site and provide a copy to the local historical society. The photo documentation would generally include the historic farmhouse, farmstead, fields and an overview map of the site showing photo locations. Where available from neighbors, former owners, and the internet, a narrative history of the property would be included in the photo documentation package. The City adheres to all applicable historic preservation laws, rules and regulations. Therefore, the NYCFFBO is not expected to result in the potential for significant adverse impacts on historic or archaeological resources.

Neighborhood Character

As discussed above, NYCFFBO acquisitions could result in the relocation of some part of the population. Community Facilities acquired under Category 2 would be relocated in the same town, but not necessarily in the same village or hamlet. Plans would be in place for continuity of service during relocation. Habitable dwellings would be demolished, which may result in some localized neighborhood changes. Under the NYCFFBO, communities would have the option to take title to the land, which could support open space or recreational priorities for the neighborhood or larger community. Acquisitions would be spread out across the watershed and towns. Structures acquired may have experienced

previous damage and would be prone to future flood/erosion risk. All acquisitions are subject to local approval. Therefore, restoration of existing natural landscapes and removing or relocating flood-prone structures under the NYCFFBO is not anticipated to have a significant adverse impact to neighborhood character in the watershed towns.

Hazardous Materials

As part of the NYCFFBO, DEP would order a Phase I environmental site assessment report (ESA) for all properties to be acquired and would also order a Pre-Demolition Assessment for all structures. As is the case in both LAP and the FEMA FBO, if the Phase I ESA identifies a recognized environmental condition on the property (excluding standard residential contaminants such as asbestos or lead-based paint), the landowner would be responsible for removal prior to closing at their cost. Prior to closing, the City would develop a Demolition and Cleanup Plan (“Demo Plan”), which would be reviewed and agreed to by the demolition vendor. The Demo Plan would detail how demolition and site restoration would be conducted, including any and all requirements under federal, State and local law, and how to address septic tanks, septic fields, and wells. After closing, the City’s vendor would conduct a Pre-Demolition Survey to determine the presence of asbestos and lead-based paint. The Demo Plan would provide guidance as to the handling of demolition materials (both on and off-site) based on the results of this survey. Therefore, the NYCFFBO is not expected to result in the potential for significant adverse hazardous materials impacts.

Water Quality and Public Health

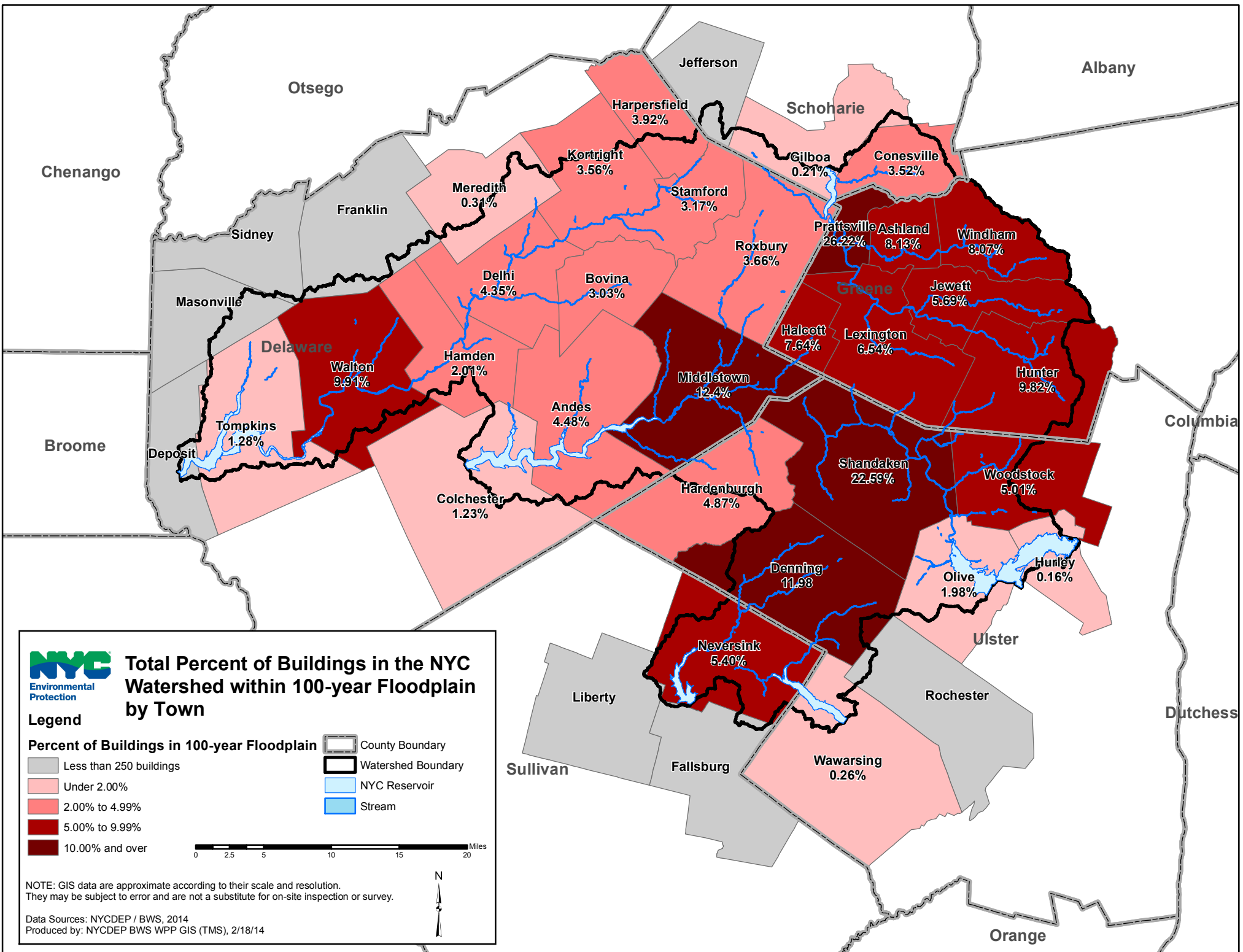
Floods in populated areas can result in adverse impacts to waterbodies and water supplies by mobilizing pollutants, debris, silt, and even building materials into streams and downstream reservoirs. The purpose of the NYCFFBO is to help reduce the threat posed by future storms. Removing or relocating vulnerable structures from flood prone areas would minimize the risk of water quality impacts related to extreme weather events.

The NYCFFBO is included in the Revised 2007 FAD as a component of the broad array of efforts to protect New York City’s drinking water supply. It is not expected that the proposed NYCFFBO would have any adverse impacts to water quality or public health.

Conclusions

As shown in the above analyses, the proposed project changes would not introduce new or previously undisclosed significant adverse impacts and therefore, in accordance with 617.9(a) (7), a Supplemental EIS is not required, and the impact conclusions from the 2010 Final EIS and Findings Statement for the Extended Watershed Land Acquisition Program remain.

Attachment 1



Attachment 2



West-of-Hudson Structures within 100 Year Flood Zone and/or Floodway Summary by County, Town, and Designated Area

	<u>% of Town in Watershed</u>	<u>Total Buildings *</u>	<u>Buildings in 100 Year Flood Zone</u>	<u>% of Buildings in 100 Year Flood Zone</u>	<u>Buildings in Floodway</u>	<u>% of Buildings in Floodway</u>
Delaware County		24,892	1,801	7.2%	522	2.1%
Town of Andes	91%	2,279	123	5.4%	28	1.2%
Andes (Designated Hamlet)		268	63	23.5%	20	7.5%
Tremperskill (Designated Hamlet)		31	0	0.0%	0	0.0%
Outside Designated Area (Rest of Town)*		1,980	60	3.0%	8	0.4%
Town of Bovina	100%	1,024	32	3.1%	6	0.6%
Bovina (Designated Hamlet)		12	2	16.7%	0	0.0%
Bovina Center (Designated Hamlet)		107	24	22.4%	5	4.7%
Lake Delaware (Designated Hamlet)		18	1	5.6%	0	0.0%
Outside Designated Area (Rest of Town)*		887	5	0.6%	1	0.1%
Town of Colchester	21%	485	20	4.1%	0	0.0%
Outside Designated Area (Rest of Town)*		485	20	4.1%	0	0.0%
Town of Delhi	100%	2,499	194	7.8%	40	1.6%
Delhi (Village/Village Extension)		805	103	12.8%	22	2.7%
Fraser (Designated Hamlet)		32	1	3.1%	1	3.1%
Outside Designated Area (Rest of Town)*		1,662	90	5.4%	17	1.0%
Town of Deposit	8%	13	5	38.5%	5	38.5%
Outside Designated Area (Rest of Town)*		13	5	38.5%	5	38.5%
Town of Franklin	11%	202	0	0.0%	0	0.0%
Outside Designated Area (Rest of Town)*		202	0	0.0%	0	0.0%
Town of Hamden	87%	1,546	84	5.4%	9	0.6%
Delancey (Designated Hamlet)		155	5	3.2%	2	1.3%
Hamden (Designated Hamlet)		107	26	24.3%	2	1.9%
Outside Designated Area (Rest of Town)*		1,284	53	4.1%	5	0.4%
Town of Harpersfield	27%	526	24	4.6%	5	1.0%
Stamford (Village/Village Extension)		252	21	8.3%	5	2.0%
Outside Designated Area (Rest of Town)*		274	3	1.1%	0	0.0%

West-of-Hudson Structures within 100 Year Flood Zone and/or Floodway Summary by County, Town, and Designated Area

	<u>% of Town in Watershed</u>	<u>Total Buildings *</u>	<u>Buildings in 100 Year Flood Zone</u>	<u>% of Buildings in 100 Year Flood Zone</u>	<u>Buildings in Floodway</u>	<u>% of Buildings in Floodway</u>
Delaware County		24,892	1,801	7.2%	522	2.1%
Town of Kortright	62%	1,092	27	2.5%	2	0.2%
Bloomville (Designated Hamlet)		141	15	10.6%	0	0.0%
South Kortright (Designated Hamlet)		13	0	0.0%	0	0.0%
Outside Designated Area (Rest of Town)*		938	12	1.3%	2	0.2%
Town of Masonville	24%	244	0	0.0%	0	0.0%
Outside Designated Area (Rest of Town)*		244	0	0.0%	0	0.0%
Town of Meredith	42%	637	2	0.3%	0	0.0%
Meredith Square (Designated Hamlet)		5	0	0.0%	0	0.0%
Outside Designated Area (Rest of Town)*		632	2	0.3%	0	0.0%
Town of Middletown	100%	4,384	594	13.5%	248	5.7%
Arkville (Designated Hamlet)		341	119	34.9%	38	11.1%
Clovesville (Designated Hamlet)		45	30	66.7%	4	8.9%
Dunraven (Designated Hamlet)		55	4	7.3%	0	0.0%
Fleischmanns (Village/Village Extension)		324	134	41.4%	67	20.7%
Halcottsville (Designated Hamlet)		67	9	13.4%	3	4.5%
Margaretville (Village/Village Extension)		364	149	40.9%	77	21.2%
New Kingston (Designated Hamlet)		44	0	0.0%	0	0.0%
Outside Designated Area (Rest of Town)*		3,144	149	4.7%	59	1.9%
Town of Roxbury	100%	3,112	151	4.9%	22	0.7%
Grand Gorge (Designated Hamlet)		286	27	9.4%	0	0.0%
Roxbury (Designated Hamlet)		303	26	8.6%	10	3.3%
Roxbury Run (Designated Hamlet)		53	0	0.0%	0	0.0%
Outside Designated Area (Rest of Town)*		2,470	98	4.0%	12	0.5%
Town of Sidney	1%	22	0	0.0%	0	0.0%
Outside Designated Area (Rest of Town)*		22	0	0.0%	0	0.0%
Town of Stamford	100%	1,673	75	4.5%	23	1.4%
Bloomville (Designated Hamlet)		2	2	100.0%	2	100.0%

West-of-Hudson Structures within 100 Year Flood Zone and/or Floodway Summary by County, Town, and Designated Area

	<u>% of Town in Watershed</u>	<u>Total Buildings *</u>	<u>Buildings in 100 Year Flood Zone</u>	<u>% of Buildings in 100 Year Flood Zone</u>	<u>Buildings in Floodway</u>	<u>% of Buildings in Floodway</u>
Delaware County		24,892	1,801	7.2%	522	2.1%
Town of Stamford	100%	1,673	75	4.5%	23	1.4%
Hobart (Village/Village Extension)		267	19	7.1%	8	3.0%
South Kortright (Designated Hamlet)		73	9	12.3%	1	1.4%
Stamford (Village/Village Extension)		345	34	9.9%	11	3.2%
Outside Designated Area (Rest of Town)*		986	11	1.1%	1	0.1%
Town of Tompkins	67%	1,089	25	2.3%	3	0.3%
Trout Creek (Designated Hamlet)		105	11	10.5%	0	0.0%
Outside Designated Area (Rest of Town)*		984	14	1.4%	3	0.3%
Town of Walton	89%	4,065	445	10.9%	131	3.2%
Walton (Village/Village Extension)		1,436	333	23.2%	109	7.6%
Outside Designated Area (Rest of Town)*		2,629	112	4.3%	22	0.8%
Greene County		10,326	955	9.2%	191	1.8%
Town of Ashland	100%	1,008	82	8.1%	5	0.5%
Ashland (Designated Hamlet)		135	22	16.3%	3	2.2%
East Ashland (Designated Hamlet)		88	37	42.0%	0	0.0%
Outside Designated Area (Rest of Town)*		785	23	2.9%	2	0.3%
Town of Halcott	100%	458	35	7.6%	0	0.0%
Halcott (Designated Hamlet)		30	4	13.3%	0	0.0%
Outside Designated Area (Rest of Town)*		428	31	7.2%	0	0.0%
Town of Hunter	74%	2,729	268	9.8%	63	2.3%
Haines Falls (Designated Hamlet)		134	8	6.0%	2	1.5%
Hunter (Village/Village Extension)		625	109	17.4%	25	4.0%
Onteora Park (Designated Hamlet)		64	0	0.0%	0	0.0%
Tannersville (Village/Village Extension)		566	57	10.1%	18	3.2%
Outside Designated Area (Rest of Town)*		1,340	94	7.0%	18	1.3%
Town of Jewett	100%	1,564	89	5.7%	33	2.1%

West-of-Hudson Structures within 100 Year Flood Zone and/or Floodway Summary by County, Town, and Designated Area

	<u>% of Town in Watershed</u>	<u>Total Buildings *</u>	<u>Buildings in 100 Year Flood Zone</u>	<u>% of Buildings in 100 Year Flood Zone</u>	<u>Buildings in Floodway</u>	<u>% of Buildings in Floodway</u>
Greene County		10,326	955	9.2%	191	1.8%
Town of Jewett	100%	1,564	89	5.7%	33	2.1%
East Jewett (Designated Hamlet)		71	11	15.5%	6	8.5%
Hunter Village Extension Area (Jewett) (Village/Village Extension)		14	1	7.1%	0	0.0%
Jewett (Designated Hamlet)		73	0	0.0%	0	0.0%
Jewett Comm/Indus (Commercial/Industrial)		11	1	9.1%	0	0.0%
Outside Designated Area (Rest of Town)*		1,395	76	5.4%	27	1.9%
Town of Lexington	100%	1,425	93	6.5%	44	3.1%
Lexington (Designated Hamlet)		97	36	37.1%	18	18.6%
West Kill (Designated Hamlet)		91	3	3.3%	2	2.2%
Outside Designated Area (Rest of Town)*		1,237	54	4.4%	24	1.9%
Town of Prattsville	100%	738	194	26.3%	11	1.5%
Prattsville (Designated Hamlet)		176	127	72.2%	10	5.7%
Outside Designated Area (Rest of Town)*		562	67	11.9%	1	0.2%
Town of Windham	100%	2,404	194	8.1%	35	1.5%
Hensonville (Designated Hamlet)		209	43	20.6%	6	2.9%
Maplecrest (Designated Hamlet)		78	13	16.7%	2	2.6%
Windham (Designated Hamlet)		417	120	28.8%	25	6.0%
Outside Designated Area (Rest of Town)*		1,700	18	1.1%	2	0.1%
Schoharie County		1,798	47	2.6%	0	0.0%
Town of Conesville	85%	1,163	41	3.5%	0	0.0%
Conesville (Designated Hamlet)		3	0	0.0%	0	0.0%
Conesville Comm/Indus (Commercial/Industrial)		2	0	0.0%	0	0.0%
West Conseville (Designated Hamlet)		22	0	0.0%	0	0.0%
Outside Designated Area (Rest of Town)*		1,136	41	3.6%	0	0.0%
Town of Gilboa	28%	478	2	0.4%	0	0.0%
Outside Designated Area (Rest of Town)*		478	2	0.4%	0	0.0%

West-of-Hudson Structures within 100 Year Flood Zone and/or Floodway Summary by County, Town, and Designated Area

	<u>% of Town in Watershed</u>	<u>Total Buildings *</u>	<u>Buildings in 100 Year Flood Zone</u>	<u>% of Buildings in 100 Year Flood Zone</u>	<u>Buildings in Floodway</u>	<u>% of Buildings in Floodway</u>
Schoharie County		1,798	47	2.6%	0	0.0%
Town of Jefferson	10%	157	4	2.5%	0	0.0%
Outside Designated Area (Rest of Town)*		157	4	2.5%	0	0.0%
Sullivan County		2,597	135	5.2%	33	1.3%
Town of Fallsburg	2%	99	0	0.0%	0	0.0%
Outside Designated Area (Rest of Town)*		99	0	0.0%	0	0.0%
Town of Liberty	0%	19	0	0.0%	0	0.0%
Outside Designated Area (Rest of Town)*		19	0	0.0%	0	0.0%
Town of Neversink	79%	2,479	135	5.4%	33	1.3%
Claryville (Town of Neversink) (Designated Hamlet)		96	54	56.3%	6	6.3%
Curry (Designated Hamlet)		65	6	9.2%	4	6.2%
Grahamsville (Designated Hamlet)		276	30	10.9%	9	3.3%
Neversink (Designated Hamlet)		122	0	0.0%	0	0.0%
Unionville (Designated Hamlet)		80	8	10.0%	1	1.3%
Outside Designated Area (Rest of Town)*		1,840	37	2.0%	13	0.7%
Ulster County		8,680	950	10.9%	264	3.0%
Town of Denning	87%	930	112	12.0%	22	2.4%
Claryville (Town of Denning) (Designated Hamlet)		106	31	29.2%	6	5.7%
Sundown (Designated Hamlet)		113	46	40.7%	16	14.2%
Outside Designated Area (Rest of Town)*		711	35	4.9%	0	0.0%
Town of Hardenburgh	44%	348	17	4.9%	0	0.0%
Outside Designated Area (Rest of Town)*		348	17	4.9%	0	0.0%
Town of Hurley	36%	620	1	0.2%	0	0.0%
Outside Designated Area (Rest of Town)*		620	1	0.2%	0	0.0%
Town of Olive	70%	1,968	39	2.0%	7	0.4%

West-of-Hudson Structures within 100 Year Flood Zone and/or Floodway Summary by County, Town, and Designated Area

	<u>% of Town in Watershed</u>	<u>Total Buildings *</u>	<u>Buildings in 100 Year Flood Zone</u>	<u>% of Buildings in 100 Year Flood Zone</u>	<u>Buildings in Floodway</u>	<u>% of Buildings in Floodway</u>
Ulster County		8,680	950	10.9%	264	3.0%
Town of Olive	70%	1,968	39	2.0%	7	0.4%
Ashokan (Designated Hamlet)		176	0	0.0%	0	0.0%
Boiceville (Designated Hamlet)		102	10	9.8%	0	0.0%
West Shokan (Designated Hamlet)		49	0	0.0%	0	0.0%
Outside Designated Area (Rest of Town)*		1,641	29	1.8%	7	0.4%
Town of Rochester	3%	59	0	0.0%	0	0.0%
Outside Designated Area (Rest of Town)*		59	0	0.0%	0	0.0%
Town of Shandaken	100%	3,186	720	22.6%	217	6.8%
Allaben (Designated Hamlet)		42	23	54.8%	2	4.8%
Big Indian (Designated Hamlet)		34	15	44.1%	7	20.6%
Chichester (Designated Hamlet)		57	16	28.1%	2	3.5%
Mount Tremper (Designated Hamlet)		33	16	48.5%	9	27.3%
Phoenicia (Designated Hamlet)		207	145	70.0%	22	10.6%
Pine Hill (Designated Hamlet)		147	39	26.5%	13	8.8%
Outside Designated Area (Rest of Town)*		2,666	466	17.5%	162	6.1%
Town of Wawarsing	12%	373	1	0.3%	0	0.0%
Outside Designated Area (Rest of Town)*		373	1	0.3%	0	0.0%
Town of Woodstock	52%	1,196	60	5.0%	18	1.5%
Outside Designated Area (Rest of Town)*		1,196	60	5.0%	18	1.5%
Totals		48,293	3,888	8.1%	1,010	2.1%

Attachment 3

Summary of Active or Complete FEMA Flood Buyout Properties within the NYC Watershed since 1996

as of July 1, 2015

County	Town	Hamlets	Town Totals	January 1996 Flood (1996 to 2000)		Irene/Lee (2011 to Present)		Totals	
				Properties	Acres	Properties	Acres	Properties	Acres
Delaware	Middletown	Arkville		3	2.97	5	4.83	8	7.80
		Covesville		1	2.03	4	3.47	5	5.50
		Margaretville		21	6.43	9	3.56	30	9.99
		Fleischmanns		2	0.95	7	9.84	9	10.79
		Rest of Town		0	0	3	4.89	3	4.89
	Middletown Totals			27	12.38	28	26.59	55	38.97
	Roxbury	Rest of Town	Roxbury Totals	1	1.77	0	0.00	1	1.77
Delaware County Totals				28	14.15	28	26.59	56	40.74

				January 1996 Flood (1996 to 2000)		Irene/Lee (2011 to Present)		Totals		
County	Town	Hamlets	Town Totals	Properties	Acres	Properties	Acres	Properties	Acres	
Greene	Ashland	Ashland	Ashland Totals	0	0	1	0.31	1	0.31	
	Hunter	Lanesville	Hunter Totals	0	0	2	1.04	2	1.04	
	Jewett	East Jewett	Jewett Totals	0	0	1	9.50	1	9.50	
	Lexington	Lexington		0	0	2	1.34	2	1.34	
		West Kill		0	0	1	0.82	1	0.82	
		Rest of Town		0	0	2	3.56	2	3.56	
		Lexington Totals		0	0	5	5.72	5	5.72	
	Prattsville	Prattsville		0	0	3	12.39	3	12.39	
		Rest of Town		0	0	1	0.86	1	0.86	
		Prattsville Totals		0	0	4	13.25	4	13.25	
	Windham	Maplecrest		0	0	1	0.88	1	0.88	
		Windham		0	0	1	0.19	1	0.19	
		Windham Totals		0	0	2	1.07	2	1.07	
	Greene County Totals				0	0	15	30.89	15	30.89

				January 1996 Flood (1996 to 2000)		Irene/Lee (2011 to Present)		Totals	
County	Town	Hamlets	Town Totals	Properties	Acres	Properties	Acres	Properties	Acres
Ulster	Olive	Boiceville	Olive Totals	0	0	1	0.69	1	0.69
	Shandaken	Allaben		0	0	2	2.58	2	2.58
		Big Indian		0	0	1	3.68	1	3.68
		Chichester		0	0	1	0.85	1	0.85
		Mt. Tremper		0	0	7	14.48	7	14.48
		Oliveria		0	0	4	3.77	4	3.77
		Phoenicia		0	0	1	0.74	1	0.74
				Shandaken Totals	0	0	16	26.10	16
	Ulster County Totals				0	0	17	26.79	17

Watershed Grand Totals				28	14.15	60	84.27	88	98.42
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Notes: (1) Includes all FEMA Projects acquired on still under active consideration by NYC in partnership with the applicable County; For Delaware County, also includes 22 properties in the FEMA program which Delaware County withdrew from the City partnership (County to take title without City assistance). See the tab entitled "Delaware County Detail" for a breakdown of the LAP and Non-LAP FEMA properties in that County.

(2) For the 1996 event, all properties were acquired by the City of New York. For Irene/Lee, properties were or are to be acquired by the County, municipality or the City. All of these ownership categories are lumped together here.