



# Federal Emergency Management Agency

Washington, D.C. 20472

## LETTER OF MAP REVISION DETERMINATION DOCUMENT

| COMMUNITY AND REVISION INFORMATION                    |  | PROJECT DESCRIPTION   | BASIS OF REQUEST  |
|---|--|---|---|
| COMMUNITY   | Seminole County<br>Florida<br>(Unincorporated Areas) | NO PROJECT  | BASE MAP CHANGES<br>FLOODWAY<br>HYDRAULIC ANALYSIS<br>HYDROLOGIC ANALYSIS<br>NEW TOPOGRAPHIC DATA |
|   | COMMUNITY NO.: 120289                                |   |   |
| IDENTIFIER  | Winter Park Chain of Lakes                           | APPROXIMATE LATITUDE & LONGITUDE: 28.631, -81.325<br>SOURCE: USGS QUADRANGLE DATUM: NAD 83  |   |
| ANNOTATED MAPPING ENCLOSURES                          |  | ANNOTATED STUDY ENCLOSURES  |   |
| TYPE: FIRM* NO.: 12117C0165F DATE: September 28, 2007 |  | DATE OF EFFECTIVE FLOOD INSURANCE STUDY REPORT: September 28, 2007<br>PROFILE(S): 20P<br>FLOODWAY DATA TABLE: 5<br>SUMMARY OF DISCHARGES TABLE: 3 |   |

Enclosures reflect changes to flooding sources affected by this revision.

\* FIRM - Flood Insurance Rate Map; \*\* FBFM - Flood Boundary and Floodway Map; \*\*\* FHBM - Flood Hazard Boundary Map

### FLOODING SOURCE(S) & REVISED REACH(ES)

See Page 2 for Additional Flooding Sources

Stream A No. 2 - from the boundary between Seminole and Orange Counties to approximately 280 feet upstream  
Howell Creek - from the confluence with Lake Howell to the county boundary between Seminole and Orange Counties

### SUMMARY OF REVISIONS

| Flooding Source | Effective Flooding | Revised Flooding | Increases | Decreases |
|-----------------|--------------------|------------------|-----------|-----------|
| Stream A No. 2  | Zone A             | Zone A           | YES       | YES       |
| Howell Creek    | Zone AE            | Zone AE          | YES       | YES       |
|                 | Zone X (unshaded)  | Zone X (shaded)  | YES       | YES       |
|                 | Floodway           | Floodway         | YES       | YES       |

\* BFEs - Base Flood Elevations

### DETERMINATION

This document provides the determination from the Department of Homeland Security's Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) report and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at <http://www.fema.gov/nfip>.

Luis Rodriguez, P.E., Chief  
Engineering Management Branch  
Federal Insurance and Mitigation Administration



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**LETTER OF MAP REVISION  
DETERMINATION DOCUMENT (CONTINUED)**

**OTHER FLOODING SOURCES AFFECTED BY THIS REVISION**

**FLOODING SOURCE(S) & REVISED REACH(ES)**

Howell Creek - from the confluence with Lake Howell to the boundary between Seminole and Orange Counties

**SUMMARY OF REVISIONS**

| Flooding Source | Effective Flooding | Revised Flooding | Increases | Decreases |
|-----------------|--------------------|------------------|-----------|-----------|
| Howell Creek    | BFEs*              | BFEs             | YES       | NONE      |

\* BFEs - Base Flood Elevations

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at <http://www.fema.gov/nfip>.

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## LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

### OTHER COMMUNITIES AFFECTED BY THIS REVISION

**CID Number:** 120179      **Name:** Orange County, Florida

| AFFECTED MAP PANELS |                  |                          | AFFECTED PORTIONS OF THE FLOOD INSURANCE STUDY REPORT  |
|---------------------|------------------|--------------------------|--|
| TYPE: FIRM*         | NO.: 12095C0165F | DATE: September 25, 2009 | DATE OF EFFECTIVE FLOOD INSURANCE STUDY REPORT: September 25, 2009<br>PROFILE(S): 21P<br>FLOODWAY DATA TABLE: 7<br>SUMMARY OF DISCHARGES TABLE: 4<br>STILLWATER ELEVATION TABLE: 5 |
| TYPE: FIRM*         | NO.: 12095C0255F | DATE: September 25, 2009 |  |

**CID Number:** 120184      **Name:** City of Maitland, Florida

| AFFECTED MAP PANELS |                  |                          | AFFECTED PORTIONS OF THE FLOOD INSURANCE STUDY REPORT  |
|---------------------|------------------|--------------------------|--|
| TYPE: FIRM*         | NO.: 12095C0165F | DATE: September 25, 2009 | DATE OF EFFECTIVE FLOOD INSURANCE STUDY REPORT: September 25, 2009<br>PROFILE(S): 21P, 42P, 68P<br>FLOODWAY DATA TABLE: 7<br>SUMMARY OF DISCHARGES TABLE: 4<br>STILLWATER ELEVATION TABLE: 5 |
| TYPE: FIRM*         | NO.: 12095C0255F | DATE: September 25, 2009 |  |

**CID Number:** 120186      **Name:** City of Orlando, Florida

| AFFECTED MAP PANELS |                  |                          | AFFECTED PORTIONS OF THE FLOOD INSURANCE STUDY REPORT  |
|---------------------|------------------|--------------------------|--|
| TYPE: FIRM*         | NO.: 12095C0255F | DATE: September 25, 2009 | DATE OF EFFECTIVE FLOOD INSURANCE STUDY REPORT: September 25, 2009<br>PROFILE(S): 43P<br>FLOODWAY DATA TABLE: 7<br>SUMMARY OF DISCHARGES TABLE: 4<br>STILLWATER ELEVATION TABLE: 5 |
| TYPE: FIRM*         | NO.: 12095C0255F | DATE: September 25, 2009 |  |

**CID Number:** 120188      **Name:** City of Winter Park, Florida

| AFFECTED MAP PANELS |                  |                          | AFFECTED PORTIONS OF THE FLOOD INSURANCE STUDY REPORT   |
|---------------------|------------------|--------------------------|---|
| TYPE: FIRM*         | NO.: 12095C0165F | DATE: September 25, 2009 | DATE OF EFFECTIVE FLOOD INSURANCE STUDY REPORT: September 25, 2009<br>PROFILE(S): 43P, 21P<br>FLOODWAY DATA TABLE: 7<br>SUMMARY OF DISCHARGES TABLE: 4<br>STILLWATER ELEVATION TABLE: 5 |
| TYPE: FIRM*         | NO.: 12095C0255F | DATE: September 25, 2009 |   |

**CID Number:** 120291      **Name:** City of Casselberry, Florida

| AFFECTED MAP PANELS |  |  | AFFECTED PORTIONS OF THE FLOOD INSURANCE STUDY REPORT |
|---------------------|--|--|---|
|                     |  |  |   |

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## LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

TYPE: FIRM\* NO.: 12117C0165F DATE: September 28, 2007

DATE OF EFFECTIVE FLOOD INSURANCE STUDY REPORT: September 28, 2007  
PROFILE(S): 20P  
FLOODWAY DATA TABLE: 5  
SUMMARY OF DISCHARGES TABLE: 3

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at <http://www.fema.gov/nfip>.

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### LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

#### COMMUNITY INFORMATION

##### APPLICABLE NFIP REGULATIONS/COMMUNITY OBLIGATION

We have made this determination pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 93-234) and in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, P.L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed NFIP criteria. These criteria, including adoption of the FIS report and FIRM, and the modifications made by this LOMR, are the minimum requirements for continued NFIP participation and do not supersede more stringent State/Commonwealth or local requirements to which the regulations apply.

We provide the floodway designation to your community as a tool to regulate floodplain development. Therefore, the floodway revision we have described in this letter, while acceptable to us, must also be acceptable to your community and adopted by appropriate community action, as specified in Paragraph 60.3(d) of the NFIP regulations.

##### COMMUNITY REMINDERS

We based this determination on the 1-percent-annual-chance discharges computed in the submitted hydrologic model. Future development of projects upstream could cause increased discharges, which could cause increased flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on discharges and could, therefore, indicate that greater flood hazards exist in this area.

Your community must regulate all proposed floodplain development and ensure that permits required by Federal and/or State/Commonwealth law have been obtained. State/Commonwealth or community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction or may limit development in floodplain areas. If your State/Commonwealth or community has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

We will not print and distribute this LOMR to primary users, such as local insurance agents or mortgage lenders; instead, the community will serve as a repository for the new data. We encourage you to disseminate the information in this LOMR by preparing a news release for publication in your community's newspaper that describes the revision and explains how your community will provide the data and help interpret the NFIP maps. In that way, interested persons, such as property owners, insurance agents, and mortgage lenders, can benefit from the information.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at <http://www.fema.gov/nfip>.

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## LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Mr. Brad Loar  
Director, Mitigation Division  
Federal Emergency Management Agency, Region IV  
Koger Center - Rutgers Building, 3003 Chamblee Tucker Road  
Atlanta, GA 30341  
(770) 220-5400

### STATUS OF THE COMMUNITY NFIP MAPS

We will not physically revise and republish the FIRM and FIS report for your community to reflect the modifications made by this LOMR at this time. When changes to the previously cited FIRM panels and FIS report warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at <http://www.fema.gov/nfip>.

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## LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

### PUBLIC NOTIFICATION OF REVISION

A notice of changes will be published in the Federal Register. This information also will be published in your local newspaper on or about the dates listed below and through FEMA's Flood Hazard Mapping website at [https://www.floodmaps.fema.gov/fhm/Scripts/bfe\\_main.asp](https://www.floodmaps.fema.gov/fhm/Scripts/bfe_main.asp).

#### LOCAL NEWSPAPER

Name: *The Orlando Sentinel*

Dates: October 31, 2013 and November 7, 2013

Within 90 days of the second publication in the local newspaper, a citizen may request that we reconsider this determination. Any request for reconsideration must be based on scientific or technical data. Therefore, this letter will be effective only after the 90-day appeal period has elapsed and we have resolved any appeals that we receive during this appeal period. Until this LOMR is effective, the revised BFEs presented in this LOMR may be changed.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at <http://www.fema.gov/nfip>.

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TABLE 3. SUMMARY OF DISCHARGES - continued

| FLOODING SOURCE AND LOCATION                    | DRAINAGE<br>AREA (sq. mi.) | PEAK DISCHARGES (cfs) |           |           |             |
|---|----------------------------|-----------------------|-----------|-----------|-------------|
|   |                            | 10-percent            | 2-percent | 1-percent | 0.2-percent |
| GRASSY LAKE DRAINAGE CHANNEL<br>TO TRIPLET LAKE |                            |                       |           |           |             |
| At Sunset Drive                                 | 1.6                        | 93                    | 145       | 179       | 289         |
| At U.S. Route 17-92                             | 1.4                        | 28                    | 41        | 46        | 56          |
| HOWELLCREEK                                     |                            |                       |           |           |             |
| At Lake Jesup                                   | 27.2                       | 2,080                 | 4,630     | 6,420     | 12,140      |
| At State Route 419                              | 26.4                       | 2,030                 | 4,500     | 6,240     | 11,750      |
| At Cross Section G                              | 23.5                       | 680                   | 1,410     | 2,110     | 3,880       |
| At Lake Howell                                  | 30.4                       | 538                   | 990       | 945       | 1,540       |
| LITTLE ECONLOCKHATCHEE RIVER                    |                            |                       |           |           |             |
| At Lockwood Road                                | *                          | 3,250                 | *         | 6,440     | *           |
| At State Route 520                              | *                          | 4,760                 | *         | 8,520     | *           |
| At Orange County boundary                       | *                          | 4,720                 | *         | 8,360     | *           |
| LITTLE HOWELL CREEK                             |                            |                       |           |           |             |
| At mouth  | 2.4                        | 450                   | 1,150     | 1,370     | 3,110       |
| LITTLE WEKIVA RIVER                             |                            |                       |           |           |             |
| At State Route 434                              | 33.8                       | 920                   | 1,500     | 1,800     | 2,580       |
| At Montgomery Road                              | 31.1                       | 780                   | 1,280     | 1,520     | 2,070       |
| At CSX Transportation                           | 27.6                       | 700                   | 1,140     | 1,370     | 1,830       |
|   | 25.4                       |                       |           |           |             |
| At State Route 431                              |                            | 550                   | 880       | 1,050     | 1,610       |
| SIX MILE CREEK                                  |                            |                       |           |           |             |
| At Lake Jesup                                   | 4.5                        | 430                   | 780       | 950       | 1,530       |
| SIX MILE CREEK TRIBUTARY                        |                            |                       |           |           |             |
| At mouth  | 2.4                        | 230                   | 480       | 560       | 820         |

\* Data not available

**REVISED TO  
REFLECT LOMR  
EFFECTIVE: March 7, 2014**



| FLOODING SOURCE     |                       | FLOODWAY     |                            |                                 | BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD88) |                  |               |          |
|---------------------|-----------------------|--------------|----------------------------|---------------------------------|--|------------------|---------------|----------|
| CROSS SECTION       | DISTANCE <sup>1</sup> | WIDTH (FEET) | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY                                       | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| <b>Howell Creek</b> |                       |              |                            |                                 |  |                  |               |          |
| A                   | 3,960                 | 600          | 2,600                      | 1.1                             | 8.7  | 8.5 <sup>2</sup> | 8.9           | 0.4      |
| B                   | 5,200                 | 314          | 1,195                      | 5.4                             | 13.4   | 13.4             | 14.1          | 0.7      |
| C                   | 7,250                 | 239          | 1,938                      | 3.2                             | 15.7   | 15.7             | 16.5          | 0.8      |
| D                   | 9,600                 | 158          | 1,520                      | 1.5                             | 17.6   | 17.6             | 18.2          | 0.6      |
| E                   | 13,200                | 108          | 597                        | 3.8                             | 18.2   | 18.2             | 18.8          | 0.6      |
| F                   | 15,600                | 67           | 380                        | 6.0                             | 24.3   | 24.3             | 24.8          | 0.5      |
| G                   | 19,000                | 131          | 950                        | 2.4                             | 30.8   | 30.8             | 31.8          | 1.0      |
| H                   | 19,450                | 200          | 610                        | 3.4                             | 31.6   | 31.6             | 32.5          | 0.9      |
| I                   | 24,800                | 85           | 400                        | 2.2                             | 42.4   | 42.4             | 42.6          | 0.2      |
| J                   | 27,100                | 57           | 450                        | 2.7                             | 42.6   | 42.6             | 43.4          | 0.8      |
| K                   | 31,250                | 65           | 520                        | 2.3                             | 50.7   | 50.7             | 50.8          | 0.1      |
| L                   | 36,400                | 222          | 610                        | 2.0                             | 55.5   | 55.5             | 55.5          | 0.0      |
| M*                  |                       |              |                            |                                 |  |                  |               |          |
| N*                  |                       |              |                            |                                 |  |                  |               |          |
| O*                  |                       |              |                            |                                 |  |                  |               |          |
|                     |                       |              | ↑<br>Revised Data          |                                 |  |                  |               |          |

<sup>1</sup> Feet above mouth

<sup>2</sup> Elevation computed without consideration of backwater effects from Lake Jesup

\* Data revised based on a Link-Node model

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EFFECTIVE: March 7, 2014**

**TABLE 5**

FEDERAL EMERGENCY MANAGEMENT AGENCY

**SEMINOLE COUNTY, FL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**HOWELL CREEK**

| FLOODING SOURCE   |      |                       | FLOODWAY <sup>1</sup> |                 |                            | BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD) |                  |               |          |
|-------------------|------|-----------------------|-----------------------|-----------------|----------------------------|--|------------------|---------------|----------|
| NODES             | LINK | DISTANCE <sup>2</sup> | WIDTH (FEET)          | PEAK FLOW (CFS) | VELOCITY (FEET PER SECOND) | REGULATORY                                     | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE |
| Howell Creek<br>M | M-N  | 50,075                | 104                   | 950             | 4.6                        | 56.6   | 56.6             | 56.7          | 0.1      |
|                   |      | 50,489                |                       |                 |                            | 59.5   | 59.5             | 59.5          | 0.0      |
| O                 | O-P  | 50,889                | 125                   | 940             | 4.3                        | 60.2   | 60.2             | 60.2          | 0.0      |
|                   |      | 51,365                |                       |                 |                            | 61.7   | 61.7             | 61.8          | 0.1      |
| P                 |      |                       |                       |                 |                            |  |                  |               |          |

<sup>1</sup> Values represent maximum along link

<sup>2</sup> Feet above mouth

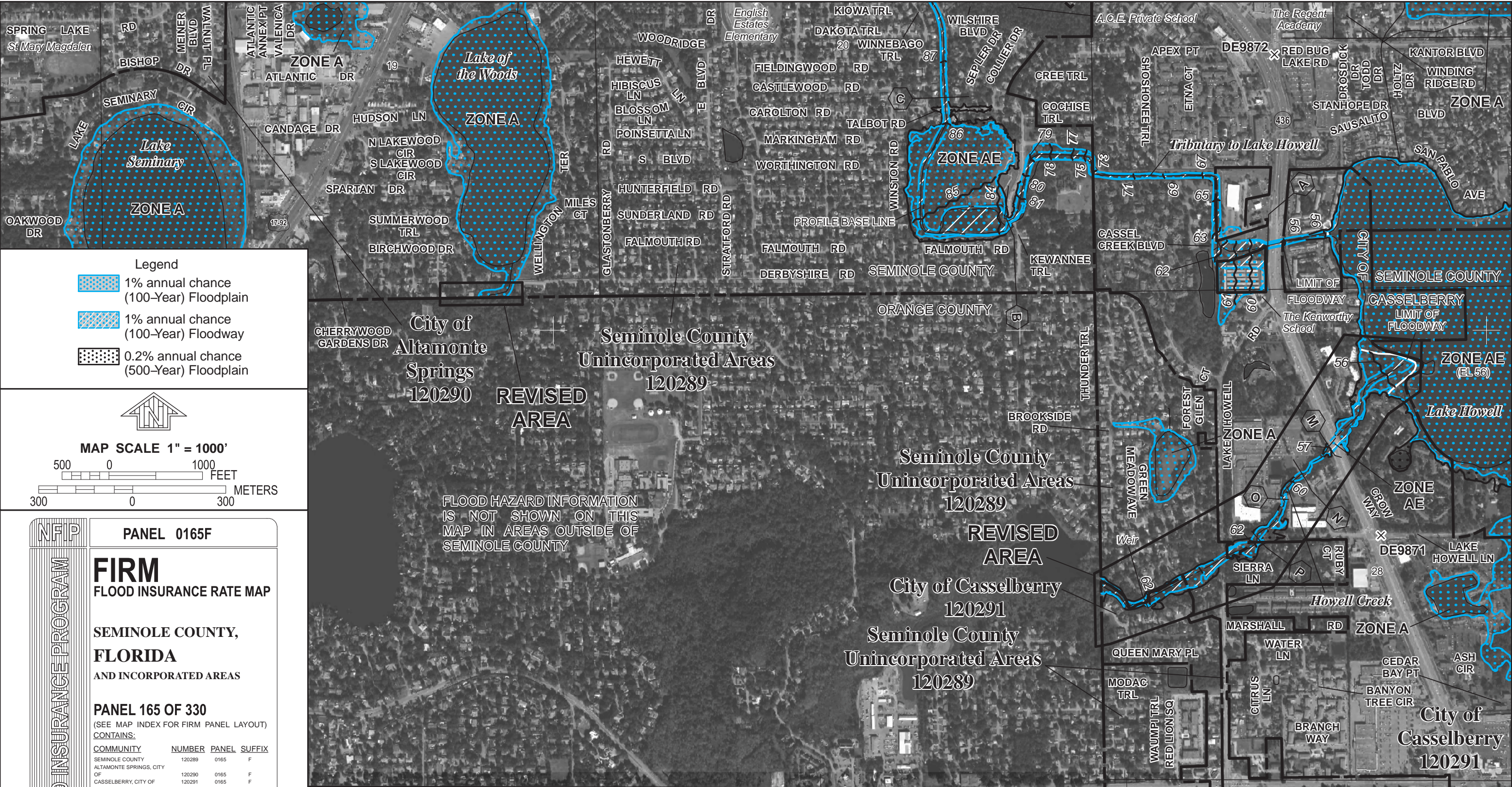
Revised Data 

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EFFECTIVE: March 7, 2014**

|         |  |                      |
|---------|--|----------------------|
| TABLE 5 | FEDERAL EMERGENCY MANAGEMENT AGENCY<br><b>SEMINOLE COUNTY, FL<br/>AND INCORPORATED AREAS</b> | <b>FLOODWAY DATA</b> |
|         |  | <b>HOWELL CREEK</b>  |







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NATIONAL FLOOD INSURANCE PROGRAM

NFIP

PANEL 0165F

FIRM

FLOOD INSURANCE RATE MAP

SEMINOLE COUNTY,

FLORIDA

AND INCORPORATED AREAS

PANEL 165 OF 330

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

| COMMUNITY                  | NUMBER | PANEL | SUFFIX |
|----------------------------|--------|-------|--------|
| SEMINOLE COUNTY            | 120289 | 0165  | F      |
| ALTAMONTE SPRINGS, CITY OF | 120290 | 0165  | F      |
| CASSELBERRY, CITY OF       | 120291 | 0165  | F      |
| LONGWOOD, CITY OF          | 120292 | 0165  | F      |
| WINTER SPRINGS, CITY OF    | 120295 | 0165  | F      |

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER

12117C0165F

MAP REVISED

SEPTEMBER 28, 2007

Federal Emergency Management Agency



