Hurricane Irene - Remote Sensing-Derived Assessment

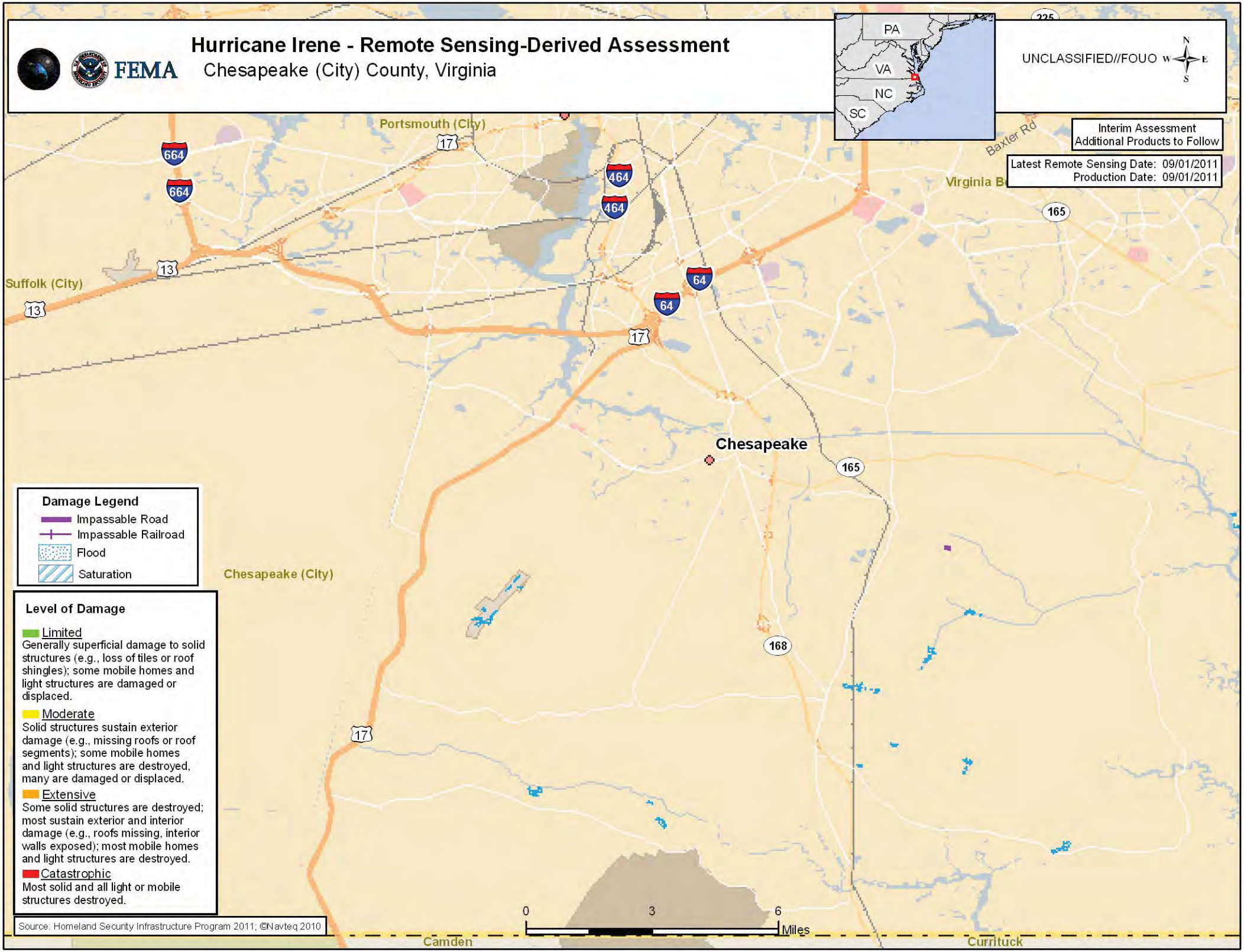
Chesapeake (City) County, Virginia

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

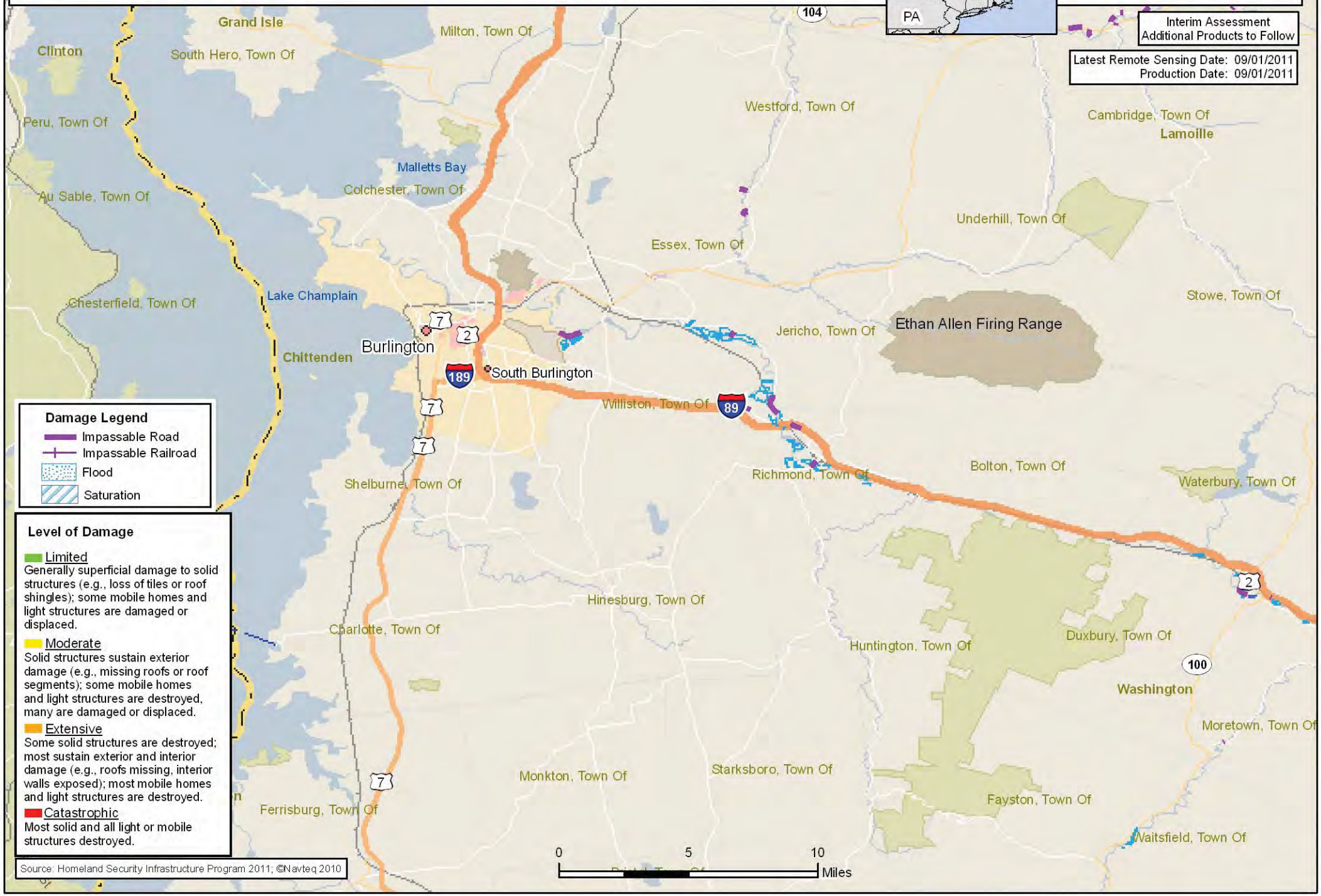
Chittenden County, Vermont

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

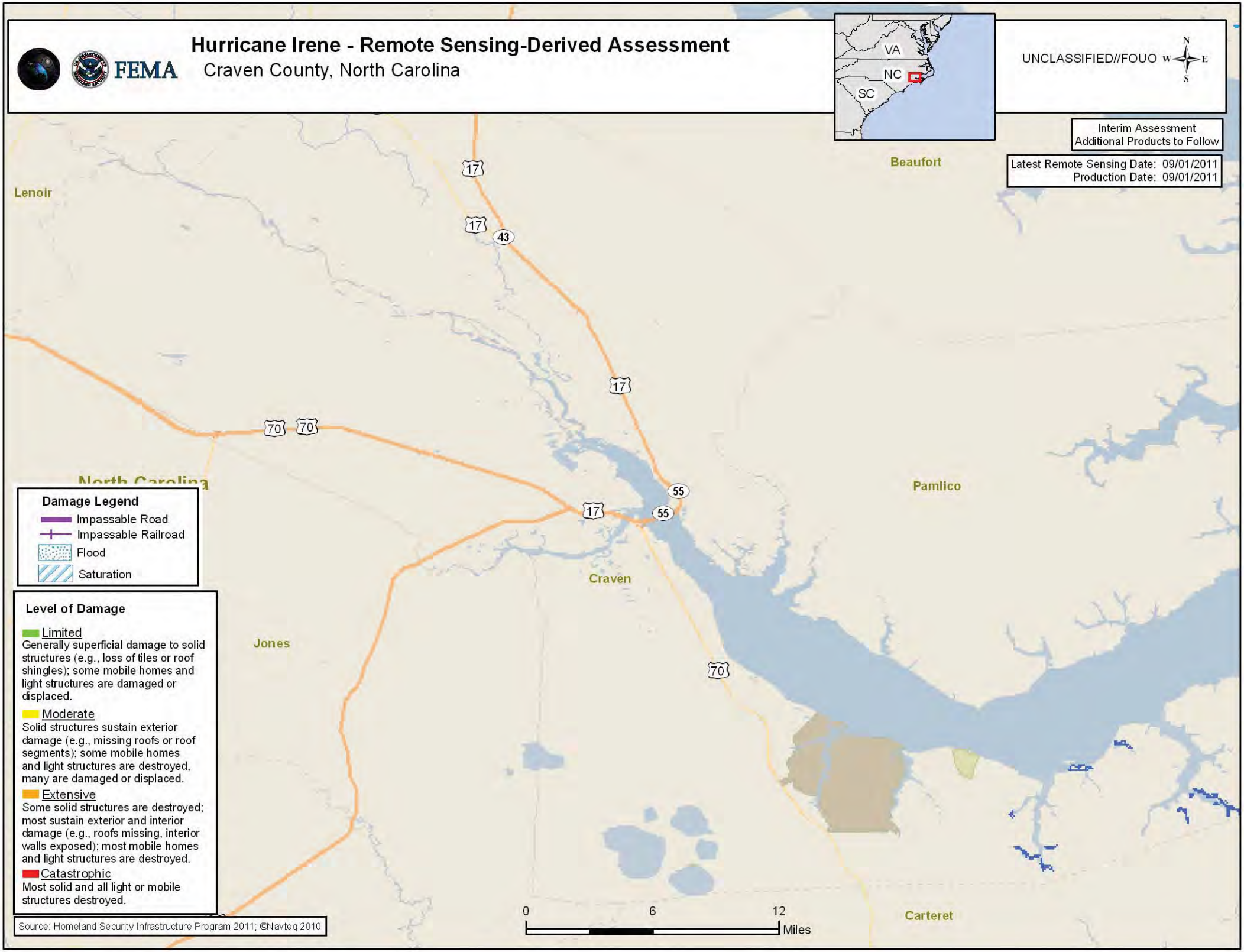
Craven County, North Carolina

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

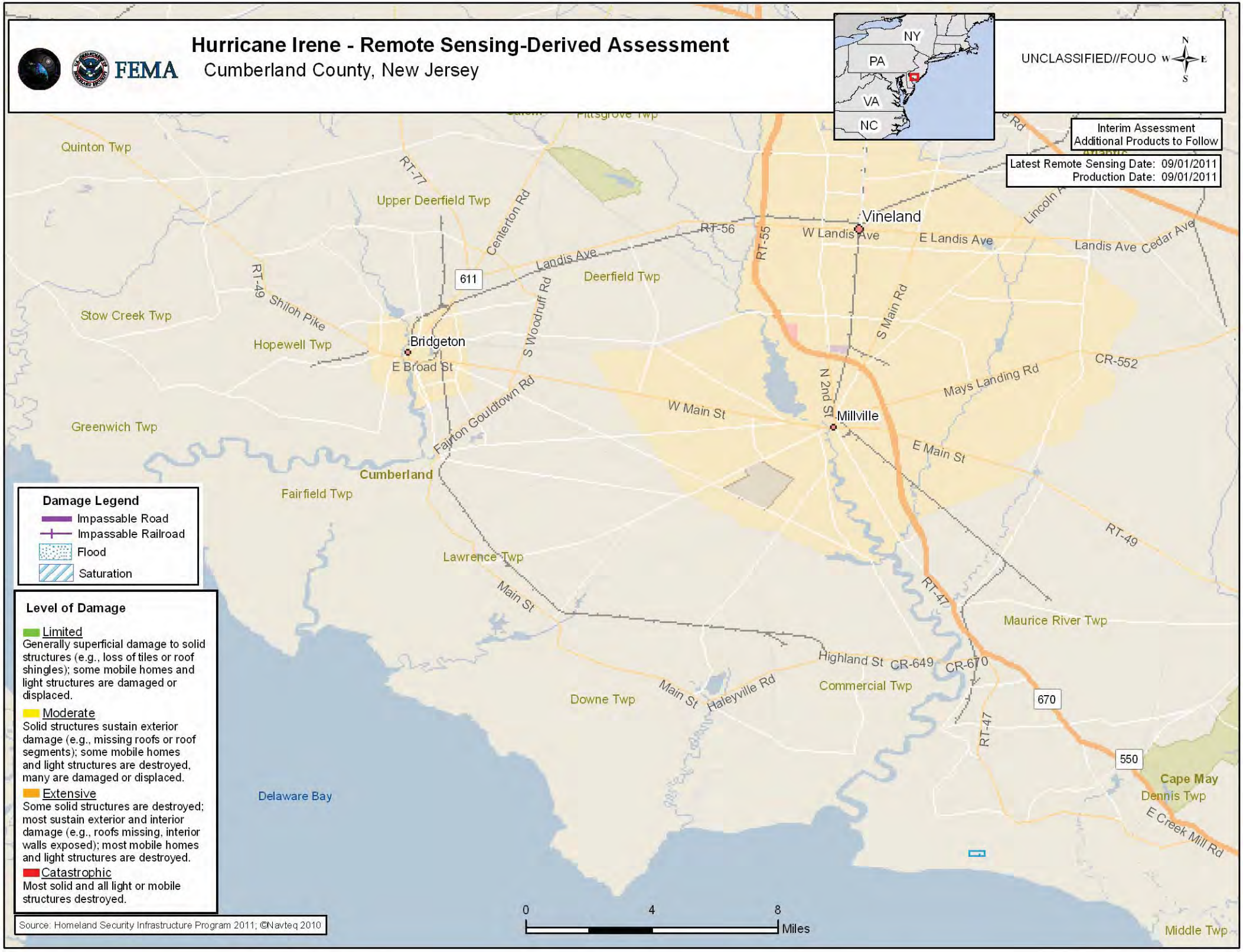
Cumberland County, New Jersey

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

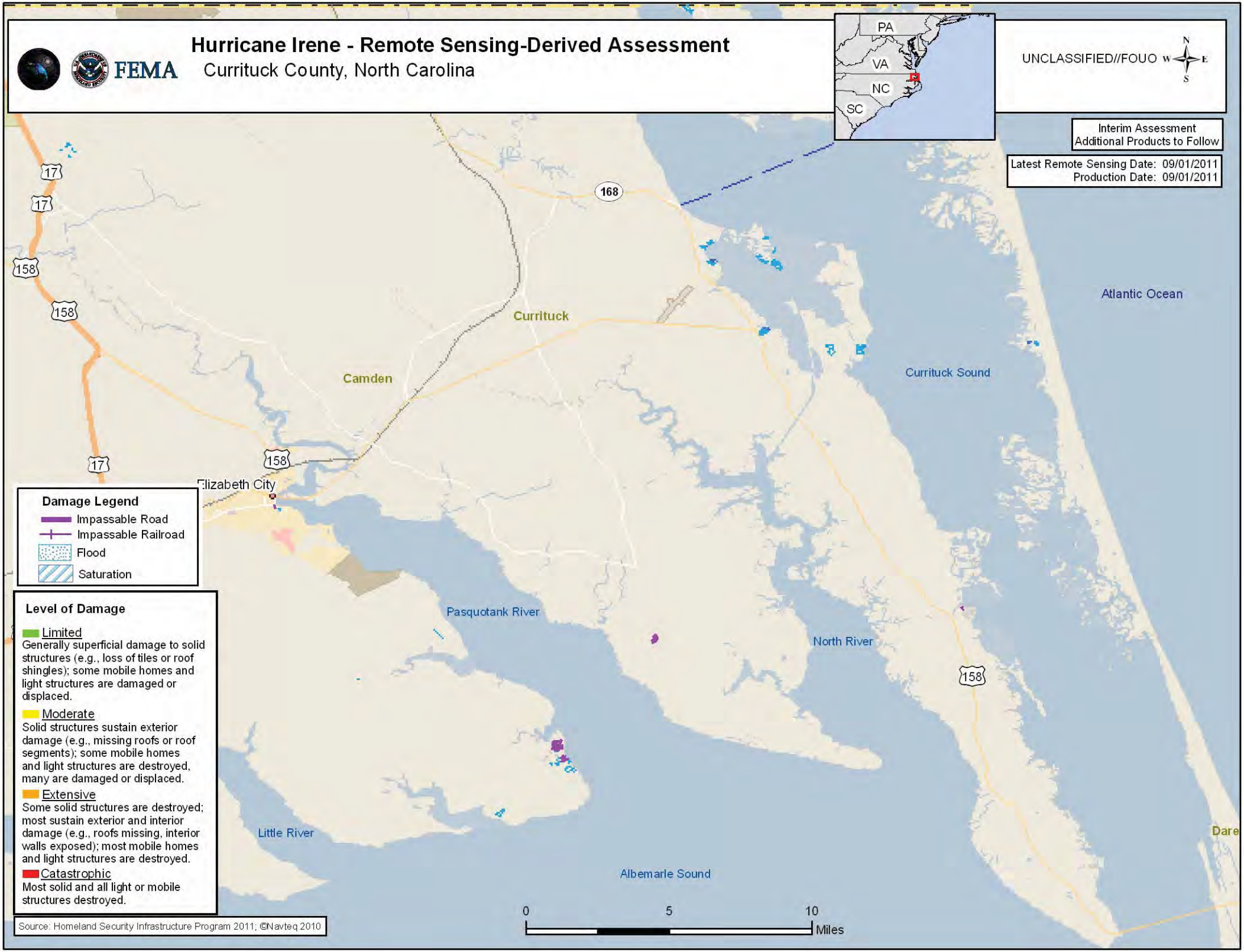
Currituck County, North Carolina

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

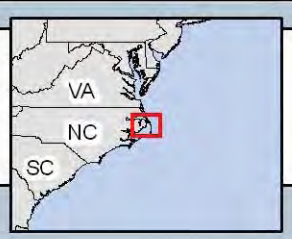
Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

Dare County, North Carolina

FEMA

UNCLASSIFIED//FOUO



Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011

Tyrrell

Dare

North Carolina

Atlantic Ocean

64

264

Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

0 10 20 Miles

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

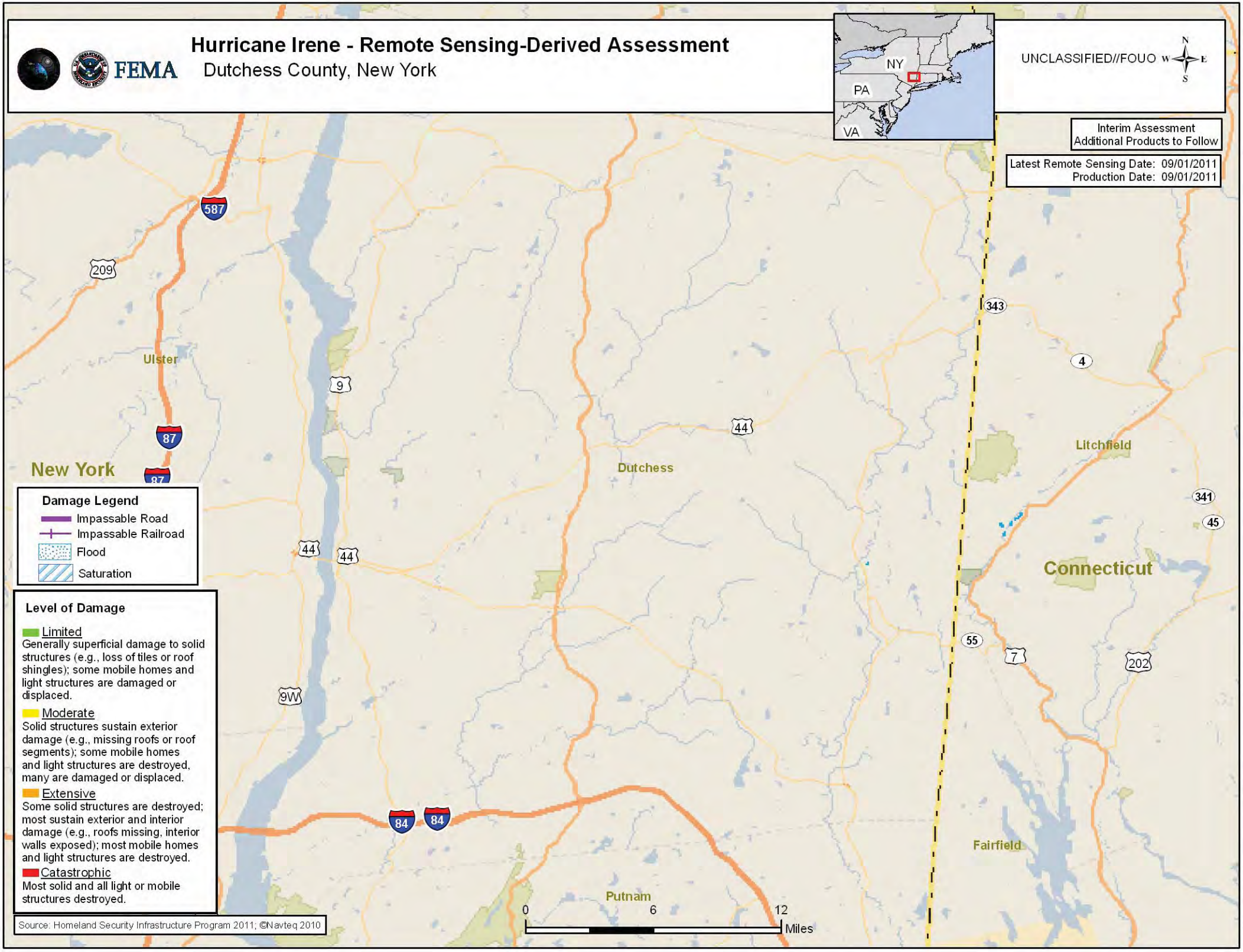
Dutchess County, New York

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

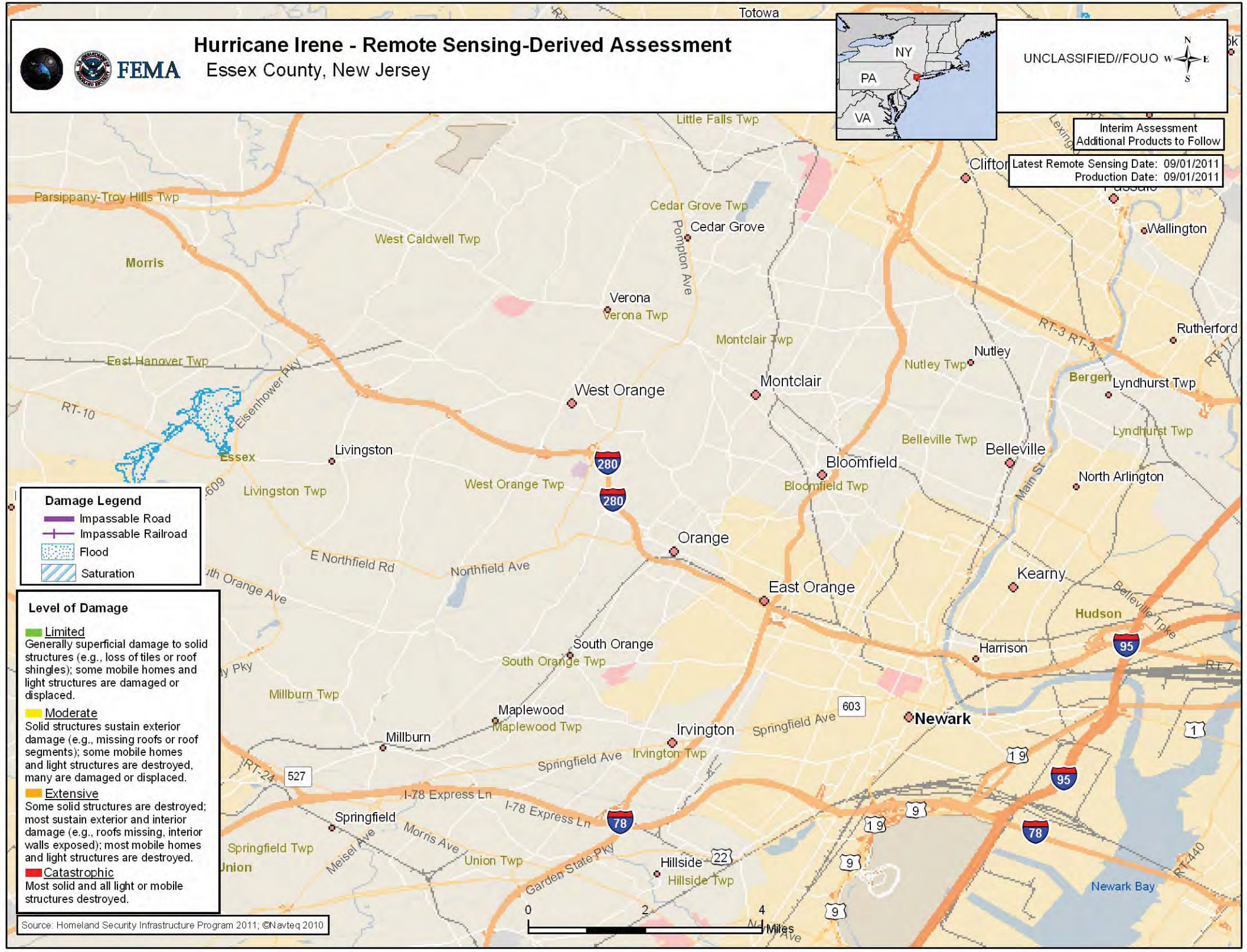
Essex County, New Jersey

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

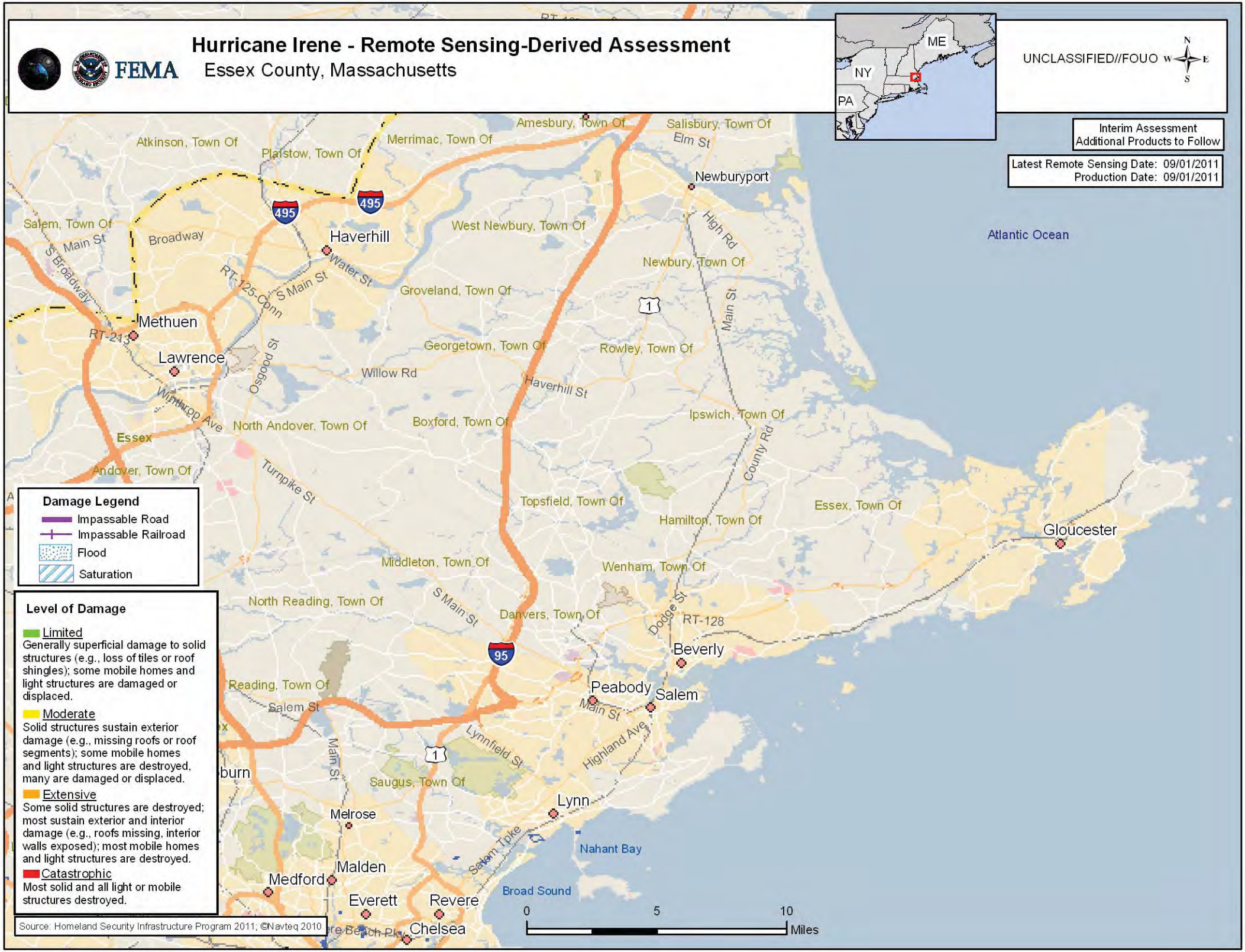
Essex County, Massachusetts

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

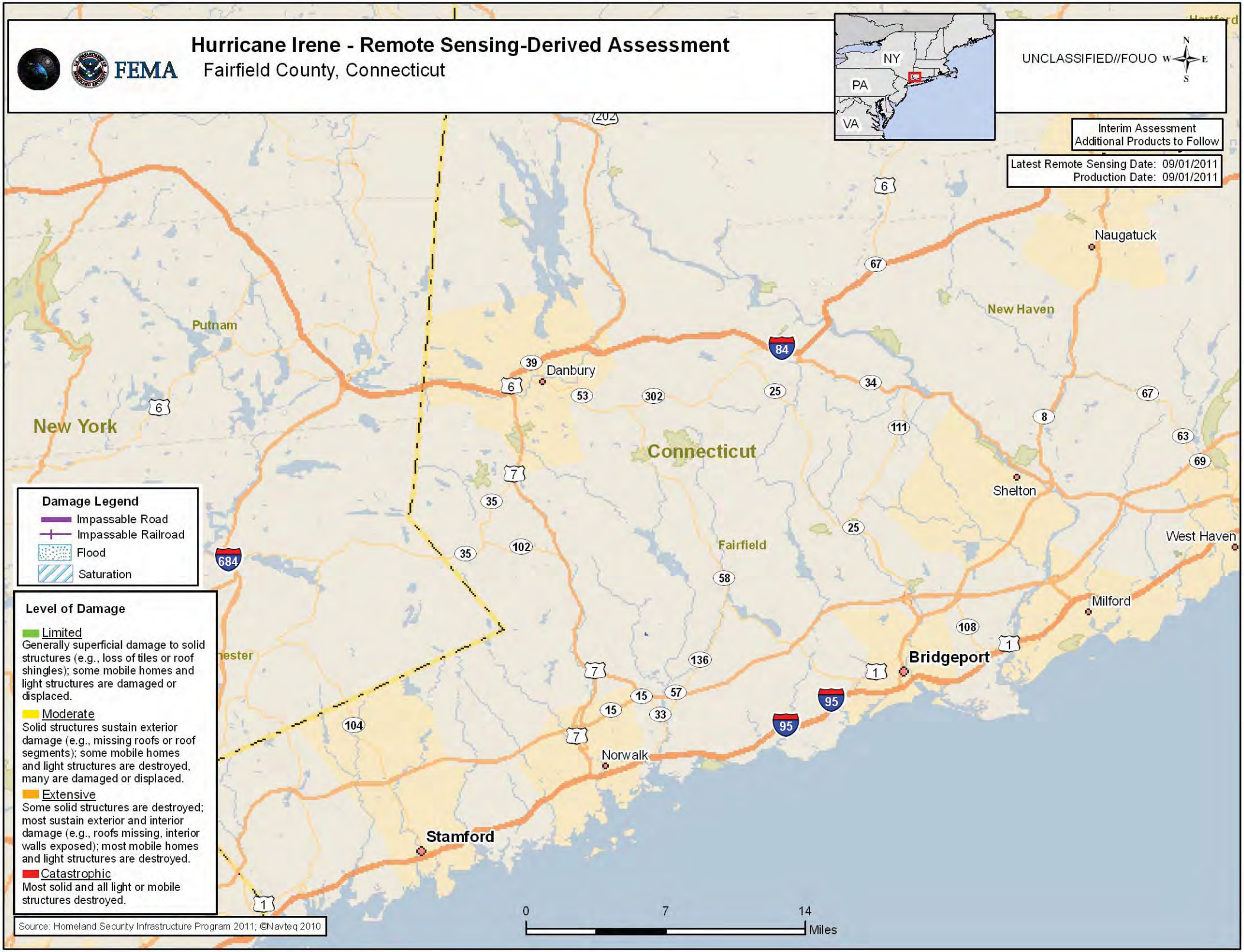
Fairfield County, Connecticut

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



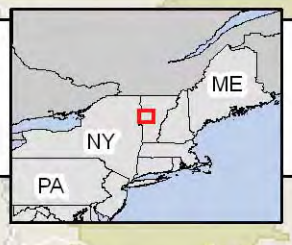
Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

Addison County, Vermont

FEMA

UNCLASSIFIED//FOUO



Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011

Adirondack Park
Essex
Westport, Town Of
Main St
RT-9n
Ferrisburg, Town Of
Monkton, Town Of
Starksboro, Town Of
Fayston, T
Waitsfield, Town Of
Washington
Panton, Town Of
VT-22a
New Haven, Town Of
Warren, Town Of
Bristol, Town Of
Lincoln, Town Of
Roxbury, Town Of
Addison, Town Of
Addison
Weybridge, Town Of
Middlebury, Town Of
Granville, Town Of
Ripton, Town Of
Town Of
Orange
Cornwall, Town Of
Salisbury, Town Of
Hancock, Town Of
ham, Town Of
Rochester, Town Of
Leicester, Town Of
Goshen, Town Of
Windsor
Whiting, Town Of
Orwell, Town Of
Brandon, Town Of
Sudbury, Town Of
Chittenden, Town Of
Pittsfield, Town Of
Rutland
Stockbridge, Town Of

17
125
7
30
100

Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

0 5 10 Miles

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

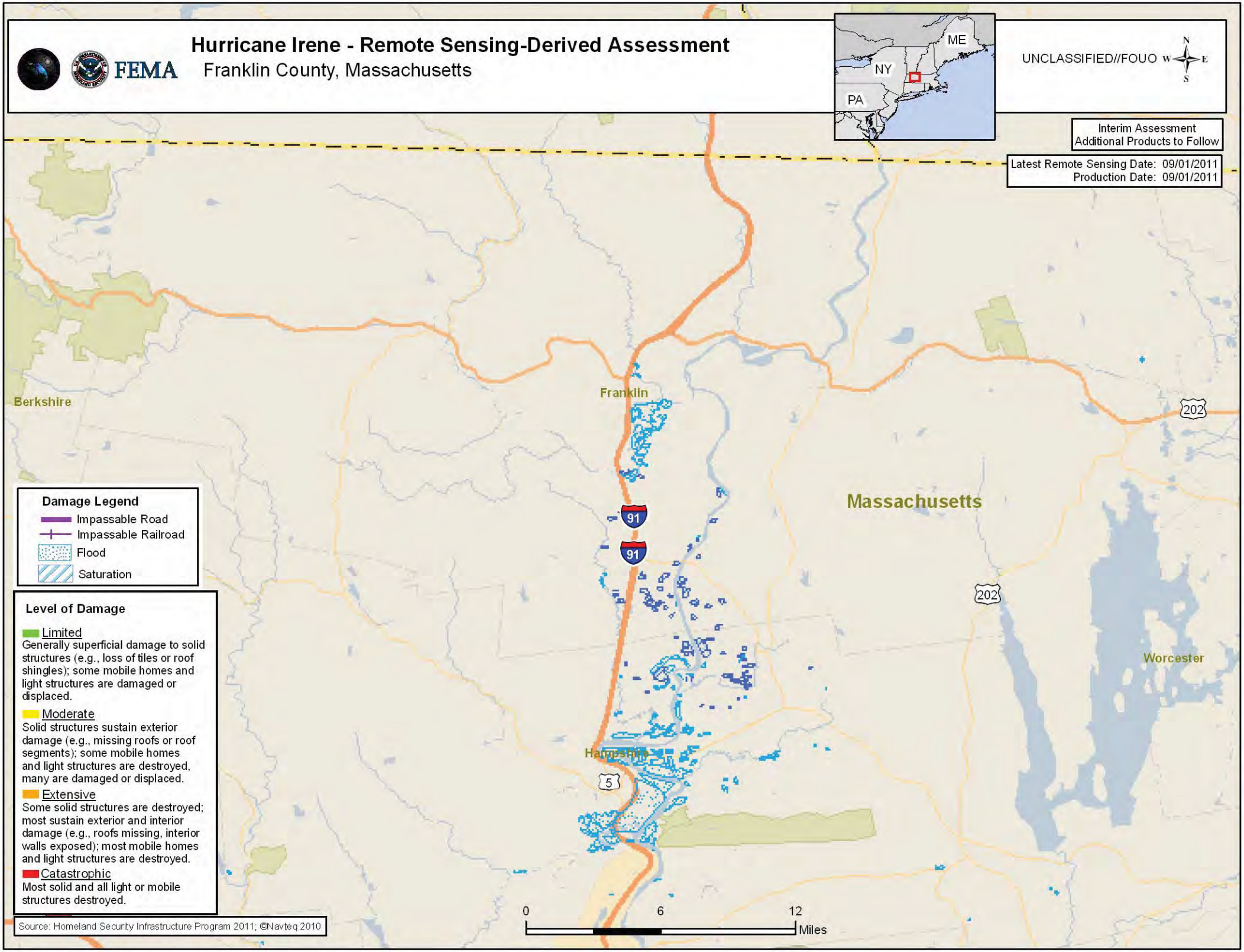
Franklin County, Massachusetts

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

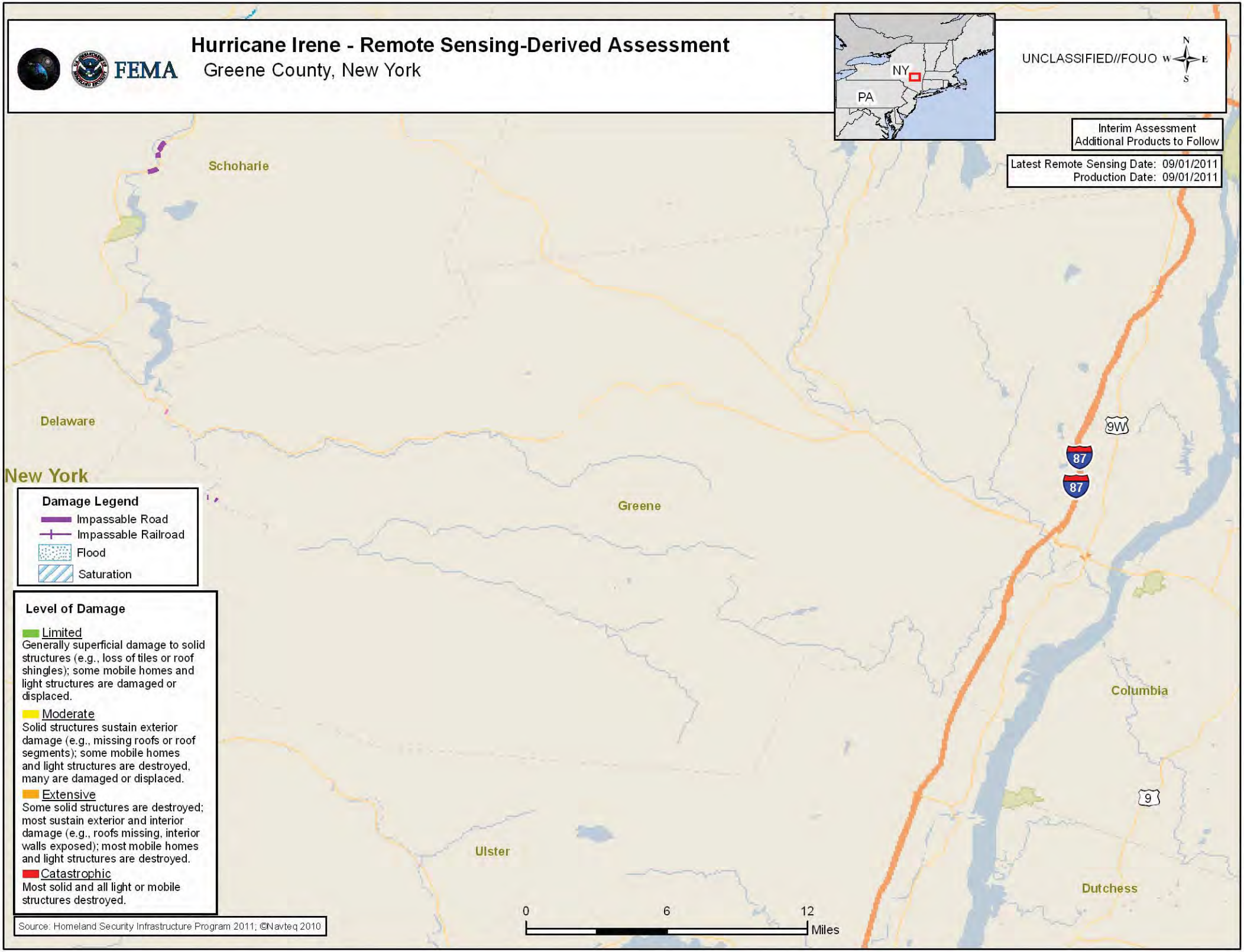
Hurricane Irene - Remote Sensing-Derived Assessment

Greene County, New York

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

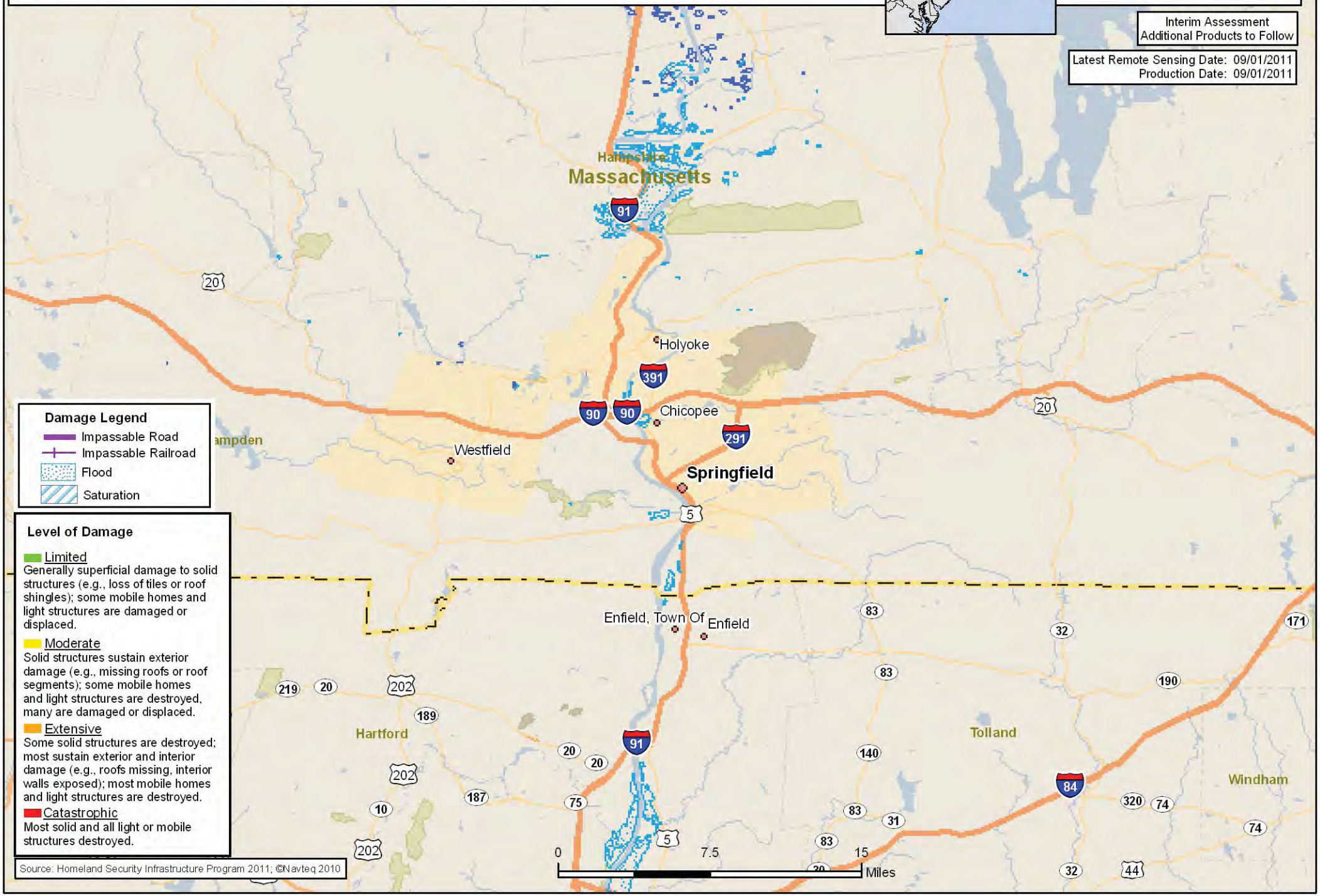
Hampden County, Massachusetts

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

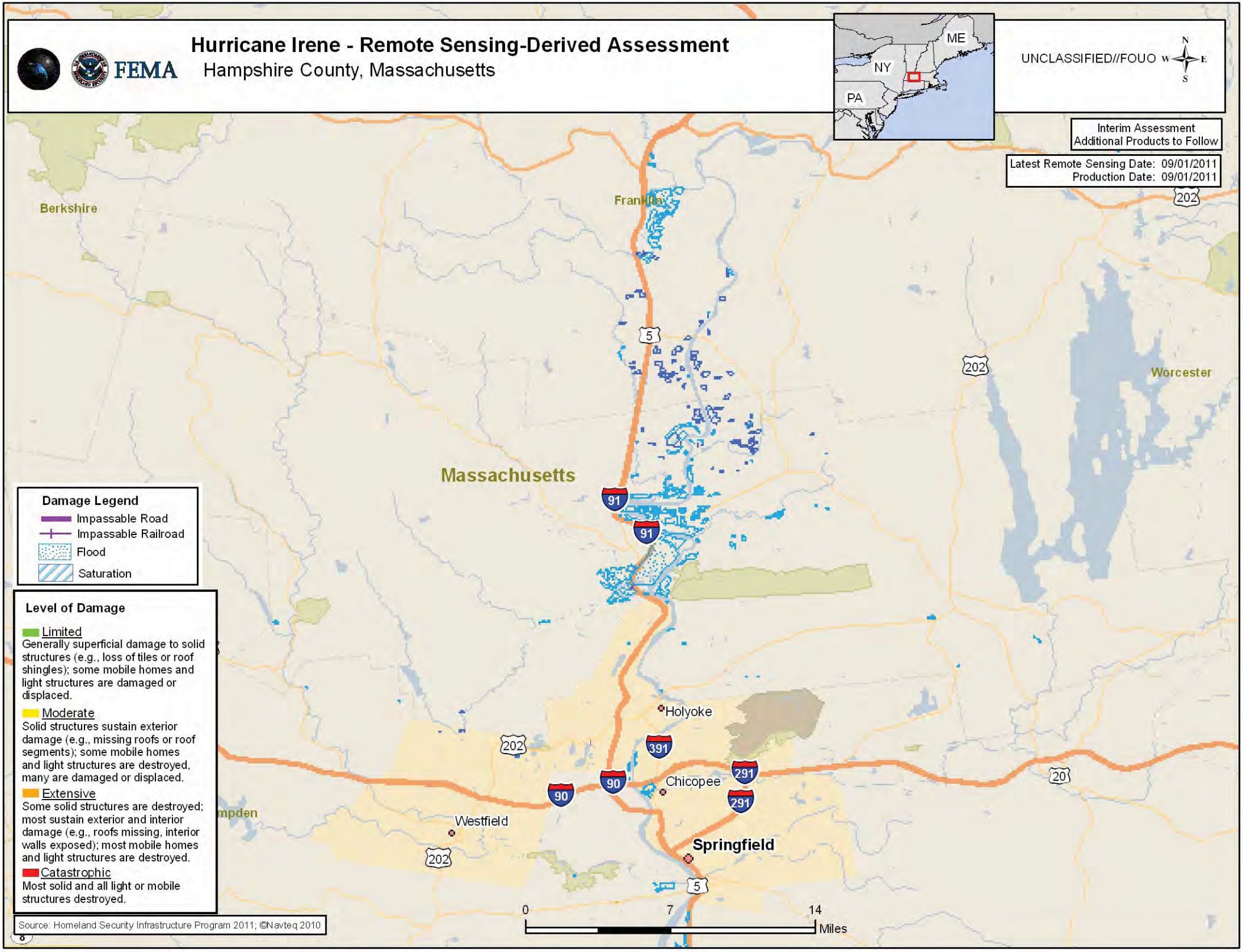
Hampshire County, Massachusetts

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

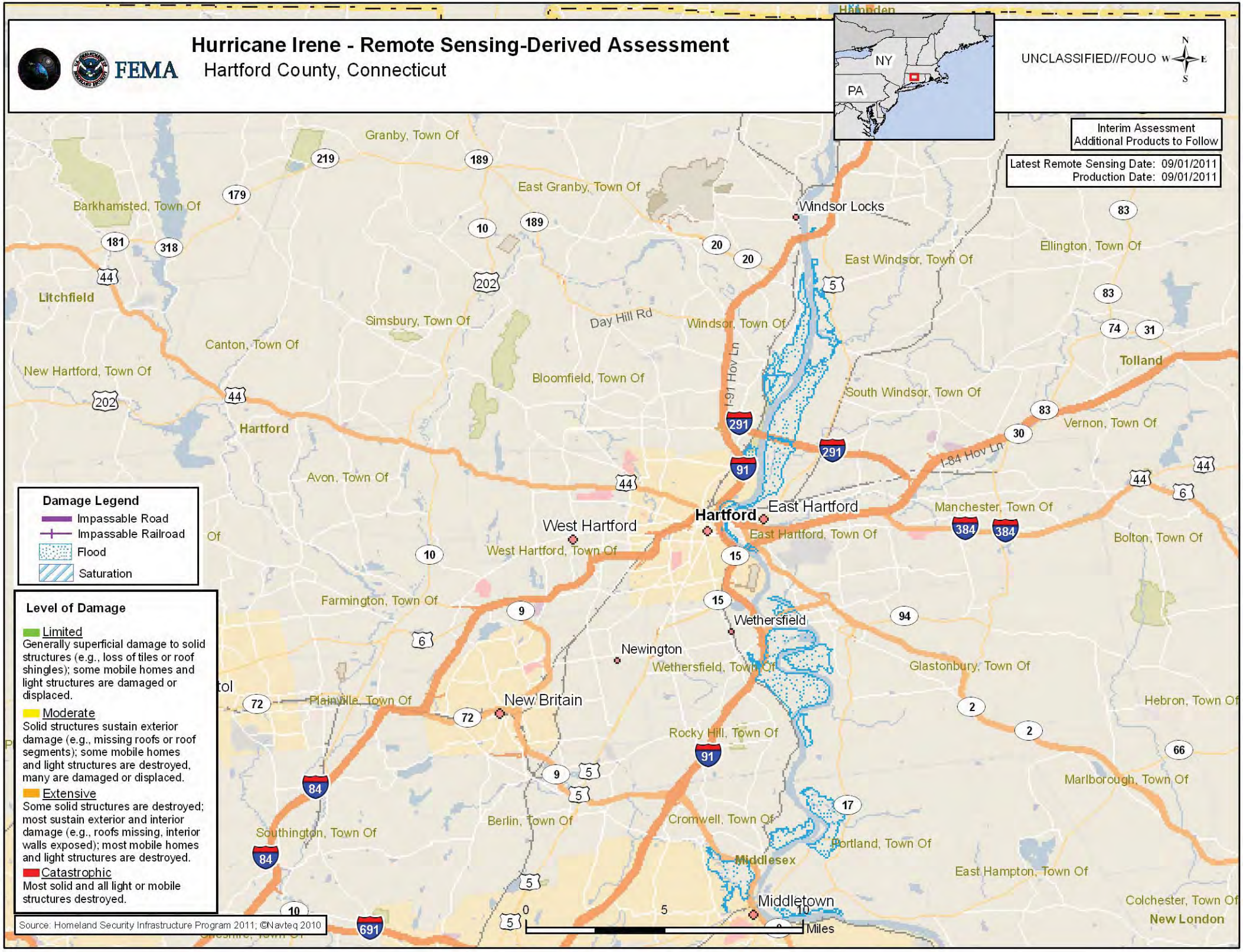
Hartford County, Connecticut

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011

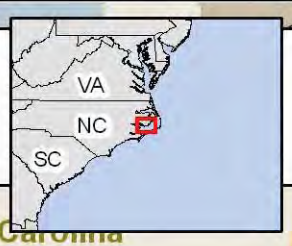


Hurricane Irene - Remote Sensing-Derived Assessment

Hyde County, North Carolina

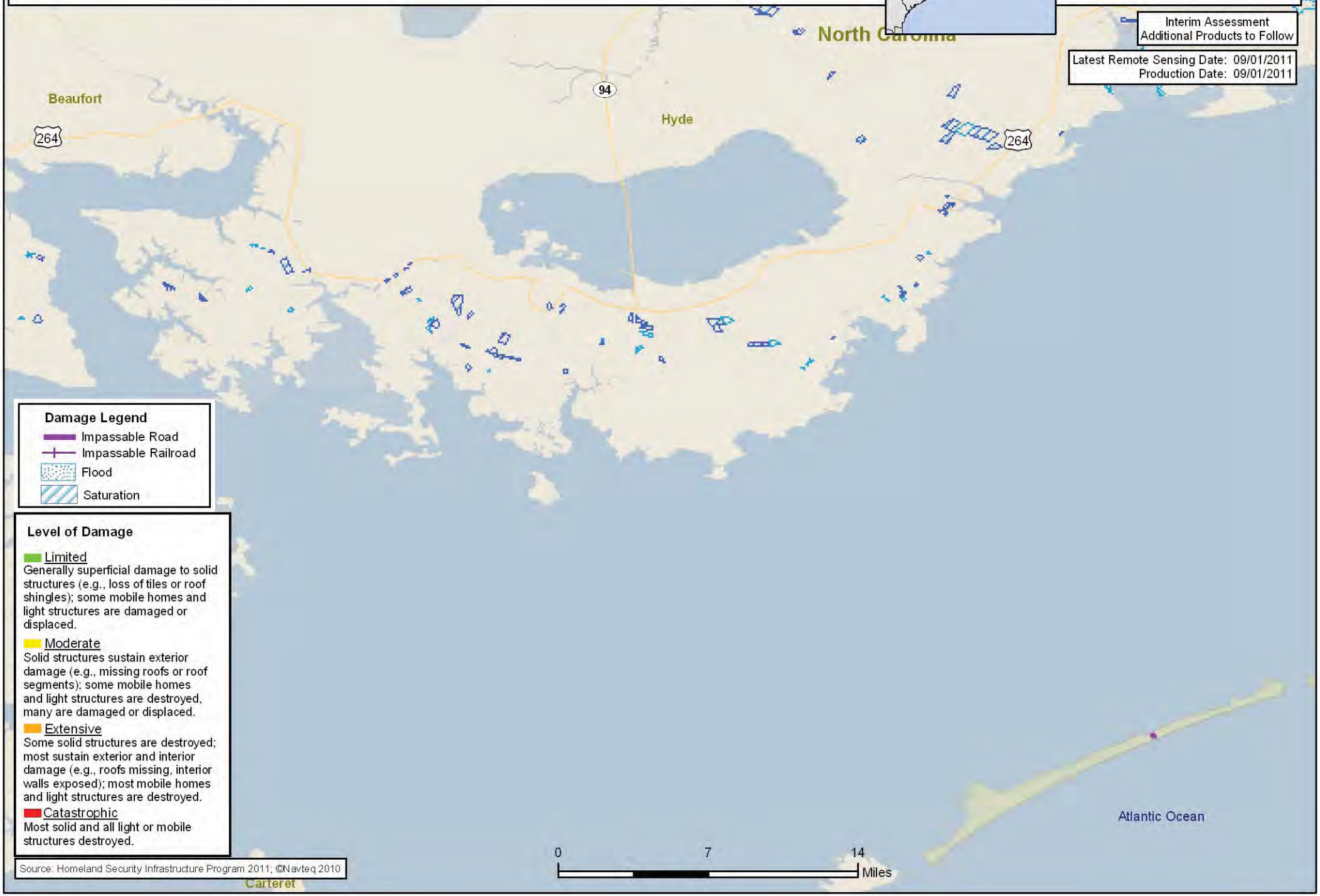
FEMA

UNCLASSIFIED//FOUO



Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

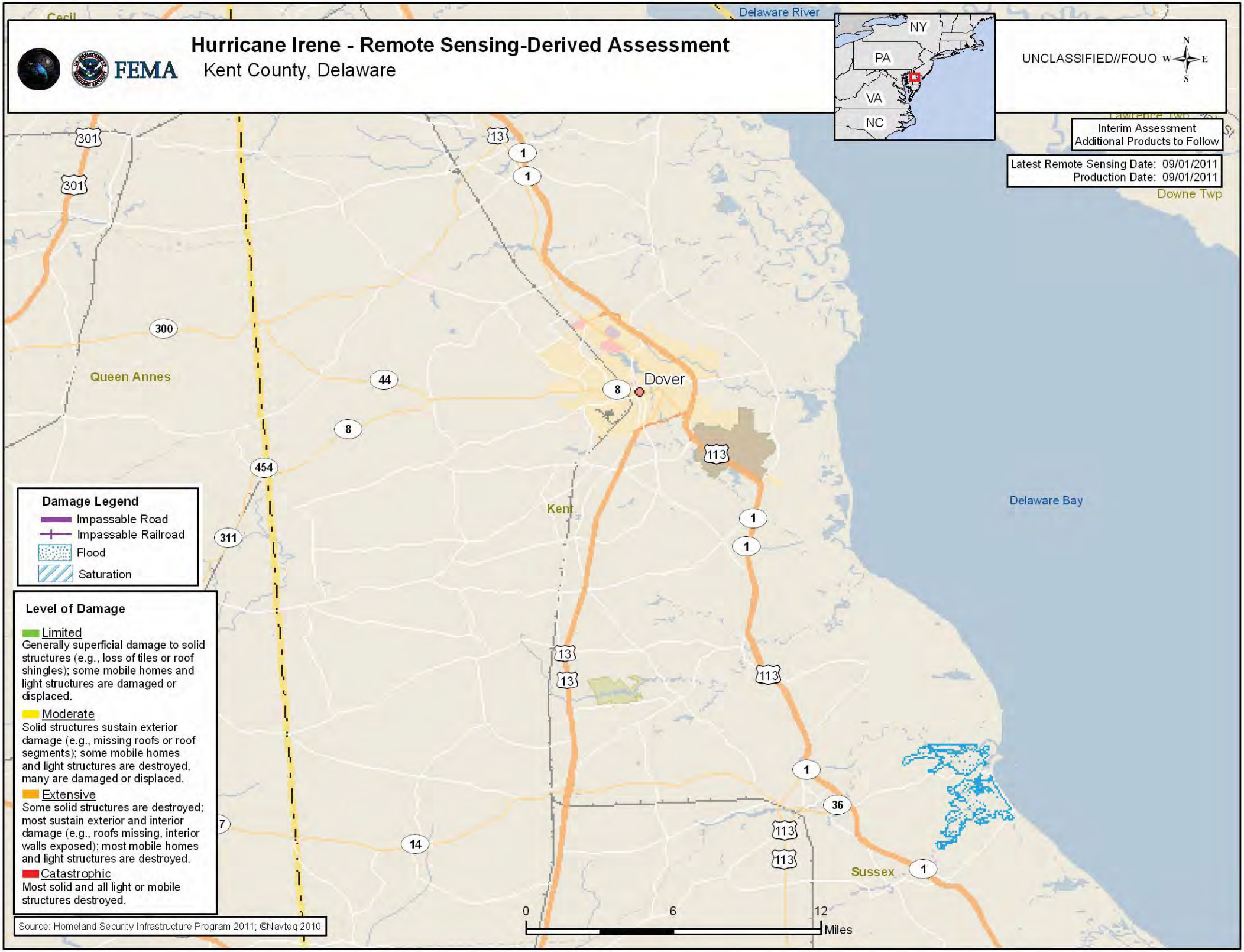
Kent County, Delaware

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

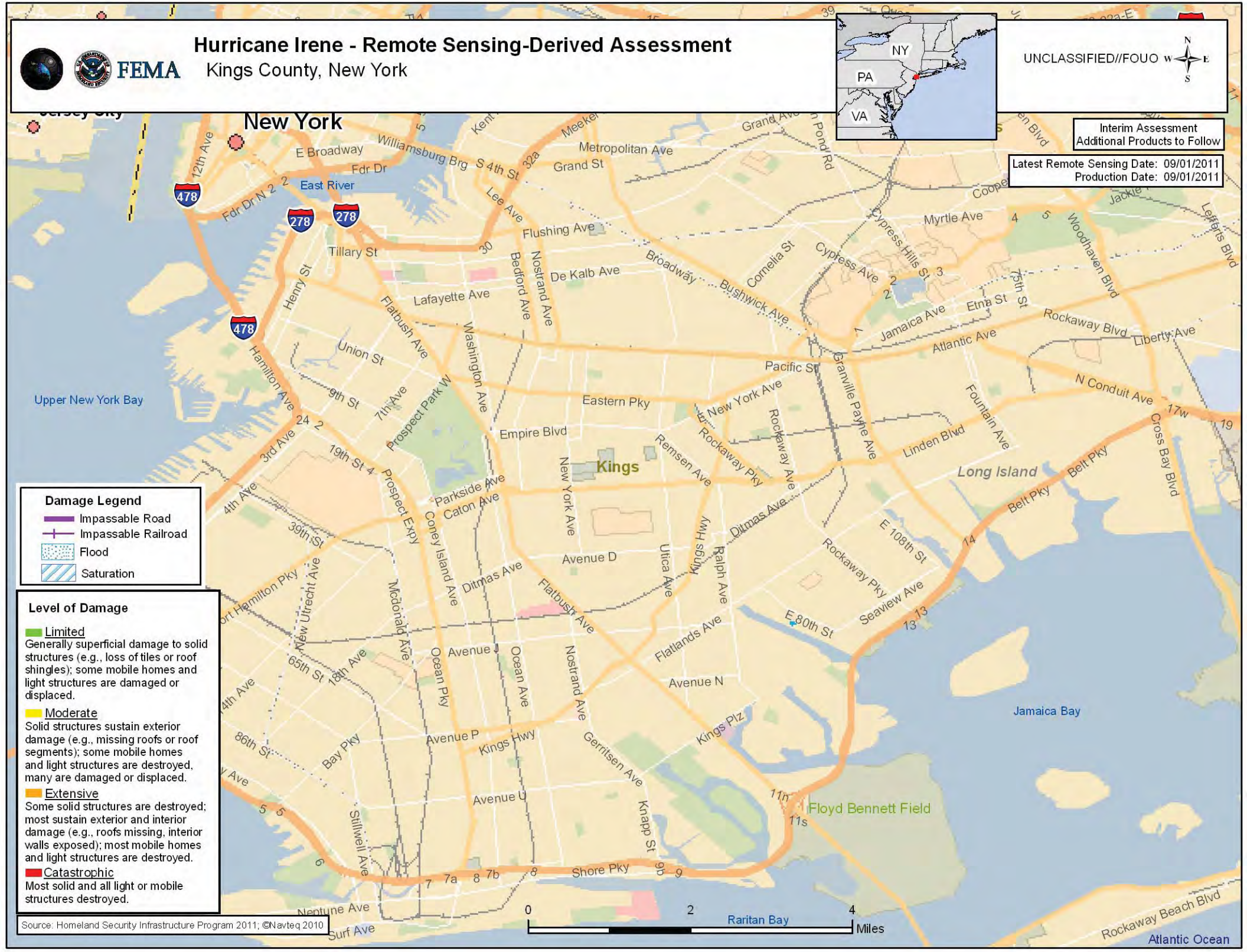
Kings County, New York

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

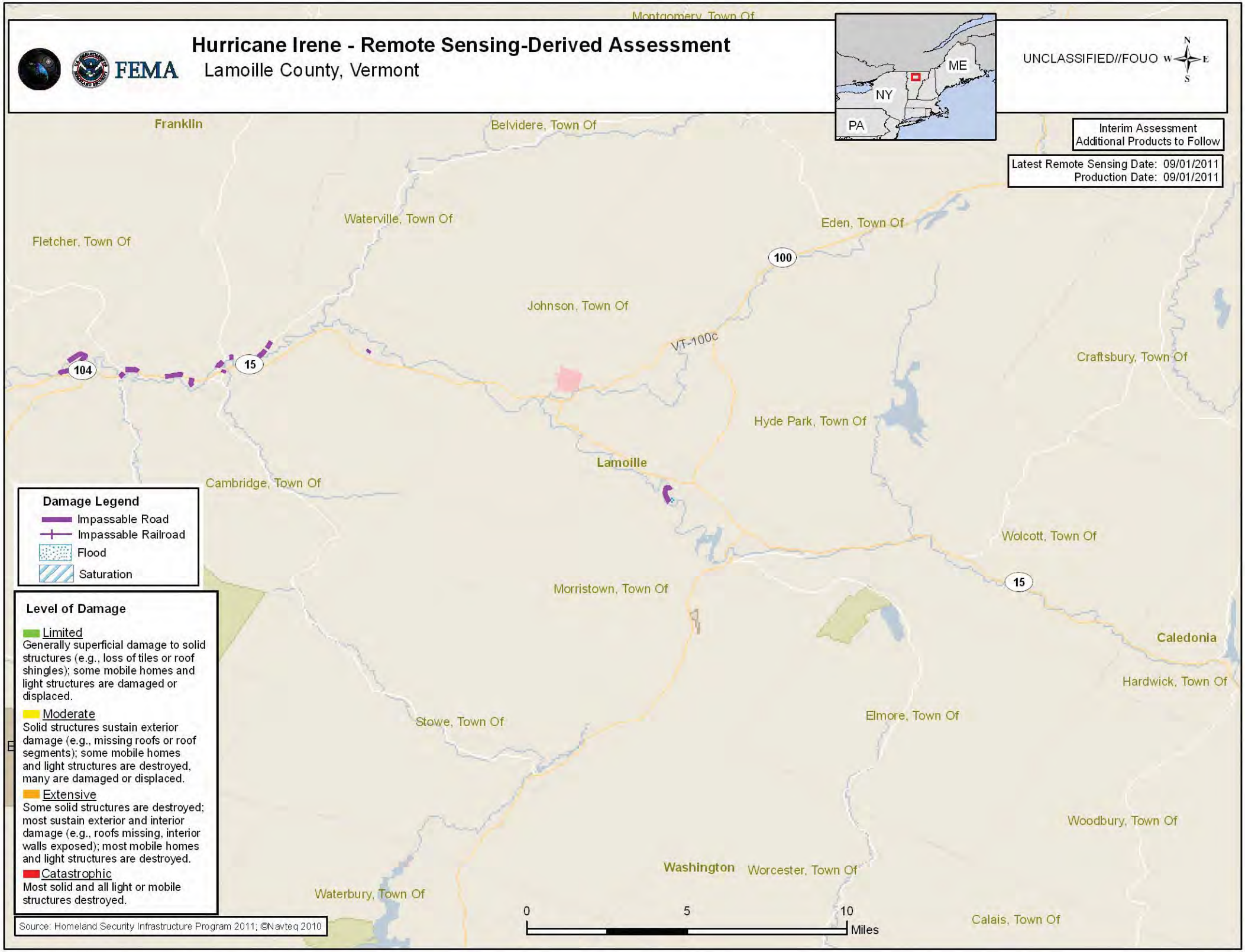
Lamoille County, Vermont

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

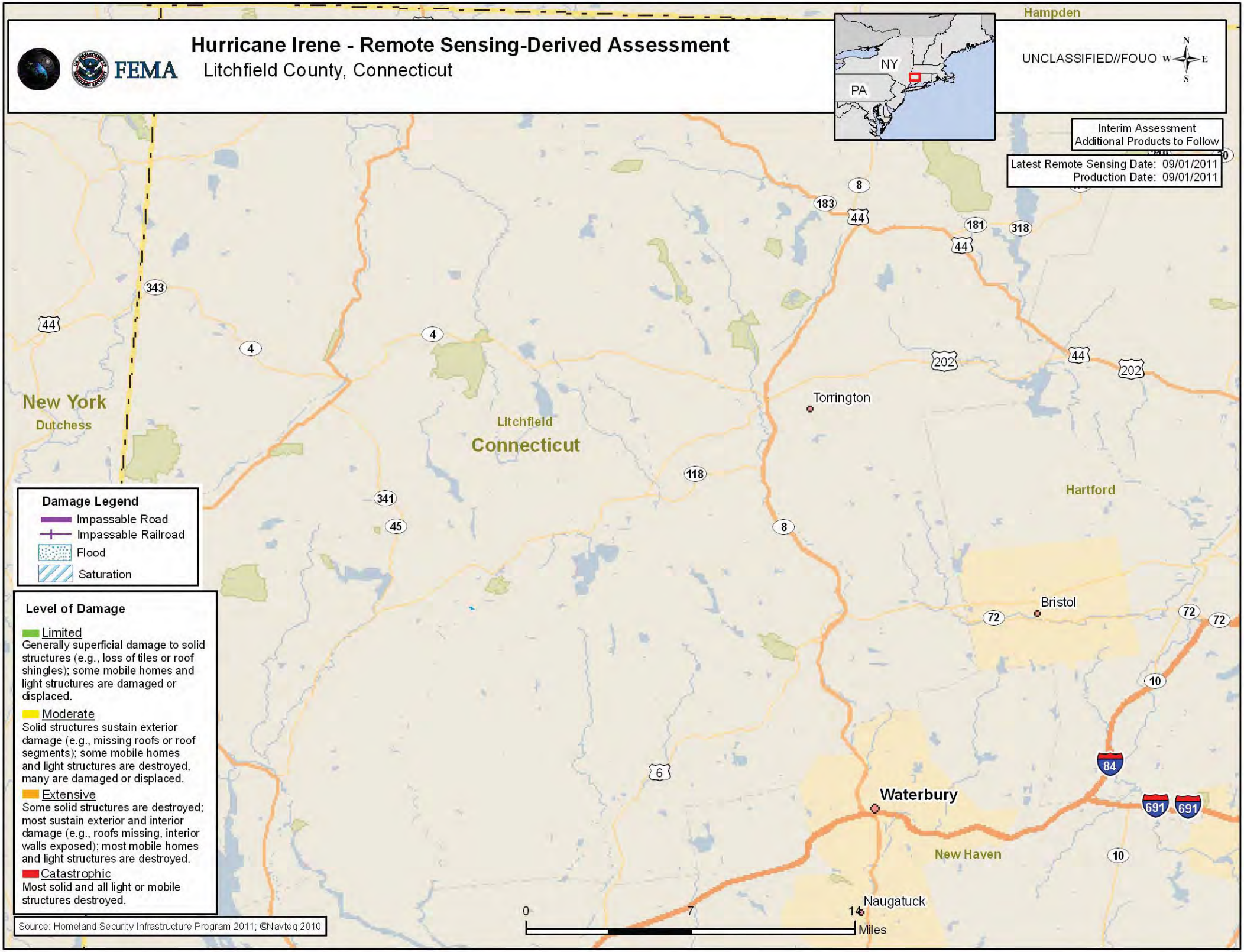
Litchfield County, Connecticut

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

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Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

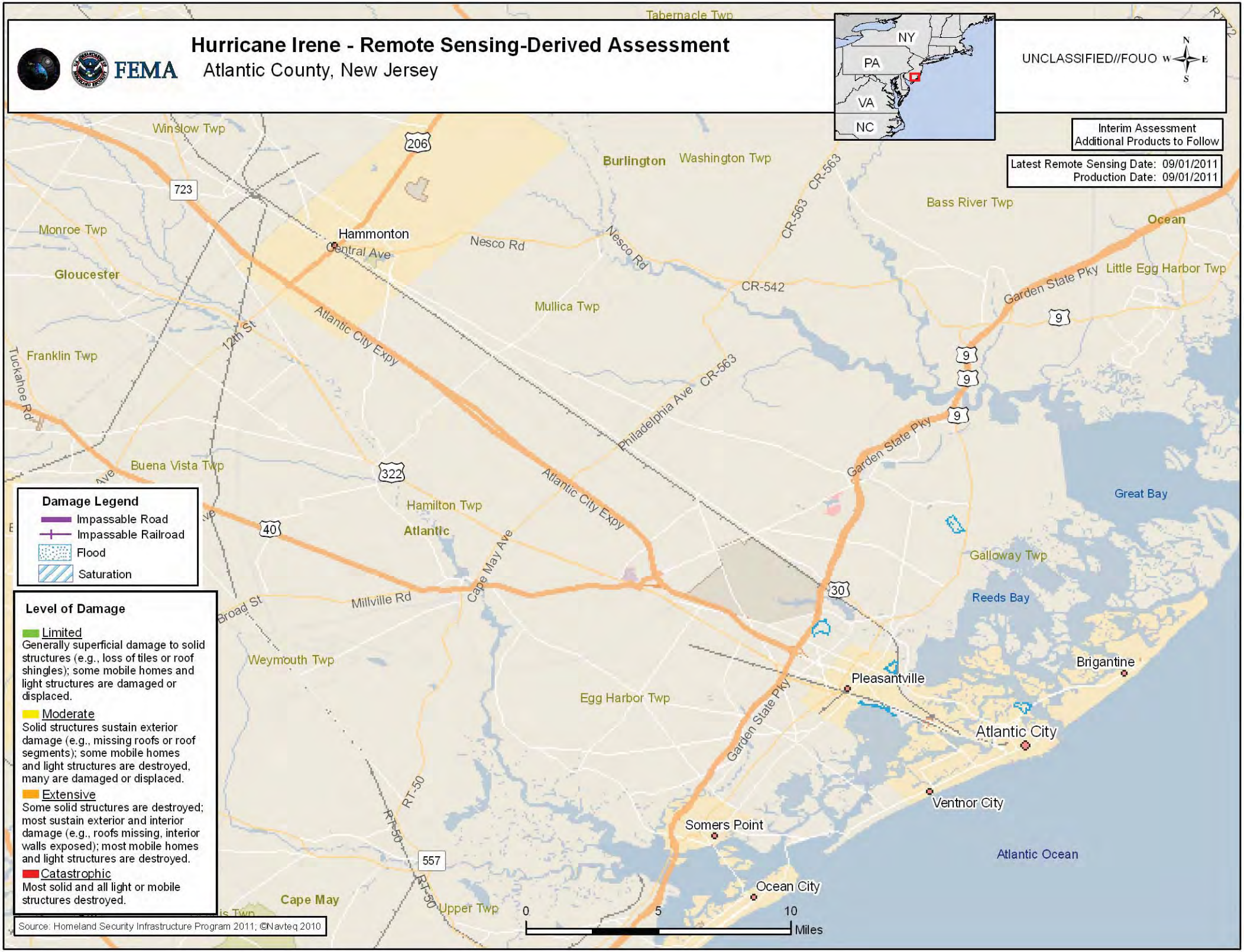
Atlantic County, New Jersey

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

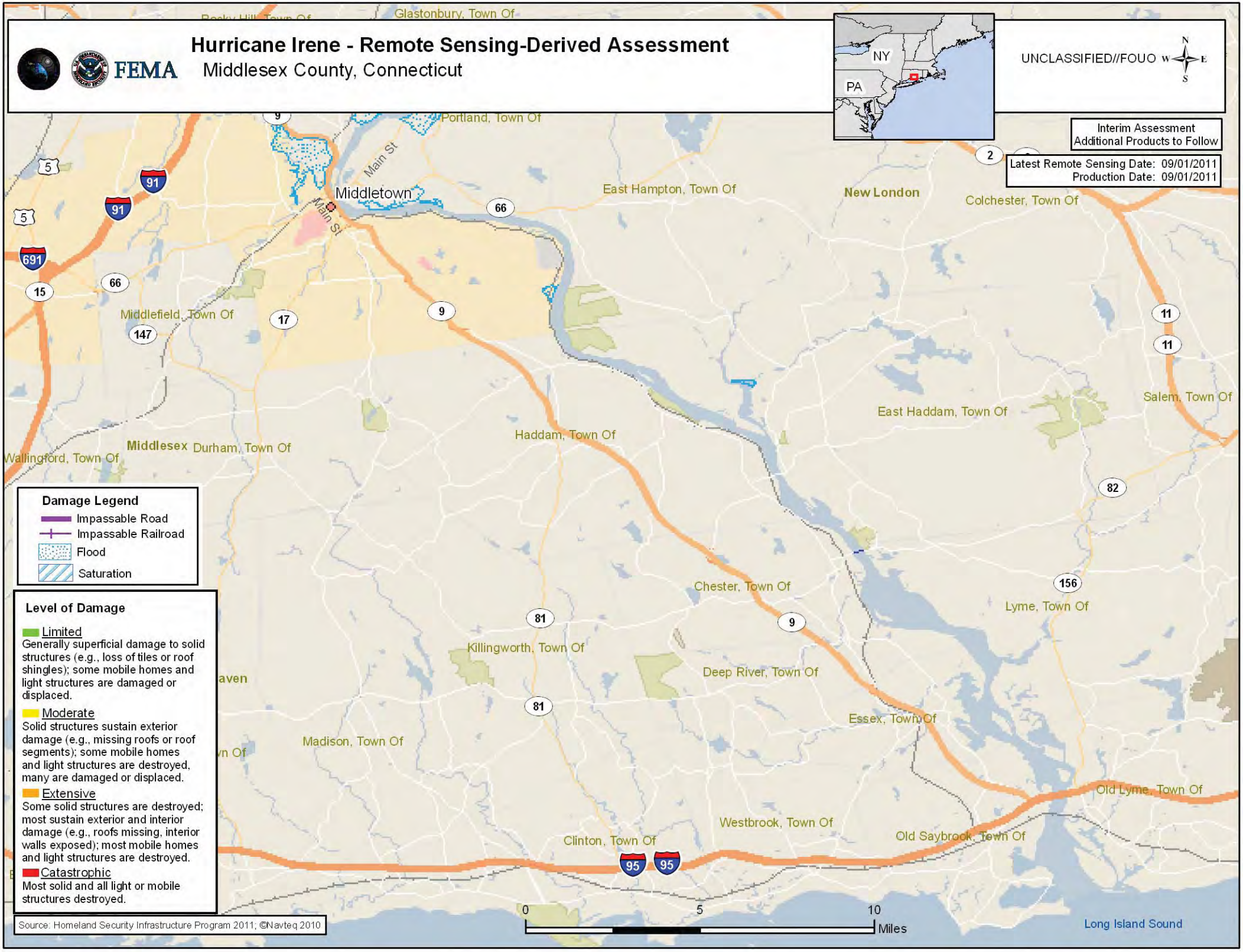
Middlesex County, Connecticut

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

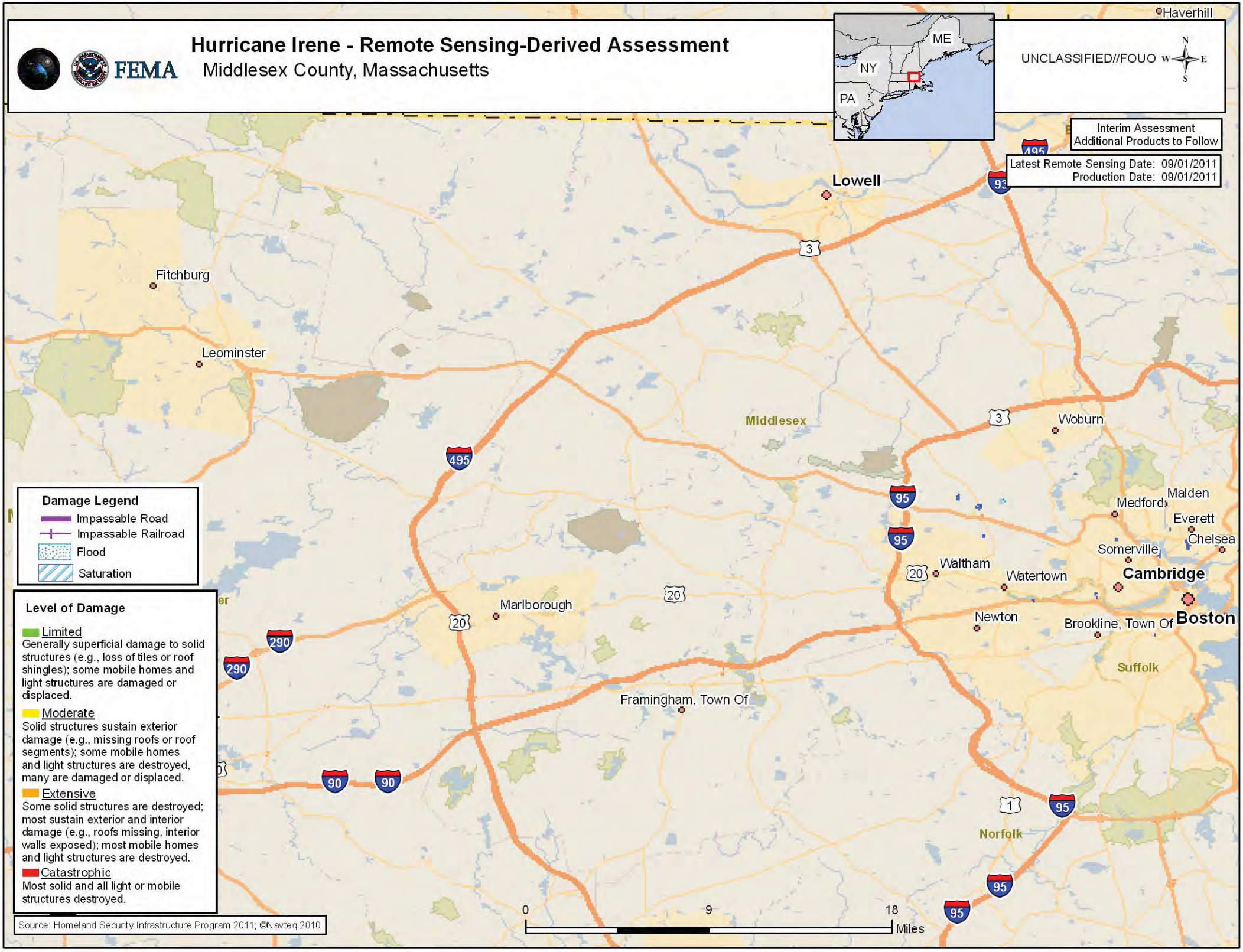
Middlesex County, Massachusetts

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

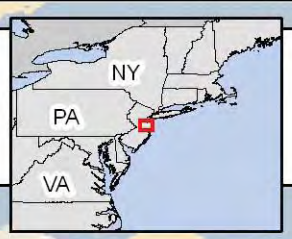
Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

Monmouth County, New Jersey

FEMA

UNCLASSIFIED//FOUO



Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011

Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

0 7 14 Miles

Piscataway Twp
South River
North Brunswick Twp
East Brunswick
East Brunswick Twp
Middlesex
South Brunswick Twp
Old Bridge Twp
Old Bridge
Morganville
Holmdel Twp
Hazlet Twp
Keansburg
Middletown Twp
Red Bank
Marlboro Twp
Plainsboro Twp
Cranbury Twp
Monroe Twp
Tinton Falls
Eatontown
Long Branch
Colts Neck Twp
Manalapan Twp
Monmouth
Freehold
Ocean Twp
Freehold Twp
Millstone Twp
Asbury Park
Neptune Twp
Howell Twp
Wall Twp
Atlantic Ocean
Jackson Twp
Ocean
Lakewood Twp
Lakewood
Point Pleasant
Brick Twp
Manchester Twp
Toms River Twp
New Hanover Twp
Garden State Pky
Bordentown Ave
Forsgate Dr
Monmouth Rd
Broad St
Ocean Ave
Pinehurst
RT-18
RT-35
RT-36
RT-33
RT-33-Br
RT-34
RT-138
RT-70
95
1
9
35
130
195

Hurricane Irene - Remote Sensing-Derived Assessment

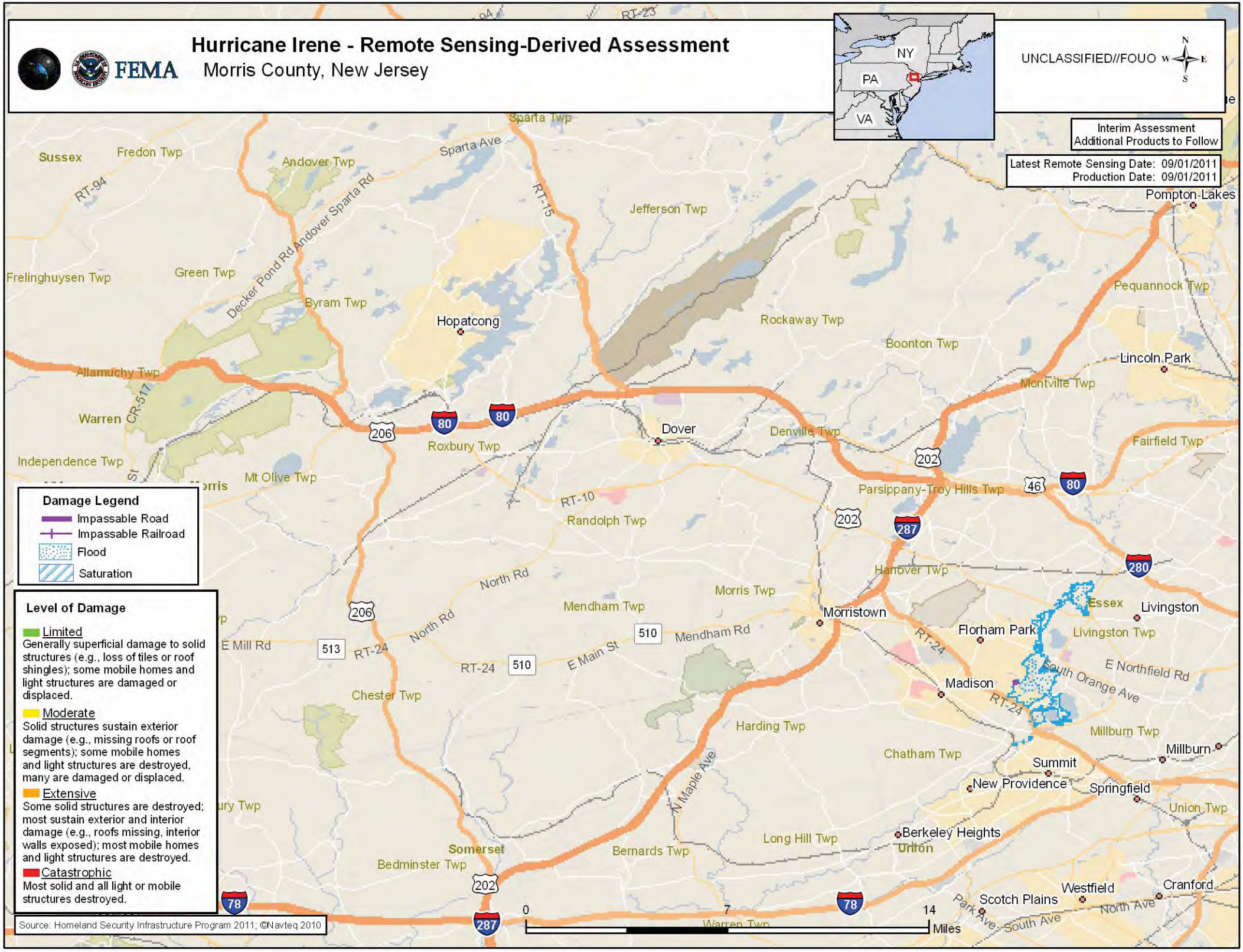
Morris County, New Jersey

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Hurricane Irene - Remote Sensing-Derived Assessment

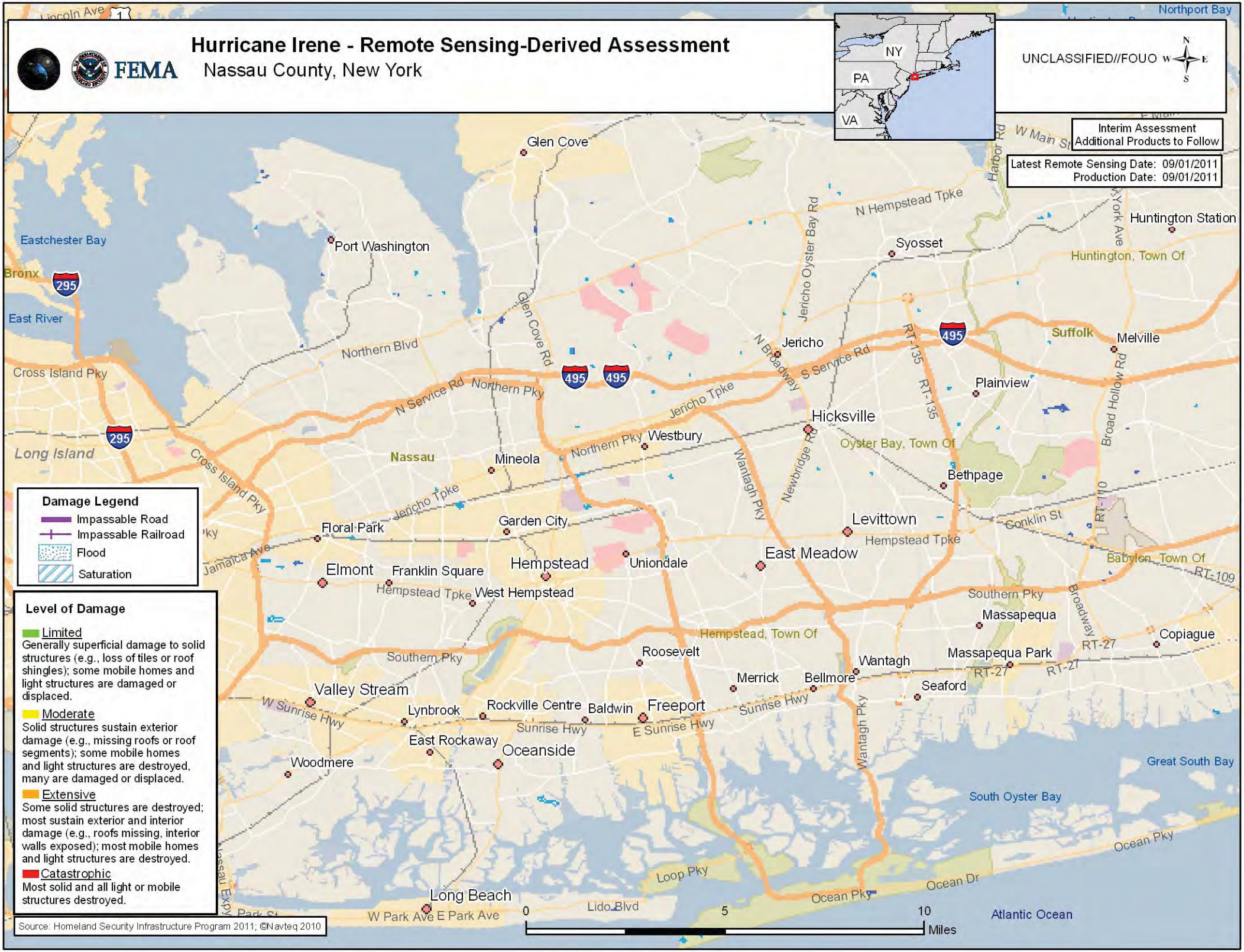
Nassau County, New York

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Hurricane Irene - Remote Sensing-Derived Assessment

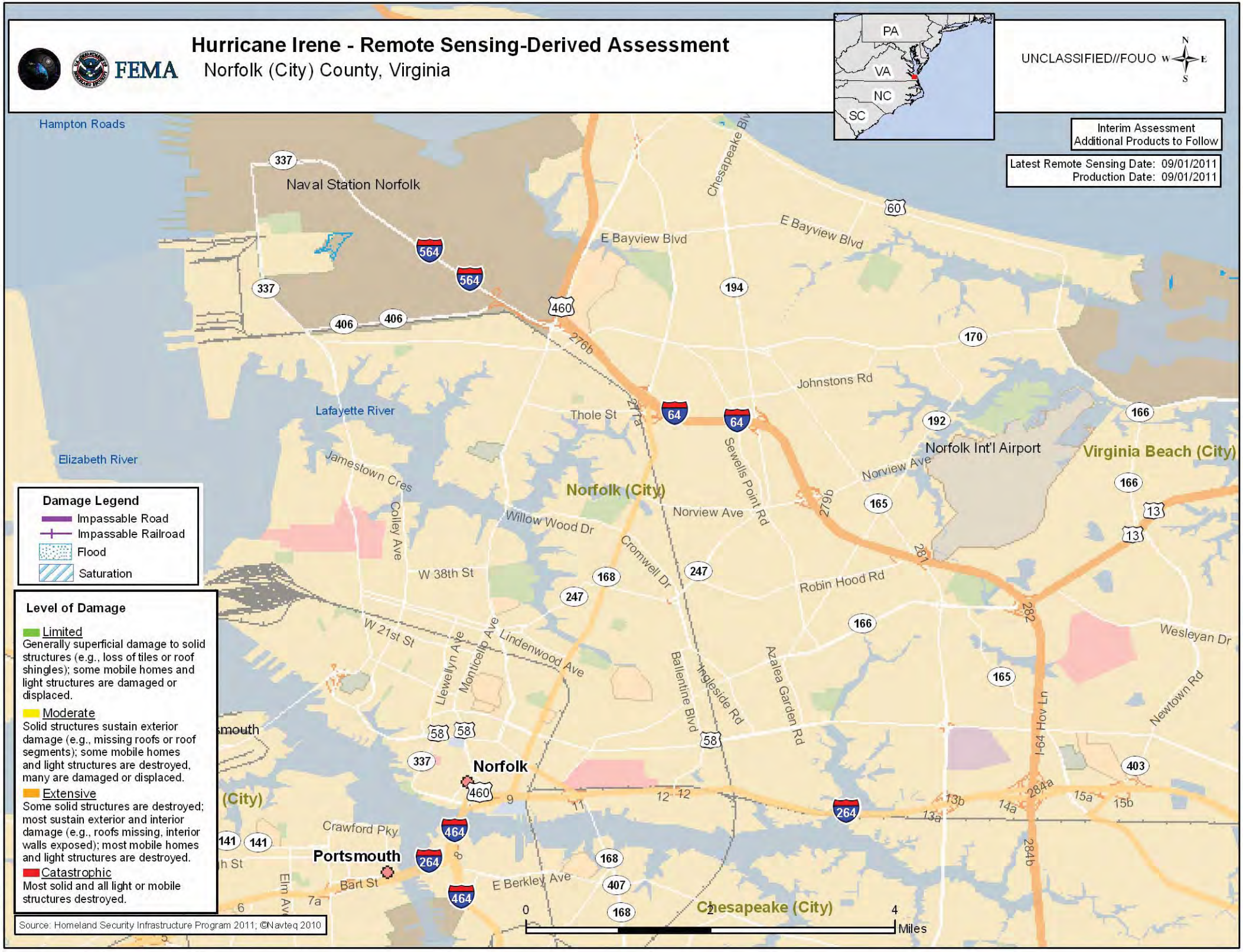
Norfolk (City) County, Virginia

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

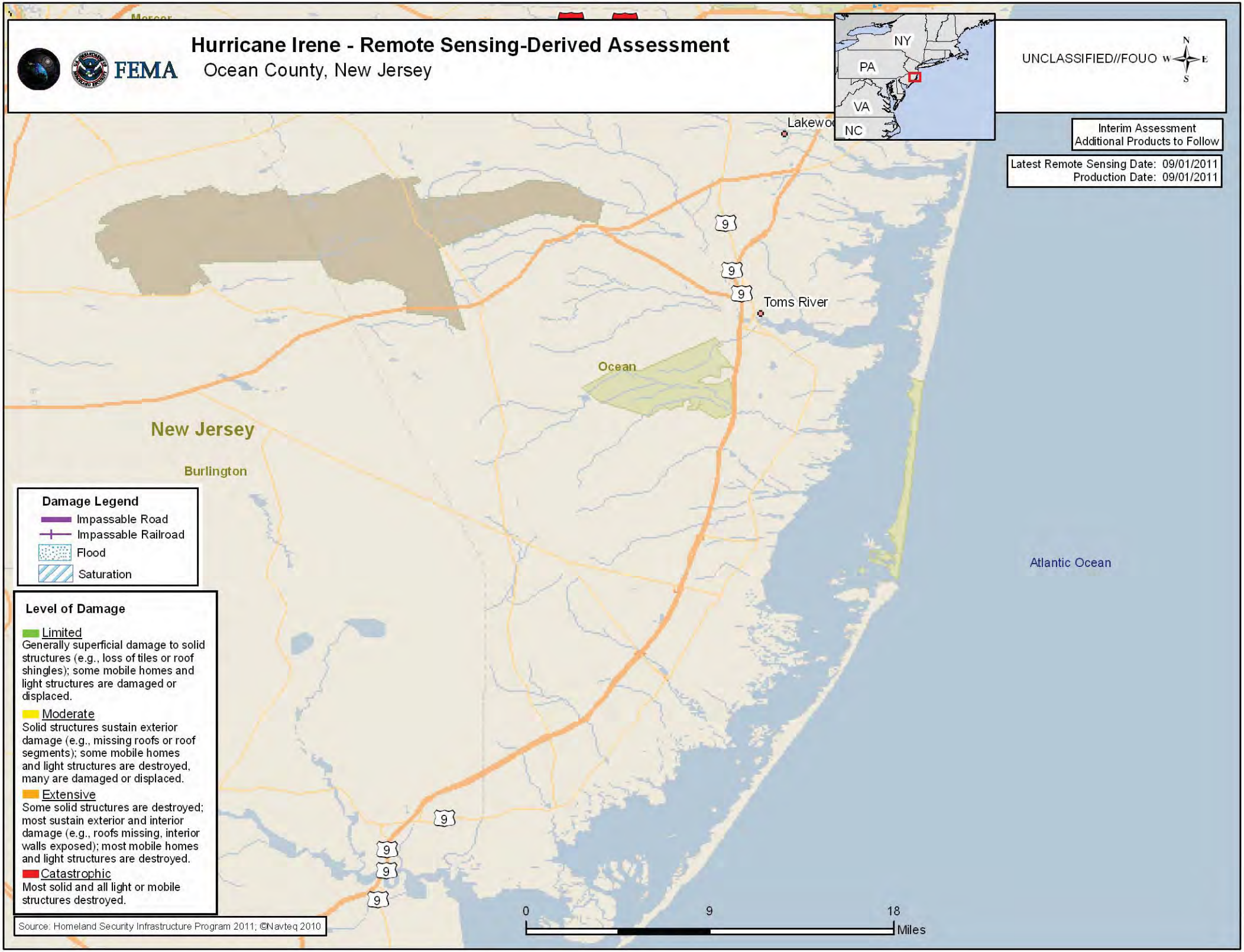
Ocean County, New Jersey

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

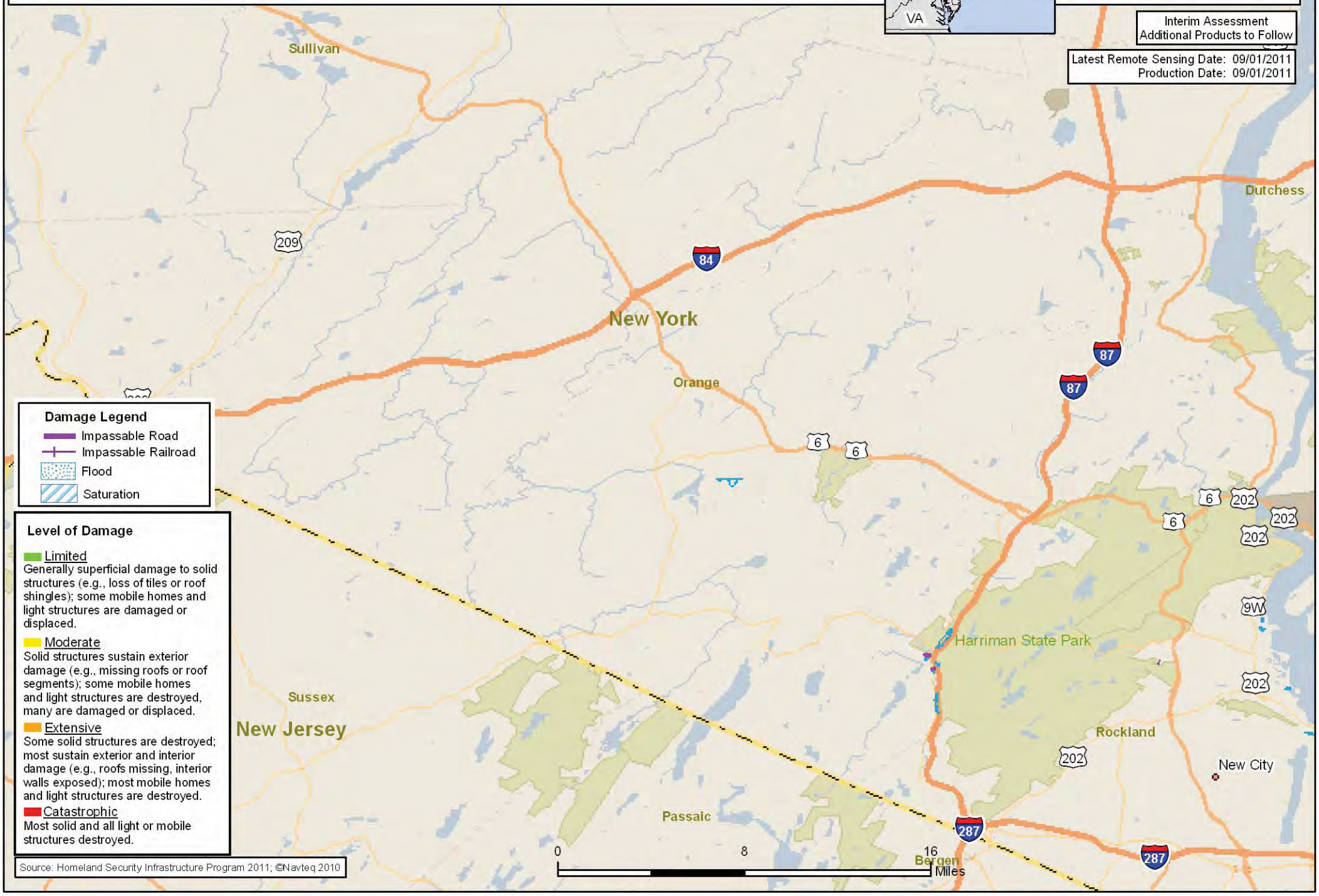
Orange County, New York

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

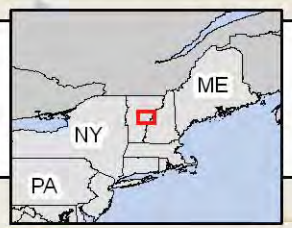
Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

Orange County, Vermont

FEMA

UNCLASSIFIED//FOUO



Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011

Washington
Addison
Orange
Vermont
Windsor
Grafton
New Hampshire
62
302
25
89
91
5

Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

0 7.5 15 Miles

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

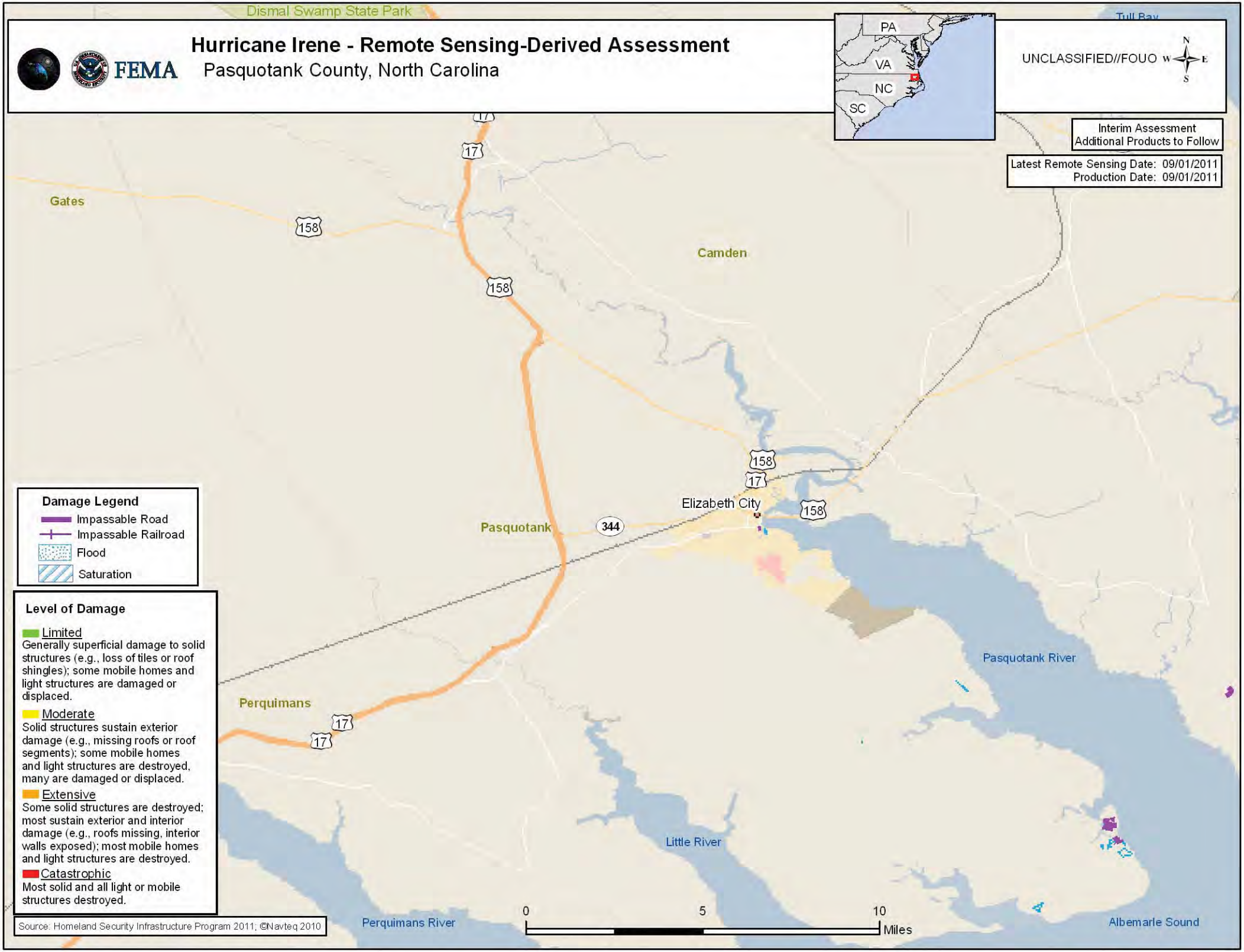
Pasquotank County, North Carolina

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

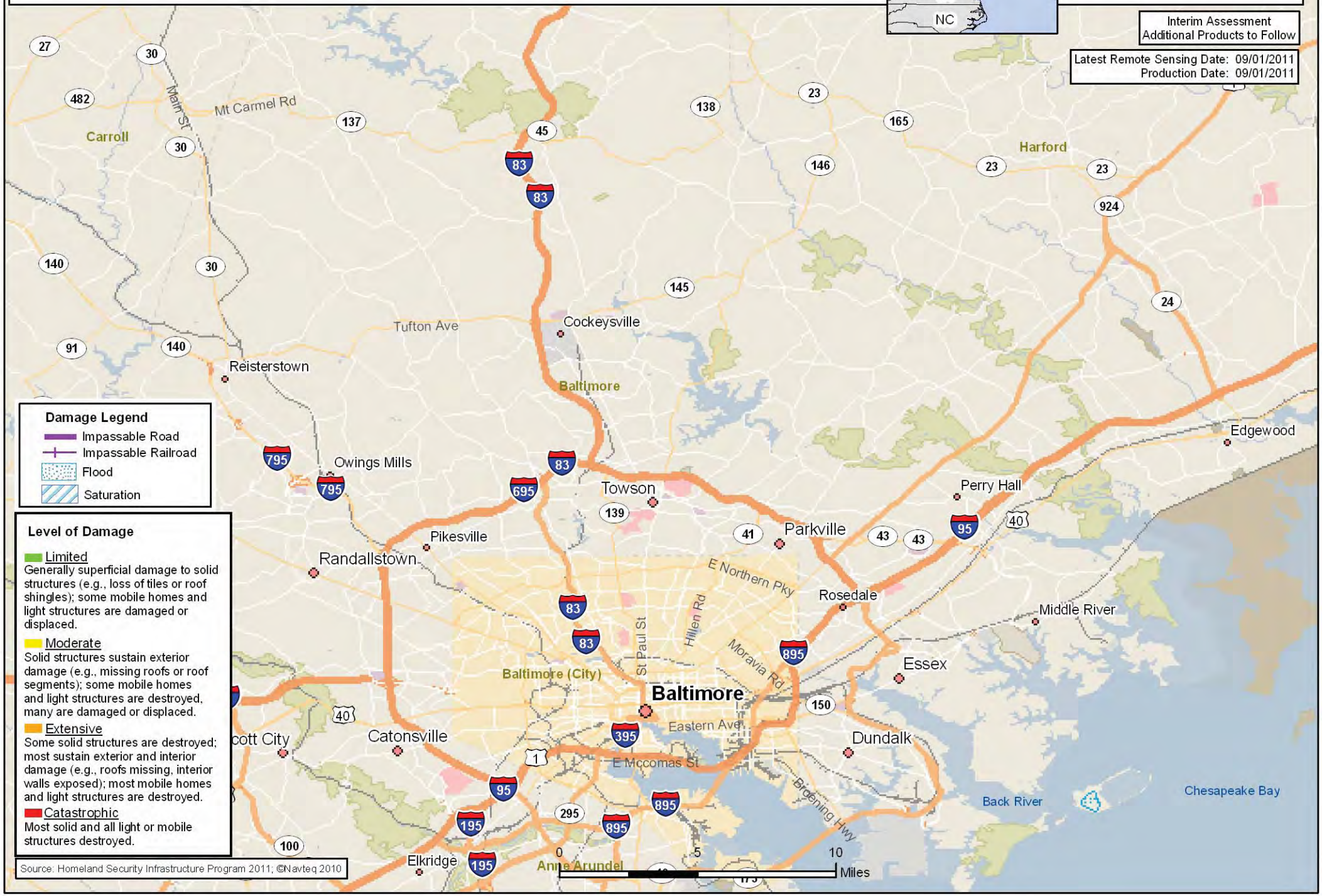
Baltimore County, Maryland

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

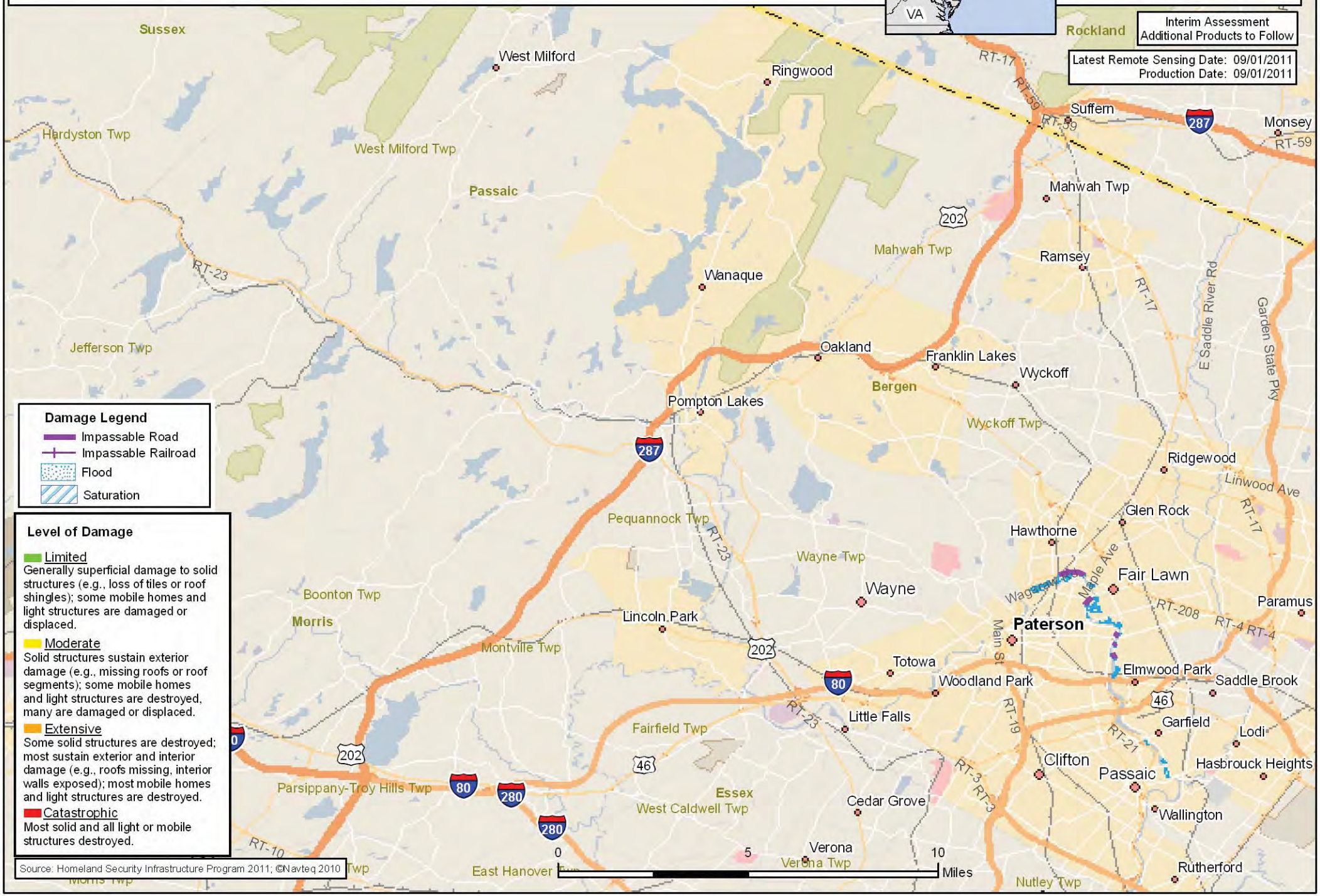
Passaic County, New Jersey

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Hurricane Irene - Remote Sensing-Derived Assessment

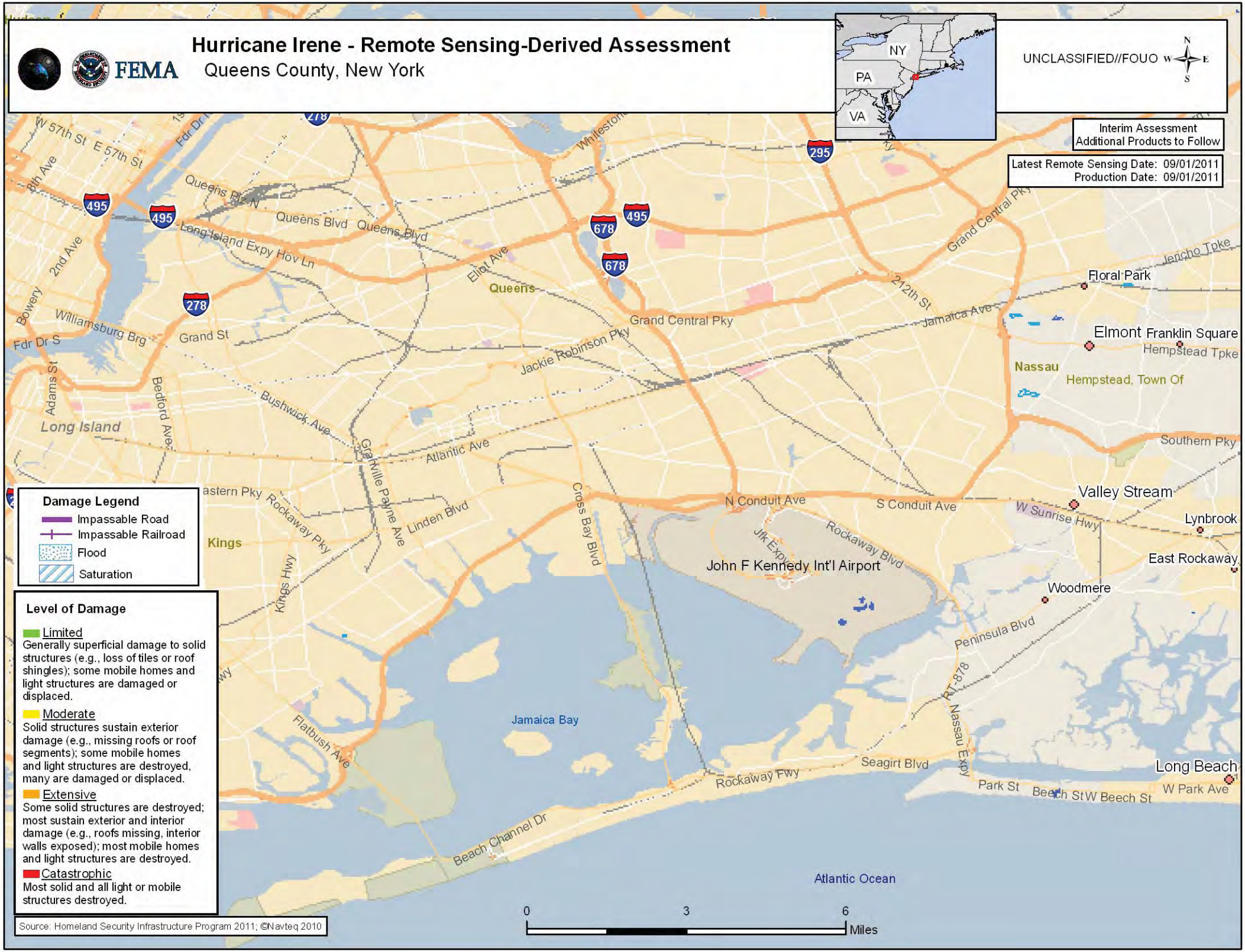
Queens County, New York

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

Rockingham County, New Hampshire

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011

Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

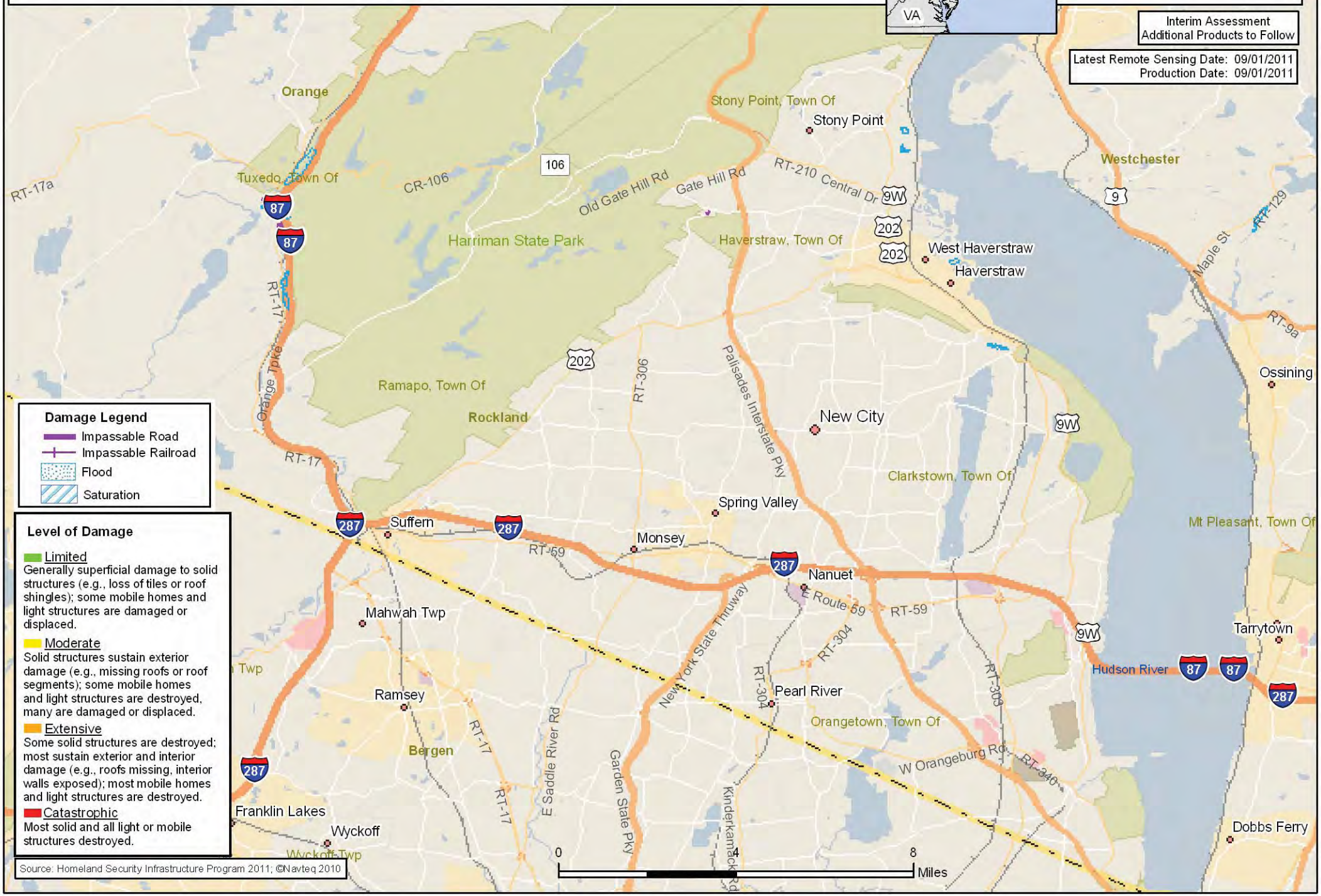
Rockland County, New York

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

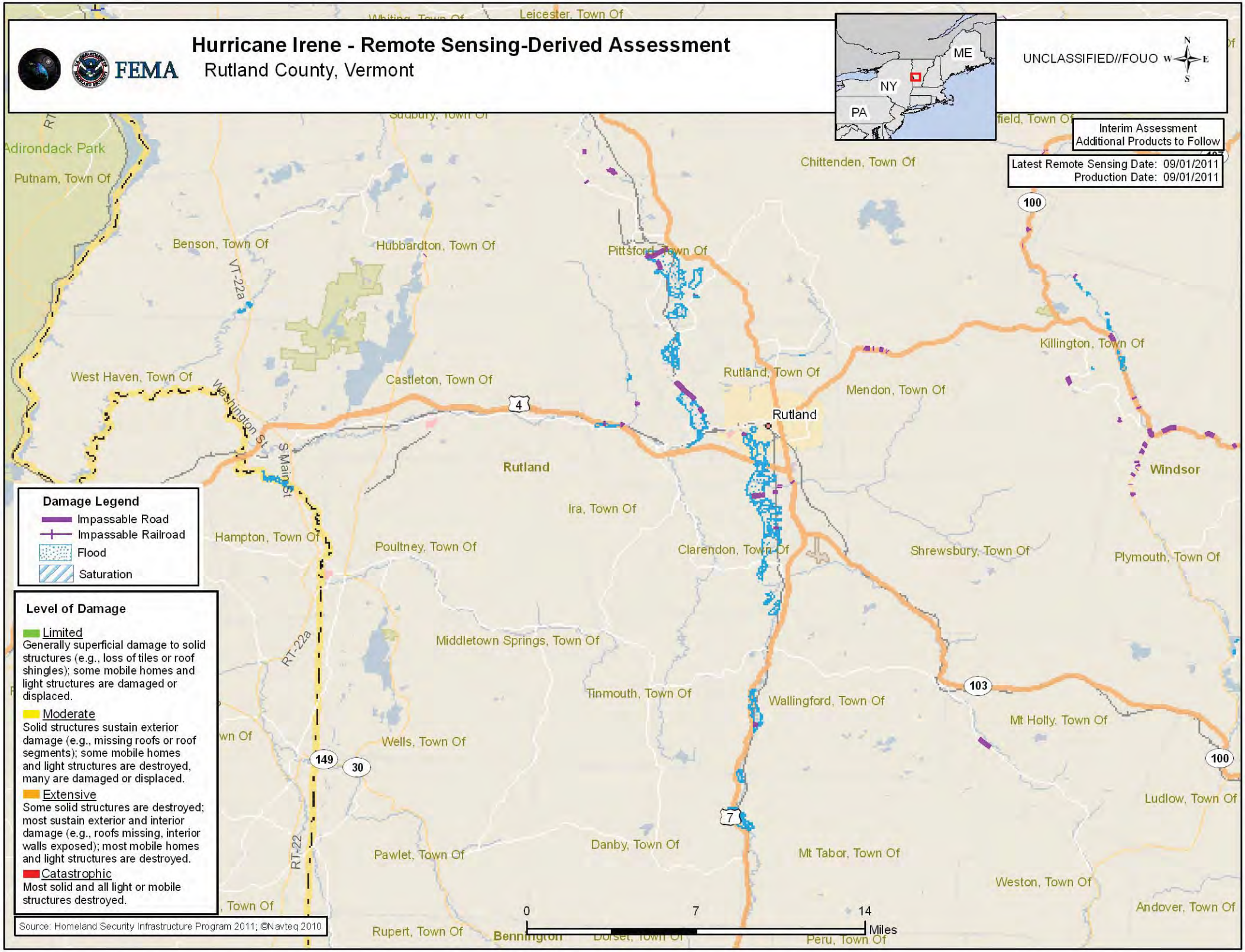
Rutland County, Vermont

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Hurricane Irene - Remote Sensing-Derived Assessment

Schoharie County, New York

FEMA

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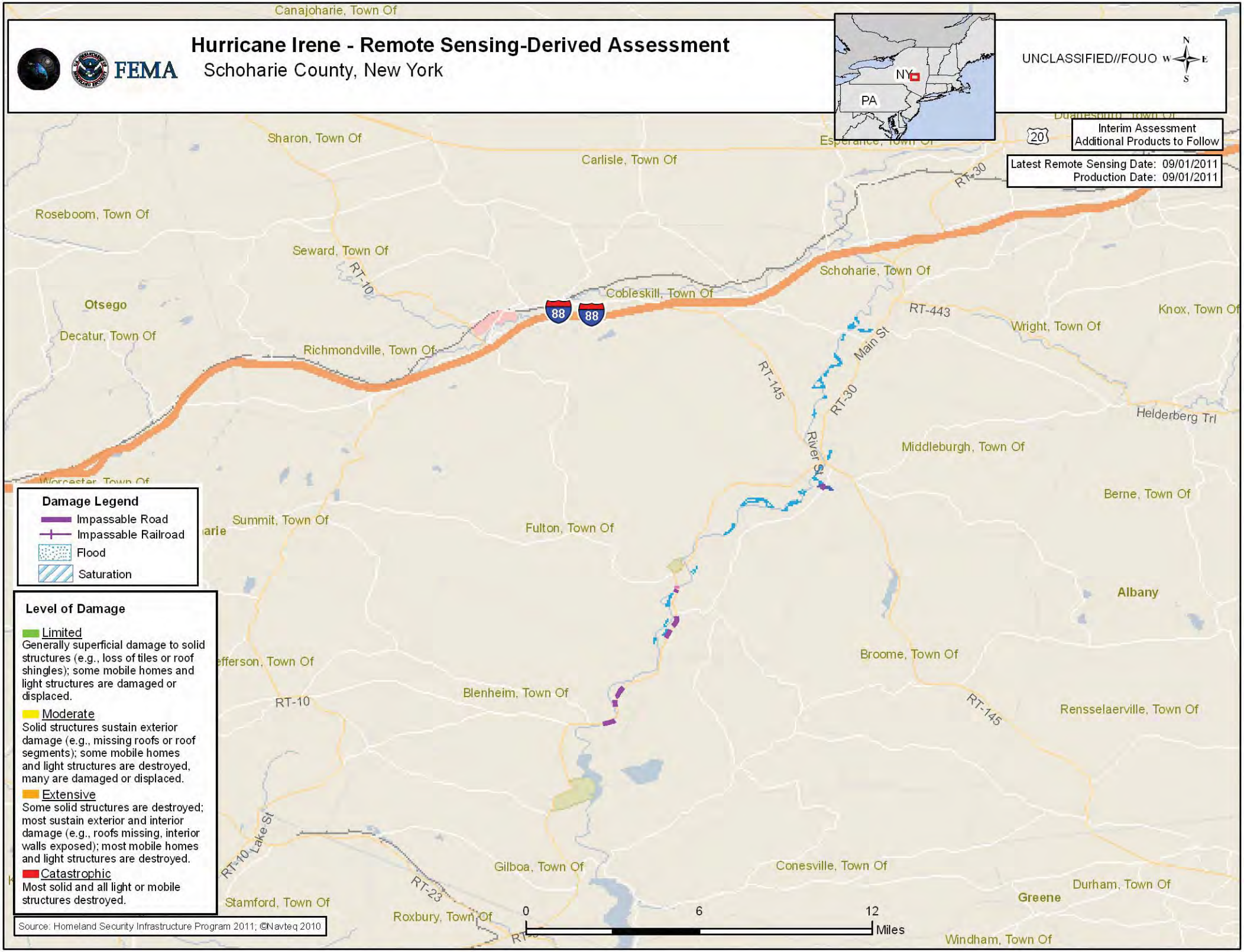
Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

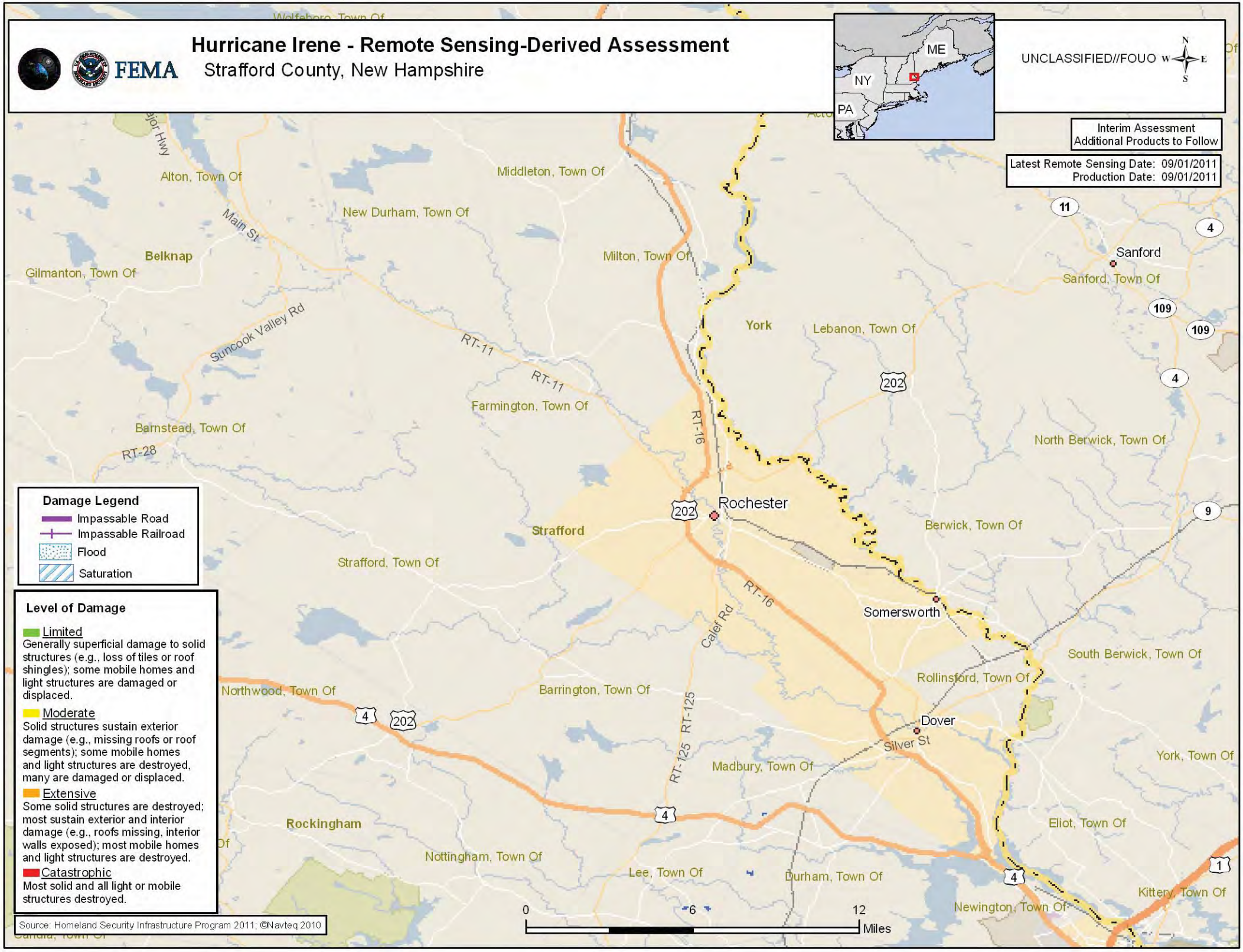
Strafford County, New Hampshire

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

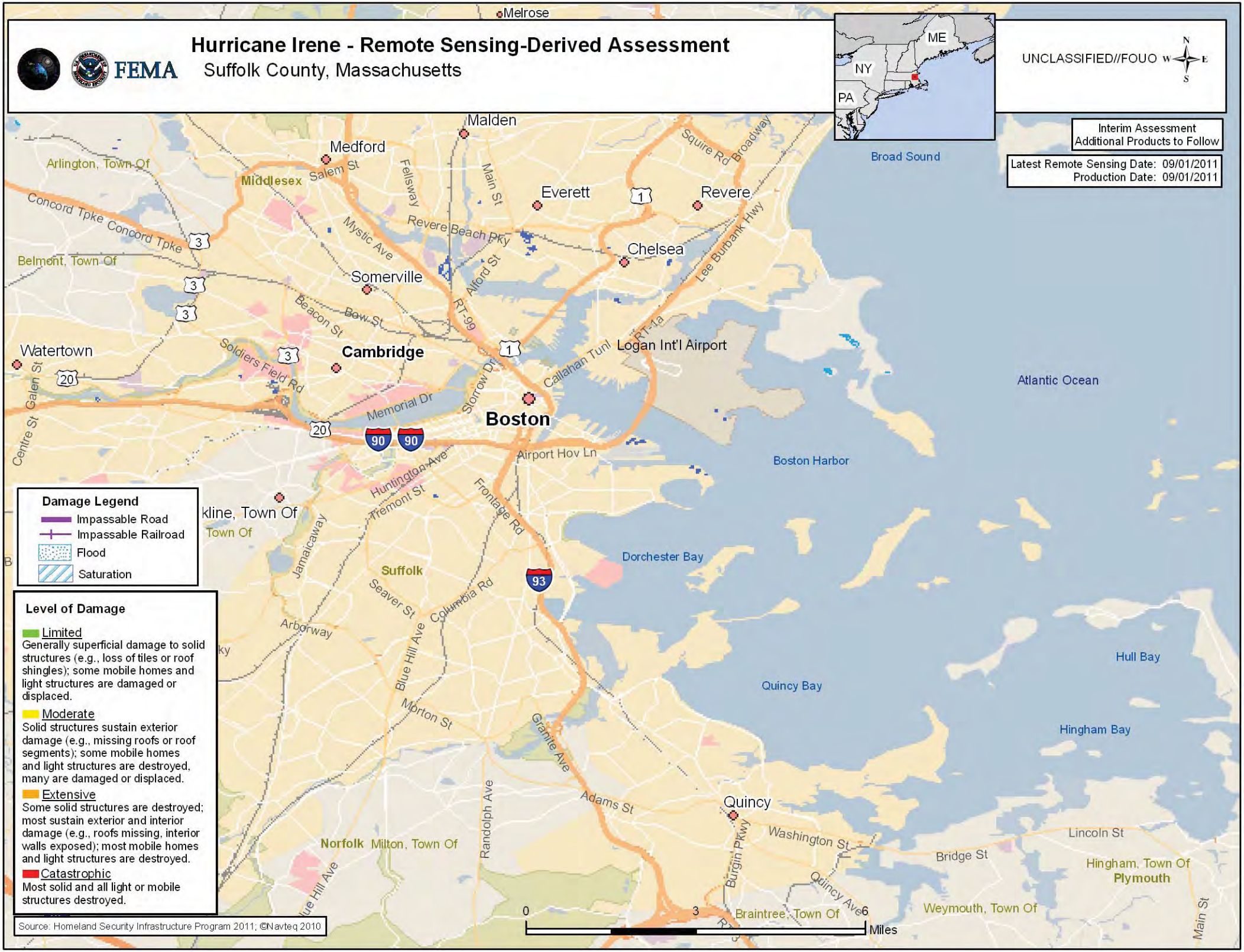
Suffolk County, Massachusetts

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Hurricane Irene - Remote Sensing-Derived Assessment

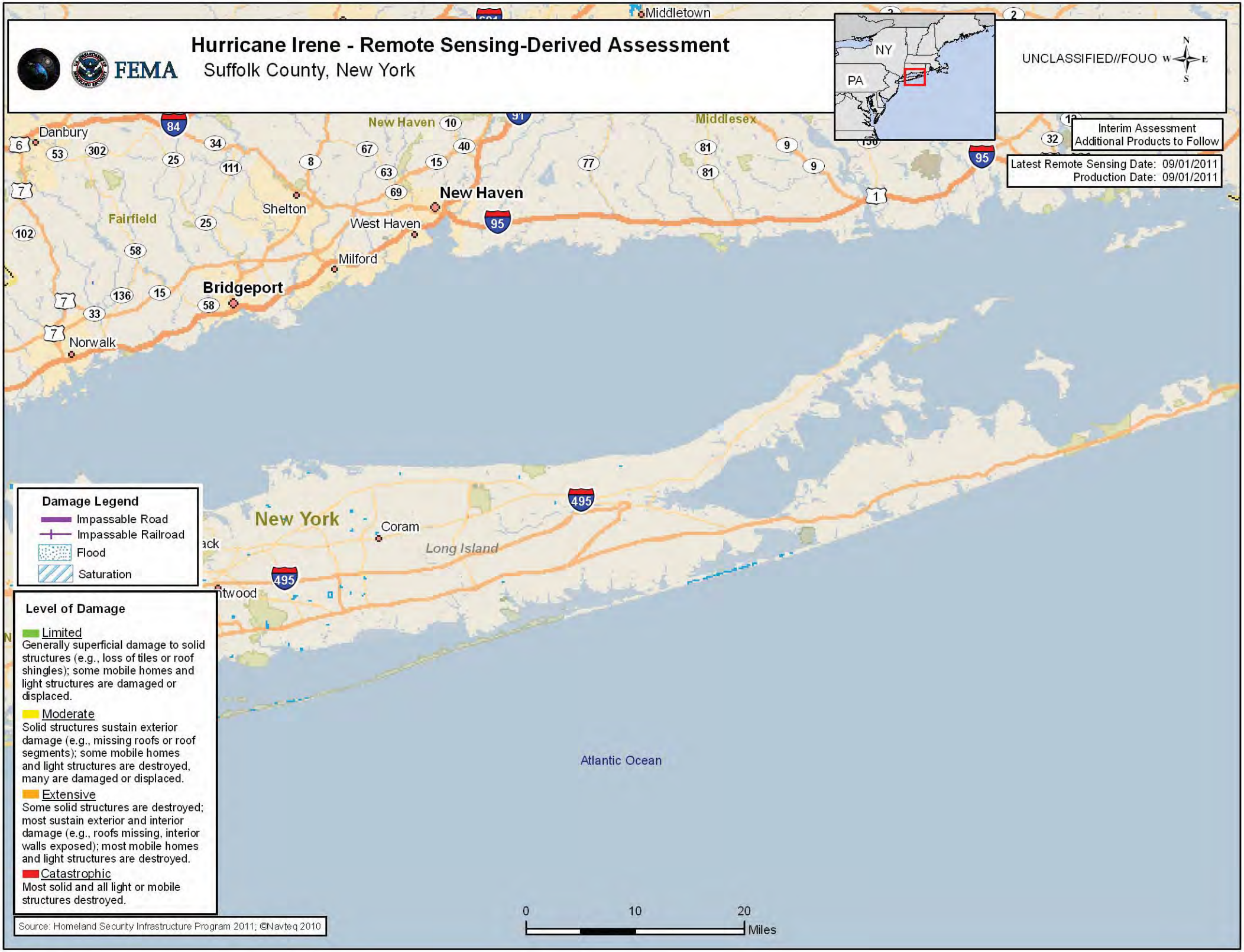
Suffolk County, New York

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

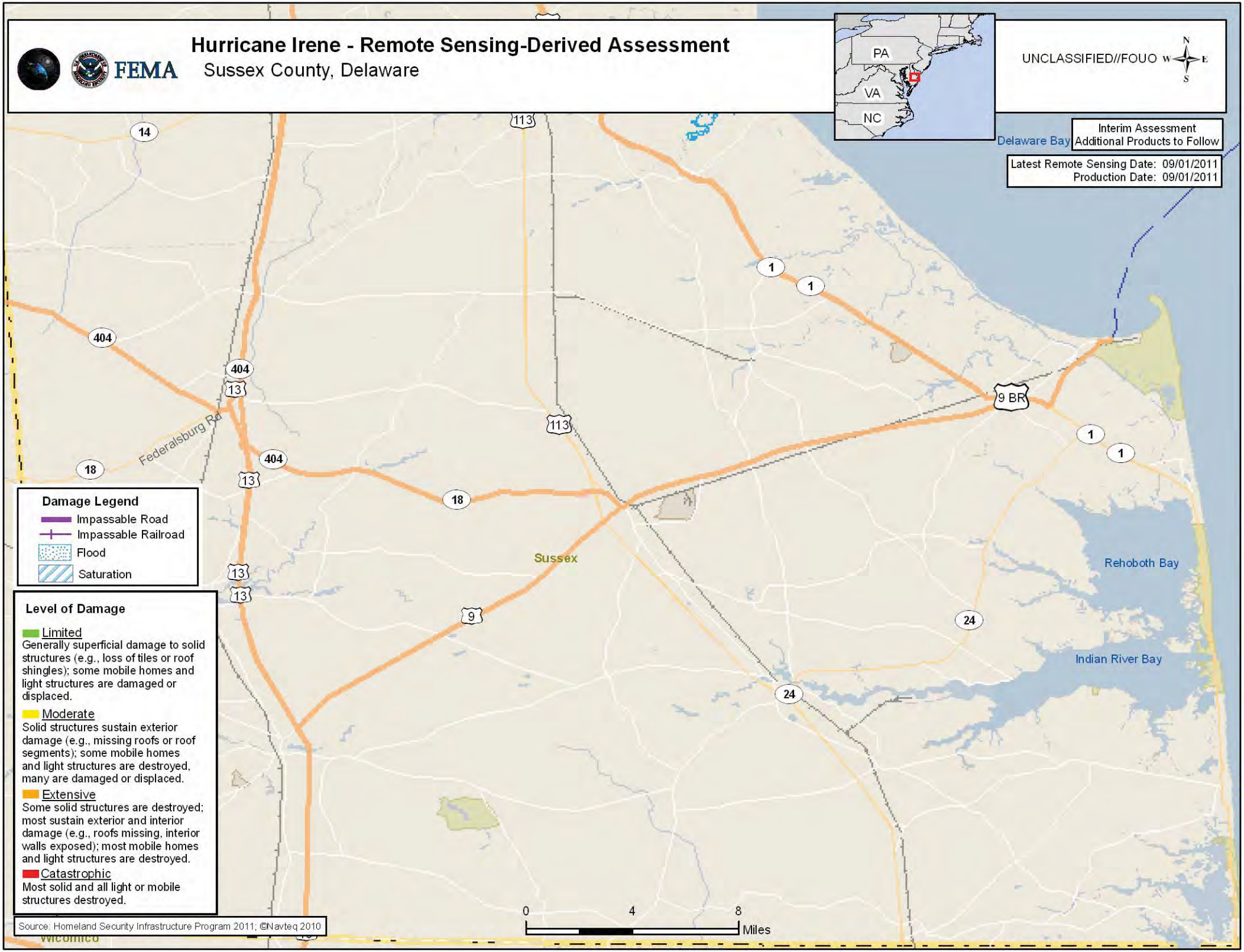
Sussex County, Delaware

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

Barnstable County, Massachusetts

FEMA

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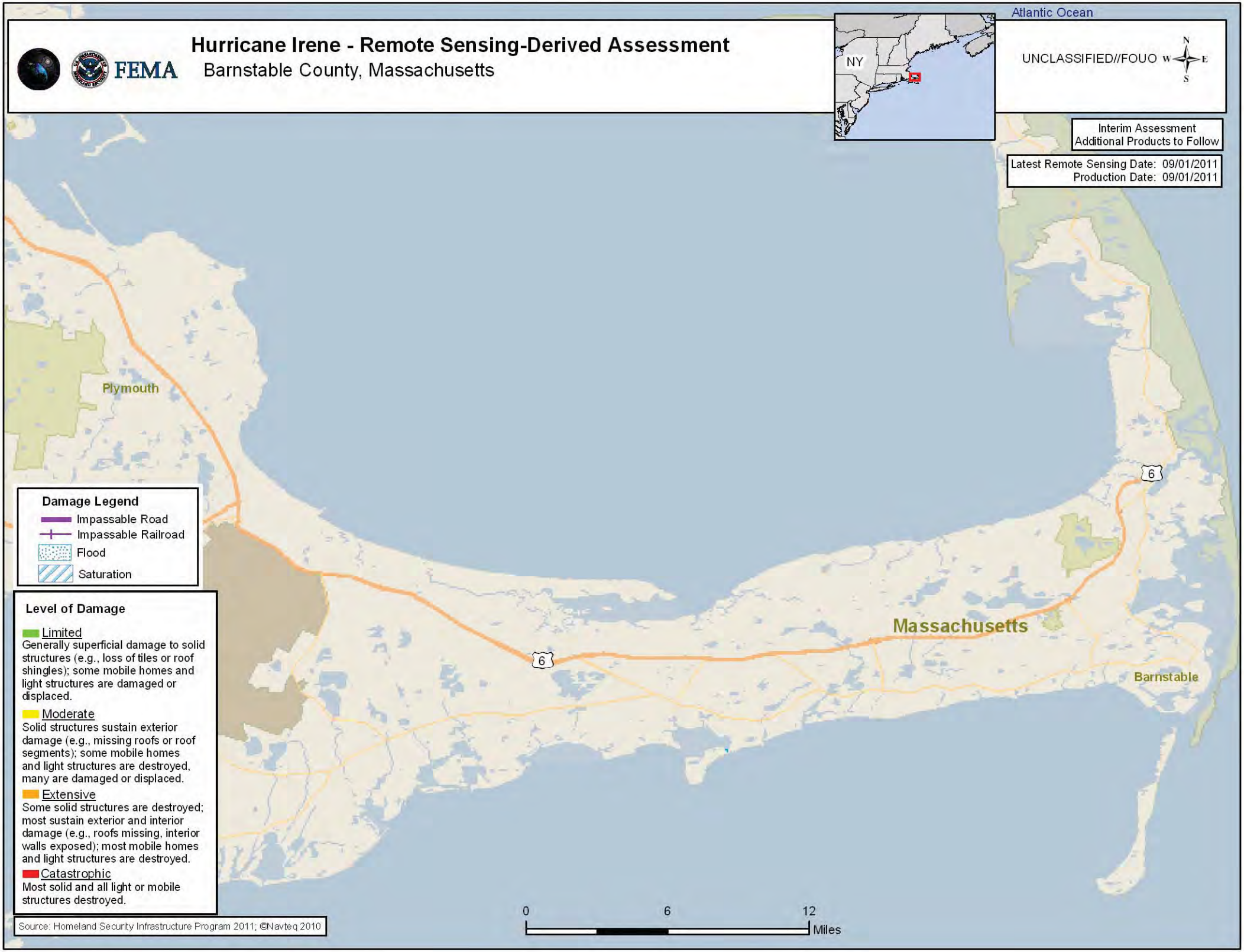
Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

Tyrrell County, North Carolina

FEMA

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Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011

Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

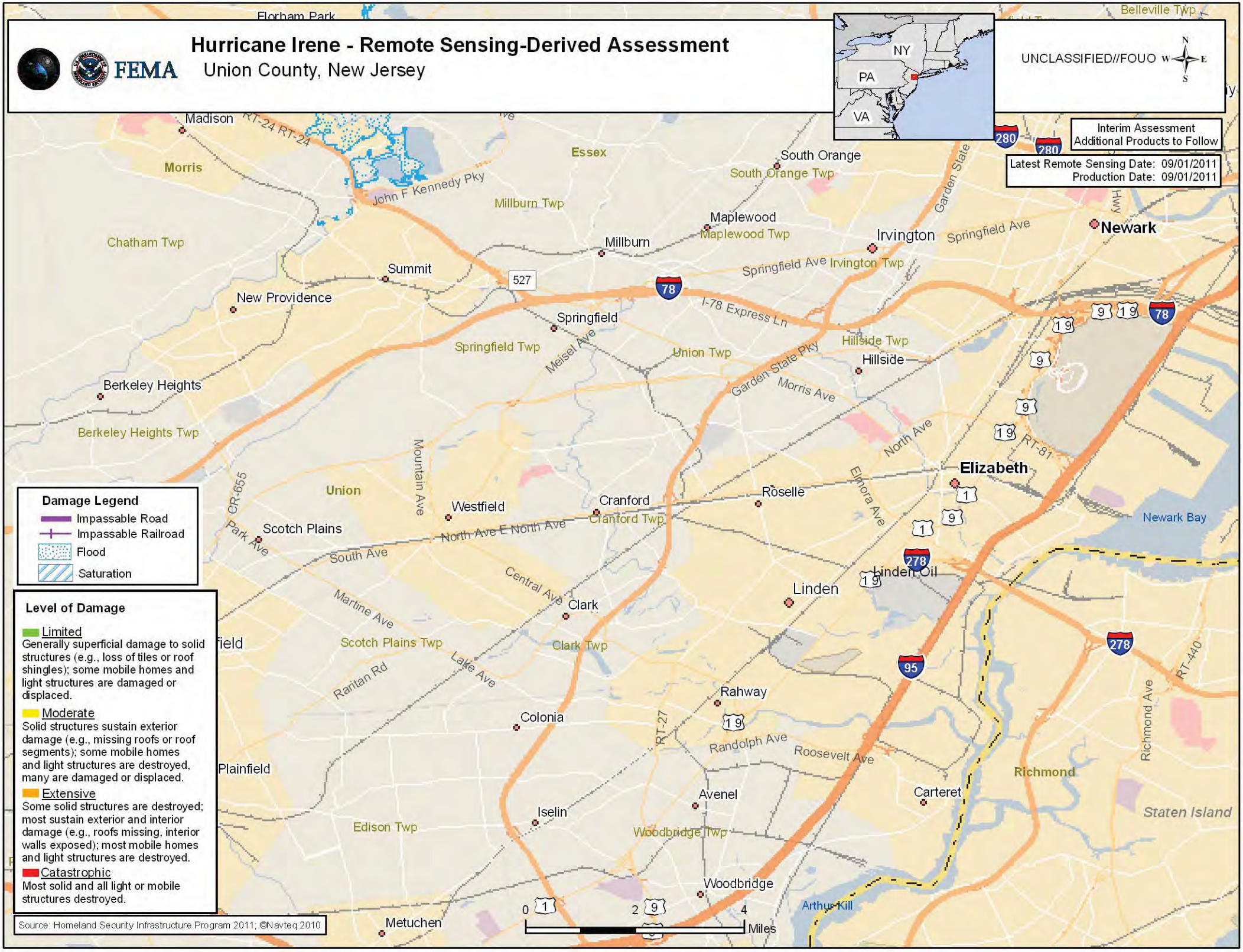
Union County, New Jersey

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

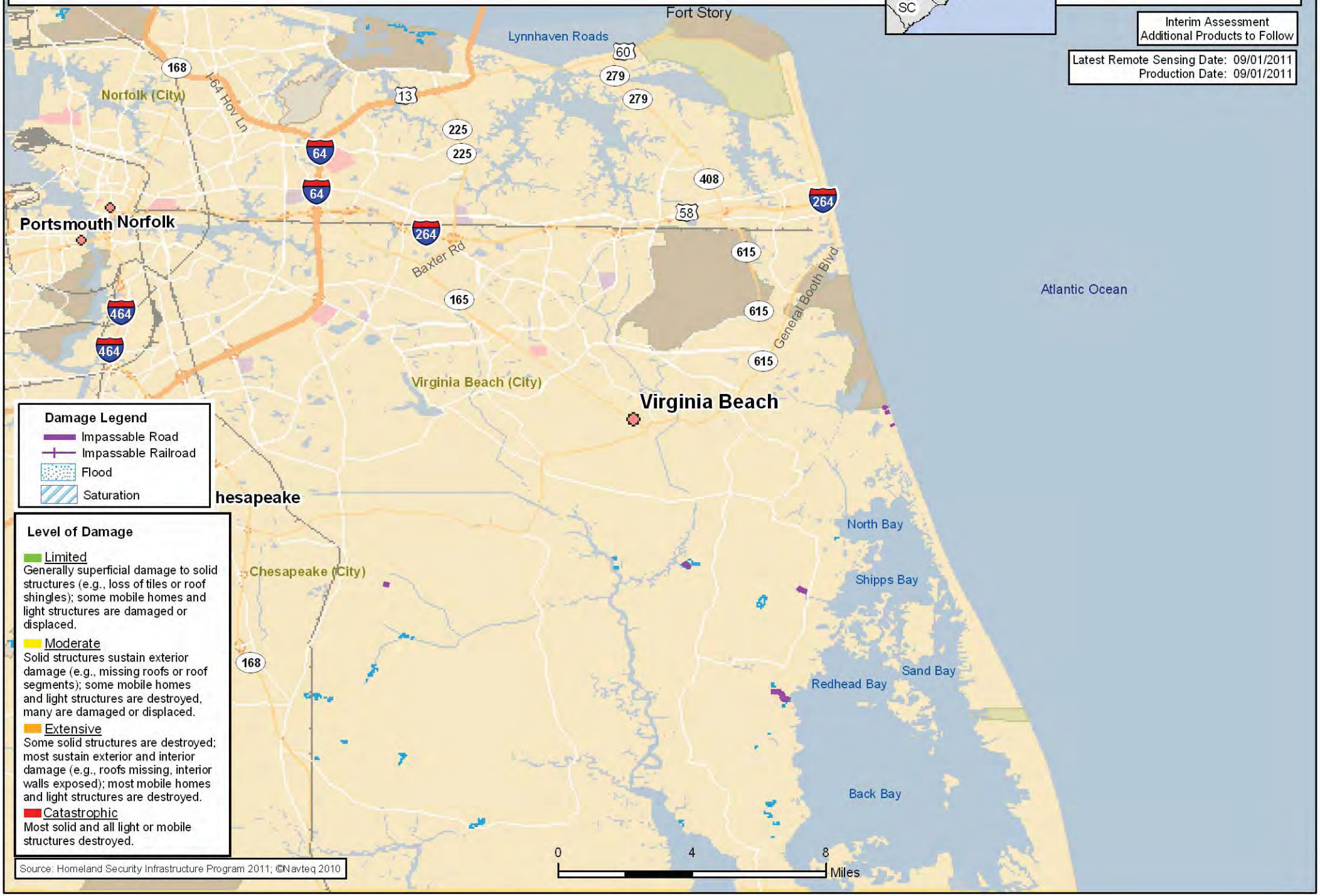
Virginia Beach (City) County, Virginia

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

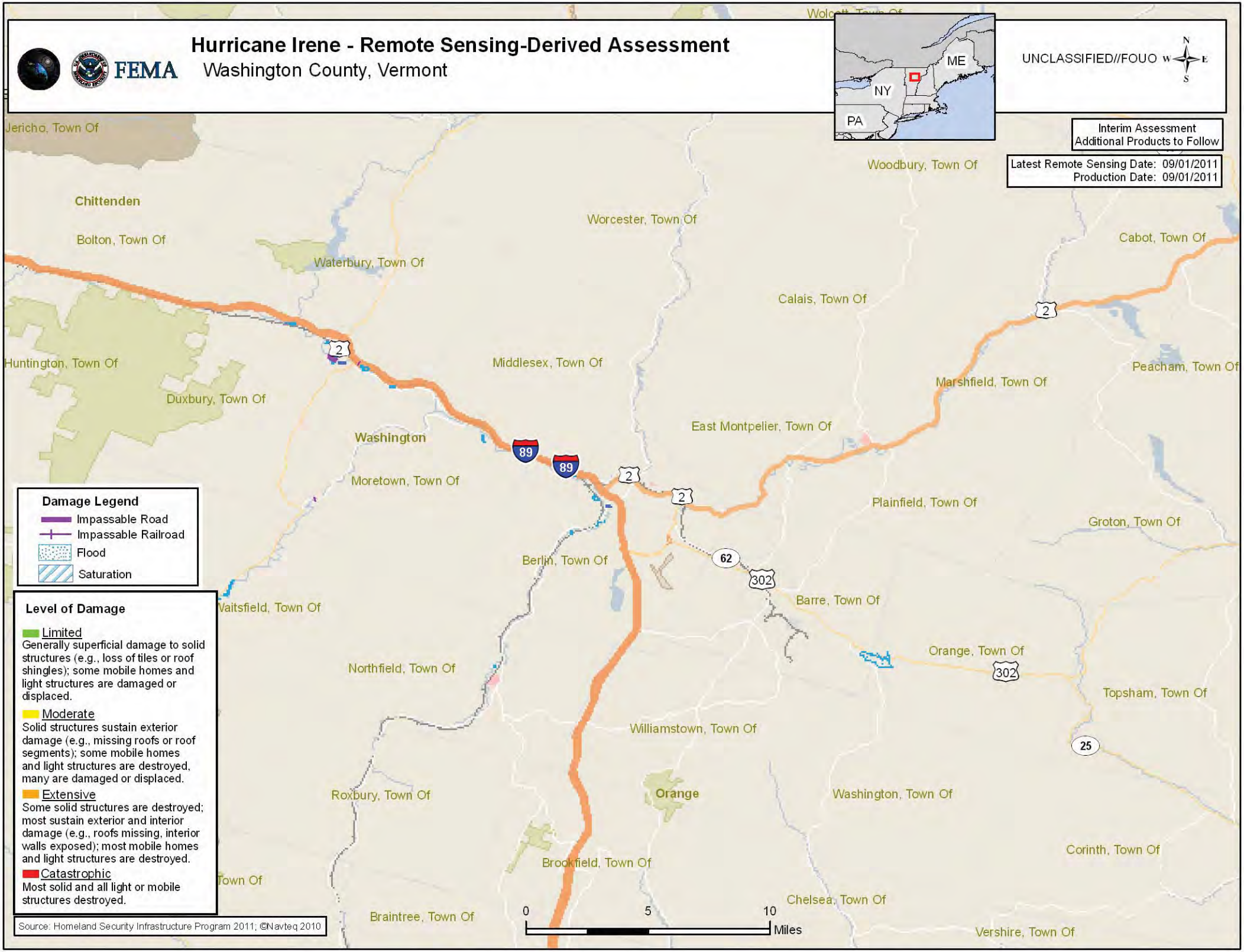
Washington County, Vermont

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Hurricane Irene - Remote Sensing-Derived Assessment

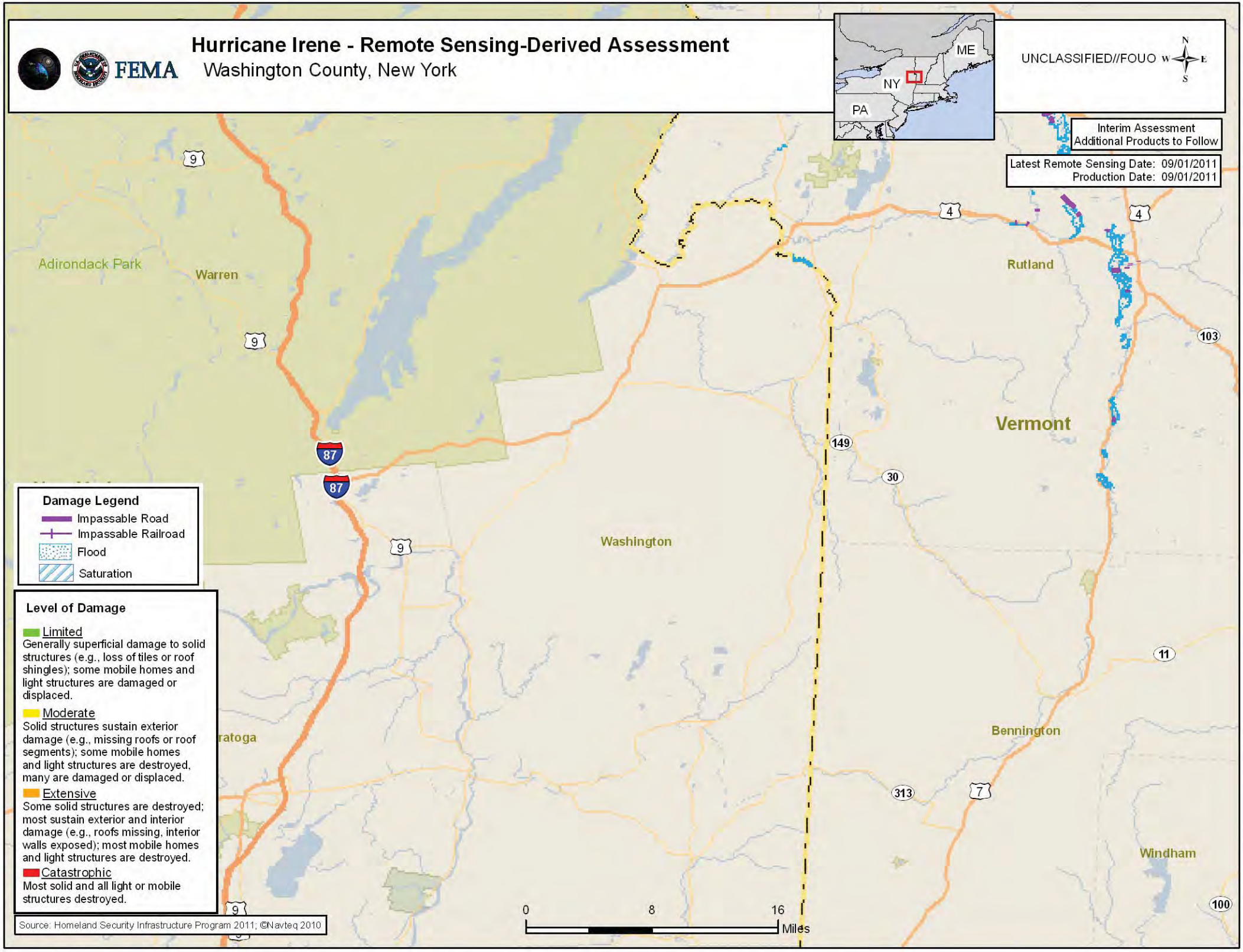
Washington County, New York

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

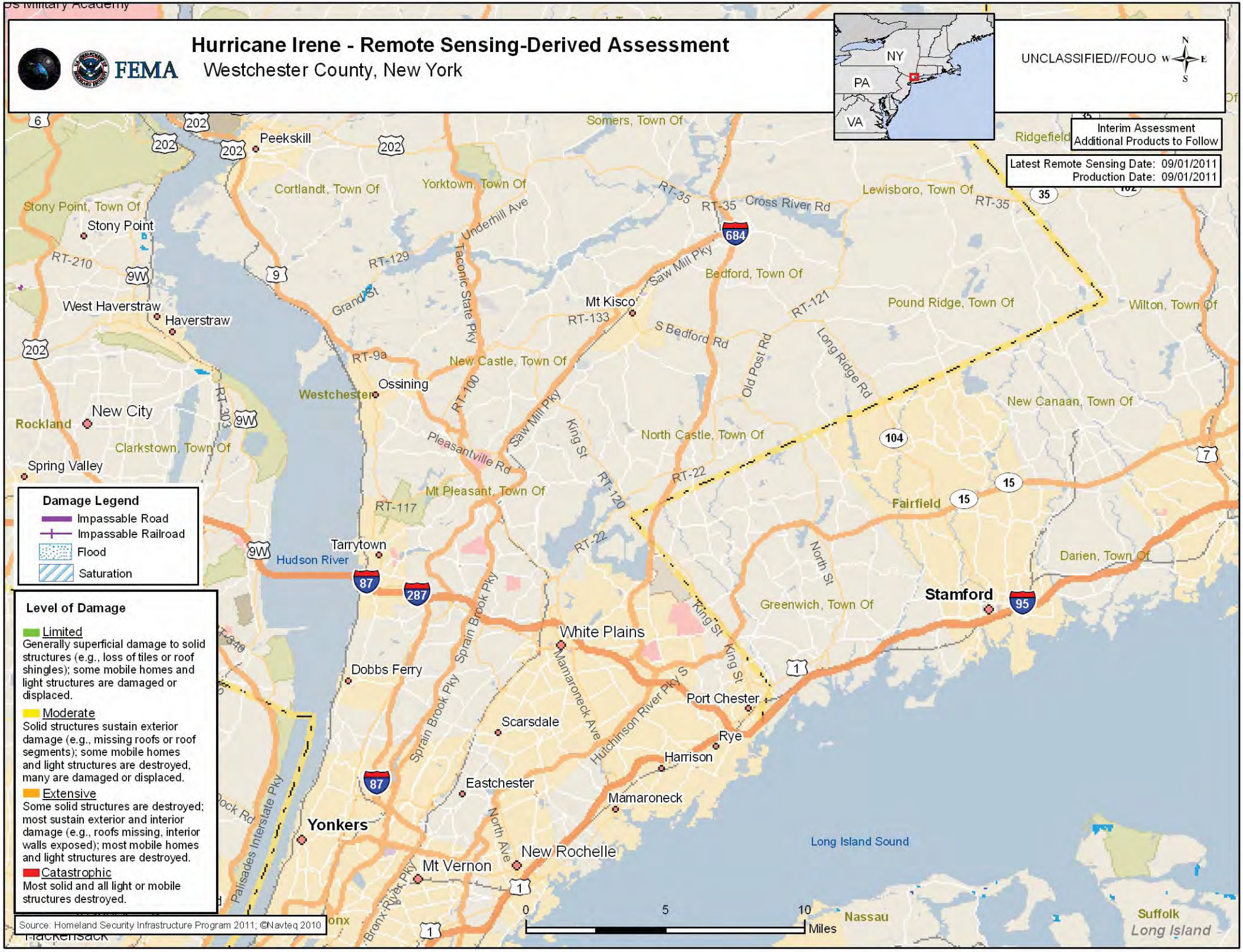
Westchester County, New York

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011

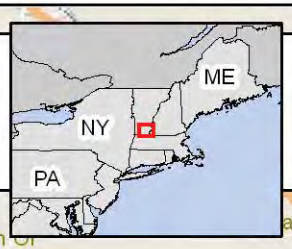


Hurricane Irene - Remote Sensing-Derived Assessment

Windham County, Vermont

FEMA

UNCLASSIFIED//FOUO



Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011

Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

0 5 10 Miles

Bennington
Manchester, Town Of
Londonderry, Town Of
Grafton, Town Of
Winhall, Town Of
Athens, Town Of
Jamaica, Town Of
Stratton, Town Of
Sunderland, Town Of
Townshend, Town Of
Westminster, Town Of
Walpole, Town Of
Bellows Rd
Wardsboro, Town Of
Windham
Putney, Town Of
Monadnock Hwy
Newfane, Town Of
Westmoreland, Town Of
Dover, Town Of
Dummerston, Town Of
Cheshire
RT-9
Chesterfield, Town Of
Wilmington, Town Of
Marlboro, Town Of
Brattleboro, Town Of
Hinsdale, Town Of
Canal St
Winchester, Town Of
Ashuelot St
Manning Hill Rd
Whitingham, Town Of
Halifax, Town Of
Guilford, Town Of
Vernon, Town Of
Rowe, Town Of
Heath, Town Of
7
100
9
5
91
112

Hurricane Irene - Remote Sensing-Derived Assessment

Windsor County, Vermont

FEMA

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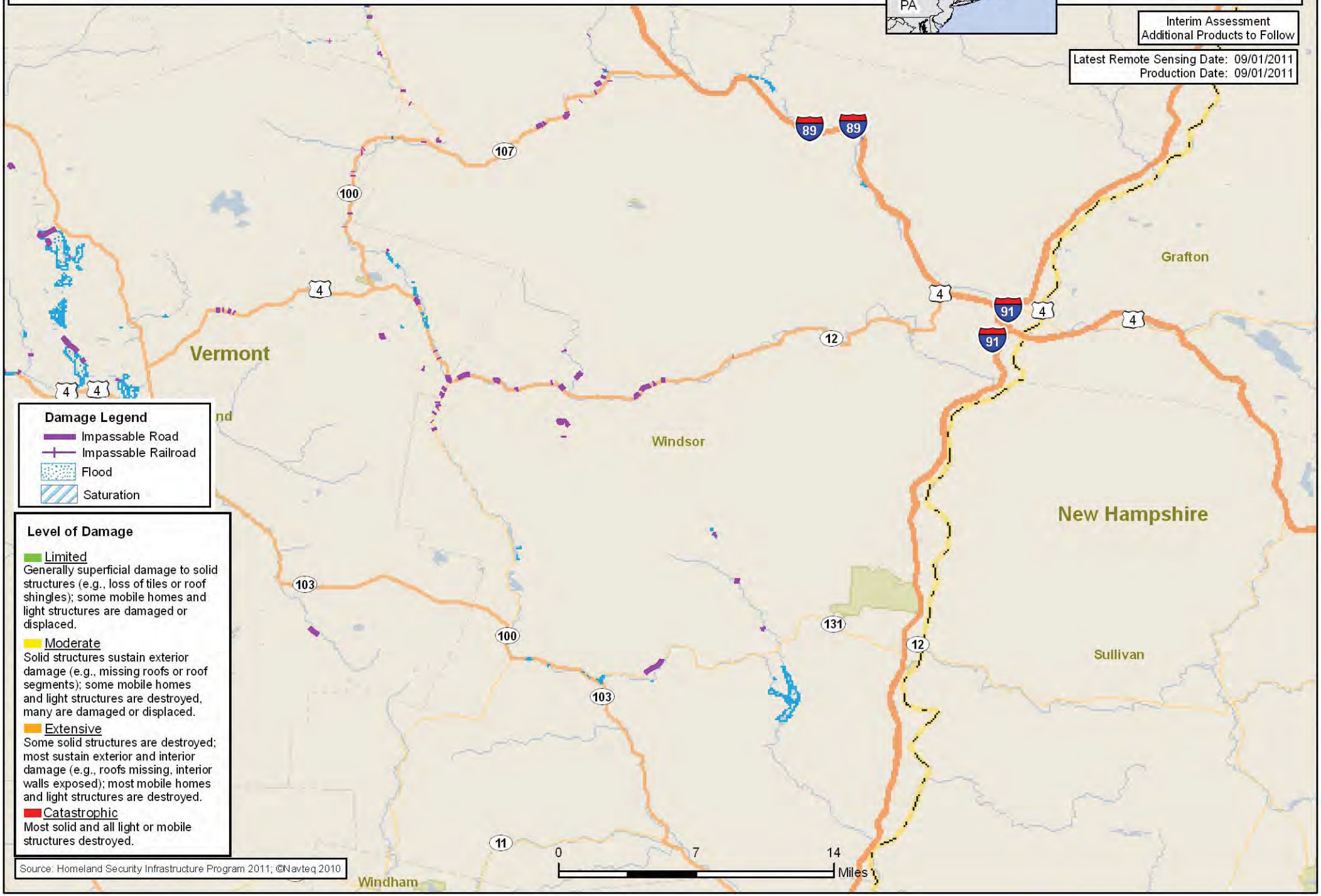
Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

Limited
Generally superficial damage to solid structures (e.g., loss of tiles or roof shingles); some mobile homes and light structures are damaged or displaced.

Moderate
Solid structures sustain exterior damage (e.g., missing roofs or roof segments); some mobile homes and light structures are destroyed, many are damaged or displaced.

Extensive
Some solid structures are destroyed; most sustain exterior and interior damage (e.g., roofs missing, interior walls exposed); most mobile homes and light structures are destroyed.

Catastrophic
Most solid and all light or mobile structures destroyed.

Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

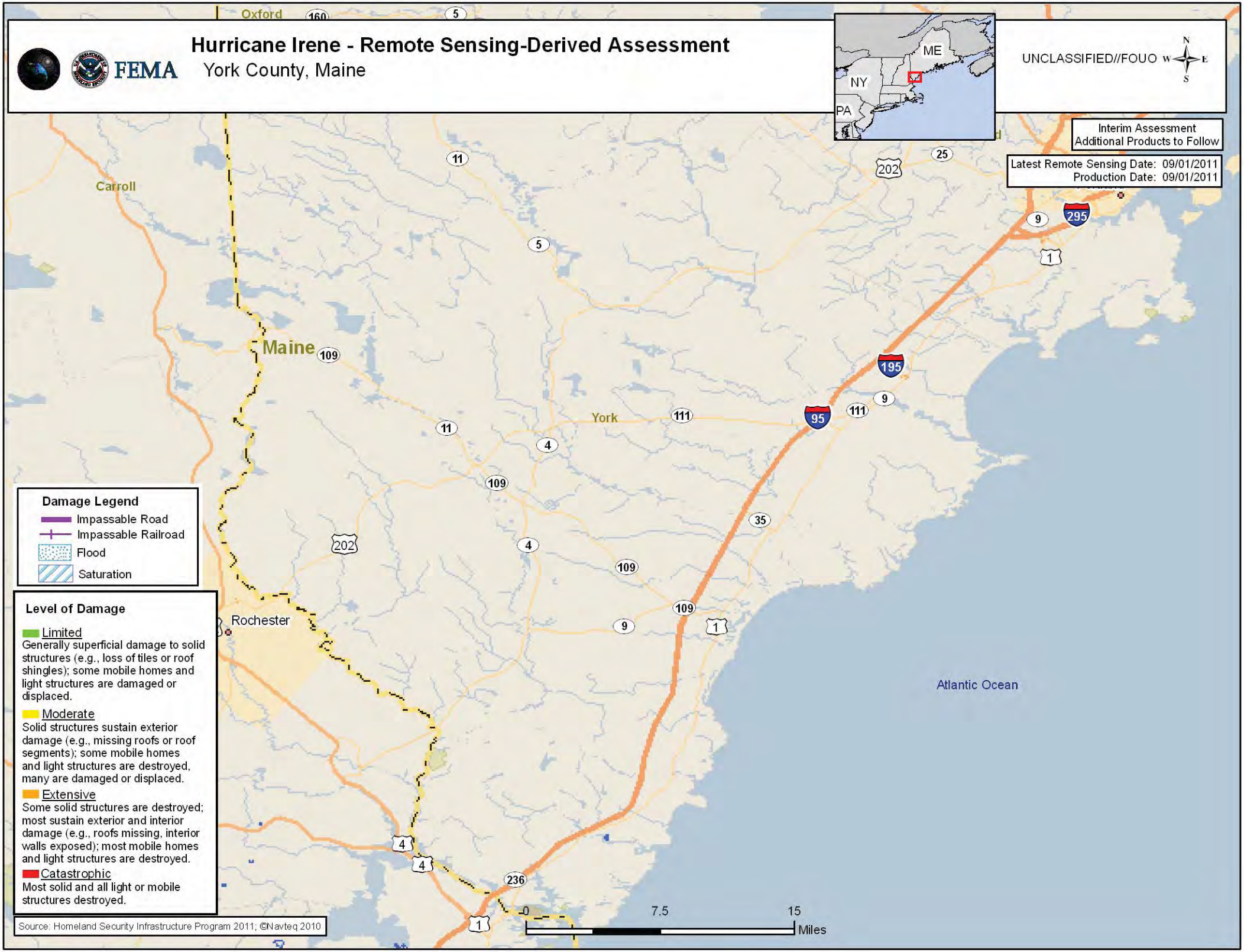
York County, Maine

FEMA

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

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Catastrophic
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Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

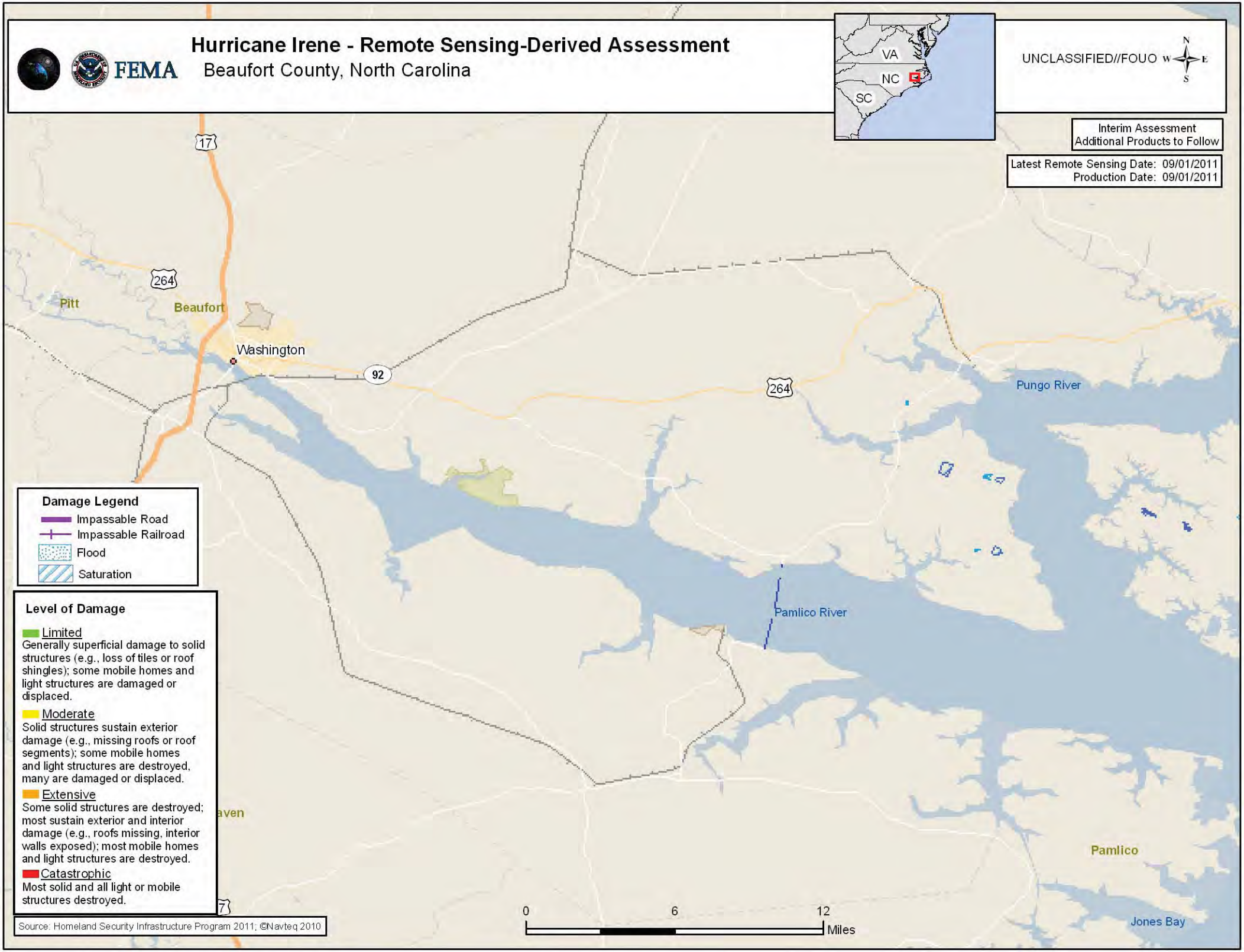
Hurricane Irene - Remote Sensing-Derived Assessment

Beaufort County, North Carolina

UNCLASSIFIED//FOUO

Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

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Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

Bergen County, New Jersey

FEMA

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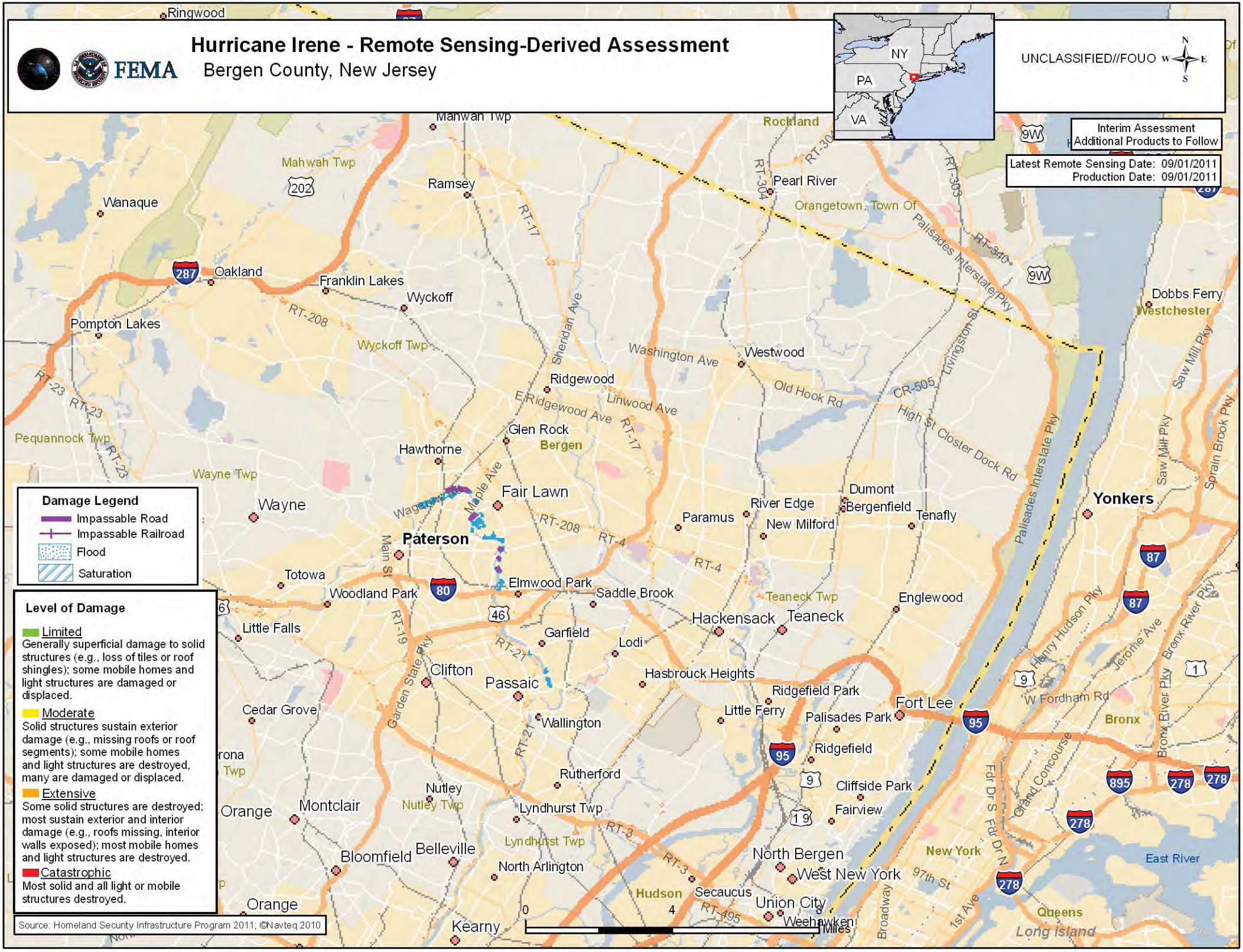
Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Hurricane Irene - Remote Sensing-Derived Assessment

Camden County, North Carolina

FEMA

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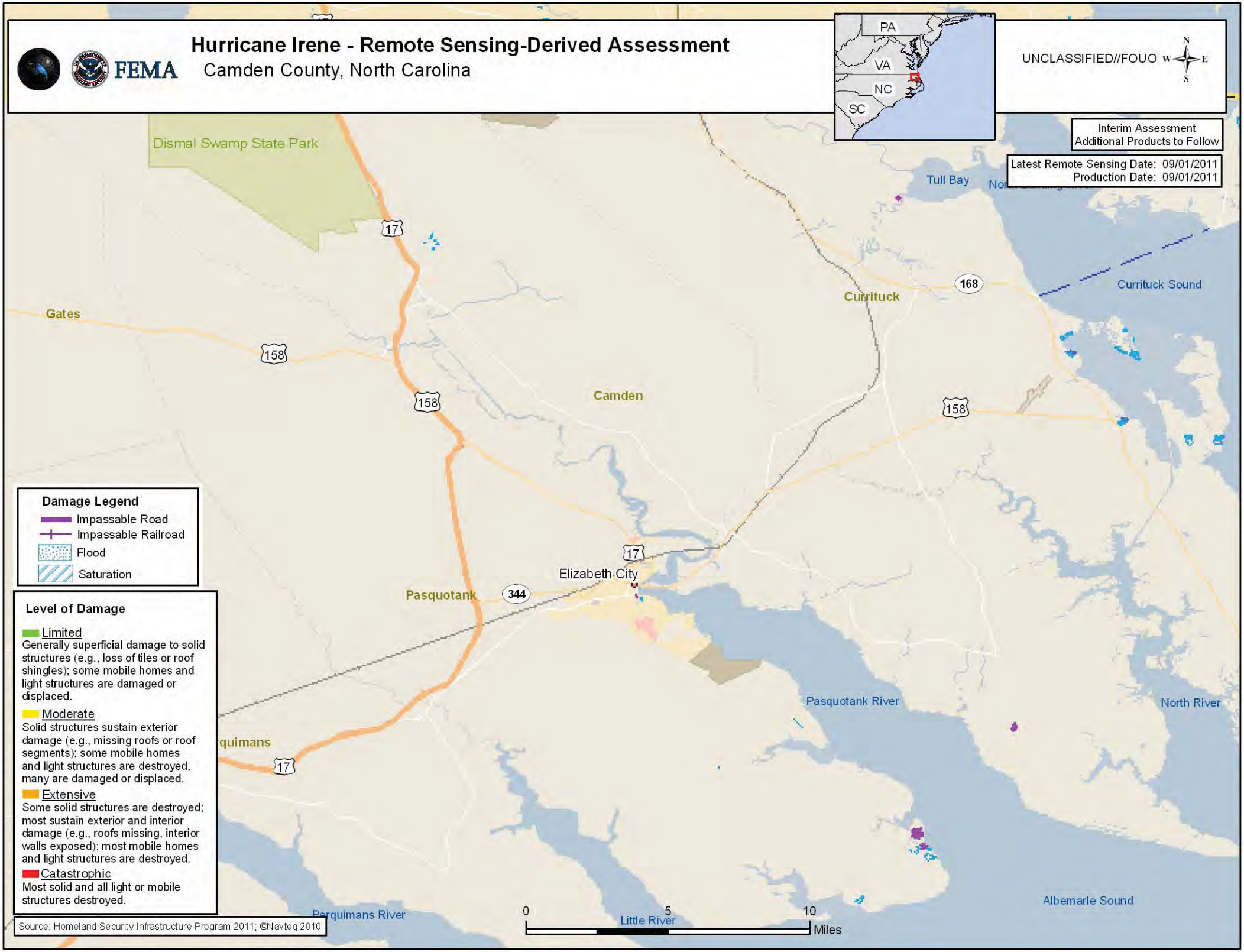
Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

- Impassable Road
- Impassable Railroad
- Flood
- Saturation

Level of Damage

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Catastrophic
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Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

Cape May County, New Jersey

FEMA

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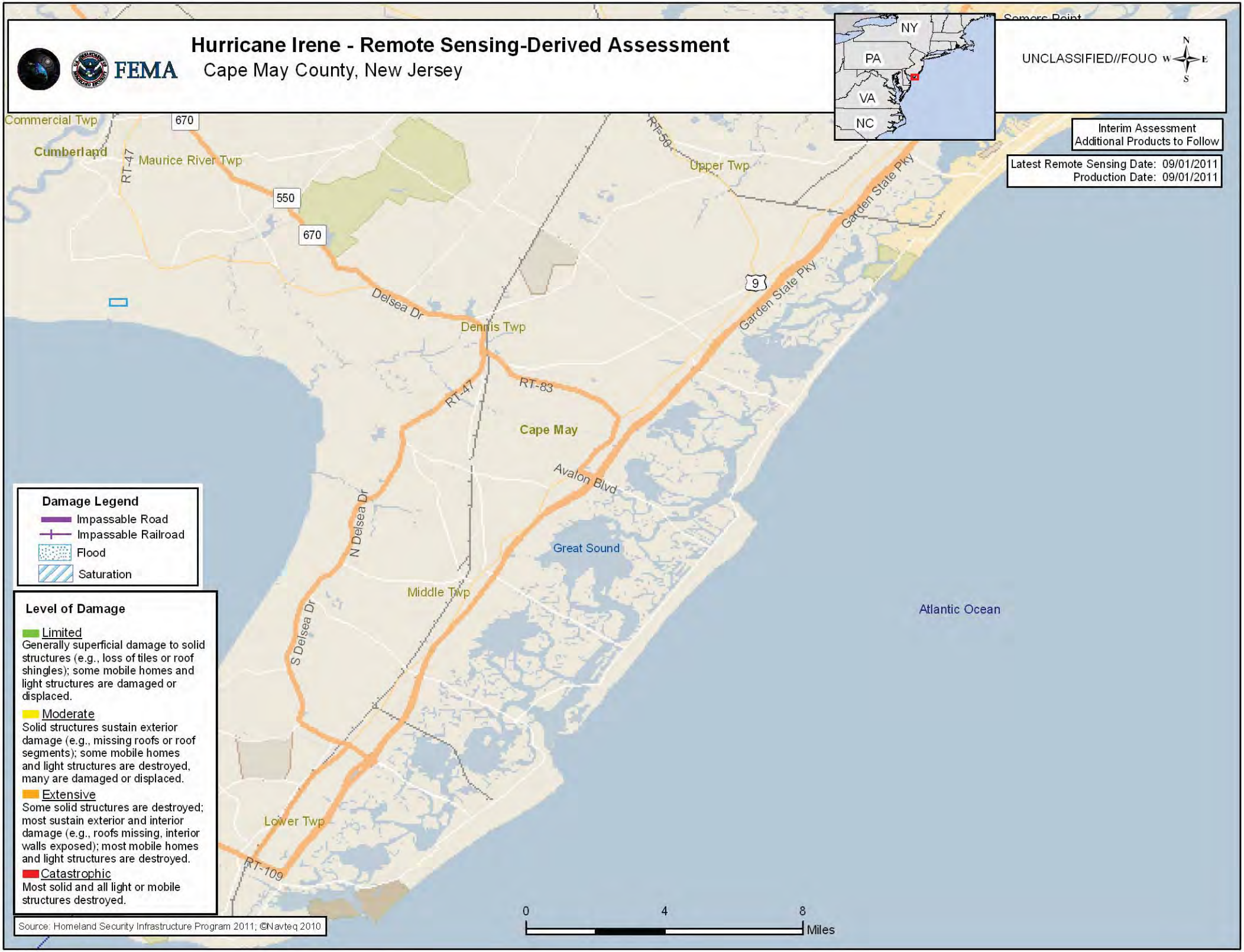
Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



Damage Legend

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- Impassable Railroad
- Flood
- Saturation

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Source: Homeland Security Infrastructure Program 2011; ©Navteq 2010

Hurricane Irene - Remote Sensing-Derived Assessment

Carteret County, North Carolina

FEMA

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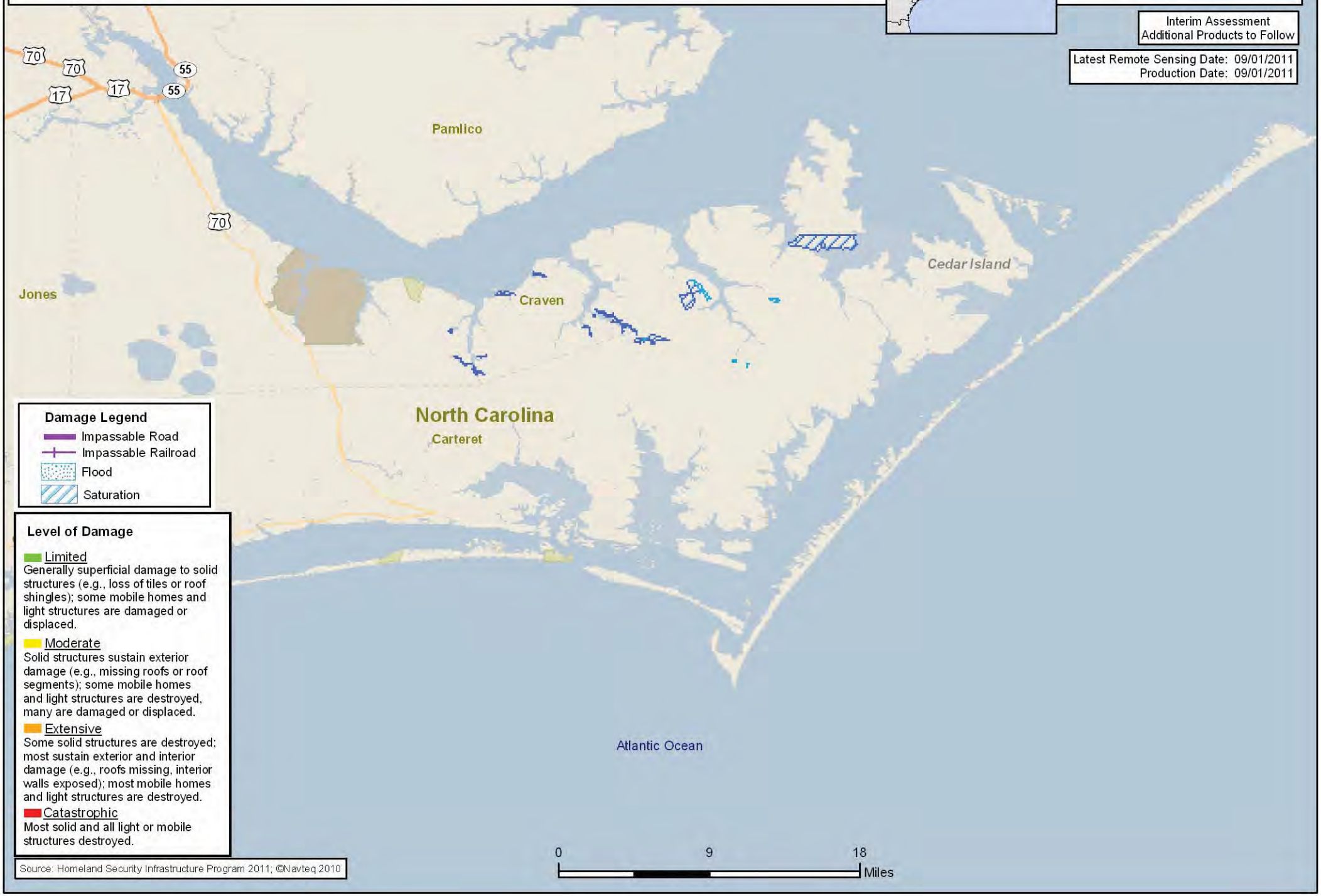
Interim Assessment
Additional Products to Follow

Latest Remote Sensing Date: 09/01/2011
Production Date: 09/01/2011



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