

**VOLUME I**

|  | <u>Page</u>    |
|--|----------------|
| <b>SECTION 1 INTRODUCTION .....</b>  | <b>1-1</b>     |
| <b>BACKGROUND .....</b>  | <b>1-1</b>     |
| DMA 2000 Origins -The Robert T. Stafford Disaster Relief<br>and Emergency Assistance Act ..... | 1-1            |
| Organizations Involved In The Mitigation Planning Effort .....                                 | 1-2            |
| Multiple Agency Support For Hazard Mitigation .....  | 1-3            |
| <b>IMPLEMENTATION OF THE PLANNING PROCESS .....</b>  | <b>1-9</b>     |
| Benefits of Mitigation Planning .....  | 1-9            |
| Organization of This Mitigation Plan.....  | 1-10           |
| <b>ONGOING STAKEHOLDER INVOLVEMENT.....</b>  | <b>1-11</b>    |
| <br><b>SECTION 2 PLAN ADOPTION.....</b>  | <br><b>2-1</b> |
| <b>OVERVIEW .....</b>  | <b>2-1</b>     |
| Plan Adoption by Local Governing Bodies.....   | 2-1            |
| <br><b>SECTION 3 PLANNING PROCESS.....</b>   | <br><b>3-1</b> |
| <b>INTRODUCTION .....</b>  | <b>3-1</b>     |
| <b>HAZARD MITIGATION IN BURLINGTON COUNTY – PREPARING TO PLAN ..</b>                           | <b>3-2</b>     |
| Organization of Planning Partnership .....   | 3-3            |
| <b>STAKEHOLDERS INVOLVED IN MITIGATION PLANNING .....</b>                                      | <b>3-12</b>    |
| Municipal and Local Involvement .....  | 3-13           |
| Federal, State, County, and Regional Agency Involvement.....                                   | 3-13           |
| Burlington County Government Departments.....  | 3-14           |
| Public Participation - Citizen Involvement .....   | 3-15           |
| <b>COORDINATION WITH EXISTING PLANNING EFFORTS AND PROGRAMS ..</b>                             | <b>3-20</b>    |
| Hazard Mitigation Grant Program (HMGP).....  | 3-20           |
| Flood Mitigation Assistance (FMA) Program.....   | 3-21           |
| Pre-Disaster Mitigation (PDM) Program .....  | 3-21           |
| Federal Disaster and Recovery Assistance Programs .....  | 3-21           |
| Public Assistance (PA).....  | 3-21           |
| Community Development Block Grants (CDBG) .....  | 3-22           |
| National Flood Insurance Program.....  | 3-22           |
| Community Rating System (CRS) .....  | 3-23           |
| <b>INTEGRATION OF EXISTING DATA AND PLANS INTO MITIGATION PLAN.</b>                            | <b>3-24</b>    |
| Local Data .....   | 3-24           |
| Federal and State Data.....  | 3-25           |
| <b>REVIEW OF EXISTING REPORTS AND PLANS.....</b>   | <b>3-26</b>    |
| <b>CONTINUED PUBLIC INVOLVEMENT .....</b>  | <b>3-29</b>    |
| <br><b>SECTION 4 COUNTY PROFILE .....</b>  | <br><b>4-1</b> |
| <b>GENERAL INFORMATION.....</b>  | <b>4-1</b>     |
| Physical Setting .....   | 4-1            |
| <b>POPULATION AND DEMOGRAPHICS .....</b>   | <b>4-13</b>    |
| <b>GENERAL BUILDING STOCK .....</b>  | <b>4-18</b>    |
| <b>LAND USE AND POPULATION TRENDS.....</b>   | <b>4-23</b>    |
| Land Use Trends .....  | 4-23           |

|   |             |
|---|-------------|
| Population Trends .....   | 4-28        |
| <b>FUTURE GROWTH AND DEVELOPMENT .....</b>                            | <b>4-31</b> |
| <b>CRITICAL FACILITIES.....</b>                                       | <b>4-54</b> |
| Essential Facilities.....   | 4-54        |
| Transportation Systems .....  | 4-72        |
| Lifeline Utility Systems.....   | 4-75        |
| High-Potential Loss Facilities .....                                  | 4-84        |
| Other Facilities .....  | 4-86        |
| <br>  |             |
| <b>SECTION 5 RISK ASSESSMENT .....</b>                                | <b>5-1</b>  |
| 5.1 Methodology and Tools.....  | 5.1-1       |
| 5.2 Identification of Natural Hazards of Concern .....                | 5.2-1       |
| 5.3 Hazard Ranking.....   | 5.3-1       |
| Hazard Ranking Methodology .....                                      | 5.3-1       |
| Probability of Occurrence .....                                       | 5.3-1       |
| Impact .....  | 5.3-1       |
| Risk Ranking Value .....  | 5.3-2       |
| Hazard Ranking Results .....  | 5.3-2       |
| Hazards Profiles and Vulnerability Assessment.....                    | 5.3-5       |
| 5.4 Hazard Profiles   |             |
| 5.4.1 Coastal Erosion.....  | 5.4.1-1     |
| 5.4.2 Drought.....  | 5.4.2-1     |
| 5.4.3 Earthquake.....   | 5.4.3-1     |
| 5.4.4 Flood .....   | 5.4.4-1     |
| 5.4.5 Landslides.....   | 5.4.5-1     |
| 5.4.6 Severe Storms .....   | 5.4.6-1     |
| 5.4.7 Wildfire.....   | 5.4.7-1     |
| 5.4.8 Winter Storms.....  | 5.4.8-1     |
| <br>  |             |
| <b>SECTION 6 MITIGATION STRATEGIES .....</b>                          | <b>6-1</b>  |
| <b>BACKGROUND AND PAST ACCOMPLISHMENTS.....</b>                       | <b>6-1</b>  |
| <b>GENERAL MITIGATION PLANNING APPROACH .....</b>                     | <b>6-1</b>  |
| Guiding Principle, Mitigation Goals and Objectives .....              | 6-1         |
| Goals and Objectives.....   | 6-3         |
| Capability Assessment .....   | 6-6         |
| <b>IDENTIFICATION, PRIORITIZATION, ANALYSIS AND IMPLEMENTATION OF</b> |             |
| <b>MITIGATION ACTIONS .....</b>                                       | <b>6-6</b>  |
| Strengths, Weakness, Opportunities and Obstacles (SWOO) .....         | 6-6         |
| Catalog of Mitigation Actions .....                                   | 6-8         |
| Mitigation Actions.....   | 6-8         |
| Prioritization.....   | 6-10        |
| Benefit/Cost Review.....  | 6-11        |
| Jurisdictional Annexes .....  | 6-12        |
| Area-Wide Collaborative Actions .....                                 | 6-13        |
| <br>  |             |
| <b>SECTION 7 PLAN MAINTENANCE PROCEDURES .....</b>                    | <b>7-1</b>  |
| <b>MONITORING, EVALUATING AND UPDATING THE PLAN.....</b>              | <b>7-1</b>  |
| Monitoring.....   | 7-5         |
| Evaluating.....   | 7-5         |
| Updating.....   | 7-7         |

IMPLEMENTATION OF MITIGATION PLAN THROUGH EXISTING  
PROGRAMS ..... 7-8  
CONTINUED PUBLIC INVOLVEMENT ..... 7-12

**ACRONYMS AND ABBREVIATIONS** ..... AC-1

**GLOSSARY**.....GL-1

**REFERENCES**..... R-1



VOLUME II

|   | <u>Page</u> |
|---|-------------|
| <b>SECTION 8 PLANNING PARTNERSHIP .....</b>     | <b>8-1</b>  |
| BACKGROUND .....                                | 8-1         |
| THE PLANNING PARTNERSHIP .....                  | 8-1         |
| Initial Solicitation and Letters of Intent..... | 8-1         |
| Planning Partner Expectations.....              | 8-2         |
| Jurisdictional Annex Templates .....            | 8-2         |
| Workshop .....                                  | 8-2         |
| Benefit/Cost Review.....                        | 8-3         |
| Completion of the Planning Process .....        | 8-4         |
| <br><b>SECTION 9 JURISDICTIONAL ANNEXES</b>     |             |
| 9.1 Burlington County .....                     | 9.1-1       |
| 9.2 Bass River, Township of.....                | 9.2-1       |
| 9.3 Beverly, City of.....                       | 9.3-1       |
| 9.4 Bordentown, City of .....                   | 9.4-1       |
| 9.5 Bordentown, Township of .....               | 9.5-1       |
| 9.6 Burlington, City of.....                    | 9.6-1       |
| 9.7 Burlington, Township of.....                | 9.7-1       |
| 9.8 Chesterfield, Township of.....              | 9.8-1       |
| 9.9 Cinnaminson, Township of .....              | 9.9-1       |
| 9.10 Delanco, Township of .....                 | 9.10-1      |
| 9.11 Delran, Township of .....                  | 9.11-1      |
| 9.12 Eastampton, Township of .....              | 9.12-1      |
| 9.13 Edgewater Park, Township of.....           | 9.13-1      |
| 9.14 Evesham, Township of .....                 | 9.14-1      |
| 9.15 Fieldsboro, Borough of .....               | 9.15-1      |
| 9.16 Florence, Township of .....                | 9.16-1      |
| 9.17 Hainesport, Township of.....               | 9.17-1      |
| 9.18 Lumberton, Township of .....               | 9.18-1      |
| 9.19 Mansfield, Township of.....                | 9.19-1      |
| 9.20 Maple Shade, Township of .....             | 9.20-1      |
| 9.21 Medford Lakes, Borough of.....             | 9.21-1      |
| 9.22 Medford, Township of .....                 | 9.22-1      |
| 9.23 Moorestown, Township of.....               | 9.23-1      |
| 9.24 Mount Laurel, Township of .....            | 9.24-1      |
| 9.25 Mt. Holly, Township of .....               | 9.25-1      |
| 9.26 New Hanover, Township of.....              | 9.26-1      |
| 9.27 North Hanover, Township of .....           | 9.27-1      |
| 9.28 Palmyra, Borough of.....                   | 9.28-1      |
| 9.29 Pemberton, Borough of.....                 | 9.29-1      |
| 9.30 Pemberton, Township of.....                | 9.30-1      |
| 9.31 Riverside, Township of.....                | 9.31-1      |
| 9.32 Riverton, Borough of .....                 | 9.32-1      |
| 9.33 Shamong, Township of .....                 | 9.33-1      |
| 9.34 Southampton, Township of.....              | 9.34-1      |
| 9.35 Springfield, Township of .....             | 9.35-1      |



9.36 Tabernacle, Township of .....9.36-1  
9.37 Washington, Township of.....9.37-1  
9.38 Westampton, Township of.....9.38-1  
9.39 Willingboro, Township of.....9.39-1  
9.40 Woodland, Township of .....9.40-1  
9.41 Wrightstown Borough.....9.41-1  
9.42 Burlington County College.....9.42-1

**APPENDICES**

- A Applicable Federal and State Regulations
- B Sample Resolution of Plan Adoption
- C Public and Stakeholder Outreach
- D Mitigation Catalog
- E Federal and State Mitigation Resources
- F Jurisdictional Annex Template and Instructions
- G FEMA Guidance Worksheets
- H Public Survey Results
- I Meeting Documentation
- J Sample Letter of Intent
- K Future Growth

**TABLES**

| <b><u>Table</u></b> |  | <b><u>Page</u></b> |
|---------------------|--|--------------------|
| 1-1                 | Participating Jurisdictions in Burlington County .....   | 1-2                |
| 1-2                 | FEMA Local Mitigation Plan Review Crosswalk .....  | 1-6                |
| 1-3                 | Mitigation Plan Update Summary .....   | 1-7                |
| 3-1                 | Participating Burlington County Jurisdictions .....  | 3-1                |
| 3-2                 | Steering Committee Members .....   | 3-4                |
| 3-3                 | Planning Committee Members (Municipal Representatives and Special Purpose District<br>Members Only) .....  | 3-6                |
| 3-4                 | Summary of Planning Activities .....   | 3-10               |
| 3-5                 | Burlington County Stakeholders .....   | 3-12               |
| 3-6                 | Burlington County Floodplain Administrators .....  | 3-22               |
| 3-7                 | CRS Municipalities in Burlington County .....  | 3-24               |
| 3-8                 | Record Review (Municipalities) - Record of the review of existing programs, policies,<br>and technical documents for participating jurisdictions (all) ..... | 3-26               |
| 4-1                 | Land Use Summary for Burlington County, 2002 – 2007 .....  | 4-9                |
| 4-2                 | Burlington County Population Statistics (2010 U.S. Census) .....   | 4-13               |
| 4-3                 | Replacement Value by Occupancy Class .....   | 4-18               |
| 4-4                 | Burlington County Farmland by Crop (Acres): 2002 and 2007 .....  | 4-24               |
| 4-5                 | Farms in Burlington County, 1900 to 2007 .....   | 4-24               |
| 4-6                 | County and State Parks in Burlington County .....  | 4-27               |
| 4-7                 | Burlington County Population Trends, 1900 to 2010 .....  | 4-28               |
| 4-8                 | Burlington County Resident Population by Municipality: 1940-2000 .....   | 4-28               |
| 4-9                 | Ten Largest Municipalities in Burlington County .....  | 4-30               |
| 4-10                | Potential New Development in Burlington County .....   | 4-32               |
| 4-11                | Police Stations in Burlington County .....   | 4-54               |
| 4-12                | Fire Stations in Burlington County .....   | 4-55               |
| 4-13                | EMS Facilities in Burlington County .....  | 4-57               |
| 4-14                | Emergency Operation Centers in Burlington County .....   | 4-58               |
| 4-15                | Medical Facilities in Burlington County .....  | 4-59               |
| 4-16                | Shelter Facilities in Burlington County .....  | 4-61               |
| 4-17                | Schools in Burlington County .....   | 4-64               |
| 4-18                | Senior Facilities in Burlington County .....   | 4-71               |
| 4-19                | Airports/Heliports in Burlington County .....  | 4-73               |
| 4-20                | Railroad Facilities in Burlington County .....   | 4-75               |
| 4-21                | Burlington County Potable Water Facilities .....   | 4-76               |
| 4-22                | Electric Substations and Transfer Stations in Burlington County .....  | 4-79               |
| 4-23                | Electric Facilities in Burlington County .....   | 4-79               |
| 4-24                | Communication Facilities in Burlington County .....  | 4-81               |
| 4-25                | Burlington County Wastewater Treatment Facilities and Pump Stations .....  | 4-81               |
| 4-26                | Dams in Burlington County .....  | 4-84               |
| 4-27                | Other Facilities in Burlington County .....  | 4-86               |
| 5.2-1               | Identification of Natural Hazards of Concern for Burlington County .....   | 5.2-2              |

|           |   |          |
|-----------|---|----------|
| 5.3-1     | Probability of Occurrence Ranking Factors.....  | 5.3-1    |
| 5.3-2     | Numerical Values and Definitions for Impacts on Population, Property and Economy.....   | 5.3-2    |
| 5.3-3     | Probability of Occurrence Ranking for Hazards of Concern for Burlington County ...  | 5.3-3    |
| 5.3-4     | Impact Ranking for Hazards of Concern for Burlington County.....  | 5.3-4    |
| 5.3-5     | Total Risk Ranking Value for Hazards of Concern for Burlington County .....   | 5.3-5    |
| 5.3-6     | Summary of Overall Ranking of Natural Hazards by Jurisdiction .....   | 5.3-6    |
|           |   |          |
| 5.4.1-1   | Coastal Erosion Events between 1936 and 2012 .....  | 5.4.1-5  |
| 5.4.1-2   | Approximate Population in the CAFRA Boundary .....  | 5.4.1-52 |
| 5.4.1-3   | Total Improved Value Exposure to 2-Feet of Sea Level Rise .....   | 5.4.1-52 |
| 5.4.1-4   | Total Improved Value Exposure in the CAFRA Boundary.....  | 5.4.1-53 |
| 5.4.1-5   | Building Replacement Cost Value Exposure in the CAFRA Boundary.....   | 5.4.1-53 |
| 5.4.1-6   | Total Improved Value Exposure to 2-Feet of Sea Level Rise .....   | 5.4.1-53 |
| 5.4.1-7   | Building Replacement Cost Value Exposure to 2-Feet of Sea Level Rise .....  | 5.4.1-53 |
|           |   |          |
| 5.4.2-1   | PDSI Classifications .....  | 5.4.2-2  |
| 5.4.2-2   | NDMC Drought Severity Classification Table.....   | 5.4.2-3  |
| 5.4.2-3   | Drought Indicators for New Jersey.....  | 5.4.2-5  |
| 5.4.2-4   | Drought Events Affecting Burlington County Between 1950 and 2013 .....  | 5.4.2-12 |
|           |   |          |
| 5.4.3-1.  | Richter Scale .....   | 2        |
| 5.4.3-2.  | Modified Mercalli Intensity Scale .....   | 2        |
| 5.4.3-3.  | Damage Levels Experienced in Earthquakes.....   | 3        |
| 5.4.3-4.  | Earthquake Magnitude/Intensity Comparison .....   | 3        |
| 5.4.3-5.  | Earthquake Occurrences in the New York/New Jersey Area, 1737-2012.....  | 8        |
| 5.4.3-6.  | Summary of Estimated Sheltering Needs for Burlington County.....  | 19       |
| 5.4.3-7.  | Estimated Displaced Households and Population Seeking Short-Term Shelter from the 500- and 2,500-year MRP Events per Municipality ..... | 19       |
| 5.4.3-8.  | Estimated Number of Injuries and Casualties from the 2,500-Year MRP Earthquake Event .....  | 21       |
| 5.4.3-9.  | Example of Structural Damage State Definitions for a Light Wood-Framed Building....   | 22       |
| 5.4.3-10. | Estimated Buildings Damaged by General Occupancy for 100-year, 500-year and 2,500-year MRP Earthquake Events .....                      | 23       |
| 5.4.3-11. | Estimated Number of Buildings Damaged by Building Type for 100-year, 500-year and 2,500-year MRP Earthquake Events.....                 | 23       |
| 5.4.3-12. | Estimated Building Value (Building and Contents) Damaged by the 500- and 2,500-Year MRP Earthquake Events .....                         | 24       |
| 5.4.3-13. | Estimated Damage and Loss of Functionality for Critical Facilities in Burlington County for the 500-Year MRP Earthquake Event .....     | 26       |
| 5.4.3-14. | Estimated Damage and Loss of Functionality for Critical Facilities in Burlington County for the 2,500-Year MRP Earthquake Event .....   | 27       |
| 5.4.3-15. | Estimated Utility Impacts in Burlington County from the 2,500-year MRP Earthquake Event .....   | 28       |
| 5.4.3-16. | Estimated Debris Generated by the 500- and 2,500-year MRP Earthquake Events.....  | 28       |
|           |   |          |
| 5.4.4-1.  | 24-Hour Precipitation Frequency Estimates Burlington County .....   | 5        |
| 5.4.4-2.  | New Jersey State-Studied Streams in Burlington County .....   | 11       |
| 5.4.4-3.  | Hazard Potential Classification for Dams .....  | 16       |
| 5.4.4-4.  | High Hazard Dams in Burlington County .....   | 17       |
| 5.4.4-5.  | New Jersey Dam Inspection Requirements .....  | 17       |

|           |  |    |
|-----------|--|----|
| 5.4.4-6.  | Flooding Events between 1933 and 2013.....   | 19 |
| 5.4.4-7.  | CRS Communities in Burlington County .....   | 39 |
| 5.4.4-8.  | Estimated Burlington County Population Exposed to the 1-Percent Flood Hazard (2010 Census).....  | 42 |
| 5.4.4-9.  | Estimated Population Displaced or Seeking Short-Term Shelter from the 1-Percent Annual Chance Flood Events.....  | 43 |
| 5.4.4-10. | Total land area located in the 1- and 0.2-percent annual chance flood zones (acres).....   | 46 |
| 5.4.4-11. | Total Improved Value Exposure to the 1-Percent Annual Chance Flood Event .....   | 48 |
| 5.4.4-12. | Estimated General Building Stock Exposure to the 1-Percent Annual Chance Flood Event   | 50 |
| 5.4.4-13. | Estimated General Building Stock Potential Loss to the 1-Percent Annual Chance Flood Event .....   | 51 |
| 5.4.4-14. | Occupancy Class of Repetitive Loss Structures in Burlington County by Municipality..   | 53 |
| 5.4.4-15. | NFIP Policies, Claims and Repetitive Loss Statistics.....  | 55 |
| 5.4.4-16. | Critical Facilities Located in the 1-Percent and 0.2-Percent Annual Chance Flood Boundaries and Estimated Potential Damage for the 1-Percent Annual Chance Flood Event ..... | 59 |
| 5.4.4-17. | Utilities and Transportation Facilities Located in the 1-Percent and 0.2-Percent Annual Chance Flood Boundaries .....  | 61 |
| 5.4.4-18. | Estimated Debris Generated from the 1-Percent Flood Event .....  | 62 |
| 5.4.5-1.  | Landslide Events between 1893 and 2007.....  | 8  |
| 5.4.5-1.  | Total Assessed Value of Improvements Exposed to Landslides in Burlington County ...  | 12 |
| 5.4.5-3.  | Estimated Area Exposed to Landslides in Burlington County .....  | 13 |
| 5.4.5-4.  | Estimated Population Exposed to Landslides in Burlington County .....  | 15 |
| 5.4.5-5.  | Total Assessed Value of Improvements Exposed to Landslides in Burlington County ...  | 17 |
| 5.4.5-6.  | Estimated General Building Stock Replacement Cost Value Exposed to Landslides in Burlington County .....   | 18 |
| 5.4.5-7.  | Emergency Critical Facilities Exposed to Estimated Landslide Hazard Areas in Burlington County .....   | 20 |
| 5.4.6-1.  | Hail Size.....   | 4  |
| 5.4.6-2.  | Fujita Damage Scale .....  | 4  |
| 5.4.6-3.  | Enhanced Fujita Damage Scale .....   | 5  |
| 5.4.6-4.  | EF Scale Damage Indicators.....  | 6  |
| 5.4.6-5.  | The Saffir-Simpson Scale .....   | 7  |
| 5.4.6-6.  | Wind Zones in the U.S.....   | 13 |
| 5.4.6-7.  | Severe Storm Events between 1903 and 2013.....   | 22 |
| 5.4.6-8.  | Summary of Potential Surge Inundation Areas by Community .....   | 40 |
| 5.4.6-9.  | Estimated Population Exposed to Storm Surge in Burlington County .....   | 42 |
| 5.4.6-10. | Sheltering Needs for the 500-year MRP Hurricane Events for Burlington County .....   | 43 |
| 5.4.6-11. | Description of Damage Categories .....   | 45 |
| 5.4.6-12. | Estimated Building Replacement Value (Structure Only) Damaged by the 100-Year and 500-Year Mean Return Period Hurricane-Related Winds for All Occupancy Classes.....         | 47 |
| 5.4.6-13. | Estimated Assessed Value of Improved Property in the SLOSH Inundation Zones .....  | 51 |
| 5.4.6-14. | Critical Facilities and Utilities Located in the SLOSH Inundation Zones.....   | 53 |
| 5.4.6-15. | Debris Production for 100- and 500-Year Mean Return Period Hurricane-Related Winds   | 54 |
| 5.4.7-1.  | Fire Danger Rating and Color Code .....  | 3  |
| 5.4.7-2.  | Area in the Wildfire Fuel Hazard Ranking Zones in Burlington County .....  | 6  |

|          |   |      |
|----------|---|------|
| 5.4.7-3. | Approximate Area in the New Jersey Forest Service Risk Areas in Burlington County (Acres) .....                                 | 7    |
| 5.4.7-4. | Wildfire Events in New Jersey and Burlington County between 1755 and 2013.....  | 16   |
| 5.4.7-5. | Estimated Population Exposed to the Wildfire Hazard in Burlington County .....  | 23   |
| 5.4.7-6. | Estimated Assessed Value of Improvements Exposed to the Wildfire Hazard in Burlington County .....                              | 24   |
| 5.4.7-7. | Estimated Replacement Cost Value Exposed to the Wildfire Hazard in Burlington County  | 26   |
| 5.4.7-8. | Facilities in the High to Extreme NJ Forest Service Risk Areas in Burlington County ...   | 27   |
| 5.4.8-1. | NESIS Ranking Categories 1 - 5 .....  | 3    |
| 5.4.8-2. | RSI Ranking Categories.....   | 4    |
| 5.4.8-3. | Winter Storm Events Between 1995 and 2012. ....   | 10   |
| 5.4.8-4. | Probability of Occurrence of Winter Storms/Ice Storms, Burlington County .....  | 27   |
| 5.4.8-5. | Burlington County Population Statistics (2010 U.S. Census) .....  | 29   |
| 5.4.8-6. | General Building Stock Exposure (Structure Only) and Estimated Losses from Severe Winter Storm Events in Burlington County..... | 31   |
| 6-1      | Burlington County Hazard Mitigation Plan Objectives .....   | 6-5  |
| 6-2      | Agencies/Stakeholders.....  | 6-7  |
| 6-3      | Common Mitigation Actions .....   | 6-9  |
| 6-4      | Project Assessment .....  | 6-11 |
| 7-1      | Mitigation Planning Committee.....  | 7-1  |
| 7-2      | Incorporation into Ongoing Planning, Zoning, Building, and Engineering Activities ....  | 7-7  |
| 7-3      | Existing Processes and Programs for Mitigation Plan Implementation.....   | 7-9  |
| 8-1      | Participating Jurisdictions in Burlington County.....   | 8-1  |
| 8-2      | Benefit/Cost Review .....   | 8-3  |

**FIGURES**

| <b><u>Figure</u></b> | <b><u>Page</u></b>   |
|----------------------|--|
| 1-1                  | Burlington County Mitigation Plan Area..... 1-5  |
| 1-2                  | Burlington County Hazard Mitigation Planning Process..... 1-11   |
| 3-1                  | Screenshot of the Hazard Mitigation Plan Link on the Burlington County Government Website ..... 3-18               |
| 3-2                  | Screenshot of the Burlington County Hazard Mitigation Plan Public Website ..... 3-19                               |
| 4-1                  | Burlington County, New Jersey ..... 4-2  |
| 4-2                  | Watershed Management Areas of New Jersey ..... 4-3   |
| 4-3                  | Burlington County Watersheds..... 4-4  |
| 4-4                  | Watersheds of Burlington County ..... 4-5  |
| 4-5                  | Physiographic Provinces in Burlington County..... 4-6  |
| 4-6                  | Climate Zones in New Jersey ..... 4-8  |
| 4-7                  | Land Use Land Cover for Burlington County, 2007 Data..... 4-10   |
| 4-8                  | Philadelphia-Camden-Wilmington Metropolitan Statistical Area, PA-NJ-DE-MD Metropolitan Statistical Area ..... 4-12 |
| 4-9                  | Distribution of General Population for Burlington County, New Jersey ..... 4-15                                    |
| 4-10                 | Distribution of Persons over the Age of 65 in Burlington County, New Jersey ..... 4-16                             |
| 4-11                 | Distribution of Low-Income Population in Burlington County, New Jersey ..... 4-17                                  |
| 4-12                 | Distribution of Residential Building Stock Replacement Cost Value in Burlington County..... 4-20                   |
| 4-13                 | Distribution of Commercial Building Stock Replacement Value in Burlington County..... 4-21                         |
| 4-14                 | Distribution of Industrial Building Replacement Cost Value in Burlington County..... 4-22                          |
| 4-15                 | Municipalities within the New Jersey Pinelands ..... 4-26  |
| 4-16                 | Burlington County Population Trends, 1940 – 2010..... 4-30   |
| 4-17                 | Potential New Development in Burlington County ..... 4-31  |
| 4-18                 | Essential Facilities in Burlington County ..... 4-60   |
| 4-19                 | Schools and Shelters in Burlington County ..... 4-70   |
| 4-20                 | Transportation Lifelines in Burlington County..... 4-74  |
| 4-21                 | Potable Water Facilities in Burlington County ..... 4-78   |
| 4-22                 | Major Utilities Lines in Burlington County..... 4-80   |
| 4-23                 | Wastewater Service Areas, Infrastructure and Facilities in Burlington County ..... 4-83                            |
| 4-24                 | Dams in Burlington County ..... 4-85   |
| 4-25                 | User Defined Facilities in Burlington County ..... 4-88  |
| 5.4.1-1              | New Jersey Coastal Boundary Map..... 5.4.1-4   |
| 5.4.1-2              | Coastal Area Facilities Review Act (CAFRA) Area in Burlington County ..... 5.4.1-10                                |
| 5.4.2-1              | Drought Regions of New Jersey ..... 5.4.2-5  |
| 5.4.2-2              | Climate Divisions of the U.S. .... 5.4.2-8   |
| 5.4.2-3              | Climate Divisions of New Jersey..... 5.4.2-9   |
| 5.4.2-4              | NJDEP Drought Regions in New Jersey ..... 5.4.2-10   |
| 5.4.3-1.             | Earthquake Hazard Map of the Conterminous United States ..... 5  |
| 5.4.3-2.             | Earthquake Hazard Map of New Jersey (PGA of 10% in 50 Years)..... 6  |

5.4.3-3. Earthquake Epicenters in New Jersey (1783-2013)..... 7

5.4.4-1. Floodplain ..... 2

5.4.4-2. Transect Schematic ..... 4

5.4.4-3. Burlington County Flood Zones ..... 41

5.4.4-4. NFIP Repetitive Loss Areas ..... 57

5.4.4-5. Potential New Development and Flood Boundaries ..... 65

5.4.5 1. Landslide Incidence and Susceptibility in the Northeast U.S. .... 3

5.4.5 2. Landslide Susceptibility in New Jersey ..... 5

5.4.5 3. Recorded Landslides in the State of New Jersey ..... 6

5.4.5 4. Previous Occurrences and Landslide Hazard Areas in Burlington County ..... 9

5.4.5 5. Potential New Development and Previous Occurrences and Landslide Hazard Areas .... 17

5.4.6-1. Wind Speeds and Storm Track for the 100-Year Mean Return Period Event in Burlington County..... 9

5.4.6-2. Wind Speeds and Storm Track for the 500-Year Mean Return Period Event in Burlington County..... 10

5.4.6-3. Number of Hurricanes for a 100-year Return Period..... 39

5.4.7-1. Wildfire Fuel Hazard for Burlington County..... 8

5.4.7-2. Fuel Hazard Risk Areas within Burlington County ..... 10

5.4.7-3. Fire Risk Areas within Burlington County ..... 11

5.4.7-4. New Jersey Forest Fire Service Administrative Boundaries ..... 12

5.4.7-5. Pinelands Management and Planning Areas in Burlington County..... 14

5.4.7-6. Potential New Development and High to Extreme Risk Areas ..... 28

5.4.8-1. Annual Mean Snowfall within the Eastern U.S. .... 5

5.4.8-2. Average Yearly Snowfall for New Jersey..... 6

5.4.8-3. Average Number of Hours Per Year with Freezing Rain in the United States..... 7