Table of Contents

Section 1.0 - Introduction

1.1 – Plan Summary

1.2 - State Background Information

- 1.2.1 Land Area
- 1.2.2 Bodies of Water
 - 1.2.2.1 Rivers
 - 1.2.2.2 Lakes

1.3 - Population and Development

1.4 – Summary of 2007 New York State Hazard Mitigation Plan Revisions

Section 2.0 – State Coordination Efforts & Capabilities

2.1 – Multi-Hazard Mitigation Planning Process

- 2.1.1 Planning Committee
- 2.1.2 Information Gathering Process
- 2.1.3 Review and Integration of Existing Plans and Documents

2.2 – Integration with State Planning Efforts

2.2.1 – Incorporation of Mitigation into Other State Planning Efforts

2.3 - State Agencies

- 2.3.1 New York State Emergency Management Office (NYSEMO)
 - 2.3.1.1- SEMO Sections
 - 2.3.1.2- The Mitigation Section
 - 2.3.1.3- The Planning Section
 - 2.3.1.4- The Recovery Section
 - 2.3.1.5- CEMP
 - 2.3.1.6- State Approach for Integrating Mitigation Initiatives (Capability)
- 2.3.2 New York State Department of State (DOS)
- 2.3.3 New York State Department of Environmental Conservation (DEC)
- 2.3.4 Office of Parks, Recreation, and Historical Preservation (OPRHP)
- 2.3.5 New York State Bridge Authority (NYSBA)
- 2.3.6 New York State Department of Agriculture and Markets (AGMKT)
- 2.3.7 New York State Division of Housing and Community Renewal (DHCR)
- 2.3.8 New York State Department of Transportation (DOT)
- 2.3.9 New York State Office of General Services (OGS)

2.4 - Consolidation of Planning Requirements for All State Mitigation Programs

2.4.1 - Coordination with Other Agencies

2.5 - Federal Agencies

- 2.5.1 Federal Emergency Management Agency (FEMA)
- 2.5.2 United States Department of Interior (DOI)
- 2.5.3 United States Army Corps of Engineers (USACE)

2.5.4 - Natural Resource Conservation Service (NRCS)

2.6 - Local Agencies

- 2.6.1 Environmental Emergency Services, Inc. (EES): Chemung & Steuben Counties
- 2.6.2 Hudson River Black River Regulating District (HRBRRD)
- 2.6.3 New York City Department of Environmental Protection (NYCDEP)
- 2.6.4 Genesee/Finger Lakes Regional Planning Council (G/FLRPC)
- 2.6.5 Earthquake Engineering to Extreme Events (formerly MCEER)

2.7 - Inter-State Agreements

- 2.7.1 Delaware River Basin Commission (DRBC)
- 2.7.2 Susquehanna River Basin Commission (SRBC)
- 2.7.3 Northeastern Forest Fire Protection Compact (NFFPC)

Section 3.0 - Risk Assessment

3.1 – New York State Hazard Identification

3.2 – Risk Analysis

- 3.2.1 U.S. Census Local Population and Housing Data
- 3.2.2 Use of Planning Tools in Local Plan Development
- 3.2.3 FEMA Profiling Requirements
- 3.2.4 Description of State Facilities

3.3 - Profiling Hazard Events, Assessing Vulnerability, & Estimating Loss

- 3.3.1 Past Major Disaster Events
- 3.4 Flood Hazard Profile
- 3.5 Hurricanes Hazard Profile
- 3.6 Tornado Hazard Profile
- 3.7 Winter Storms and Blizzards Hazard Profile
- 3.8 Hail Storm Hazard Profile
- 3.9 Wildfire Hazard Profile
- 3.10 Drought Hazard Profile
- 3.11 Extreme Heat Hazard Profile
- 3.12 Earthquake Hazard Profile
- 3.13 Landslide Hazard Profile
- 3.14 Land Subsidence Hazard Profile
- 3.15 Powre Failure Hazard Profile

<u>Section 4.0 – Mitigation Strategy</u>

4.1 – Hazard Mitigation Goals

- 4.1.1 State Hazard Mitigation Vision
- 4.1.2 Goals and Update Assessment
- 4.2 State Capability Assessment
- 4.2.1 Local Capability Assessment
- 4.3 Mitigation Projects, Actions, and Activities

- 4.3.1 Mitigation Projects
- 4.3.2 Mitigation Actions and Activities
 - 4.3.2.1 Multi-Hazard
 - 4.3.2.2 Flood Hazard
 - 4.3.2.3 Landslide Hazard
 - 4.3.2.4 Wildfire Hazard
 - 4.3.2.5 Winter Storm Hazard
 - 4.3.2.6 Earthquake Hazard
 - 4.3.2.7 Terrorism Hazard
 - 4.3.2.8 Local Hazard Mitigation Activites

Section 5.0 – Local Mitigation Planning

- **5.1** Technical Assistance
- 5.1.1 Mitigation Section, (NYSEMO)
- 5.1.2 Planning Section, (NYSEMO)
- 5.1.3 Training and Exercise Section, (NYSEMO)
- 5.1.4 Department of State (DOS), Coastal Resources, Assitance to Local Governments Section
- **5.2** Funding Sources
- 5.3 Local Plan Integration
- 5.3.1 Reviewing, Coordinating, and Integrating Local Plans
- 5.3.2 Timeframe for Reviewing Local Plans
- **5.4 Prioritizing Local Assistance**
- 5.4.1 Cost Effectiveness of Projects

Section 6.0 –Plan Maintenance Procedures

- 6.1 Plan Monitoring and Evaluation System
- 6.2 Plan Updating System
- 6.2.1 Plan Evaluation Criterion

Section 7.0 – Monitoring Progress of Mitigation Activities

7.1 – Project Management

- 7.1.1 Initiation of Projects
- 7.1.2 Eligibility Determination
- 7.1.3 Monitoring Progress of Mitigation Activities
- 7.1.4 Project Closeouts
- 7.1.5 Documentation

Section 8.0 – Program Management Capability

- 8.1 Environmental Review Procedure
- 8.2 Responsible Entities Other than Environmental Review
- 8.2.1 Benefit-Cost Analysis in Mitigation Plan
- 8.2.2 Benefit-Cost (B/C) Analysis Determination Procedure for Mitigation Projects

8.2.3 - Sample B/C Analysis

8.3 Financial and Project Reports

<u>Section 9.0 – Assessment of Mitigation Actions</u>

9.1 – Assessment of Mitigation Actions

Section 10.0 – Effective Use of Available Mitigation Funding

10.1 Funding Available

- 10.1.1 Hazard Mitigation Grant Program
- 10.1.2 Pre-Disaster Mitigation Disaster Resistant Universities (PDM DRU), Pre-Disaster Mitigation Competitive (PDM–C) Programs
- 10.1.3 Flood Mitigation Assistance Program
- 10.1.4 Repetitive Flood Claims Program (RFC)
- 10.1.5 Severe Repetitive Loss Program (SRL)

<u>Section 11.0 – Commitment to a Comprehensive Mitigation Program</u>

11.1 Support of Local Mitigation Planning Efforts

- 11.1.1 Disaster Mitigation Act of 2000
- 11.1.2 Hazard Mitigation Grant Program
- 11.1.3 Flood Mitigation Assistance Program
- 11.1.4 -Planning Guidance Documents

11.2 - Nationally Applicable Codes

- 11.2.1 Adoption of New Uniform Code
- 11.2.2 Administration and Enforcement of the Uniform Code
- 11.2.3 New York City Building Code

11.3 – Mitigation Efforts for Critical Facilities

- 11.3.1 Post-Disaster Response
- 11.3.2 Recovery Operations

11.4 – Integration of Mitigation into Recovery Operations

- 11.4.1 Cross-Training of Personnel
- 11.4.2 Joint Mitigation Efforts

Section 12.0 – Mitigation Plan Adoption Process

- 12.1 Formal Adoption Process
- 12.2 Authorities and References
- 12.2.1 New York State
- 12.2.2 Federal
- 12.2.3 Sample Adoption Resolution

Appendices

Appendix 1 – NFIP, RPS, & NFIP/RPS Comparison Spreadsheet Data and NYS RPS Property Classification List

Appendix 2 – Planning Activity Application and Project Evaluation & Priority Ranking System Forms, Multi-Hazard Mitigation Planning Grant - Application

Appendix 3 – Sample Site Visit Project Evaluation Sheet

Figures and Tables

Section 1.0 - Tables

- 1-1 New York State Facts
- 1-2 New York State General Building Stock Dollar Value Exposure by County
- 1-3 Summary of 2007 State Plan Revisions

Section 1.0 - Figures

- 1-1 New York State Topography
- 1-2 New York State County Population Change 2000-2005
- 1-3 New York State Mucipality Population Change 2000-2005
- 1-4 New York State Municipal 2005 Population Estimates
- 1-5 New York State County 2005 Population Estimates

Section 2.0 - Tables

- 2-1 Planning Participants
- 2-2 Summary of Plan Development Collaboration
- 2-3 State Agencies Roles In Mitigation Efforts
- 2-4 Local Waterfront Revitalization Plans in New York State
- 2-5 List of Coastal Water Bodies and Designated Inland Waterways
- 2-6 NFIP Community Rating System (CRS) Participants

Section 2.0 –Figures

- 2-1 Disaster Preparedness Commission (DPC) Organizational Chart
- 2-2 New York State Comprehensive Management Plan
- 2-3 The Capabilities of NY-ALERT
- 2-4 The Future of NY-ALERT
- 2-5 High Hazard Dams in New York State

Section 3.0 - Tables

- 3-1 Hazard Definitions
- 3-2 U.S. Census Local Population and Housing Data
- 3-3 New York State Entities
- 3-4 FEMA Historical Disaster Declarations

Flood

- 3-5 Ice Jam Database: Ice Jam Event Ranking by State
- 3-6 Ice Jam Flooding Events Over the Last Five Years in New York State
- 3-7 Coastal Flooding Events
- 3-8 Coastal Erosion Hazard Area Communities
- 3-9 Historical Incidents of Flooding (undeclared events)
- 3-10 Incidents of Flooding (undeclared events) 2004-2007
- 3-11 Major Flood Disaster Declarations (1954-2003)
- 3-12 Major Flood Disaster Declarations (2004-2007)
- 3-13 Flood Disasters by County Between 1/1/04 and 7/1/07
- 3-14 National Flood Insurance Program (NFIP) Policy Growth
- 3-15 National Flood Insurance Program CRS Participants
- 3-16 County Jurisdiction Threatened and Vulnerable to Flood Loss (including Q3 flood & RPS data)
- 3-17 County Jurisdiction Threatened and Vulnerable to Flood Loss (excluding Q3 data)
- 3-18 Estimating Potential Flood Loss by County
- 3-19 Estimating Potential Flood Loss by County 2005 Table (for comparsion only)
- 3-20 Flood Hazard Exposure (in 100 year Flood plain) New York State Agency Facilities

Hurricane

- 3-21 Saffir Simpson Hurricane Scale
- 3-22 Estimated Population Growth For Counties Susceptible to Hurricane and/or Tropical Storm Damage
- 3-23 Historical Major Disaster Declarations
- 3-24 Federal Disaster and Emergency Request Turndowns in New York State 1958 2001
- 3-25 Historic Hurricane Tracking Through New York State
- 3-26 Wind Hazard Exposure (FEMA Wind Zone Hurricane Susceptible Region) New York State Agency Facilities
- 3-27 Jurisdiction Most Threatended by Extreme Wind and Vulnerable to Extreme Wind Loss
- 3-28 New York State Public and Private Mapping and Modeling
- 3-29 Estimated Population Residing Within Hurricane Storm Surge Zones
- 3-30 Mitigation Activities

Tornado

- 3-31 Enhanced Fujita Scale
- 3-32 Tornado Events (by County) 1950 2007
- 3-33 Frequency and Magnitude of Past Tornado Events in New York State
- 3-34 Tornadoes in New York State Causing Two or More Deaths

Winter Storm

- 3-35 FEMA Historical Snow Related Disaster and Emergency Declarations
- 3-36 FEMA Historical Ice Related Disaster Declarations
- 3-37 Jurisdictions Most Threatened by Snow and Vulnerable to Snow Loss
- 3-38 Jurisdictions Most Threatened by Ice Storms and Vulnerable to Ice Storm Loss
- 3-39 Snow Hazard Exposure New York State Agency Facilities

Hail Storm

3-40 Hail Description and Diameter (Inches)

3-41 National Climatic Data Center: New York State Hail Information 05-07 1Inch or Greater

Wildfire

- 3-42 Fire Danger Rating and Color Code
- 3-43 New York State Forest Ranger Remote Automatic Weather Station Network
- 3-44 Past Wildfire Events in New York
- 3-45 Wildfire Hazard Exposure to New York State Agency Facilities

Drought

- 3-46 Past Occurences of Drought in New York State
- 3-47 New York State Drought Plan Monitoring Component
- 3-48 Summary of Response Actions in Drought Conditions: State, Local, and Water Suppliers

Extreme Heat

- 3-49 Adverse Effects of Prolonged Heat Exposure
- 3-50 National Weather Service Alert Procedures
- 3-51 Health Hazards and Symptoms Associated with Extreme Heat Conditions
- 3-52 Past Occurrences of Extreme Heat in New York State

Earthquake

- 3-53 Magnitude and Intensity Comparison
- 3-54 Modified Mercalli Intensity (MMI) and PGA Equivalents
- 3-55 Earthquake History Throughout New York State 1737-2005
- 3-56 New York State Declared Earthquake Disasters from 1950-2007
- 3-57 Earthquake Hazard Exposure (by PGA Value) of New York State Agency Facilities
- 3-58 Estimated Annualized Earthquake Losses for the United States
- 3-59 HAZUS-MH Earthquake Loss Estimation by County
- 3-60 HAZUS-MH Earthquake Annualized Loss Estimation and Ranking Results
- 3-61 A Summary of the Findings of the NYCEM Report
- 3-62 Mitigation Actions

Landslide

- 3-63 Landslide Incidence/Susceptibility Color Code
- 3-64 Landslide Events 1837-2007
- 3-65 Fatal Landslides 1837-2007
- 3-66 Non-Fatal Landslides 1963-2007
- 3-67 Historic Landslide Events
- 3-68 Jurisdiction Most Threatened by Landslide and Vulnerable to Landslide Loss
- 3-69 Landslide Hazard Exposure of New York State Agency Facilities

Land Subsidence

No Tables

Power Failure

3-70 Power Failure Emergency Declaration

Section 3.0 - Figures

- 3-1 New York State Counties
- 3-2 Presidential Disaster Declarations New York State 1953 August 2007

3-3 Damage Required for Disaster Declaration

Flood

- 3-4 New York State Topography
- 3-5 Number of Ice Jam Incidents on New York State Rivers
- 3-6 Coastal Erosion Hazard Area Classifications
- 3-7 Coastal Erosion Hazard Areas
- 3-8 Presidential Disaster Declarations of Flooding Events 1953 August 2007
- 3-9 National Flood Insurance Program Number of Policies by County
- 3-10 National Flood Insurance Program Number of Policies by Municipality
- 3-11 National Flood Insurance Program Insurance in Force by County 2007
- 3-12 National Flood Insurance Program Insurance in Force by Municipality
- 3-13 National Flood Insurance Program Total Premiums in Dollars by County
- 3-14 National Flood Insurance Program Total Premiums in Dollars by Municipality3
- 3-15 National Flood Insurance Program Total Claims by County 1978 2007
- 3-16 National Flood Insurance Program Total Claims by Municipality 1978 2007
- 3-17 National Flood Insurance Program Claims Total Payment by County 1978 2007
- 3-18 National Flood Insurance Program Claims Total Payment by Municipality 1978 2007
- 3-19 National Flood Insurance Program Number of Repetitive Losses by County 1978 to 2007
- 3-20 National Flood Insurance Program Number of Repetitive Losses by Municipality 1978 to 2007
- 3-21 National Flood Insurance Program Repetitive Dollar Losses by County 1978 2007
- 3-22 National Flood Insurance Program Repetitive Dollar Losses by Municipality 1978 2007
- 3-23 National Flood Insurance Program Number of Policies in an A-Zone by County 2007
- 3-24 National Flood Insurance Program Number of Policies in an A-Zone by Municipality 2007
- 3-25 National Flood Insurance Program Number of Target Repetitives by County 2007
- 3-26 National Flood Insurance Program Number of Target Repetitives by Municipality
- 3-27 National Flood Insurance Program Number of Policies in an V-Zone by County 2007
- 3-28 National Flood Insurance Program Number of Policies in an V-Zone by Municipality 2007
- 3-29 100-Year Floodplain Property Exposure Analysis
- 3-30 The Number of Residential Properties in a 100 Year Flood Zone by County
- 3-31 The Number of Residential Properties in a 100 Year Flood Zone by Municipality
- 3-32 Municipal Per Capita Residential Property Value in a 100 Year Flood Zone by County
- 3-33 Municipal Per Capita Residential Property Value in a 100 Year Flood Zone by Municipality
- 3-34 Municipal Per Capita Total Property Value in a 100 Year Flood Zone by County
- 3-35 Municipal Per Capita Total Property Value in a 100 Year Flood Zone by Municipality
- 3-36 Total Value of Properties in a 100 Year Flood Zone by County
- 3-37 Total Value of Residential Property in a 100 Year Flood Zone by County
- 3-38 Total Value of Residential Property in a 100 Year Flood Zone by Municipality
- 3-39 Total Value of Properties in a 100 Year Flood Zone by Municipality
- 3-40 Albany County Residential Property Exposure in 100 Year Floodplains
- 3-41 Allegany County Residential Property Exposure in 100 Year Floodplains
- 3-42 Broome County Residential Property Exposure in 100 Year Floodplains
- 3-43 Cattaraugus County Residential Property Exposure in 100 Year Floodplains

- 3-44 Cayuga County Residential Property Exposure in 100 Year Floodplains
- 3-45 Chautauqua County Residential Property Exposure in 100 Year Floodplains
- 3-46 Chemung County Residential Property Exposure in 100 Year Floodplains
- 3-47 Chenango County Residential Property Exposure in 100 Year Floodplains
- 3-48 Columbia County Residential Property Exposure in 100 Year Floodplains
- 3-49 Cortland County Residential Property Exposure in 100 Year Floodplains
- 3-50 Delaware County Residential Property Exposure in 100 Year Floodplains
- 3-51 Dutchess County Residential Property Exposure in 100 Year Floodplains
- 3-52 Erie County Residential Property Exposure in 100 Year Floodplains
- 3-53 Genesee County Residential Property Exposure in 100 Year Floodplains
- 3-54 Herkimer County Residential Property Exposure in 100 Year Floodplains
- 3-55 Jefferson County Residential Property Exposure in 100 Year Floodplains
- 3-56 Livingston County Residential Property Exposure in 100 Year Floodplains
- 3-57 Madison County Residential Property Exposure in 100 Year Floodplains
- 3-58 Monroe County Residential Property Exposure in 100 Year Floodplains
- 3-59 Niagra County Residential Property Exposure in 100 Year Floodplains
- 3-60 Oneida County Residential Property Exposure in 100 Year Floodplains
- 3-61 Onondaga County Residential Property Exposure in 100 Year Floodplains
- 3-62 Ontario County Residential Property Exposure in 100 Year Floodplains
- 3-63 Orange County Residential Property Exposure in 100 Year Floodplains
- 3-64 Oswego County Residential Property Exposure in 100 Year Floodplains
- 3-65 Rensselear County Residential Property Exposure in 100 Year Floodplains
- 3-66 Rockland County Residential Property Exposure in 100 Year Floodplains
- 3-67 Saratoga County Residential Property Exposure in 100 Year Floodplains
- 3-68 Steuben County Residential Property Exposure in 100 Year Floodplains
- 3-69 Suffolk County Residential Property Exposure in 100 Year Floodplains
- 3-70 Sullivan County Residential Property Exposure in 100 Year Floodplains
- 3-71 Tioga County Residential Property Exposure in 100 Year Floodplains
- 3-72 Tompkins County Residential Property Exposure in 100 Year Floodplains
- 3-73 Ulster County Residential Property Exposure in 100 Year Floodplains
- 3-74 Westchester County Residential Property Exposure in 100 Year Floodplains
- 3-75 Number of Residential Properties in a 100 Year Flood Zone Compared to the Number of NFIP Policies in Either an A-Zone or V-Zone by County
- 3-76 Number of Residential Properties in a 100 Year Flood Zone Compared to the Number of NFIP Policies in Either an A-Zone or V-Zone by Municipality
- 3-77 Number of Residential Properties in a 100 Year Flood Zone Compared to the Number of NFIP Policies by County
- 3-78 Number of Residential Properties in a 100 Year Flood Zone Compared to the Number of NFIP Policies by Municipality
- 3-79 Value of Residential Property in a 100 Year Flood Zone Compared to the Total Insurance Coverage by County

- 3-80 Value of Residential Property in a 100 Year Flood Zone Compared to the Total Insurance Coverage by Municipality
- 3-81 Residential Properties in an A-Zone or V-Zone by Municipality
- 3-82 Estimated Value of all Property in a 100 Year Flood Zone Compared to the NFIP Total Insurance Coverage by County
- 3-83 Estimated Value of all Property in a 100 Year Flood Zone Compared to the NFIP Total Insurance Coverage by Municipality
- 3-84 Flooding Outside Mapped Floodplains (Westchester County)
- 3-85 Hazard Indentification and Risk Assessment

Hurricane

- 3-86 New York State County 2005 Population Estimates
- 3-87 Wind Zones in the United States
- 2-88 New York State Wind Zones
- 3-89 100 Year Peak Gust Wind Probability
- 3-90 Presidential Disaster Declarations Hurricanes and Tropical Depressions 1953 August 2007
- 3-91 Historic Hurricane Events Tracking Through New York State 1888 1989
- 3-92 1990 2006 Hurricane Tracks
- 3-93 Location Scenarioof New York City Storm Surge Susceptibility
- 3-94 Hurricane Katrina Scenario Tracking Through New York State
- 3-95 Hurricane Storm 12 Modeling Tracks
- 3-96 Total Economic Loss Per Category, Track, and Speed
- 3-97 Total Debris in Tons Per Category, Track, and Speed
- 3-98 Total Displaced Households Per Category, Track, and Speed
- 3-99 Total Short Term Shelter Needs Per Category, Track, and Speed
- 3-100 Estimated Population in Surge Zone by Jurisdiction
- 3-101 Estimated Worst Case Losses to New York State Coastal Counties

Tornado

- 3-102 Tornado Risk Areas in the Continental United States
- 3-103 Fujita Pearson Tornado Scale
- 3-104 Tornados in New York State 1950 2005

Winter Storm

- 3-105 New York State Annual Snowfall Normals 1971 2000
- 3-106 Presidential Disaster Declarations Winter Snow Storms and Blizzards 1953 August 2007
- 3-107 Presidential Disaster Declarations Ice Storms 1953 August 2007
- 3-108 Average Number of Hours Per Year With Freezing Rain in the United States

Hail

- 3-109 Hail Days Per Year (1995 1999)
- 3-110 Areas Associated with Agricultural Land Use

Wildfire

- 3-111 Experimental Shrub Moisture
- 3-112 Observed Fire Danger Class
- 3-113 Observed Experimental Fire Potential

- 3-114 Forested Areas of New York State
- 3-115 Fire Danger Rating Areas and Remote Automatic Weather Stations
- 3-116 Long Island Pine Barrens
- 3-117 Sunrise Fires 1995
- 3-118 The Northeastern Forest Fire Prevention Compact

Drought

- 3-119 Interrelationship of the Hydrological Cycle
- 3-120 New York State Drought Management Regions

Extreme Heat

- 3-121 Weather Fatalities
- 3-122 Accurate Measurement of Temperature During an Extreme Heat Event
- 3-123 National Weather Service Publications: Heat Wave
- 3-124 Percentage of Population Most Susceptible to Extreme Heat by County: Ages 65 and Older
- 3-125 Percentage of Population Most Susceptible to Extreme Heat by County: Ages 5 and Under
- 3-126 Percentage of Population Most Susceptible to Extreme Heat by County: Ages 5 and Under / 65 and Older

Earthquake

- 3-127 NEHRP Soil Classification
- 3-128 PGA % Seismic Hazard Map (USGS)
- 3-129 NYS Geological Survey Seismic Shear Wave Velocity Tests
- 3-130 National Earthquake Hazard Reduction Program (NEHRP) Soil Site Classifications Assigned to NYS Surficial Geologic Units
- 3-131 NEHRP Site Class
- 3-132 2003 NEHRP Recommended Revisions For New Building and Other Structures
- 3-133 Spectral Acceleration (SA) % Map based on Soil Site Classification and Acceleration Parameter Coefficients
- 3-134 Albany County Adjusted Spectral Acceleration (SA) Map
- 3-135 Allegany County Adjusted Spectral Acceleration (SA) Map
- 3-136 Broome County Adjusted Spectral Acceleration (SA) Map
- 3-137 Cattaraugus County Adjusted Spectral Acceleration (SA) Map
- 3-138 Cayuga County Adjusted Spectral Acceleration (SA) Map
- 3-139 Chautauqua County Adjusted Spectral Acceleration (SA) Map
- 3-140 Chemung County Adjusted Spectral Acceleration (SA) Map
- 3-141 Chenango County Adjusted Spectral Acceleration (SA) Map
- 3-142 Clinton County Adjusted Spectral Acceleration (SA) Map
- 3-143 Columbia County Adjusted Spectral Acceleration (SA) Map
- 3-144 Cortland County Adjusted Spectral Acceleration (SA) Map
- 3-145 Delaware County Adjusted Spectral Acceleration (SA) Map
- 3-146 Dutchess County Adjusted Spectral Acceleration (SA) Map
- 3-147 Erie County Adjusted Spectral Acceleration (SA) Map
- 3-148 Essex County Adjusted Spectral Acceleration (SA) Map
- 3-149 Franklin County Adjusted Spectral Acceleration (SA) Map

- 3-150 Fulton County Adjusted Spectral Acceleration (SA) Map
- 3-151 Genesee County Adjusted Spectral Acceleration (SA) Map
- 3-152 Greene County Adjusted Spectral Acceleration (SA) Map
- 3-153 Hamilton County Adjusted Spectral Acceleration (SA) Map
- 3-154 Herkimer County Adjusted Spectral Acceleration (SA) Map
- 3-155 Jefferson County Adjusted Spectral Acceleration (SA) Map
- 3-156 Lewis County Adjusted Spectral Acceleration (SA) Map
- 3-157 Livingston County Adjusted Spectral Acceleration (SA) Map
- 3-158 Madison County Adjusted Spectral Acceleration (SA) Map
- 3-159 Monroe County Adjusted Spectral Acceleration (SA) Map
- 3-160 Montgomery County Adjusted Spectral Acceleration (SA) Map
- 3-161 Nassau County Adjusted Spectral Acceleration (SA) Map
- 3-162 New York City Adjusted Spectral Acceleration (SA) Map
- 3-163 Niagara County Adjusted Spectral Acceleration (SA) Map
- 3-164 Oneida County Adjusted Spectral Acceleration (SA) Map
- 3-165 Onondaga County Adjusted Spectral Acceleration (SA) Map
- 3-166 Ontario County Adjusted Spectral Acceleration (SA) Map
- 3-167 Orange County Adjusted Spectral Acceleration (SA) Map
- 3-168 Orleans County Adjusted Spectral Acceleration (SA) Map
- 3-169 Oswego County Adjusted Spectral Acceleration (SA) Map
- 3-170 Otsego County Adjusted Spectral Acceleration (SA) Map
- 3-171 Putnam County Adjusted Spectral Acceleration (SA) Map
- 3-172 Rensselaer County Adjusted Spectral Acceleration (SA) Map
- 3-173 Rockland County Adjusted Spectral Acceleration (SA) Map
- 3-174 Saratoga County Adjusted Spectral Acceleration (SA) Map
- 3-175 Schenectady County Adjusted Spectral Acceleration (SA) Map
- 3-176 Schoharie County Adjusted Spectral Acceleration (SA) Map
- 3-177 Schuyler County Adjusted Spectral Acceleration (SA) Map
- 3-178 Seneca County Adjusted Spectral Acceleration (SA) Map
- 3-179 Saint Lawrence County Adjusted Spectral Acceleration (SA) Map
- 3-180 Steuben County Adjusted Spectral Acceleration (SA) Map
- 3-181 Suffolk County Adjusted Spectral Acceleration (SA) Map
- 3-182 Sullivan County Adjusted Spectral Acceleration (SA) Map
- 3-183 Tioga County Adjusted Spectral Acceleration (SA) Map
- 3-184 Tompkins County Adjusted Spectral Acceleration (SA) Map
- 3-185 Ulster County Adjusted Spectral Acceleration (SA) Map
- 3-186 Warren County Adjusted Spectral Acceleration (SA) Map
- 3-187 Washington County Adjusted Spectral Acceleration (SA) Map
- 3-188 Wayne County Adjusted Spectral Acceleration (SA) Map
- 3-189 Westchester County Adjusted Spectral Acceleration (SA) Map
- 3-190 Wyoming County Adjusted Spectral Acceleration (SA) Map
- 3-191 Yates County Adjusted Spectral Acceleration (SA) Map

- 3-192 Earthquake Epicenters 1737-1986
- 3-193 Earthquake Events From 1990-2003
- 3-194 Historical Earthquake Epicenters Spatially Across the Northeast
- 3-195 Presidential Disaster Declarations Earthquake 1953 August 2007
- 3-196 Annualized Earthquake Loss
- 3-197 Per Capita Annualized Earthquake Loss
- 3-198 Annualized Earthquake Loss Per Square Mile
- 3-199 Building Types in Manhattan Neighborhoods

Landslide

- 3-200 Landslide Susceptibility
- 3-201 Landslide Inventory Map of New York Comparison of NYSGS and USGS
- 3-202 Landslide Inventory and Surficial Geology
- 3-203 Landslide Inventory of New York State
- 3-204 Soil Survey of New York State
- 3-205 USGS & NYSGS Preliminary Landslide Analysis Algorithm
- 3-206 Landslide Susceptibility Schenectady County, NY
- 3-207 Landslide Susceptibility Descriptive Zones for Schenectady County, NY
- 3-208 Schenectady County Landslide Study Risk Score Values at Point Locations of Landslide Occurences
- 3-209 Landslide Susceptibility Schenectady County, NY Model Validation
- 3-210 Integration of GIS into Schenectady Internet Mapping System (SIMS)

Land Subsidence

- 3-211 USGS United States Map of Karst From Evaporative and Carbonate Rock
- 3-212 Mineral Resources of New York
- 3-213 Claverack Creek in February 2006
- 3-214 USGS Livingston County Study
- 3-215 USGS Onondaga County Study

Power Failure

No Figures

Section 4.0 - Tables

- 4-1 Mitigation Implementation Tools for Local Governments
- 4-2 Recommended Project Types by Natural Hazards
- 4-3 Multi-Hazard Mitigation Strategy
- 4-4 Flood-Hazard Mitigation Strategy
- 4-5 Landslide-Hazard Mitigation Strategy
- 4-6 Wildfire Hazard Mitigation Strategy
- 4-7 Winter Storm Hazard Mitigation Strategy
- 4-8 Earthquake Hazard Mitigation Strategy
- 4-9 Flood Hazard Local Mitigation Activities
- 4-10 Winter Storm Local Mitigation Activities
- 4-11 Landslide Hazard Local Mitigation Activities

- 4-12 Earthquake Hazard Local Mitigation Activities
- 4-13 Wildfire Hazard Local Mitigation Activities
- 4-14 Severe Windstorms Hazard Local Mitigation Activities
- 4-15 Drought Hazard Local Mitigation Activities

Section 5.0 - Tables

5-1 Funding Sources for Mitigation

Section 6.0 - Tables

6-1 Plan Maintenance

Section 7.0

No Tables or Figures

Section 8.0 - Tables

- 8-1 Summary of Information Needed for Benefit-Cost Analysis
- 8-2 Before Mitigation Damages Adjusted to Present Day Value
- 8-3 After Mitigation Damages Adjusted to Present Day Value

Section 9.0

No Tables or Figures

Section 10.0 - Tables

- 10-1 Hazard Mitigation Grant Program (HMGP) Approved Projects (1996-2007)
- 10-2 County Breakdown of Project Grants Approved/Funded since 2004
- 10-3 Funded Mitigation Planning Communities
- 10-4 Approved Local All Hazard Mitigation Plans
- 10-5 Municipalities Not in the Planning Process
- 10-6 Flood Mitigation Assistance Program: FMA Projects
- 10-7 Flood Mitigation Assistance Program Planning Grants

Section 10.0 - Figures

- 10-1 Percentage of Project Funding 1996-2007
- 10-2 Project Grant Funding 2004-2007

Section 11.0 - Tables

11-1 New York State Codes

Section 12.0

No Tables or Figures