



# National Flood Mitigation Data Collection Tool and RLP Viewer

The National Tool or NT, version 3.0  
User's Guide

FEMA 497 / August 2008



**FEMA**

## About the Cover

This resort complex located 200 feet from the San Carlos Bay coastline in Fort Myers Beach, Florida was elevated through a joint Federal, State of Florida, and local mitigation project. In the last two decades, seven hurricanes have caused flood- and wind-related damages to the complex, resulting in nearly \$100,000 in repair costs per event. The Flood Mitigation Assistance (FMA) program funded the Federal share (75%) of the elevation of six buildings within the complex. The effectiveness of the mitigation project was tested when Hurricane Charley hit Fort Myers Beach in August 2004. At that point, four of the resort buildings had been elevated. Those four buildings experienced only minimal damage and were able to stay open and functional while several nearby hotels and motels were flooded, damaged, and/or forced to close. It is estimated that approximately \$200,000 in repair costs alone were avoided in 2004 because of the mitigation afforded by the elevation project.



**FEMA**

# **The National Flood Mitigation Data Collection Tool and RLP Viewer**

**version 3.0**

**USER'S GUIDE**

**August 2008**



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## 1. Definitions

### 1.1 Flood Insurance Terms

**Cumulative Losses** – The total value of losses on a structure during a specified period of time.

**Repetitive Loss (RL) Structure** – The National Flood Insurance Program (NFIP) definition is any property for which two or more flood insurance claims of more than \$1,000 have been paid within any rolling 10-year period since January 1, 1978. Each RL record is identified for FEMA internal program tracking by the use of a seven-digit Repetitive Loss or Property Locator number unique to the individual record. No additional identification is provided to distinguish the various sub-categories below.

**Target Group Repetitive Loss Properties** – This is a subset of NFIP repetitive loss properties that have had:

- Four or more claim payments of more than \$1,000 within any rolling 10-year period since January 1, 1978, and/or
- Two or more claim payments within any rolling 10-year period since January 1, 1978, that appear to equal or exceed the reported property value.

**Severe Repetitive Loss Properties** – A subset of Target Group Repetitive Loss Properties defined by the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004. An SRL property is defined as a residential property (occupancy is single family, 2-to-4 family, other residential, or assumed condo) that is covered under an NFIP flood insurance policy and:

- (a) That has at least four NFIP claim payments (including building and contents) over \$5,000 each, and the cumulative amount of such claims payments exceeds \$20,000; or
- (b) For which at least two separate claims payments (building payments only) have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building.

For both (a) and (b) above, at least two of the referenced claims must have occurred within any 10-year period, and must be greater than 10 days apart.

### 1.2 NFIP Terms and Building Code/Regulatory Standards

**Appurtenant Structures** – Accessory structures that are not habitable but are located on the same property as the structure of interest. Examples of appurtenances include carports, sheds, garages, and decks.

**Base Flood Elevation (BFE)** – The water surface elevation resulting from the base or 100-year flood (i.e., a flood that has a 1-percent chance of equaling or

exceeding that level in any given year). It is commonly referred to as the 100-year flood and is the national standard used by the NFIP and all Federal agencies for the purposes of requiring the purchase of flood insurance and regulating new development.

**Code Height Restrictions** – Regulations, usually at the community level, that cap the height to which a structure can be built or elevated. These are mainly used in waterfront communities where coastal or riverfront views are being protected.

**Compensatory Storage** – Floodwater storage created to offset the effects of development in the floodplain. Some communities require a hydraulically equivalent storage volume be created for floodwaters when development has resulted in the displacement of floodwaters from part of the floodplain.

**Design Flood Elevation (DFE)** – Elevation to which a building is designed to provide protection from flooding. The DFE is generally referenced to the BFE and might include some level of freeboard (see definition) above the BFE for added protection.

**Dry floodproofing** – Measures that eliminate or reduce the potential for flood damage by keeping floodwaters out of the structure. Examples include installation of watertight shield for doors and windows, reinforcement of walls to withstand hydrostatic and hydrodynamic pressures and debris impact, and use of sealants to reduce seepage of floodwater through walls.

**Flash flood** – A flood that rises and falls very quickly and is usually characterized by high flow velocities. Flash floods often result from intense rainfall over a small area and can also occur in highly urbanized areas where pavements and drainage improvements speed runoff to a stream.

**Flood Insurance Rate Map (FIRM)** – An official map of a community, on which FEMA has delineated both the special hazard areas and the risk premium zones applicable to the community. The map shows the extent of the base floodplain and may also display the extent of the floodway, and BFEs.

**Flood Insurance Study (FIS)** – A study developed in conjunction with the FIRM. The FIS, also known as a flood elevation study, frequently contains a narrative of the flood history of a community and discusses the engineering methods used to develop the FIRMs. The study also contains flood profiles for studied flooding sources and can be used to determine BFEs for some areas.

**Freeboard** – An additional amount of height included to provide a factor of safety. It is usually expressed in feet above a flood level for purposes of floodplain management.

**Levee** – A man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water to provide protection from temporary flooding.

**Pre-FIRM Building** – For insurance rating and floodplain management regulatory purposes, a pre-FIRM building is defined as a building constructed or substantially improved on or before December 31, 1974, or before the effective date of the initial FIRM of the community, whichever is later. Most pre-FIRM buildings were constructed without accounting for the flood hazard.

**Post-FIRM Building** – For insurance rating and floodplain management regulatory purposes, a post-FIRM building is defined as a building constructed or substantially improved after December 31, 1974, or after the effective date of the initial FIRM of a community, whichever is later. A post-FIRM building is required to meet the NFIP's minimum flood protection standards in effect at the time of construction.

**Substantial Damage** – Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

**Substantial Improvement** – Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. This term includes structures that have incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either:

- (1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or
- (2) Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

**Wet floodproofing** – Permanent or contingent measures applied to a structure and/or its contents that prevent or provide resistance to damage from flooding by allowing floodwaters to enter the structure. Such measures include the design of openings for intentional flooding of enclosed areas below the DFE, use of flood resistant building materials below the DFE, and protection of the structure and its contents (including utilities).

### **1.3 Property Value**

**Building Replacement Value** – The value of a structure based on the cost of materials and labor to rebuild it.

**Market Value** – The value of a structure based on the estimated price for which a willing seller in the current real estate market would sell it to a willing buyer.

#### **1.4 Stormwater Management**

**Detention Basin** – A basin constructed to temporarily impound stormwater runoff and attenuate stormwater flows.

**Retention Basin** – A basin that has a permanent pool for water quality treatment. It temporarily impounds and retains a specified amount of stormwater runoff and then discharges excess runoff through a riser structure and spillway at a specified rate.

**Debris flow** – Floodwaters that have picked up and are carrying objects of all types (e.g., trees, automobiles, boats, storage tanks, dirt, oil, various chemicals, etc.).

**Flood frequency** – The probability, expressed as a percentage, that a flood of a specific size on a specific stream will be equaled or exceeded in any given year.

## **2. Introduction**

### **2.1 Purpose**

The National Flood Mitigation Data Collection Tool (abbreviated as NFMDCT and referred to as the National Tool or NT) was developed for Nationwide use to gather information about floodprone structures in order to determine potentially appropriate long-term mitigation measures. The ultimate goal of the NT is to provide a standardized, systematic approach to collecting and interpreting property data and mitigation project development.

While the focus of the NT is on data collection for repetitive loss (RL) properties, it can be used to gather information related to flood risk, building construction, and building value for any structure. The NT is designed to encourage a comprehensive sweep for information pertinent to each structure. Data fields within the NT require information from a variety of sources, including NFIP policy information; community building, tax, and historical flood records; and field reconnaissance. Having detailed data helps create a clearer picture of the property and its flooding issues, which is important in determining the most appropriate and cost-effective mitigation method. However, the NT can also be used for more cursory or limited data collection efforts as appropriate.

The NT also allows you to make changes to the information that is currently recorded with the NFIP. FEMA recognizes that addresses linked to past and present claim records and NFIP policies may be vague or outdated. Similarly, past addressing practices may cause the data associated with RL properties to be linked with the wrong structure. Several RL properties have been mitigated from the 100-year flood or have been provided with a lesser degree of protection. If noted, and documented appropriately within the NT, any updated or corrected data captured may be revised by the NFIP.

The Repetitive Loss Property (RLP) Viewer 2.0 is a standalone application that uses Geographic Information System (GIS) to display of point features representing repetitive loss properties over base map data such as roads, streams, county and community boundaries, and Q3 flood maps. New property point shape files can be produced quickly by reading latitude and longitude coordinates stored inside the NT Access file for each property.

### **2.2 Description**

The NT was developed using Microsoft (MS) Access 2002 (i.e., XP); however, it was also designed to work with Access 2003 and 2007, provided that the installation is done properly for each of these systems and the system requirements are met (see Appendix A – System Requirements, Installation, and Maintenance Instructions). If you have Access 2002 or Access 2007, the icon that appears in the Start > All Programs list needs to be modified to point to the correct Microsoft Office folder. To do this, go to Start > All Programs and right

click on the NFMDCT\_V3 icon. Select Properties, and modify the target field to point to the correct Office folder (Office12 for Access 2007 or Office10 for Access 2002).

The NT program is not compatible for use on Macintosh computers. Version 3.0 of the NT is not supported in Access 2000. For any issues with installation, a Troubleshooting section is provided as Appendix B – Troubleshooting.

In order to use the NT in the field, it should be loaded onto a laptop to incorporate information from the field visit(s) immediately. However, paper/hardcopy data collection forms are also provided within the NT and in Appendix C – Field Data Collection Suggested Equipment and Forms to allow data recording in the field that can be transferred to the NT after field work is complete. A two-person team is suggested to optimize efficiency in the field. Suggested equipment for field data collection is also included in Appendix C – Field Data Collection Suggested Equipment and Forms.

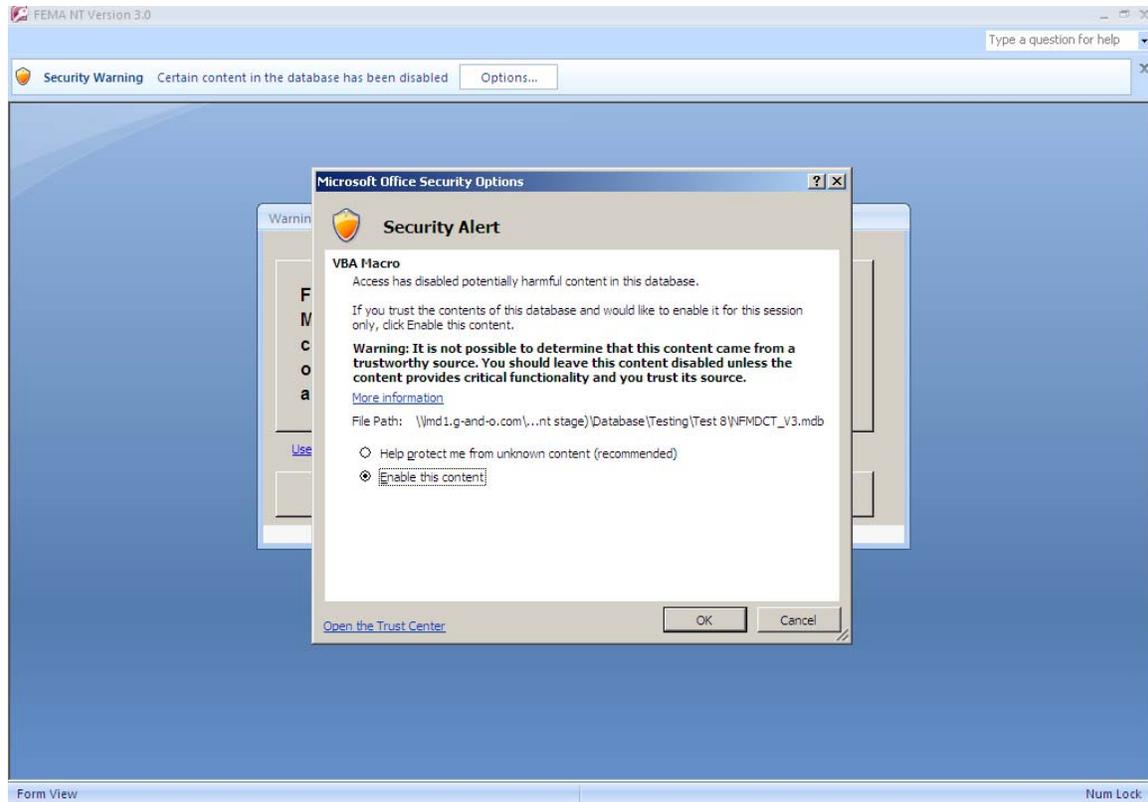
Once the field data collection efforts are complete and the NT has been populated, a copy should be provided to the appropriate FEMA Regional Repetitive Loss Coordinator for inclusion into both the Regional and National Database Repositories. A list of these coordinators is provided in Appendix D – Regional Repetitive Loss Coordinators. The National Database Repository will be housed at FEMA Region IV. Each individual FEMA Region will serve as a Regional Repository where the populated databases will be housed and then forwarded to Region IV for inclusion in the National Database Repository. An upload site for each Region may eventually be created for field data collectors to send data to the Region's Repository via the Internet.

The NT database screens are best viewed with a screen resolution of 1024 by 768 pixels. A screen resolution of 800 by 600 pixels is acceptable vertically but will not fit horizontally.

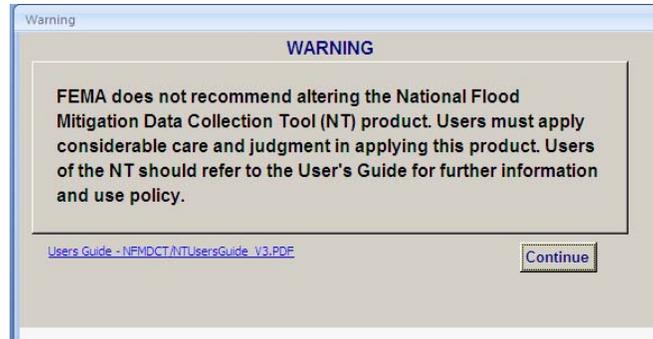
The RLP Viewer 2.0 is an enhanced version of the Repetitive Loss Properties GIS Viewing Tool 1.1. The major improvement is that this GIS-based tool is suited to display maps and tabular data about repetitive loss properties as collected by the NT. It is now a standalone application capable of connecting to any standard NT database in Access format (.mdb). Hence, the application can be used in any state and county in the U.S. without any complicated preprocessing of the data in a different, non-standard NT database format.

### 3. Warnings and Agreements

If the NT is running in MS Access 2007, both a Security Warning bar will appear along the top of the NT screen and a tool warning window will appear in the main area of the screen. First, click on the *Options...* button of the Security Warning bar to open the Security Alert window and then select the *Enable this content* option before clicking *OK*.

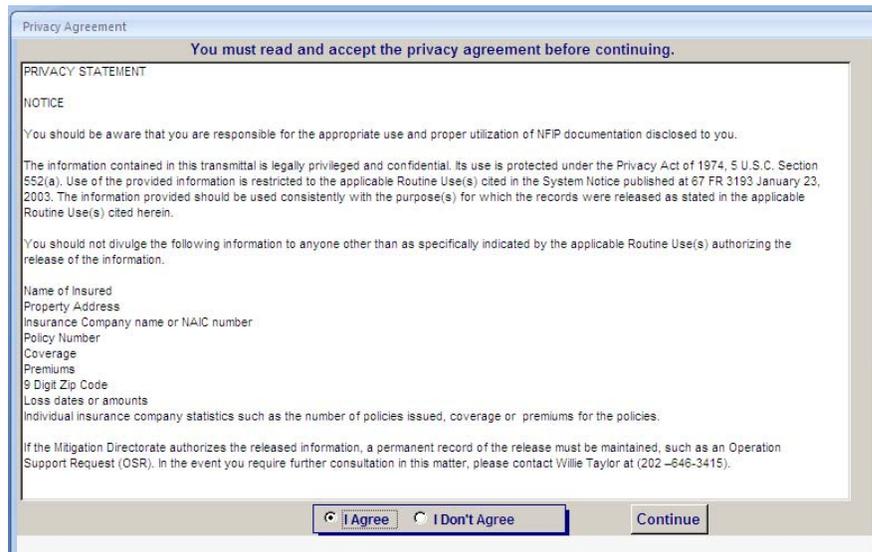


Next, click *Continue* on the tool warning window. This warning serves to notify you to exercise care in making any modifications to the program code and structure of the database tables within the NT. Data collected with the NT will be stored in a National Repository. Changes to the structure of the NT can cause variations in the format of data leading to difficulties in storing it with and comparing it to other data. Additionally, the NT developers and FEMA Information Technology (IT) staff cannot provide technical support to those who have altered the NT. Select *Continue* once you have read the warning.



If the NT is running in MS Access 2003 when it is first opened, an MS Access security warning window will open. After selecting *Open* on this window, a Tool Warning window will open. Read the warning before clicking on *Continue*.

Next, a third window will open with information on a Privacy Agreement. The Privacy Act of 1974 protects most, if not all, of the information about the properties inventoried by the NT. Sharing or using any NFIP data released with the NT for purposes other than those approved for the identified category of user may be a violation of the Privacy Act and the offender will be subject to the provisions of the act. In order to access the NT, you must acknowledge understanding this act by selecting the *I Agree* option and then selecting *Continue*.



## 4. Overview of Options

Once the terms of the Privacy Statement are agreed upon, you will be shown the *National Flood Mitigation Data Collection Tool (NT)* main menu and presented with six options: *Limited View*, *Detailed View*, *Reports*, *Utilities*, *Help*, and *Exit Application*.



### 4.1 Limited View

The *Limited View* enables you to enter data from a brief visual inspection of the property, limited communication with the property owner/occupant or neighbor, and basic flood risk data from the FIRM. There is also an option to describe potential or pending mitigation actions in the *Notes* sections. Data in the *Limited View* serve as the basis for all data records and should be completed prior to the collection of additional data.

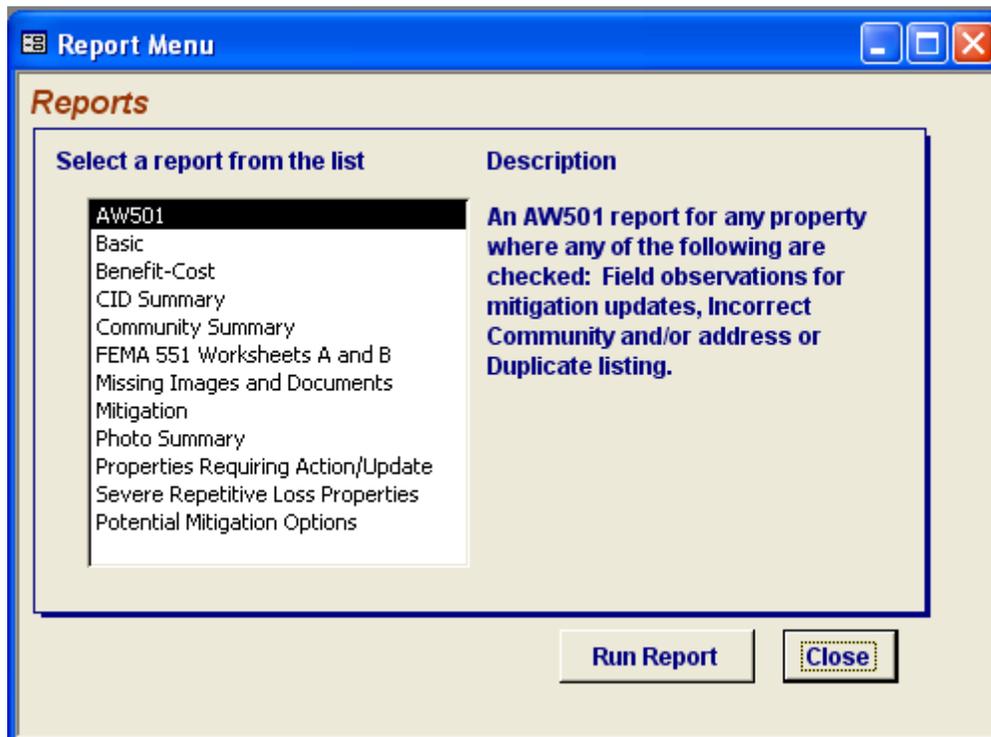
### 4.2 Detailed View

Detailed data collection is suitable when a more thorough inspection of the property and its surroundings is conducted, as well as when local or state officials are contacted for structure-specific information and coordination of on-site data collection efforts. *Limited View* information should also be collected and populated within the NT as part of detailed data collection efforts.

### 4.3 Reports

The *Reports* function provides summary reports for any or all of the properties in the database. Reports can be accessed from the main menu or by selecting Reports on the top tool bar of the Limited or Detailed Views.

The reports generated can be printed to portable document format (PDF) even if your computer does not have Adobe Acrobat installed. Selecting *Create PDF* from the Print Menu or, if you have Adobe Acrobat installed, clicking on *Print* and then choosing Adobe PDF from the list of printers you have available. Once the PDF is created, you can rename and save the file to any location by using the Save As function under File on the Adobe tool bar.



There are currently 12 types of reports available: AW-501, Basic, Benefit-Cost, CID Summary, Community Summary, Missing Images and Documents, Mitigation, Photo Summary, Properties Requiring Action/Update, Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551) – Worksheets, Severe Repetitive Loss Properties, and Suggested Mitigation Options.

#### 4.3.1 AW-501

An AW-501 report is automatically generated for a property when any of the following fields are checked: field observations for Mitigation Updates; Incorrect Community and/or Address; or Duplicate Listing. The information contained in this report can be used to complete the NFIP

Repetitive Loss Update Worksheet (form AW-501). Also see [Appendix G](#) of this User's Guide for additional information about the AW-501.

#### **4.3.2 Basic**

This report is a summary of property information for each property selected. It includes information on the site, structure, claims, insurance, and mitigation measures.

#### **4.3.3 Benefit-Cost**

This report is prepared for each selected property and contains data collected with the NT that can be used in the development of a FEMA Benefit Cost Analysis (BCA, including property value information and flood risk data.

#### **4.3.4 CID Summary**

The Community Identification Number (CID) report provides property listings (Address and Property Locator/Repetitive Loss Number) for all records in the NT for a specific community.

#### **4.3.5 Community Summary**

This report provides counts of records, by community, corresponding to properties that require updates, properties that are mitigated, flood source, and land use.

#### **4.3.6 Missing Images and Documents**

A report listing any images or documents that are associated with a property but are missing from the NFMDCT folder.

#### **4.3.7 Mitigation**

A per property hybrid report combining selected structural, NFIP, Benefit Cost and Mitigation Analysis Information on a single page. Sorted by community first, then property locator number. This report is useful in the property owner consultation process.

#### **4.3.8 Photo Summary**

This report shows all photographs attached to a record. You can also generate reports for multiple selected properties. The report criteria screen allows you to click on the column heading to sort the properties by Rep Loss #, Community Name, or CID number before selecting specific and multiple properties that you want to generate a report.

### 4.3.9 Properties Requiring Action/Update

This report contains a listing of properties that require follow-up action by FEMA. The report will include properties with any of the following boxes checked: Updates Made; Incorrect Community and/or address; additional Research Needed; Mitigation Updates based on Field observations, Mitigation Observed; Mitigation Verified; duplicate Listing; and Claims Update Required.

### 4.3.10 Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551) – Worksheets

Worksheet A from FEMA publication 551 is a sample information packet to be used while working with a property owner. All of the data and information contained within the sample packet are fictitious. Worksheet B is the same packet but with blank sheets that can be completed by any user. The small, blue and white “551” symbol indicates that this report requires specific fields in NT in order to be created. This symbol can be found next to these specific fields in tabs of both the Limited and Detailed View.

### 4.3.11 Severe Repetitive Loss Properties

This report generates listings, including address, repetitive loss (RL) number, and claims history for those properties meeting the current SRL definition. However, in addition to the 1-to-4 family residences identified in the official definition, the report will also include listings for the “OTHER RESID” occupancy type found in NFIP.

The 10 SRL indicators from the imported NFIP spreadsheet use the following codes and values:

Code	Value
All	All Types
V	Validated
VU	Validated Uninsured
VN	Validated NonResidential
VNU	Validated Nonresidential Uninsured
P	Pending
PU	Pending Uninsured
PN	Pending NonResidential
PNU	Pending Nonresidential Uninsured

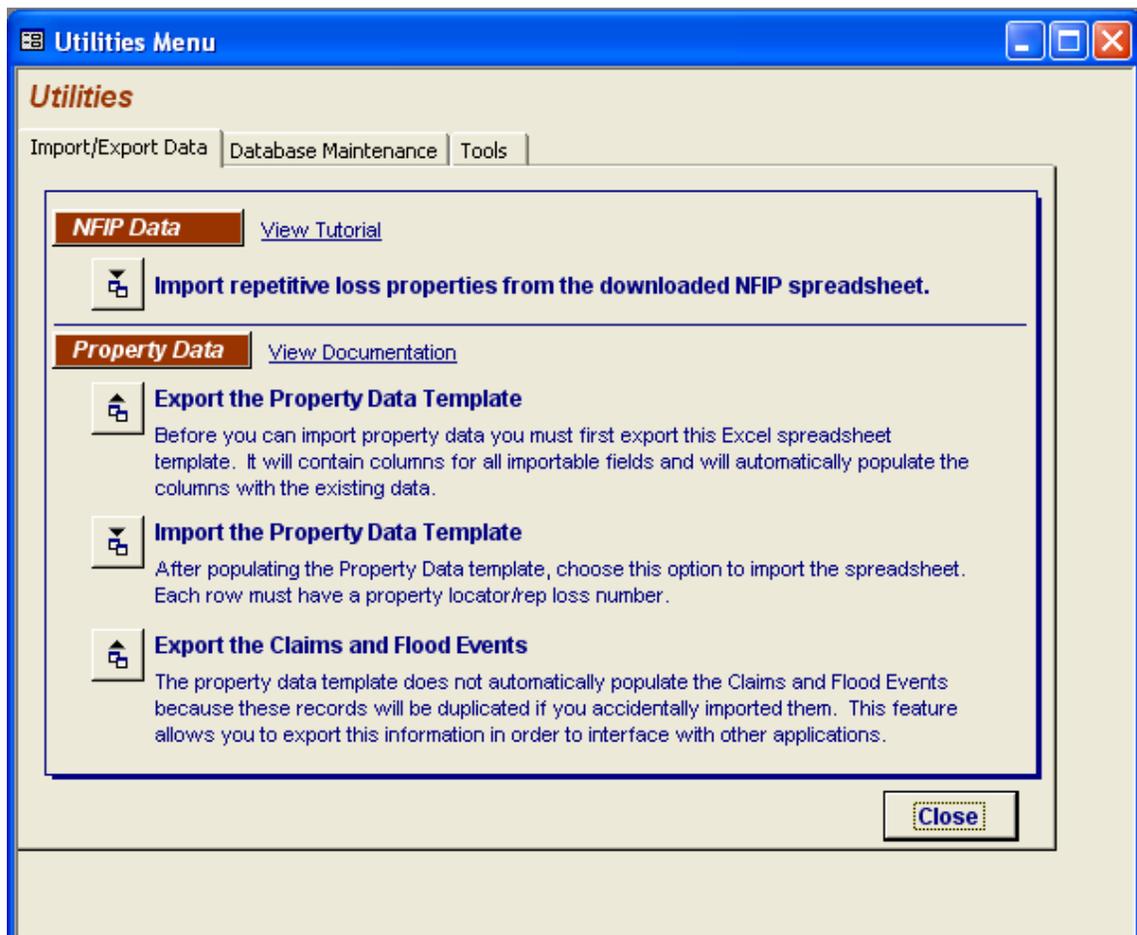
Reports can be generated based on any or all of the SRL indicators selected by using a drop down box. After choosing your criteria, click on the *Continue* button to generate the report. For any report generated, the Property Locator/Rep Loss # will include the SRL number and indicator. For example, “0123456 SRL(Verified).”

### 4.3.12 Suggested Mitigation Options

This report summarizes possible mitigation options for select properties as entered in the NT. For example, if the community or property owner has plans to mitigate the structure and is awaiting funding, it should be noted in the *Flood Risk and Mitigation Possibilities/Possible Mitigation Measures* section for it to appear in this report.

## 4.4 Utilities

The Utilities has three tabs: *Import/Export Data*, *Database Maintenance*, and *Tools*. With the *Import/Export Data* tab, you have option to import NFIP data (Section 4.4.2), export the Property Data Template spreadsheet, import property data (Section 4.4.3), or export the claims and flood events data (for use with FEMA's Benefit Cost Analysis [BCA] program). The *Database Maintenance* tab has options to append properties (Section 4.4.4), merge properties (Section 4.4.5), review the Photo Gallery (Section 4.4.6), or create a subset NT database (Section 4.4.7). Finally, the *Tools* tab (Section 4.4.8) has links to additional software programs and worksheets. Most of the options discussed here have a tutorial associated which provides step-by-step instructions.



#### 4.4.1 Downloading NFIP Data

Prior to field inspections, NFIP data for the structures of interest should be obtained from the appropriate FEMA Regional RL Coordinator in the form of a RL Data for National Tool, MS Excel file. The file contains records for RL structures with information on claims and, in some cases, previously captured mitigation information for the property. Regional RL Coordinators (see [Appendix D](#)) have the capability to access NFIP data and related systems to perform data queries. The Drill Down can be accessed via an Internet connection using NFIP Services, which requires login and password for direct access into the site. Only authorized state and Federal officials have access.

Before beginning, make sure the Internet pop-up blocker is turned off.

To access the system, go to

<http://nfipbureau.fema.gov>

- From the Main Screen, choose the *SQANet* link.
- Click the *Click here to login* link.
- Review the Privacy Statement Notice before choosing the *Agree* button.
- In the pop-up window, enter the user name and password. Then click *OK*.
- On the menu of links on the left-hand side under the *Reports* heading, select *RL* to open the sub-menu of reports to choose from.
- In the sub-menu, select the report *RL Data For National Tool*.
- Within the main area of the web page, select a state and select from three options for data results: Mitigated Properties Only, Unmitigated RL Properties Only, or Mitigated and Unmitigated RL Properties.

Next, select the Submit button to run the report.

- After submitting this report, the main screen will be blank. At the top, select the far left button which is the “Export this report” button.

- Next, an Information window appears about downloading the ActiveX file. Download this file. Unfortunately, you will need to repeat the previous steps again. This may be corrected in the future.
- After repeating the steps, an Export Report window will appear. Select the file format *Microsoft Excel 97-2000 – Data Only (XLS)*. Then click *OK*.
- When prompted, click *Save* and save the file to a folder with a name of your choice. Remember the folder and filename for importing the file into the NT later.

A step-by-step tutorial on this process is available. Go to Help > Tutorials tab > Importing NFIP Data (which includes steps for accessing and downloading NFIP data).

#### 4.4.2 Importing NFIP Data

This function allows data from NFIP to be uploaded to the NT and used to create new records or to update information in existing records.

The NFIP database stores records of all NFIP claims and policies. NFIP data are used as a starting point to create records in the NT; when NFIP data are imported, new records will be created for each property included in the NFIP data that does not already have a record in the NT. Existing NT records that correspond to records in the NFIP data being imported will NOT have all NFIP-populated fields overridden each time there is an import; field data captured by the NT will remain intact. NFIP data includes the address and CID of the structure, insured and claimant information, data on claims paid, and information on mitigation measures taken that have been previously captured by FEMA.

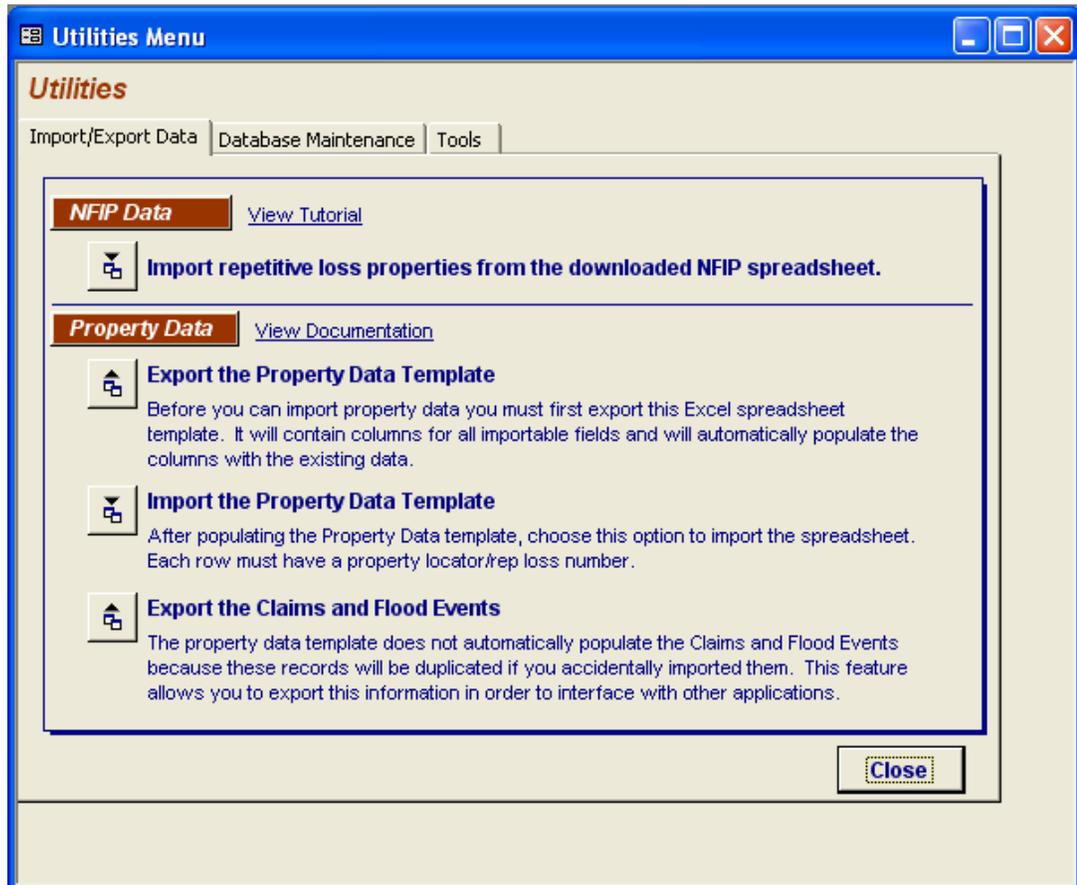
#### **Tips**

- Delete any rows for properties that are not of interest.
- Make sure the output file is saved as an MS Excel version 5.0 or higher.
- The NFIP spreadsheet field *Local Property Identifier* is imported into the *Local Lot/Parcel ID* field (found in the Detailed View).

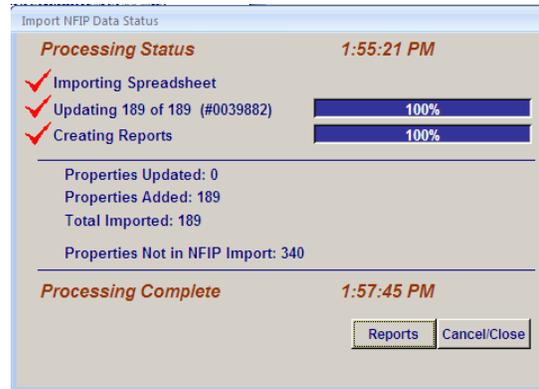
To begin the import process:

1. From the main menu of NT, select *Utilities* button to get to the *Utilities Menu*.

2. Under the *Import/Export Data* tab, select the *Import repetitive loss properties from the downloaded NFIP spreadsheet* button.

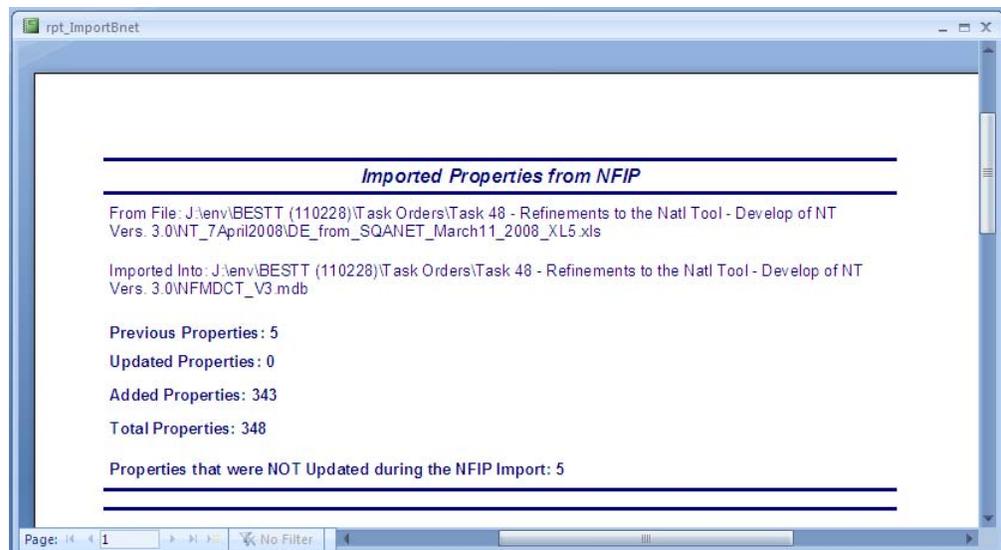


3. Browse to and select the appropriate MS Excel file to import and click *Open*. A confirmation screen prompts you to make sure the correct file has been selected. Select *No* or *Cancel* if you want to stop the import. Selecting *Yes* will start importing the properties right away.
4. The Import NFIP Data Status window will open and show progress bars until the import process is complete. The window will also report the number of properties that were updated or added.



5. After the properties have been imported, selecting the *Report* button will bring to view four reports:

- 1) Imported Properties from NFIP
- 2) New Properties added to the Database during the NFIP Import
- 3) Properties that were NOT Updated during the import
- 4) Import Results (a summary of properties organized by CID)



rpt\_ImportRLS\_N

**New Properties added to the Database during the NFIP Import**

**Property Locator/Rep Loss # (189)**

0000006	0008871	0010316	0031988	0067053
0000090	0008879	0010323	0031991	0067061
0000094	0008884	0010325	0031993	0067062
0000102	0008888	0010333	0032004	0067063
0000151	0008889	0010339	0032009	0067064
0000152	0008896	0010349	0032018	0067065
0000153	0008897	0010358	0032021	0067066
0000206	0008919	0010367	0036336	0067077
0000318	0008923	0010373	0037677	0067078
0002425	0008924	0010374	0038882	0067079

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rpt\_ImportRLS\_X

**Properties that were NOT Updated during the NFIP Import**

**Property Locator/Rep Loss # (340)**

0000000	0005269	0021639	0056433	0077813	0094711	0116850
0000040	0005278	0031485	0056509	0077682	0094749	0119210
0000195	0005283	0031490	0056615	0085152	0094772	0122803
0000290	0005286	0031492	0056655	0091124	0094784	0123088
0001255	0005313	0031533	0056670	0091148	0094788	0123452
0001483	0005332	0031575	0056770	0091171	0094800	0123457
0001484	0005333	0031608	0057363	0091366	0094832	0123736
0001485	0005348	0031672	0058314	0091374	0094837	0123850
0001606	0005349	0031673	0058317	0091376	0094868	0123989
0001608	0005732	0031678	0058318	0091380	0094871	0124097
0001609	0006471	0031687	0058319	0091381	0094875	0124477
0001611	0006768	0031694	0058321	0091385	0094882	0124698
0002192	0006780	0031788	0058322	0091390	0094883	0124836

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rpt\_ImportCID

**IMPORT RESULTS**

CID #	Property Records Before Import	Existing Property Records Updated	Existing Property Records Not Updated	New Property Records Added	Property Records After Import
450085	0	0	0	189	189
				0000006 0000090 0000094	
				0000102 0000151 0000152	
				0000153 0000206 0000318	
				0002425 0003403 0003962	
				0004047 0004076 0005138	
				0005147 0005175 0005179	
				0005190 0005902 0005904	
				0005968 0005993 0006024	
				0006028 0006041 0006747	
				0006754 0006765 0006773	
				0006775 0006794 0006818	
				0006850 0006853 0006858	

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Each of these reports may be printed by selecting *Print...* or saved as a PDF by selecting *Create PDF*.

6. Press *Close/Cancel* to close the NFIP Import Data Status screen. Once you choose *Close/Cancel*, there is no way to re-enter the status window to obtain this status report.

The imported NFIP data can be viewed from several of the screens in the NT, as shown in the “grayed out” boxes. The NFIP data cannot be modified. However, there are opportunities within the NT to provide updated or better information back to the NFIP that can be used to update NFIP data. If you find updated or more accurate data during field work and/or research that should be reported to the NFIP, check the appropriate update boxes on the *Address and Updates* tab in the Limited View and on the *Claims* tab of the Detailed View. Checked boxes will serve as markers that the existing information in NFIP may need to be updated with the new data.

On the top tool bar under View, the Data Collection screen displays the NFIP date of download and the NFIP data as of date. You will also see the first site inspection record to be filled in with the inspector’s information after the first field inspection.

The NT will create new records for each property listed in the NFIP data output file and update records already in the NT with this information. Therefore, the output file from NFIP should contain information for structures that need new records created or structures that need address, claim, and policy data updated.

A step-by-step tutorial on this process is available. Go to Help > Tutorials tab > Importing NFIP Data.

#### **4.4.3 Importing Property Data**

This feature enables you to import additional property data, photographs and other NT data fields through an automated process. All fields that can be completed within the NT are importable using a Property Data Template (an MS Excel spreadsheet). The spreadsheet has three worksheets (Import Data, Claims, and Flood Events) with a column for each data field. Any errors during the import process are displayed in a report immediately following the import. The View Documentation link provides additional information about the importing property data procedure, possible errors and solutions.

To begin using the spreadsheet:

1. From the Main Menu, click the Utilities button.

2. In the *Import Data* tab, choose the *Export the Property Data Template* button. The spreadsheet automatically opens populated with the loaded Property Locator/Repetitive Loss Numbers and data field entries in their respective columns. Note the three different worksheets labeled in the tabs: *Import Data*, *Claims*, and *Flood Events*.

Property Locator/Rep Loss Num	Image/ Documents Path	Address Updates - Incorrect Community	Address Updates - Incorrect Community Notes	Address Updates - Community Name	Address Updates - CID #	Address Updates - Street #
1 9999002			test notesasdf asdf ad			
3 9999003		Yes		BEACH, CITY OF	099991	
4 9999004				BEACHCOMBER, CITY OF	099992	
5 9999005				BEACHCOMBER, CITY OF	099992	
6 9999006				BEACHCOMBER, CITY OF	099992	
7 9999007				BEACHCOMBER, CITY OF	099992	
8 9999008				BEACHCOMBER, CITY OF	099992	
9 9999009				BEACHCOMBER, CITY OF	099992	
10 9999010				BEACHCOMBER, CITY OF	099992	

3. For each property, populate a row starting in the column labeled *Property Locator/Rep Loss Num*.
  - a. For repetitive loss structures, this should be the 7-digit Property Locator Number or Repetitive Loss Number.
  - b. You do not need to enter any leading zeros; if the number entered is less than seven digits, preceding zeroes will automatically be added into the NT file to bring it to a total length of seven digits. For example, entering “56” will become “0000056.”
  - c. For structures other than repetitive losses, the *Property Locator/Rep Loss Num* field should be populated with the 6-digit CID followed by the street address (7 characters minimum, 50 characters maximum). For existing records, the *Property Locator/Rep Loss Num* must match exactly

with a record's current Property Locator/Repetitive Loss Number in order for the data to be associated with that record.

4. Complete as many of the columns as necessary in the three different worksheets. Some of the columns contain drop down lists. These lists reflect the same drop down items as presented in the NT. For example, the *Address Updates - Incorrect Community* column allows you to choose from *Yes* or *No*. For NT items with multiple fields to select, for example, the HVAC Machinery, there is a separate column for each item offered.
5. The file itself is not automatically saved to your NFMDCT folder. To save the spreadsheet, chose File > Save or Save As.
6. To import the spreadsheet, go to the Utilities menu in NT and select *Import the Property Data Template*.
7. On the Import Data screen, enter your name, title/agency, and comments for importing data. This information is recorded every time there is a change to property data within the NT, including an import of property data.
8. In the bottom part of the screen, browse to locate and select the spreadsheet, and then press *Import* to continue or *Close* to cancel.

### **Tips**

- For troubleshooting and solutions, refer to [Appendix B, Section B.3, Importing Property Data in to the NT](#). This documentation can also be found in the NT under Utilities > Import/Export Data tab and selecting the “View Documentation” link in the section called Property Data.
- The *Property Locator/Rep Loss Num* column is required and must exist in the spreadsheet. The number itself does not have to contain the leading zeros.
- Do NOT rename any of the column names.
- You can delete or hide any columns that you won't be importing.
- If no date is entered for the inspection, claims, or flood events, the respective data will not be imported.
- To increase the speed of the import (e.g., with data several thousand properties), you can delete any rows for those properties not being updated or delete those worksheets without data to update.

#### 4.4.3.1 Including Images or Documents

The *Image / Documents Path* column of the spreadsheet allows the multiple images or documents to be imported. For each image or document, the FULL directory path to the corresponding file must be included. For example, an image with the name “56\_011005\_01.jpg” located in the C:\program files\Images subfolder should have the following text entered in the field:

C:\program files\Images\56\_011005\_01.jpg

#### **Tips**

- Do not include blank spaces in the filename. Either replace the spaces with an underscore (“\_”) or removed the spaces in the file name completely to create a one-word filename before entering the path.
- To import multiple files for the same property, the file names must be separated with a comma or a semicolon (i.e., c:/RL00001899\_1.jpg, c:/RL00001899\_2.jpg, etc.). Do not mix commas and semicolons as file separators in the same cell.
- If multiple properties are to share the same image/document, enter the same document path and file name for each property in the spreadsheet. The image/document will only be moved once, but will be associated with all the properties it was assigned to. Likewise, the same principle applies for existing images/documents in the database. If you are importing an image/document that already exists for another property, the image/document itself will not be moved. However, an association will be made between the property and the existing image/document and the image/document may be viewed in both property records.
- To increase the speed of the import (e.g., with data for several thousand properties), you can delete any rows for those properties not being updated or delete those worksheets without data to update.

	A	B	C	D	E	F
	Property Locator/Rep		Address Updates - Incorrect Community	Address Updates - Incorrect Community Notes	Address Updates - Community Name	Address Updates - Community #
1	Loss Num	Image/ Documents Path				
2	9999002	C:\programfiles\Images\56_011005_01.jpg, C:\programfiles\Images\56_011005_02.jpg, C:\programfiles\Images\58_back.bmp		test notesasdf asdf ad		
3	9999003		Yes		BEACH, CITY OF	099991
4	9999004				BEACHCOMBER, CITY OF	099992
5	9999005				BEACHCOMBER, CITY OF	099992

#### 4.4.3.2 Including Latitude and Longitude

Latitude and longitude are numeric fields that should be formatted as decimal degrees with up to three numbers left of the decimal [and a negative sign (“-”) when necessary], and six numbers to the right of the decimal (for example, “-123.123456”). All latitude measurements must be between -90 and 90 degrees and all longitude measurements must be within the -180 to 180 degree range.

In our example that follows, we hid several columns (note how the top column headings move from A to AL). Any hidden or deleted columns will not be imported.

	A	AL	AM	AN	AO	AP
	Property Locator/Rep					
1	Loss Num	Site - Latitude	Site - Longitude	Site - No of Stories	Site - Basement	Site - Occupied
2	9999002	235.1234	555.6624		2	Yes
3	9999003	123.4567	321.6547		1 Yes	Yes
4	9999004					

Latitude and longitude readings can be collected by and downloaded from most handheld Global Positioning System (GPS) units. Location readings can be transcribed from the visual display on the unit for each location; however, downloading them directly into the computer may be preferred. Most GPS units on the market today come with computer attachment cables and software included or is available as an option. Once the GPS

data is transferred to the computer, the entire list of GPS readings can be managed systematically and the cut and paste tools can be used to minimize the errors associated with re-typing the numbers.

Many other tools are also available for use in downloading GPS points to computers, some of which can be acquired for little or no cost. One example for Garmin® users is a program called DNRGarmin from the Minnesota Department of Natural Resources<sup>1</sup> which imports and exports information between the GPS and the computer using formats compatible with Geographic Information Systems (GIS). Other products are available on the Internet that download data from other or, in some cases, many makers.

In order to get the latitude/longitude readings from the handheld GPS into a format usable for import into the NT, some re-formatting may be necessary. To import the readings into the NT, latitude/longitude measurements must have only numeric characters, with the exception of a negative sign (“-”) for western longitude readings, or southern latitude readings. No directional letter symbols (N, S, E, W) should be included as part of the numbers. Additionally, the values must be in the decimal degree format, and latitude and longitude measurements should be stored in different fields and not combined as one piece of data. Examples of correct and incorrect formatting of a longitude reading are provided in the example below:

Decimal degrees:	-76.905791°	CORRECT
Degrees-Minutes-Seconds:	76°54’20.846’’ W	INCORRECT
Degrees-Minutes:	76°54.347’ W	INCORRECT

To convert degrees-minutes-seconds readings to decimal degrees, the following conversion formula is used, where DD.MM.SS.SSS represents the degrees-minutes-seconds format, and DD.DDDDDD represents the decimal degrees format.

$$DD + [(MM + SS.SSS/60)/60] = DD.DDDDDD$$

Similarly, to convert degrees-decimal minutes readings to decimal degrees, the following conversion formula is used, where DD.MM.MMM equals the degrees-decimal minutes format, and DD.DDDDDD equals the decimal degrees format.

$$DD + (MM.MMM/60) = DD.DDDDDD$$

---

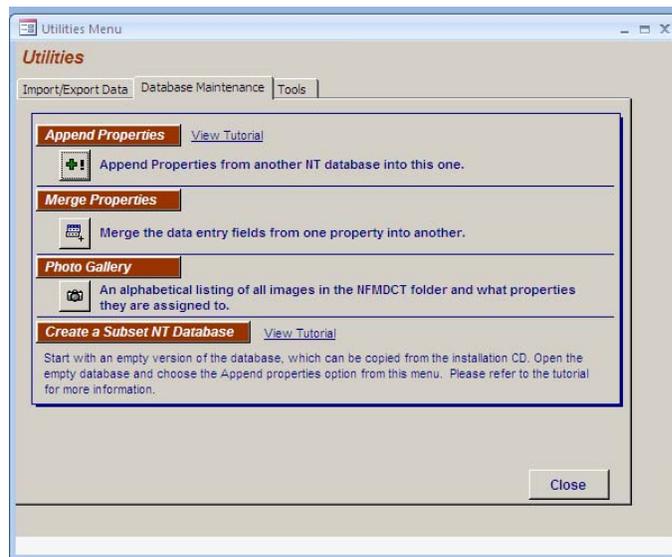
<sup>1</sup> The program is available on-line at <http://www.dnr.state.mn.us/mis/gis/tools/arcview/extensions/DNRGarmin/DNRGarmin.html>

#### 4.4.4 Appending Properties

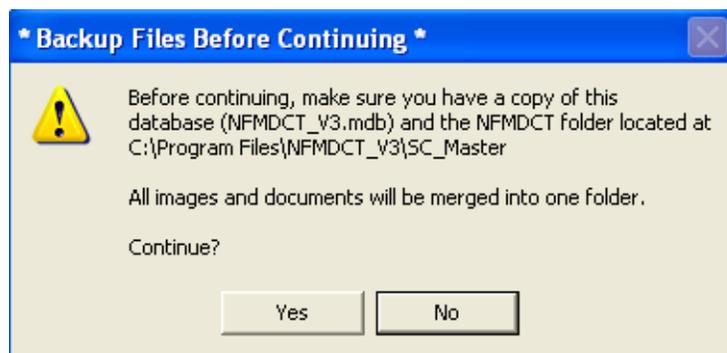
This feature is useful for attaching or adding properties from another database into the currently open database.

To begin this process:

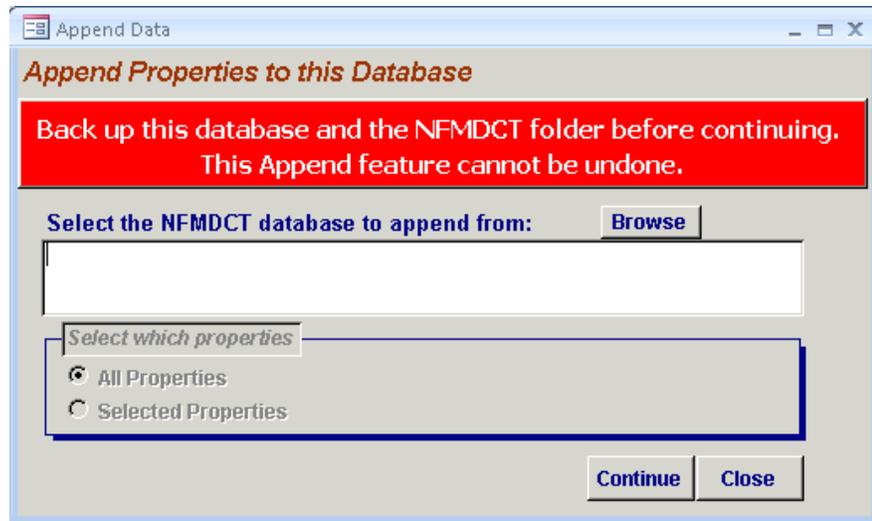
1. From the Main Menu, click the Utilities button.
2. In the *Database Maintenance* tab, choose the *Append Properties from another NT database into this one* button.



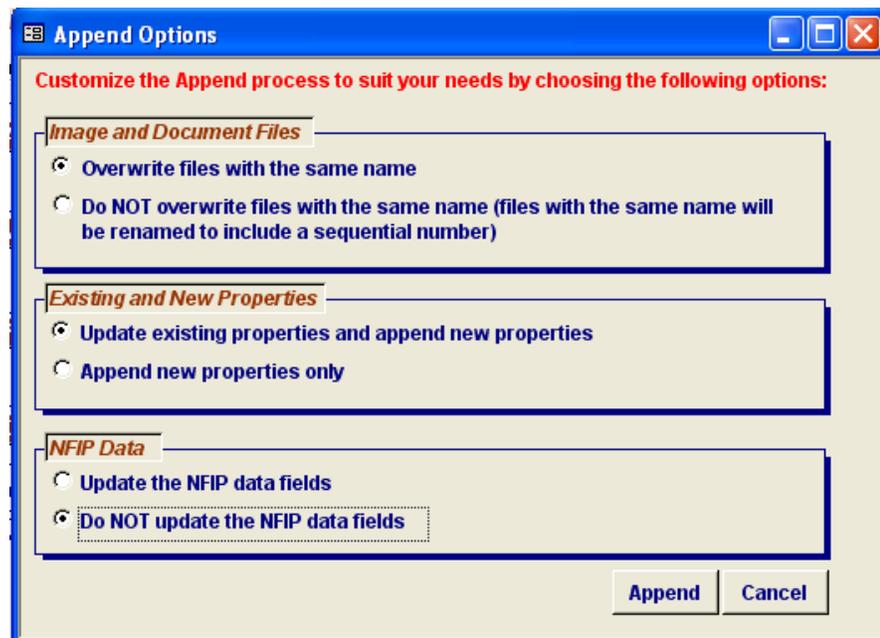
3. A pop-up window will appear to confirm that a backup of the database you are currently working with has been made along with its associated NFMDCT folder. **The append procedure cannot be undone, so it is important to create this backup copy.**



4. Next, the Append Data window opens. Click on the *Browse* button to select the database containing the records to be added.



5. Next there are two options to choose from: either append *All Properties* or only *Selected Properties*.
  - a. Select the *All properties* option to read all the properties from the database you selected. Click *Continue* to get to the Append Options window. You must select one of each option before continuing. The options you select will depend upon whether there are existing properties in the database or not. Move the mouse over each option to get more of a description. When finished, click *Append*.



- b. If the *Selected Properties* option is chosen, an Append Criteria window appears. This window has three tabs: *Address Fields*; *Claims*, *Insurance*, *Mitigation*; and

*Miscellaneous.* When finished selecting specific fields criteria, click *OK* and you are returned to the Append Data window.

After pressing *Continue*, the Append Options window displays. You must select one of each option before continuing. The options you select will depend upon whether there are existing properties in the database or not. Move the mouse over each option to get more of a description. When finished, click *Append*.

**Note:** If you need to re-enter the Append Criteria window before continuing with the append process, click on the *Edit* button next to the field *Selected Properties*.

6. After making your selections, the Confirm Append window will appear to show what options you chose. If all options are correct, click *OK* to begin the append process. Once the process is complete, the Append Status screen will display the progress of the append process. This screen will also show the number of images and documents updated.

7. By selecting the *Report* button, you can view a list of the appended properties, existing properties in the database that were not updated, and any missing image/document files. You can print the report by selecting the printer icon. However, once you close the screen, the report will no longer be available. Press *Close* when finished.

<b>Appended Properties</b>		
FROM: C:\Program Files\NFMDCT_V3\SC_Master\SC_099992\NFMDCT_V3_SC099992.mdb		
TO: C:\Program Files\NFMDCT_V3\SC_Master\NFMDCT_V3.mdb		
CRITERIA: Inspection Date between 7/1/2008 AND 7/31/2008		
<b>Previous Properties: 76</b>		
<b>Updated Properties: 4</b>		
<b>Total Properties: 76</b>		
<b>Images and Documents: 1</b>		
<b>Updated Properties</b>		
<b>Rep Loss #</b>	<b>Community</b>	<b>Address</b>
9999902	DISASTERVILLE, TOWN OF	99 WATER ST, 99 WATER ST, DISASTERVILLE SC
9999925	WATER ISLAND, TOWN OF	903 DOVE AVENUE, WATER ISLAND SC
9999926	WATER ISLAND, TOWN OF	703 DOVE AVE, WATER ISLAND SC
9999927	WATER ISLAND, TOWN OF	1305 DOVE AVE, WATER ISLAND SC
<b>Total Updated Properties: 4</b>		

<b>Missing Image/Document Files from Append Process</b>	
The following files were missing from the source database C:\Program Files\NFMDCT_V3\SC_Master\SC_099992\NFMDCT_V3_SC099992.mdb.*	
<b>Rep Loss #</b>	<b>Image or Document Filename</b>
9999925	9999925_20080627_1.jpg
<b>Total Missing Files: 1</b>	
* To associate these files with the property, locate the file and load it to the property using the View / Images, View / Documents or Utilities / Import Property Data Template menu items.	

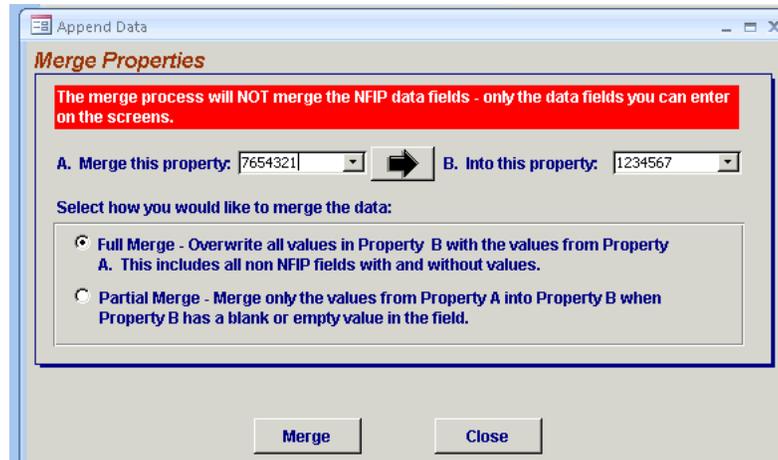
A step-by-step tutorial on this process is available. Go to Help > Tutorials tab > Appending Data into an Existing Database.

#### 4.4.5 Merging Properties

Merging data from one property into another is useful in consolidating the information for duplicate properties to maintain consistency of the data entered. Any data entered for one property (“A”) can be merged into another (“B”) to either overwrite all of the existing values existing in property “B” or only add in data for value fields not filled in property “B.” However, you must merge from a property with a PL # higher into a property with a PL # that is lower. This is to ensure that the original NFIP data (usually associated with the property created earlier in time; hence, the property with the lower PL #) remains.

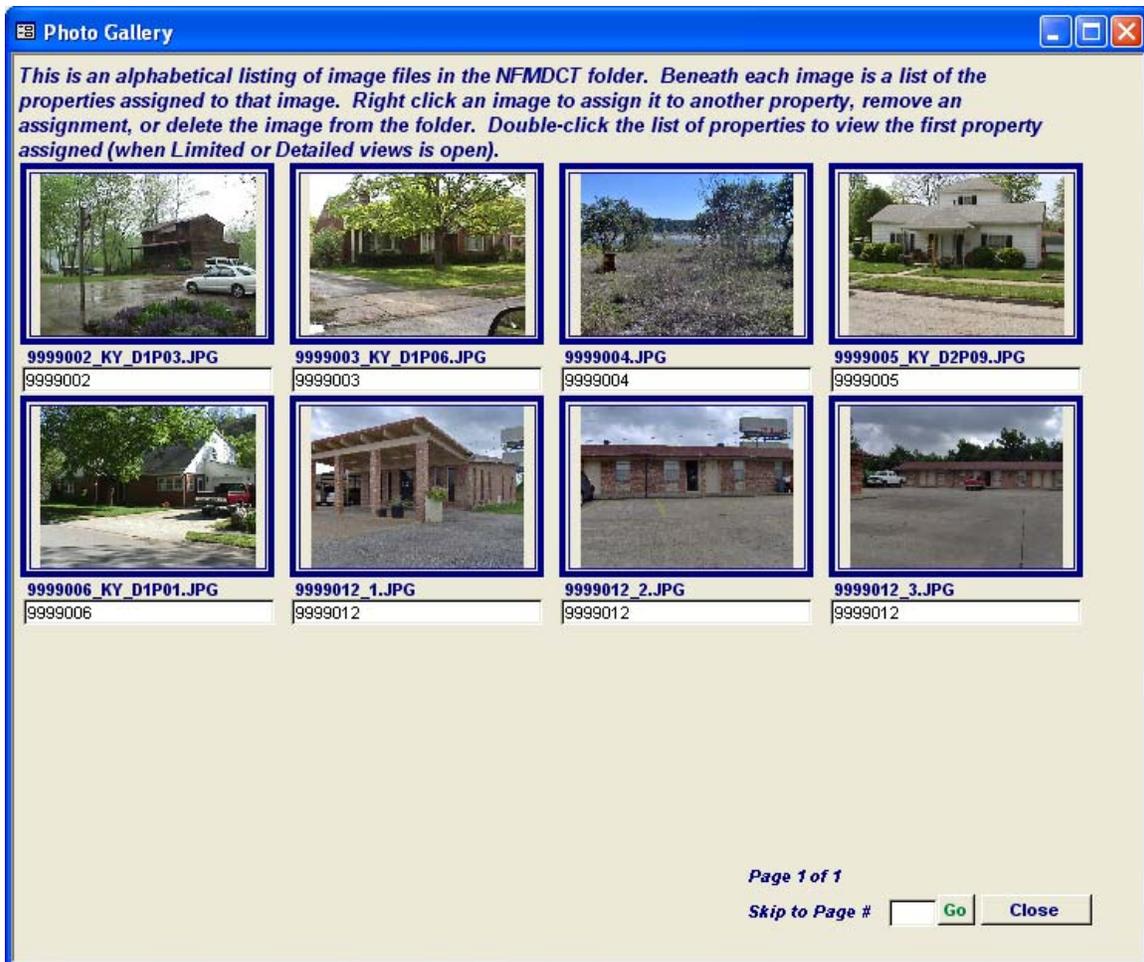
Once the merge process is complete, property “A” can be deleted from the database to avoid confusion over which duplicate property is more “complete,” data wise. Be sure to check the “Duplicate Listing with Property Locator #” box and add the PL # from property “A.”

Only the data capable of being entered in NT can be merged. The NFIP data fields cannot be merged or changed.



#### 4.4.6 Photo Gallery

The photo gallery is an alphabetical listing of all images in the NFMDCT folder and what properties they are assigned to. Within the gallery, you can assign, remove assignment and delete photos. Double-clicking on the property number in the photo gallery will automatically take you to that property record, provided that the Limited or Detailed Views are open in NT.



#### 4.4.7 Creating a Subset NT Database

A subset database is a new NT database created from a master NT database that includes a subset of records from either the master NT database or another NT database. Creating a subset database is useful if you need to provide specific property data to a community official or field inspector. For a community official, the subset database needed may contain only the properties in the official's community. Field inspectors may find it easier to work with a database that contains only the properties being inspected during their site visit.

The NT database and the NFMDCT folder *must* remain together at all times.

The steps to create a subset database are nearly identical to the steps for appending a database (refer also to [Section 4.4.4, Appending Properties](#)):

1. Begin by creating a new folder to contain the subset database and its associated images and documents. Copy an empty version of the NT database and rename the NFMDCT\_V3\_empty.mdb file to something more recognizable for your purpose.
2. Open the subset NT database. From the Main Menu, click on the *Utilities* button to get to the Utilities Menu. Click on the *Database Maintenance* tab, and then select *Append Properties*.

A pop-up window will appear with a message to Backup Files Before Continuing. This is a warning to alert you to the fact that the append function cannot be undone. You should backup the database and the associated NFMDCT folder anytime you have properties in the database that you are appending to. Since our database is empty, it is not necessary to back it up. Press *Yes* to continue.

3. In the Append Data window, *Browse* and select the master NFMDCT database that contains the properties you want in your subset database.
  - a. To append all the properties from the master database, select *All Properties*. Click *Continue* to get to the Append Options window and select one of each option. You must select one of each option before continuing. The options you select will depend upon whether there are existing properties in the database or not. Move the mouse over each option to get more of a description. Since the database is empty, any of the options can be selected. When finished, click *Append*.
  - b. To append specific properties from the master database, select *Selected Properties*. The Append Criteria window will appear. This window has three tabs to select specific fields to update: *Address Fields*; *Claims*, *Insurance*, *Mitigation*; and *Miscellaneous*. When finished, click *OK* and you are returned to the Append Data window.

After pressing *Continue*, the Append Options window displays. You must select one of each option before continuing.

The options you select will depend upon whether there are existing properties in the database or not. Move the mouse over each option to get more of a description. When finished, click *Append*.

**Note:** If you need to re-enter the Append Options window before continuing with the append process, click on the *Edit*

button next to the field *Selected Properties* in the Append Data window.

4. Next, the Confirm Append pop-up window displays to confirm the file and options chosen. If all options are correct, press *OK* to start appending properties into the database.

The Append Status screen displays the status of each step of the Append process. The Append process may take some time, depending on the number of properties, images and documents being appended. This screen will also show the number of images and documents updated.

After the process is complete, a new NFMDCT folder is created within the folder that has the new subset database.

By selecting the *Report* button, you can view a list of the properties that were appended into the database. You can print the report by selecting *Print...* or *Create PDF*. However, once you close the screen, the report will no longer be available. Press *Close* when done. The database now contains all of the properties, their images and documents that you selected. You can view them by going into the Limited or Detailed Views.

Now that you've created and populated a subset database with your selected properties, you can copy it to a laptop, CD or another location of your choice. To move the subset database, make sure to move both the subset database and the NFMDCT folder. Alternative methods may be used to create a subset of records on another computer, but this is the preferred method. Refer to [Section 4.4.4, Appending Properties](#), for further instructions.

A step-by-step tutorial on this process is available. Go to Help > Tutorials tab > Creating a Subset NT Database.

#### **4.4.7.1 Updating the Master Database from a Subset Database**

After the field inspector's version of the subset database has been updated, it is necessary to merge the field data back into the master database in order to keep it current. This process is almost the same as creating the subset database for the field inspector. See also [Section 4.4.4, Appending Properties](#).

1. Move the field inspector's database into its own folder, with a date (example: Alabama/From\_Field/20070925). See also [Appendix Section A.4, NT Folder Organization and Maintenance](#), for additional guidance.

2. Backup the master NT database. One way to do this is to create a compressed file, using a utility such as WinZip™, that contains the database (.mdb file) and the NFMDCT folder. You may want to store your compressed files in a folder called “Backups.” If so, include the backup date in the name of the compressed file and move it to the Backups folder.
3. To begin the process:
  - a. From the Main Menu of the master database, click the Utilities button.
  - b. In the *Database Maintenance* tab, choose the *Append Properties from another database into this one* button.
  - c. The pop-up window *\*Backup Files Before Continuing\** will appear. Ensure that you have created a backup of the master database and click *Yes*. The append procedure cannot be undone, so it is important to create this backup copy.
  - d. Next, the *Append Data* window opens. Click on the *Browse* button to select the database containing the records to be added to the master. You must also choose from one of two property options to update the master: *All Properties* or *Selected Properties*.
    1. If the *All Properties* option is chosen, click *Continue* to get to the *Append Options* window. You must select one of each option before continuing. The options you select will depend upon whether there are existing properties in the database or not. Move the mouse over each option to get more of a description. When finished selecting your options, click *Append*.
    2. If the *Selected Properties* option is chosen, an *Append Criteria* window appears. This window has three tabs: *Address Fields*; *Claims, Insurance, Mitigation*; and *Miscellaneous*. When finished selecting specific fields criteria, click *OK* and you are returned to the *Append Data* window.

After pressing *Continue*, the *Append Options* window displays. You must select one of each option before continuing. The options you select will depend upon whether there are existing properties in the database or not. Move the mouse

over each option to get more of a description. When finished, click *Append*.

**Note:** If you need to re-enter the Append Criteria window before continuing with the append process, click on the *Edit* button next to the field *Selected Properties* in the Append Data window.

- e. After making your selections, the Confirm Append window will appear to show what options you chose. If all options are correct, click *OK* to begin the append process. Once the process is complete, the Append Status screen will display the progress of the append process. This screen will also show the number of images and documents updated.
  - f. By selecting the *Report* button, you can view a list of the appended properties, existing properties in the database that were not updated, and any missing image/document files. You can print the report by selecting the printer icon. However, once you close the screen, the report will no longer be available. Press *Close* when finished.
4. The master database is now up-to-date and is ready for the next subset. If two field inspectors have the same set of data in their respective subset, the Append process allows you to choose which set of properties are appended back into the master database. This is done by using the Select Properties option on the Append screen and then selecting the criteria you desire (*Inspection Date*, *Inspector's Name*, *Updates Made* checkbox as well as others).

#### 4.4.8 Tools

- Repetitive Loss Property Viewer\* (See [Appendix A, Section A.3, Installing the Repetitive Loss Property \(RLP\) Viewer](#))
- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551)

\* You can move the location of this tool on your computer by clicking on the *Change Program Location* button.

## 4.5 Help

The Help button on either the Main Menu or top tool bar opens a separate Help Menu with five tabs:

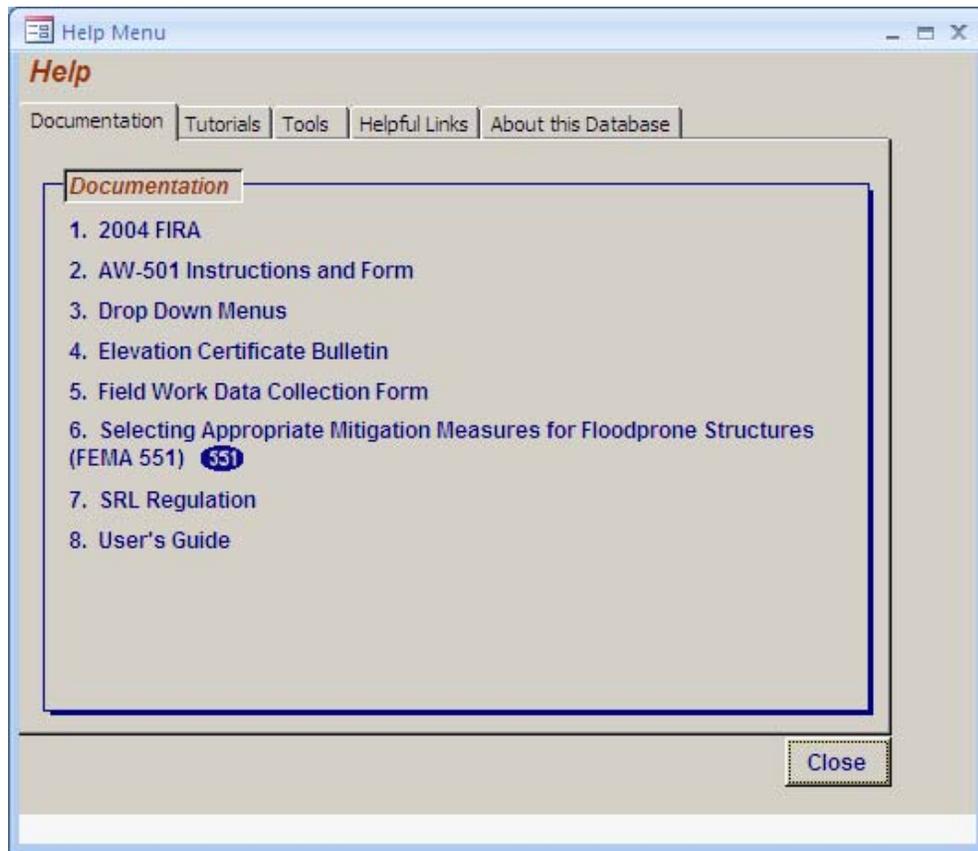
- Documentation (support documents in PDF format<sup>2</sup>)
  1. 2004 FIRA
  2. AW-501 Instructions and Form
  3. Drop Down Menus
  4. Elevation Certificate Bulletin
  5. Field Work Data Collection Form
  6. Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551)
  7. SRL Regulations
  8. User's Guide
  
- Tutorials: MS PowerPoint Slide Shows provide a step-by-step look at performing these functions.
  1. Importing NFIP Data (includes accessing and downloading NFIP data)
  2. Creating a Subset Database
  3. Appending Data into an Existing Database
  4. Maintaining a Master Database
  
- Tools
  1. Repetitive Loss Property Viewer\* (See [Appendix A, Section A.3, Installing the Repetitive Loss Property \(RLP\) Viewer](#))
  2. Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551)

\* You can move the location of this tool on your computer by clicking on the *Change Program Location* button.
  
- Helpful Links
  1. AW-501 Forms
  2. FEMA 551
  3. FEMA Home page
  4. FEMA Library
  5. FEMA Map Service Center
  6. National Flood Insurance Program

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<sup>2</sup> Note that Adobe Reader 7.0 has a known bug where it will not display PDF documents when they are linked from a Microsoft Office document such as an Access database. You will need Adobe Reader 6.0 to use the links to the PDF documents.

7. NFIP Flood Insurance Manual
  8. NFIP Services
  9. Mitigation Best Practices Portfolio
  10. HMA Grant Programs
- About this Database: Information about the database, including name of the database file, application path, location of images and documents, database location on the PC, and the versions of the NT and MS Access.



#### **4.6 Exit Application**

The Exit Application feature closes the NT and exits out of Microsoft Access.

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## 5. Data Gathering

Specific property information that is not imported from the NFIP should be obtained during the field inspection, from the FIS, local officials, and other sources. Coordination with the community prior to field deployment is imperative, particularly when detailed data are being collected for a structure.

Prior to conducting the field inspection visit, contact the appropriate local official to inform them of the planned field work and to obtain any additional information. Depending on the size of the community, there may be more than one official or agency where important information may be obtained. The following section highlights the offices or agencies within a community that may have relevant information.

### 5.1 Community Contacts

There are several community agencies that may have relevant information needed for a complete data collection effort. They include the Engineering or Public Works Department, Building Official or Code Enforcement Department, and the Tax Assessor's Office. Following is a list of information that may be collected from each of these community agencies:

#### Engineering or Public Works Department

- Historical Flooding
  - Dates
  - Recurrence interval with documentation
  - Extent of damage within community
- Flood Protection Projects
  - Pending or completed
  - Description and agency ownership
  - Level of protection provided (recurrence interval)
  - Date (or anticipated date) of completion
  - Flood events since project completed

#### Building Official/Department

- Permit Records
  - Structure and site elevation information
  - Post-flood repairs, including amount and type of damage

- Mitigation projects
- Regulations
  - Floodplain ordinance (higher regulatory standards such as freeboard)
  - Height restrictions
  - Compensatory storage

#### Tax Assessor's Office

- Tax ID and parcel number
- Assessed value of structure and lot
- Estimated market value of structure and lot (if available)

## **5.2 Field Data Collection**

During the field data collection process, there is a possibility of meeting property owners or neighbors interested in the purpose of the field work. It is mandatory for field crews to carry proper identification at all times. If “windshield” type surveys are being conducted, prior notification of owners may not be necessary.

Appendix F – Site Data Collection Notification and/or Explanation Letters contains a sample letter which can be modified to notify property owners/occupants and state or local officials. A second letter is also included that should be carried by FEMA employees or FEMA contractors during field work to alleviate any concerns from interested parties, such as property owners who may have questions about the data collection efforts. A third letter is included in the appendix as a sample for local official use. This letter can be modified as necessary and either mailed to property owners prior to field work, or used by community employees or contractors during site inspection.

## 6. Data Collection with the NT

The NT categorizes most data according to whether it falls in the Limited View or the Detailed View. In addition to recording information for existing records within these views, new records can also be created both views.

At the bottom of both views are additional “shortcut” search buttons:

- Go to PL#
- Go to Record #
- Find Properties
- Show All Properties
- Go to Detailed View (or Go to Limited View)
- Save
- Close

Use the arrow keys on the bottom left of the NT screen to move either from one record to another or to the first or last record.

### Tips

- Your keyboard’s Page Up and Page Down keys can be used to move to the previous and next records, respectively. The Home key can be used to access the first record, and the End key can be used to access the last record.

The screenshot shows a software interface for data collection. The top section contains several input fields and checkboxes:
 

- No Building On Property
- Historic Building
- Field 2: [dropdown]
- Field 3: [dropdown]
- Field 4: [dropdown]
- Mitigation Verified [dropdown]
- Duplicate Listing with Property Locator # [input]
- Updates Made
- Notes [input]

 Below the form is a toolbar with the following elements:
 

- Navigation arrows: Home, Previous, Next, End
- Go to PL#: [input] Go
- Go to Record #: [input] Go
- Find Properties
- Show All Properties
- Go to Detailed View
- Save
- Close

 The status bar at the bottom left indicates "Record 6 of 25".

- To access an existing data record or create a new one, first choose either the Limited or Detailed View option from the Main Menu screen. Once in the desired view, you can access functions via the top tool bar.
- The Go to Detailed View button changes over to Go to Limited View, and vice versa, depending on which view you are currently in.

## 6.1 Top Tool Bar Functions

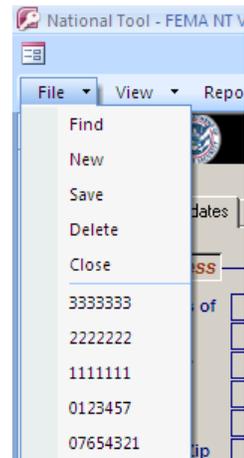
There are five options along the top tool bar: File, View, Reports, Tools, and Help. Under four of the options are drop down menus with several options.



### 6.1.1 File

There are five functions available under the File menu: Find, New, Save, Delete, and Close. Below the Close function, the 10 most recent properties worked on will be shown and available for quick return. (For brevity, only the last five properties are shown here at right.)

**Find** - The Find function is used to retrieve existing records that meet certain criteria. The Find window has three tabs: *Address Fields*; *Claims, Insurance, Mitigation*; and *Miscellaneous*. This search is performed on NFIP data that has been uploaded to the database.



After entering your specific search criteria, click *Find* or press Enter to open all the records matching the criteria. Clicking the *Show All Properties* button removes the search criteria chosen and returns you the entire set of records within the NT database.

**Search Criteria**

Prop Locator/Rep Loss # is [ ]

Address Fields | Claims, Insurance, Mitigation | Miscellaneous

**NFIP Address Fields**

Community ID is [ ]

Community ID starts with [ ]

Community name contains [ ]

Street address contains [ ]

OR

City name contains [ ] OR [ ]

State is [ ]

Zip Code contains [ ]

County name contains [ ]

**Address Update Fields**

Community ID is [ ]

Community name contains [ ]

Street # contains [ ]

Directional contains [ ]

Street name contains [ ] OR [ ]

Unit # contains [ ]

City name contains [ ] OR [ ]

State is [ ]

Zip Code contains [ ]

County name contains [ ]

Region is [ ]

Show All Properties Find Cancel

The screenshot shows the 'Search Criteria' dialog box with the 'Claims, Insurance, Mitigation' tab selected. The 'Prop Locator/Rep Loss # is' field is empty. The 'Claims' section includes:
 

- Claim Date is between [ ] and [ ]
- Claims Payment is >= [ ]
- Claims Payment is between [ ] and [ ]
- No. of Claims per NFIP >= [ ]
- No. of Claims per NFIP <= [ ]

 The 'Insurance' section includes:
 

- Zone Insured In Contains [ ]
- Insured Status is [ ]
- Insured Name Contains [ ]
- Name of Last Claimant Contains [ ]
- Last Claimant (Revised) Contains [ ]

 The 'Mitigation' section includes:
 

- Owner Interested in Mitigation [ ]
- Mitigation Verified [ ]
- Mitigated Already [ ]

 Buttons at the bottom are 'Show All Properties', 'Find', and 'Cancel'.

The screenshot shows the 'Search Criteria' dialog box with the 'Miscellaneous' tab selected. The 'Prop Locator/Rep Loss # is' field is empty. The 'Miscellaneous' section includes:
 

- NFIP as of Date between [ ] and [ ]
- Inspection Date between [ ] and [ ]
- Building Value is >= [ ]
- Severe Rep Loss per NFIP [ ]
- Additional Research Needed [ ]
- Updates Made [ ]
- Duplicate Listing [ ]
- Incorrect Community and/or Address [ ]

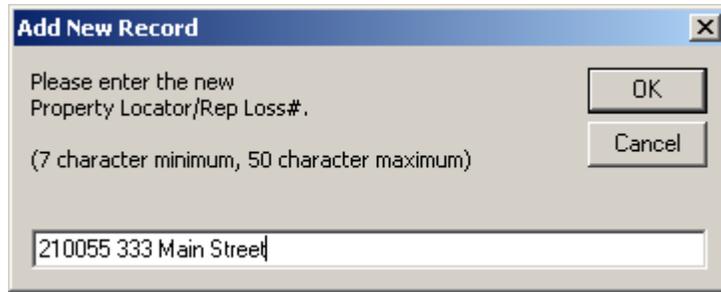
 Buttons at the bottom are 'Show All Properties', 'Find', and 'Cancel'.

New – The New selection creates a new property record. Generally, new records that are not RLs will be created within the Limited View. Records for RL properties should be created by importing NFIP information (including claims and insurance information) using the Import NFIP data function (refer to [Section 4.4.2, Importing NFIP Data](#)).

1. After selecting the New function, the Data Collection window opens. The fields *Date of Download* and *NFIP Data as of Date* correspond to NFIP data that have been imported and will be automatically populated during an import; they cannot be manually entered or edited in NT.

2. Complete the *Inspection Date*, *Inspector*, and *Title/Agency* fields in order to create the record. The *Site Inspection* box is checked automatically for new records; with subsequent updates, this box can be unchecked. At this point, completing the *Comments* section is not essential.
3. After the information is entered and *Save/Continue* is selected, an Add New Record window will appear to assign a Property Locator/Rep Loss# to the record.

For **non-RL properties**, the convention for this naming includes the six-digit CID followed by the street address not to exceed 50 characters total. For example, in the City of Hopkinsville, Kentucky, where the CID is 210055, the Property Locator number for 333 Main Street would be “210055 333 Main St.” There should be no apostrophes or quotes used in the Property Locator number.

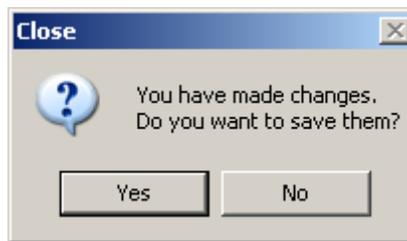


Records for **RL properties** should be created through the Import NFIP Data function (see also [Section 4.4.2, Importing NFIP Data](#)).

4. After assigning a Property Locator number and clicking *OK*, a new blank record will be available. If a Property Locator number of more than 50 characters is chosen, there will be an error message.

Save – Selecting the Save function (either from the top tool bar or at the bottom right of the screen) will cause the Data Collection window to appear. Each time changes are made to a record, the Data Collection window appears to keep track of the history of changes. Within this window you will be required to complete the name of the inspector (first and last name), the title or agency of the inspector, and comments stating the reason for the change, if necessary.

If you enter additional data for a property and attempt to move to another record (or between views) without saving, a Close window will appear to confirm whether or not you would like to save the changes:



Selecting *Yes* will prompt the Data Collection window to appear, and you will be required to complete the information requested. Selecting *No* will return you to the database screen for the property without saving any changes. However, in order to retain any changes and move to another record, you will need to complete the Data Collection window fields.

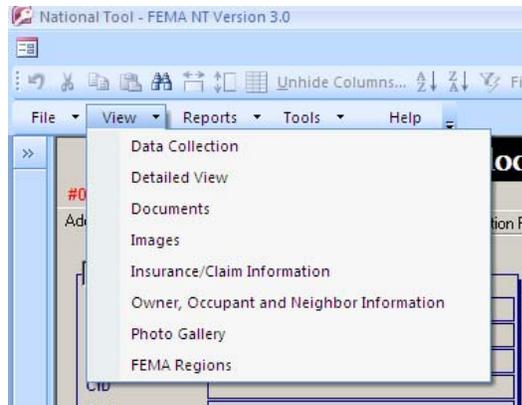
Delete – This function is used to delete individual records and must be used when the record to be deleted is open. After choosing delete, a window will open to confirm the deletion of the record.



Close – This will close all of the records and return to the Main Menu. If data have been edited but not saved, choosing *Close* will prompt a window asking if you want to save changes. If *Yes* is selected, the Data Collection window will appear, and you will be required to complete the information requested.

### 6.1.2 View

There are eight options under the drop down menu for View: Data Collection; Detailed View; Documents; Images; Insurance/Claim Information; Owner, Occupant and Neighbor Information; Photo Gallery; and FEMA Regions.



Data Collection – This feature opens a window to view and/or update information regarding the *Inspection Date*, *Site Inspection* box, *Inspector*, *Title/Agency* of the inspector, and any *Comments*. The *Site Inspection* box is checked automatically; it can be unchecked if no site inspection occurred.

With multiple inspection entries, you can click on any entry to view the full inspection record. The Site Inspection checkbox is the only field that can be changed. This is especially useful in reviewing the Comments section, which only shows the abbreviated text in the main field.



To insert a document:

1. With the Documents window open, click *Load*.
2. *Browse* to the desired file, and select it.

To view an attached document:

1. Select it from the Loaded Documents list
2. Choose *View*.

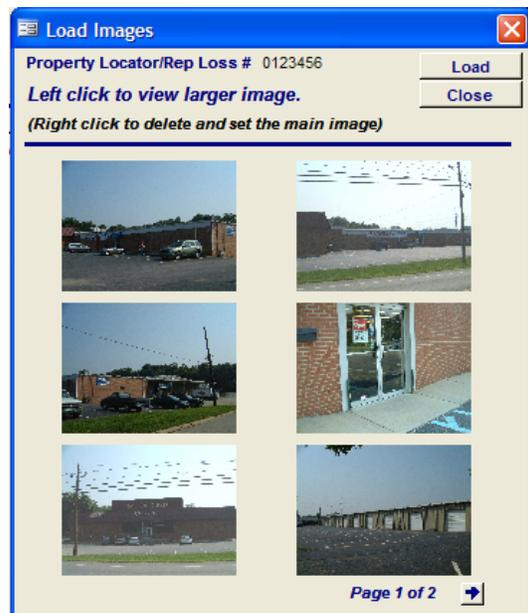
Similarly, selecting a file name and clicking *Delete* will delete the file.

### **Tips**

- Do not include commas, semi-colons, or blank spaces in the file names. Either replace these items with an underscore (“\_”) or a hyphen (“-”).
- To load more than one document at a time, hold down the CTRL key as you select the documents.

**Images** – The Images feature provides an interface for loading and viewing images to attach to an individual record. The Load Images window displays a thumbnail of the image, and the Load Images window can display up to six thumbnails at a time.

Once a file has been loaded, it can be set as the main image or deleted by right clicking on it (by default, the main image will be the first image loaded and displayed on the basic report generated).



If the *View thumbnail image* box is checked and the Load Images window is closed, the main image will appear as a thumbnail in the upper right portion of the Limited View. This thumbnail can be dragged to different locations on the database screen. It will also remain in place when switching between Limited and Detailed Views until the *View thumbnail image* box is unchecked. Also, a full-sized version of the image can be

displayed by clicking on the thumbnail. It will remain in place even if you move to another the record within the database. The window can be closed by selecting exit (the “X” in the upper right corner).

To insert an image in the Load Images window:

1. Click *Load*
2. *Browse* to the desired image file from the Locate Files window
3. Click *OK*

### **Tips**

- Do not include commas, semi-colons, or blank spaces in the file names. Either replace these items with an underscore (“\_”) or a dash (“-”).
- To load more than one image at a time, hold down the CTRL key as you select the images.

Insurance/Claim Information – This feature provides information on the insurance policy and allows you to enter additional information as well. The *Insurance* section indicates whether the structure is insured, whether it is insured as either pre- or post-FIRM, the current insured’s name, the zone it’s insured in, and the occupancy type. All of this insurance information comes from the NFIP download. Additional fields where you can enter information are unshaded and include the insurance company number, policy number, and the premium paid. The *Claims* section shows information from NFIP and includes the *Name of Last Claimant*, the *Total Number of Claims per NFIP*, the *Date of Last Claim*, the *Estimated Building Value*, and *Total Payments Made* for the property (both building and contents).

The bottom text note states that for the Total number of claims per NFIP, the NFIP Bureau and Statistical Agent should count claims paid within 10 days of each other as one claim. Claims with identical dates are also displayed as one claim with all payments combined. Claims within 10 days of each other, but on separate dates, are displayed as separate claims (see *Claims* tab in the Detailed View) but only counted once under total number of claims per NFIP.

Owner, Occupant and Neighbor Information – Fields in this window should be completed if there was communication with the owner, occupant, or a neighbor as part of the data collection efforts. Dates of contact, names, and phone numbers should be entered. Additionally, if the owner was contacted, indicate whether or not the owner expressed an interest in mitigating the structure.

Photo Gallery – The photo gallery is an alphabetical listing of all images in the NFMDCT folder and what properties they are assigned to. Within the gallery, you can assign, remove assignment and delete photos. Double-clicking on the property number in the photo gallery will automatically take you to that property record, provided that the Limited or Detailed Views are open in NT.

FEMA Regions – This window displays a list of states and U.S. territories within each FEMA Region.

### 6.1.3 Reports

The Reports drop down menu gives you access to specific reports that can be generated. For more information on each of the reports available, see Section 4.3, Reports.

### 6.1.4 Tools

The Tools drop down menu gives you access to specific tools available.

- Export Property Data Template

- Export Claims and Flood Events (for use with FEMA’s Benefit Cost Analysis [BCA] program)
- Merge Properties (see also [Section 4.4.5, Merging Properties](#))

### 6.1.5 Help

The Help menu provides access to useful reference documents in five tabs: *Documentation, Tutorials, Tools, Helpful Links, and About this Database*. Refer to [Section 4.5, Help](#), for more detailed information regarding these tabs and options provided.

## 6.2 Limited View

Within the data collection portion of the NT, there are three tabs for data entry under the Limited View: *Address and Updates, Site Observations, and Flood Risk and Mitigation Possibilities*.

### 6.2.1 Address and Updates Tab

#### 6.2.1.1 NFIP Address

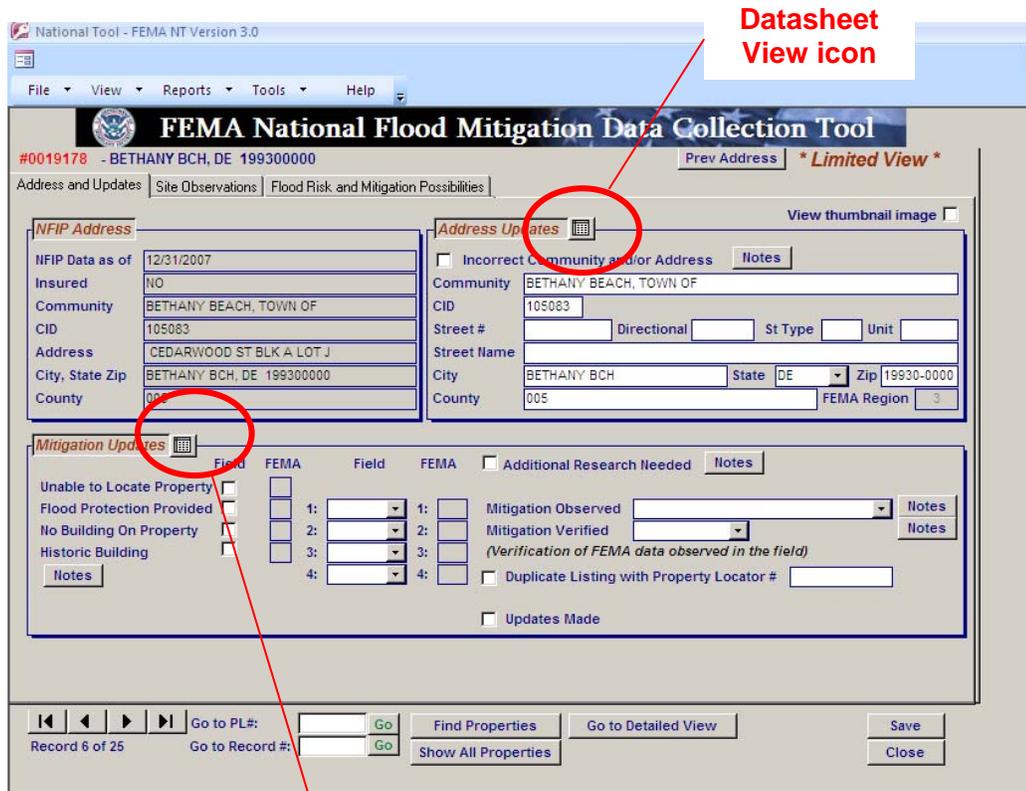
The *NFIP Address* section is populated by importing information from the NFIP data import and represents the address information currently associated with the property. The *NFIP Data as of* field is the date which the data was downloaded. If the address has been modified from an earlier listing, the previous address will also be imported and can be viewed by pressing the *Previous Address* button on the top right of the screen. All of the information imported from NFIP is for reference only and cannot be edited; thus, these fields are “grayed out.”

#### 6.2.1.2 Address Updates

The *Address Updates* section allows you to update data from the NFIP import process as necessary to facilitate easier searches for records within the NT. Additionally, if there are cosmetic errors with the address from NFIP or if the RL record is currently assigned to the wrong community, the address information may be corrected in this section. Also, completing fields such as the *Directional* (e.g., N, S, E, W) and *St Type* (structure type) fields can further distinguish the property. If updated data are provided, select the *Incorrect Community and/or Address* box. There is also a *Notes* button that will open a pop-up window to enter more information about the property location or directions to the property. If notes exist, hovering the cursor over the *Notes* button will display a preview of the text within.

The *Address Updates* section is the first section in NT which has datasheet view icons present, allowing you to see the data contained in the particular section for all of the currently selected records within a datasheet view. This allows you to change the same piece of information for multiple records at the same time or to

compare data between different structures. Also, information from these views can be exported into MS Excel format for more detailed analysis.



Datasheet View icon

Property Locator#	NFIP_Address1	NFIP_Address2	StreetNumber	StreetName	StreetSuffix	StreetUnit	NFIP_City	City_New
0000001	Test Building1	1 Garren Blvd.	1	Garren	Blvd		Any	Any
0000002	Test Building2	2 Sheldon Ct.	2	Sheldon	Ct.		Any	Any
0000003	Test Building3	3 Grzesik St.	3	Grzesik	St.		Any	Any
0000004	Test Building4	4 Sparenberg Trail	4	Sparenberg	Trail		Any	Any
0000005	Test Building5	5 Yeung Ave.	5	Yeung	Ave.		Any	Any

### 6.2.1.3 Mitigation Updates

Four mitigation categories are listed on the left half of this section. Adjacent to the right of the categories (*Unable to Locate Property*, *Flood Protection Provided*, *No Building On Property*, and *Historic Building*) are two columns of boxes with “FEMA” as the header. The data found in these columns are populated from the NFIP

If any entries in the Mitigation Updates Field boxes in the Limited View are checked, the *Updates Made* box will automatically be checked when the property is saved. The NT system will also check these mitigation action fields to ensure they have been appropriately entered.

Data import and are “grayed out” boxes, representing NFIP information that cannot be manipulated once the NFIP data have been uploaded. You can update the two columns by checking the boxes with the Field header where appropriate based on field observations and the data collected.

You must assess whether or not any of the four mitigation categories apply to the structure and if the corresponding FEMA data are accurate. Coordination with state or local officials may be necessary to obtain documentation required to support the findings. The boxes across the four “mitigated” categories correspond to the data in NFIP that FEMA has on record for the structure. The four numbered boxes correspond to codes for different mitigation actions and mitigation funding sources. These mitigation action and funding source codes can also be found on the NFIP Repetitive Loss Update Worksheet (AW-501). A sample AW-501 form is provided in [Appendix G](#) or by going to Help > Documentation > 2. AW-501 Instructions and Form. Boxes 1 and 2 list the mitigation action codes and boxes 3 and 4 list the primary and secondary mitigation funding codes, respectively. Boxes 1 and 2 are lined up with the “mitigated” categories to which the action codes apply – *Flood Protection Provided* and *No Building On Property*, respectively. Following is a description on completing this section.

- Unable to Locate Property – If the corresponding FEMA box is marked with an “X,” the NFIP data indicate this structure could not be located. If during the field visit the structure cannot be located, check the corresponding box. Also, open the *Notes* window to identify the steps taken to locate the property and identify the nature of the address deficiency.
- Flood Protection Provided – If some sort of retrofitting measure has been completed to protect the property from flood damage, check this box. Otherwise, the box should remain unchecked.
  - If you check this box, choose from mitigation action codes “a” through “f” from the drop down menu labeled Box 1, corresponding to the type of protection provided (elevation, floodproofing, stormwater management, flood control project).
  - Next, boxes 3 and 4 should be used to indicate the primary source of mitigation funding and the secondary source of any known additional

funding, respectively. If either of these boxes is completed, the *Flood Protection Provided* value must be marked in either the Field or FEMA boxes. The rationale being that funding cannot be provided to a non-existent mitigation project.

If no value is needed in box 4, select “y” for unknown.

- No Building On Property

- If this box is checked, choose from mitigation action codes “g” through “i” from the pull down menu labeled Box 2, detailing whether the building was acquired and/or demolished or relocated.

- Next, boxes 3 and 4 should be used to indicate the primary source of mitigation funding and the secondary source of any known additional funding, respectively. If either of these boxes is completed, *the No Building On Property* value must be marked in either the Field or FEMA boxes. The rationale being that funding cannot be provided to a non-existent mitigation project.

If no value is needed in box 4, select “y” for unknown.

- Historic Building – If the FEMA box is marked, the structure has been determined to be a historic structure either listed on the National Register of Historic Properties or on a similar State register. If during the field visit it is determined that the structure is listed on the National Register or a State Register, the Field box should be checked. Structures eligible for the National Register or a State Register also qualify for special consideration by the NFIP. If a structure seems potentially eligible for inclusion on one of these registers, this should be noted in the Notes section.

Note: A Historic Building is not an equivalent designation to buildings that are within a Historic District. An individual historic property or structure derives its significance from being associated with important historical events, persons, or a distinctive architectural style, in comparison to a district, which derives its importance from being a unified entity, even though it is often composed of a wide variety of resources. The identity of a district results from the interrelationship of its resources, which can convey a visual sense of the overall historic environment or can be an arrangement of historically or functionally related properties. For example, a district can also encompass several interrelated activities, such as industrial, residential, or commercial buildings or could contain buildings, structures, sites, objects, or open spaces that do not contribute to its historic significance.

In the example below, the property has been mitigated via a flood protection measure, according to NFIP records. The “A” in Box 1 indicates that the structure was elevated to or above the BFE, and the “J” in Box 3 notes that the Hazard Mitigation Grant Program (HMGP) served as the primary funding source. As previously mentioned, these codes are defined in the drop downs under the field

boxes and correspond to the codes found on the second page of the AW-501 form (Appendix G) or, within NT, going to Help > Documentation > 2. AW-501 Instructions and Form.

The screenshot shows a software interface titled "Mitigation Updates". On the left, there are four checkboxes: "Unable to Locate Property", "Flood Protection Provided", "No Building On Property", and "Historic Building". The "Flood Protection Provided" checkbox is checked with an 'X'. To the right of these is a table with two columns: "Field" and "FEMA". The "Field" column has four dropdown menus labeled 1, 2, 3, and 4. The "FEMA" column has four dropdown menus labeled 1, 2, 3, and 4. The first FEMA dropdown is set to 'A', the third to 'J'. Below the table, there is a checkbox for "Additional Research Needed" which is checked, and a "Notes" button. To the right of the table, there is a "Mitigation Observed" dropdown menu set to "Mitigation Observed" and a "Mitigation Verified" dropdown menu set to "No". Below these is a checkbox for "Duplicate Listing with Property Locator #" which is unchecked, and a text input field for "Property Locator #". At the bottom, there is a checkbox for "Updates Made" which is checked. A "Notes" button is also present on the right side of the form.

If a record needs to be tagged for additional research, the *Additional Research Needed* box should be checked. Other information pertaining to the items for further investigation can also be included in the *Notes* section.

Under the *Mitigation Observed* drop down menu, you can populate the NT with apparent mitigation measures observed on-site not yet part of the NFIP record. The measures included under the drop down box are as follows:

- Structure appears to have been elevated
- Structure appears to have been floodproofed
- There is a floodwall, berm, or other type of barrier
- Lower area subject to damage appears to have been modified
- Drainage improvements appear to have been made
- Flood control project should have reduced the threat
- Owner/neighbor/local official report mitigation actions taken
- Further Research Required
- Other (explain in notes)

If the mitigation listed from the NFIP download has been observed in the field, the *Mitigation Verified* drop down box can record this verification.

In the *Duplicate Listing / with Property Locator #* field, check the box if the property is a duplicate listing and note the Repetitive Loss/Property Locator number of the other repetitive loss listing(s).

**Tip**

- To keep the number of duplicate listings within a database under control or to maintain consistency of the additional information added for several duplicates, you can use the merge properties function. Refer to [Section 4.4.5, Merging Properties](#).

If changes or updates are recorded in the *Mitigation Updates* section (including checked mitigation type boxes, and mitigation codes or funding sources) or the property is a duplicate listing, check the *Updates Made* box.

Check the *Updates Made* box if any additional information is added to the other sections. This box will indicate whether updates should be made within the NFIP system. Additionally, if any entries in the *Mitigation Updates Field* boxes in the Limited View are checked, the *Updates Made* box will automatically be checked when the property is saved.

**6.2.2 Site Observations Tab**

This screen contains several sections that should be completed during the field inspection. Note that a datasheet view is available for this section.

The small, blue and white “551” symbol (e.g., next to *No. of Stories* field) indicates that the specific field must be completed in order to generate the FEMA 551 report, that is, to aid in completing Worksheet A (Technical Considerations Scorecard) and Worksheet B (Appropriate Mitigation Measures). Both of these worksheets are used with the information packet while working with a property owner.

### 6.2.2.1 Site

The following data should be entered in this section based on a site visit:

- Inspection Date – mm/dd/yyyy format
- Inspector – First and last name
- Latitude and Longitude coordinates – These figures (formatted as decimal degrees and six figures to the right of the decimal) should be obtained in the field using GPS equipment such as a handheld GPS unit. **Accuracy within 20 meters** (approximately 65 feet) is required for FEMA grant applications. The accuracy of the GPS unit should be checked, and the **reading taken at the corner of the structure with the lowest adjacent grade** whenever possible. If the grade is uniform, the reading should be taken at the corner of the structure closest to the flood source.

See also [Section 4.4.3.1, Including Latitude and Longitude](#), for additional guidance on obtaining and notating Latitude and Longitude coordinates.

- No. of Stories\* – The number of stories in a building may be determined from a field visit or from building records. A story is defined as a complete above grade section of a building having one continuous or approximately continuous floor. Generally, this does not include attics or basements (sub-grade or partially sub-grade).

\*This field must be completed to generate the FEMA 551 report.

- Basement – Check this box if there is a basement as defined by the NFIP. A basement is defined as any area of a building with a floor that is below ground level on all sides.
- Occupied – The structure’s occupancy status should be indicated using the following selections: Yes, No, or Seasonal.
- Residence – If it is known, indicate whether the building is a Primary, Rental, or Secondary residence.
- Fill – If there is fill, the height should be indicated. This option has a drop down menu with choices from below street grade to greater than 4 feet.
- Land Use – The structure’s appropriate land use should be indicated from the following list of 13 uses: single-family residential; 2-to-4 family residential; multi-family residential (5 or more units); commercial (highway, office, retail, downtown); industrial (light, heavy); institutional (hospitals, churches); educational (schools, colleges); non-profit; public; semi-public; transportation; open space; and other (explain in notes).
- Spoke with – Check the appropriate box to indicate whether you (or the inspector) spoke with the *Owner/Occupant* or *Neighbor*, if applicable. Upon checking one of these boxes, the Owner, Occupant, and Neighbor Information window will open if further details should be added, including pertinent details about the communication.
- Neighborhood – Information on the neighborhood surrounding the property should be provided by making the appropriate selection from the following:
  - Commercial highway
  - Commercial office
  - Commercial retail/downtown
  - Heavy industrial
  - Light industrial
  - Residential – high density (multi-family/apartments)
  - Residential – low density (single-family)
  - Residential – medium density (2-family/townhouses, rowhouses)
  - Rural residential

- Elevated – Indicate the structure’s lowest floor elevation above grade, if applicable. A drop down menu provides selections ranging from Not Applicable to greater than 12 feet.
  
- Adequate Vents Present – Choose Yes, No, N/A (Not Applicable), or *Undetermined* to best indicate **if** vents are present that meet the community’s floodplain management requirements. For post-FIRM structures with enclosures below the BFE, this means at least two openings having a net area at least 1-square inch for every square foot of enclosed space are situated on different walls of the enclosure, so that their bottom edges are no higher than 1 foot above grade. Additional minimum NFIP requirements for vents can be found in the Code of Federal Regulations [44 CFR §60.3(c)(5)]. If the structure is pre-FIRM, not in a Special Flood Hazard Area (SFHA), or without enclosures below the BFE, select N/A.
  
- Flooding this site will have community-wide implications – A check in this box indicates that the building has either an essential public function, contains a special population, or has hazardous material storage on-site. If this box is checked, then one of the following options should be selected from the drop down menu:
  - Important for flood warning/response (e.g., lumber supplies company)
  - Important for disaster recovery
  - Important for public health (e.g., wastewater treatment plant)
  - Contains hazardous materials
  - Contains special population (e.g., nursing home)
  - Important utility service
  - Other (explain in notes)
  
- Structure Type\* – This is indicative of the major type of materials used to construct the structure and the degree of engineering involved in its design. General categories should be selected if further details are unknown (i.e., wood frame versus engineered wood frame, or steel versus heavy steel). Consultation with the local building official is highly recommended. The NT provides a selection of common structure types and includes a choice for Other and a *Notes* section if the inspector encounters a construction type not listed.

\*This field must be completed to generate the FEMA 551 report.

- Condition of Structure\* – These data are based on the level of repair required. Consultation with the local building official is highly recommended.
  - Good (optional minor repair) – Select this option when only cosmetic type repairs are needed
  - Fair (needs minor repair) – Select this option when the following characteristics are observed:
    - Minor shrinkage cracks due to thermal expansion and contraction
    - Signs of rust on iron or steel members
    - Signs of corrosion of rebar
  - Poor (needs significant repair) – Select this option when the following types of damage are observed:
    - Bowed brick veneer wall or parapet walls
    - Leaning of wall
    - Cracking of wall due to excessive settlement
    - Building settlement
    - Large cracking around sills, eaves, chimneys, parapets, and iron or steel lintels
    - Differential settlement of chimney
    - Fungal and insect attack of wood
    - Exposed rebar in concrete walls due to corrosion
    - Fire damage

\*This field must be completed to generate the FEMA 551 report.

- Foundation Type\* – The selection of a foundation type may require a close inspection of the structure. Consultation with the local building official is highly recommended. The NT provides a selection of common foundation types and includes a choice for Other and a *Notes* section should you encounter a foundation type not listed.

\*This field must be completed to generate the FEMA 551 report.

- Condition of Foundation\* – This is based on the level of repairs needed. Consultation with the local building official is highly recommended.
  - Good (optional minor repair) – Select this option when only cosmetic type repairs are needed
  - Fair (needs minor repair) – Select this option when one or more of the following is observed:

- Minor shrinkage cracks in foundation pier
- Soil shrinkage due to nearby trees or plants
- Cracks associated with thermal expansion and contraction
- Poor (needs significant repair) – A foundation is considered to be in poor condition if one or more of the following conditions exist:
  - Movement of foundation
  - Soil erosion around foundation
  - Settlement or rotation of pier footing
  - Cracking in foundation wall due to movement
  - Deterioration of pier like vertical cracking or bulging.
  - Fire damage
- Needs further investigation

\*This field must be completed to generate the FEMA 551 report.

- EC Diagram No. – This refers to the type of structure and foundation as it corresponds to one of eight diagrams included as part of the FEMA Elevation Certificate (EC) (FEMA Form 81-31) on pages 6 through 7 of the EC Instructions. The option Unable to Determine is also available.

The diagrams from the FEMA Elevation Certificate are attached to this tab for reference. Select the button labeled *Building Diagrams* to see representations of each type of building.

#### **6.2.2.2 Appurtenant Structures**

Appropriate boxes should be checked for appurtenant/accessory structures located on site such as a *Carport, Deck, Detached Garage, Shed, Other, or None Observed*. Any additional comments can be provided in the *Notes* section.

#### **6.2.2.3 HVAC**

Information about the location of the Heating, Ventilation, and Cooling (HVAC) is collected in this section. All locations of HVAC machinery and ductwork should be identified (crawl space, inside, or outside) and multiple selections can be highlighted. Others that are not included in the list may be explained in the corresponding *Notes* section.

### **6.2.3 Flood Risk and Mitigation Possibilities Tab**

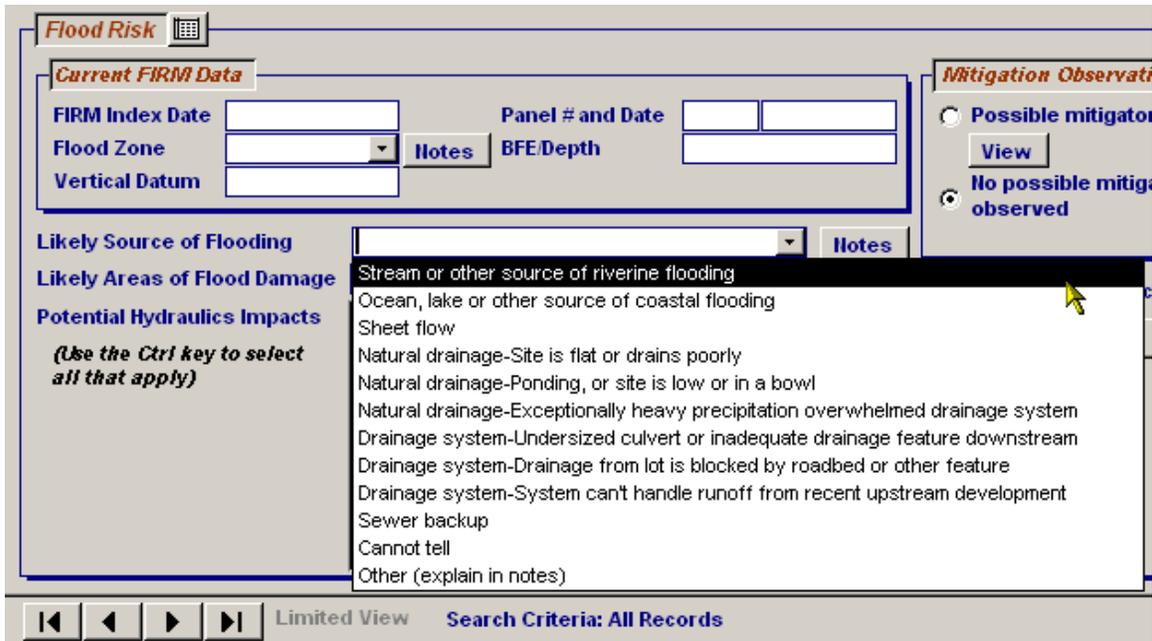
This section includes information such as current FIRM data, flooding sources, likely areas of flood damage, potential hydraulic impacts, and mitigation observations. The information for this tab is found through study of the FIRMs, and through an assessment of the site performed in the field.

### 6.2.3.1 Current FIRM Data

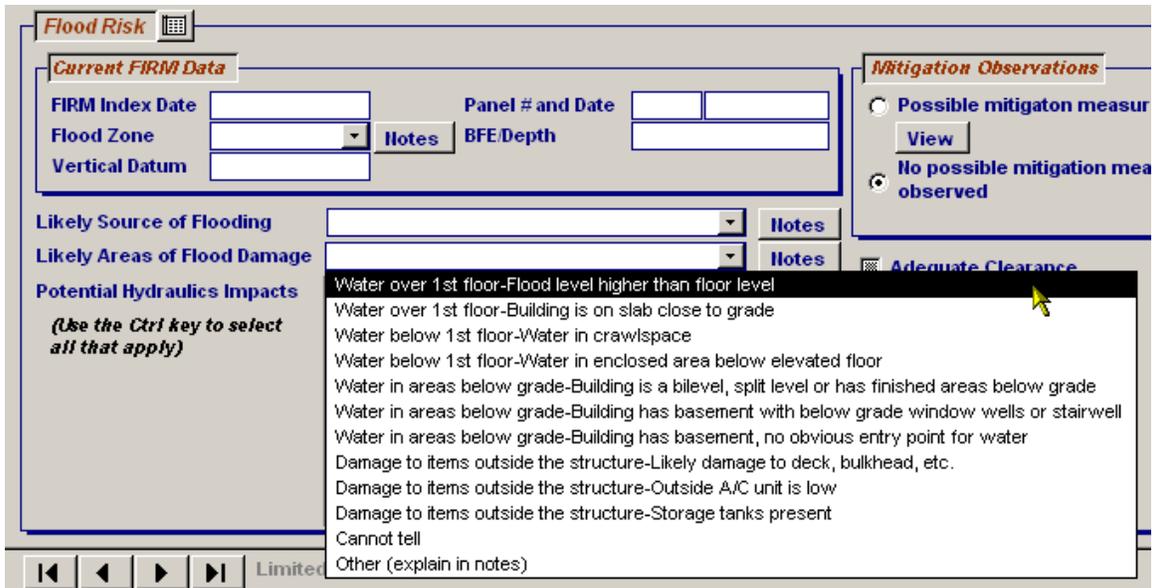
A datasheet view is available for this section, which contains information that is obtained from the FIRM, such as the *FIRM Index Date*, *Flood Zone* (A, AE A1-30, AH, AO, AR, A99, B/XShaded, C/XUnshaded, D, V, and VE V1-30) *Vertical Datum*, *FIRM Panel # and Date*, and *BFE/ Depth* (AO and AH zones). The *NFIP Community Status Book* (available online at <http://www.FEMA.gov/fema/csb.shtm>) can be used to identify the date of the current FIRM Index to be used when locating the structure on its appropriate FIRM panel. On the panel, it is the date listed under the Current Effective Map column.

A vertical datum type should be entered for the BFE. It will generally be NGVD 29 (National Geodetic Vertical Datum of 1929) or NAVD 88 (North American Vertical Datum of 1988). In some instances, a locally applicable vertical datum may be used. If the BFE and building elevation are provided in different vertical datum, it will be necessary to obtain the conversion information (probably from a local source) and enter the conversion formula in the notes section. Information on the *FIRM Index Date*, *Flood Zone*, *Vertical Datum*, *Panel # and Date*, and *BFE/Depth* is obtained from the FIRM.

The *Likely Source of Flooding* should be determined during the field visit with assistance from the FIRM or other map as necessary. The appropriate source from the drop down menu (e.g., riverine flooding, coastal flooding, sheet flow, etc.) should be selected.



For the *Likely Areas of Flood Damage*, an option from the drop down should be selected to identify the likely areas of flood damage (water over or below first floor, water in areas below grade, etc.). This information may be obtained from a site visit and/or talking with the property owner or neighbor.



The *Potential Hydraulics Impacts* section provides a list of potential structures and infrastructure that might affect the frequency and/or severity of flooding in the area. Multiple items may be selected by pressing the Control or Shift on the keyboard. A wide range of projects includes, for example, bridges, levees, and

storm drain systems. For the planned projects and other selections, a *Notes* area is provided to describe impacts that are not listed.

### 6.2.3.2 Mitigation Observations

This section allows you to input information regarding pending mitigation projects. It also provides you an opportunity to analyze the results of the data collected and provide any comments on possible appropriate mitigation actions. Use your knowledge and experience to assess the situation and suggest feasible measures that might be cost-effective. The *View* button enables access to the list of Possible Mitigation Measures window. *Notes* buttons under each of the three subsections of the Possible Mitigation Measures window are included for the input of additional information.

**Possible Mitigation Measures**

**Pending Mitigation Actions:**

- A pending flood control/drainage improvement project may mitigate the flooding.
- Community has plans to mitigate the structure.
- Owner has plans to mitigate the structure.
- Other (explain in notes)

Notes

**Structure may be protected with a retrofitting project:**

- Structure may be elevated
- Structure may be dry floodproofed
- Structure may be wet floodproofed
- Structure may be protected by a barrier
- Structure may be acquired
- Structure may be relocated

Notes

**Flooding may be relieved by a flood control project:**

- Removal of undersized culvert or other downstream obstruction
- Increase drainage capacity via channel or pumping improvements
- Construction of a levee or other barrier
- Construction of an upstream storage basin
- Other (explain in notes)

Notes

Save Close

**Adequate Clearance** – Check this box if the structure is clear by at least 20 feet on each side to allow for equipment and construction on site. This clearance may be necessary for constructing mitigation projects, such as structure elevation, on the site.

## 6.3 Detailed View

The Detailed View is applicable and suitable when a more thorough inspection of the property and its surroundings is conducted, and when contact with local or state officials is made to gather structure-specific information and coordinate on-site data collection efforts. There are four tabs within the Detailed View: *Additional Site Information*, *Elevation and Hazard*, *Claims*, and *Events and Total Damages*.

### 6.3.1 Additional Site Information Tab

In the top center of the screen, the *Tax ID* numbers and *Local Lot/Parcel ID* numbers can be added. This information is useful in identifying a property when the address is unclear or inadequate. Note that a datasheet view icon is also available for this page if you wish to view or edit data for multiple records.

If the *View thumbnail image* box is checked, the main image will appear as a thumbnail in the upper right portion. Refer to [Section 6.1.2, View](#), under the sub-section Images for more information about thumbnail images.

The screenshot displays the FEMA National Flood Mitigation Data Collection Tool interface. The title bar reads "FEMA National Flood Mitigation Data Collection Tool". Below the title bar, the address is "#9999002 - 123 10TH PLACE SE 123 10TH PLACE SE, DISASTERVILLE, DC 999930000". The interface includes a menu bar (File, View, Reports, Tools, Help) and a navigation bar (Additional Site Information, Elevation and Hazard, Claims, Events and Total Damages). The main content area is divided into several sections:

- Regulatory Requirements:** Includes checkboxes for "Freeboard" (checked), "Code Height Restrictions" (checked), and "Compensatory Storage Requirements" (unchecked). The "Freeboard" section has a "Level" dropdown menu set to "1.0 ft" and a text box containing "35 feet above street centerline".
- Equipment/Contents:** A text box contains the value "\$65,000.00" and a label "Equipment - Describe contents, equipment or inventory of value".
- Tax ID:** A text box contains "995.335.224".
- Local Lot/Parcel ID:** A text box contains "Block 15, Lot 5".
- Building Market Value:** Includes fields for "Value" (\$0.00), "Date of Info.", "Source", and "Source Type".
- Building Replacement Value:** Includes fields for "Value" (\$0.00), "Date of Info.", "Source", and "Source Type".
- Land Value:** Includes fields for "Value" (\$0.00), "Date of Info.", "Source", and "Source Type".
- Building Information:** Includes fields for "Construction Date", "Footprint (sq. ft.)" (551), and "Total Sq. Ft." (2200).
- Source of Information:** Includes checkboxes for "Site Visit", "Engineering Study", "Local Official", "Owner", and "Neighbor", each with a "Date" field.

At the bottom of the interface, there are navigation buttons: "Go to PL", "Go to Record", "Find Properties", "Show All Properties", "Go to Limited View", "Save", and "Close". The status bar shows "Record 1 of 998".

### 6.3.1.1 Regulatory Requirements

A datasheet view is available in this section that includes important criteria that could affect potential mitigation measures. Information on these regulatory requirements should be collected from local building officials. They include the following:

- **Freeboard** – If the community requires structures in floodprone areas to be elevated a specific height above the BFE, the *Freeboard* box should be checked. The required height above the BFE should be selected in the *Level* drop down menu.
- **Code Height Restrictions** – This indicates the maximum elevation/height to which a structure can be constructed or elevated, and is usually implemented in waterfront communities to protect views. A text box is provided to note the height restriction.
- **Compensatory Storage Requirements** – Some communities have regulations requiring a hydraulically equivalent storage volume to be created for floodwaters when development results in the displacement of floodwater storage capacity from part of the floodplain. If this is applicable, it should be recorded in the text box provided.

- Other Higher Regulatory Standards – Any other state or local regulations that could affect mitigation measures such as enclosure limitations or special requirements for the protection of critical facilities should be recorded in the provided text box.

#### 6.3.1.2 Equipment/Contents

Only the total value of noteworthy, expensive or unusual equipment (e.g., machinery, merchandise) and contents should be entered in this section. This will generally apply only to non-residential uses. A description should be provided along with any other information that is relevant. The values of contents or machinery common to the current or anticipated occupancy do not need to be entered.



The screenshot shows a form titled "Equipment/Contents". It has a field for "Value of Equipment and Contents" with the value "\$200,000.00" entered. Below this is a text area for "Equipment - Describe contents, equipment or inventory of value" containing the text "Manufacturing equipment and machinery and merchandise. Estimate from owner."

#### 6.3.1.3 Building Market Value

This is the value of a structure based on the estimated price for which a willing buyer in the current real estate market would pay to a willing seller. This information may be available from a tax assessor's office or from local building officials. While tax assessment records do not always give an actual building market value, they may note a multiplier to be used with the assessment value in order to calculate a market value. If a tax assessment is available without some type of conversion multiplier but seems undervalued for a market value, this should be stated in the *Notes* section along with the following data:

- Dollar value
- Date the value was estimated
- Source (e.g., local building official, tax assessor's office)
- Source type (Certified Appraisal, Community Tax Records, or Other)

#### 6.3.1.4 Building Replacement Value

This refers to the value of a structure based on the cost of materials and labor to rebuild. Building replacement values may be available from local building officials and are required for Benefit Cost Analyses. If necessary, the value may be determined by a building official, engineer, or architect using cost estimating tools such as the Marshall and Swift Handbook, R.S. Means Cost Data, or other comparable resources. Information to be completed for this section includes the following:

- Dollar value
- Date the value was calculated

- Source of the value, including who created the estimate and what method of calculation was used to develop the estimate

#### **6.3.1.5 Land Value**

As with the building market value, the land value of the property may be available from tax assessment records, and should be recorded separate from the building value. If this assessment seems undervalued (or overvalued), enter a message in the Notes section indicating a possible discrepancy. Information to be completed for this section includes the following:

- Dollar value
- Date the value was estimated
- Source of the value
- Source type (Certified Appraisal, Community Tax Records, or Other)

#### **6.3.1.6 Building Information**

The top right of this screen tab provides an area for the entry of *Construction Date*. This information might be found in building permit records. Normally, the date the permit was applied for will be used. If the year is known but not the exact date, the month and day can be entered using “01/01.” Fields for the square footage of the building footprint\* and the total structure are also provided. While this information can be gauged during a site visit, the best source for accurate measurements is the local building or zoning department.

\*This field must be completed to generate the FEMA 551 report.

#### **6.3.1.7 Source of Information**

This feature enables you to report the various source(s) of information recorded under the Detailed View. A date should be included for each source that is checked. The *Notes* section can be used to provide names, phone numbers or addresses of contacts.

### **6.3.2 Elevation and Hazard Tab**

This tab contains data related to the flood hazard and various elevation reference points of the structure that may be on file with the community. The left half of the screen requires information about the BFE and elevation of the structure. The right half of the screen requires additional flood hazard information from the FIS or other comparable source. Note that a datasheet view icon is also available for this page if you wish to view or edit these data for multiple records.

File View Reports Tools Help

**FEMA National Flood Mitigation Data Collection Tool**

#9999002 - 123 10TH PLACE SE 123 10TH PLACE SE, DISASTERVILLE, DC 999930000 [Prev Address](#) \*Detailed View\*

Additional Site Information | Elevation and Hazard | Claims | Events and Total Damages

**EC or Elevation Data** (complete only if you have certified data)

Source of Information: Community

Map and Panel #: \_\_\_\_\_

Date of FIRM Index: \_\_\_\_\_ Building Diagram #: \_\_\_\_\_

BFE/Depth (SS1): 10 Flood Zone(s) (SS1): A

Vertical Datum: \_\_\_\_\_

Conversion/Comments: \_\_\_\_\_

Top of bottom floor: 7.00

Top of next higher floor: 17.00

Bottom of lowest horizontal structural member: 6.00

Attached garage: 0.00

Lowest elevation of machinery and/or equipment: 7.00

Lowest Adjacent Grade (SS1): 5.00

Highest Adjacent Grade: 0.00

No. of permanent openings: 0.00

Total area of permanent openings (flood vents): 0.00

Certifier's Information: \_\_\_\_\_ [Elevation Certificate](#)

[NOTES](#)

**Additional Flood Hazard Data**

Date of FIS: 1/1/2008 Flash Flooding (SS1): Yes

Date of other source: \_\_\_\_\_ Flood Velocity (SS1): 10 ft/sec

Describe source (if other than FIS): \_\_\_\_\_ In Floodway (SS1): Yes

Flood Zone Characteristics: \_\_\_\_\_

Streambed Elevation from FIS: 0

Freq.	Q (cfs)	Elev (ft)
10 yr.	0.0	0.0
50 yr.	0.0	0.0
100 yr.	0.0	0.0
500 yr.	0.0	0.0

Depth of 100 yr flood at site: 5

(Flood depth is determined by subtracting the Lowest Adjacent Grade elevation from the Base Flood Elevation.)

Record 1 of 998 [Go to PL#](#) [Go](#) [Find Properties](#) [Go to Limited View](#) [Save](#)

[Show All Properties](#) [Close](#)

### 6.3.2.1 EC or Elevation Data

This section should capture information directly from a FEMA Elevation Certificate, if available. The FIRM information gathered here may be different than the current FIRM data gathered in [Section 6.2.3.1, Current FIRM Data](#), if community FIRM panels were revised after the structure was permitted for construction. If an elevation certificate is not available, certain fields may be completed using as-built records or similar certified data. Any discrepancies noted in the BFE, FIRM Zone, FIRM Index date, etc. (as compared to data collected for the Limited View tab/*Flood Risk and Mitigation Possibilities*) should be noted in the section's *Notes* area. Following is a description of each requested data field.

- Source of Information – If an elevation certificate is not provided, the source of information might be a building permit application or an as-built certification. An engineer working for the property owner or developer, or the local building code official or zoning officer may have determined and gathered certified elevation information. Generally, the flood elevation data will have been taken from the community FIS or FIRM where the BFE for a given site is mapped. However, when the area is mapped as an Approximate A or V zone, a local study or historical high water marks might be used to establish the BFE. Additionally, if a regional or local study completed more recently than the effective FIS indicates an increase in the BFE, this study might be used as a source for flood hazard data.

- Map and Panel # – The FIRM map and panel number should be entered here if it was recorded on the certified data.
- Date of FIRM Index – This should be taken from the elevation certificate or other certified data where available.
- Flood Zone – The flood zone from the elevation certificate or other certified data (corresponding to FIRM zones, for example, AE, VE, B/X shaded, etc.) should be noted here.
- BFE/Depth\* – The BFE or flood depth (AO, AH zones) from the certified data should be entered here.

\*This field must be completed to generate the FEMA 551 report.

- Building Diagram # \* – This is the elevation certificate building diagram number reported on the elevation certificate. The linked FEMA Elevation Certificate can be viewed for reference by clicking on the *Elevation Certificate* button.

\*This field must be completed to generate the FEMA 551 report.

- Vertical Datum – Enter the vertical datum type for the BFE from the elevation certificate or other certified data (see [Section 6.2.3.1, Current FIRM Data](#), for a description of vertical datum types and possible conversion notations).
- Conversion / Comments – If the BFE datum is different from the structure elevation information datum, a method for conversion should be entered here.

The next set of entries corresponds to those found in Section C of the FEMA Elevation Certificate. Structure elevation data and data about flood vents are entered here. The FEMA Elevation Certificate may be referred to for any questions. Again, this information should only be included if there is a certified source, such as an elevation certificate, on file with the community:

- Top of bottom floor – This includes basements and other possible enclosures.
- Top of next higher floor
- Bottom of lowest horizontal structural member – This measurement is generally only taken in V zones but may also be relevant in communities with Coastal A zone regulations.
- Attached garage

- Lowest elevation of machinery and/or equipment
- Lowest Adjacent Grade\*  
\*This field must be completed to generate the FEMA 551 report.
- Highest Adjacent Grade
- No. of permanent openings – This includes the openings that serve as flood vents to allow the automatic entry and exit of floodwaters from areas below the BFE.
- Total area of permanent openings (flood vents) – The surface area of flood vent openings in square inches.
- Certifiers Information section – The certifier’s contact information, license number, company name and street address should be recorded in this section.

#### **6.3.2.2 Additional Flood Hazard Data**

Information from the FIS or a comparable source (where the FIS is not available or more recent information is available) is collected here to characterize the flood risk and to collect flood hazard risk information that is necessary to run a Benefit Cost Analysis (BCA).

- Date of FIS
- Date of Other Source
- Describe Source (if other than FIS) – The name of the study or other source used should be provided here [e.g., U.S. Army Corps of Engineers (USACE) flood information reports, Federal Highway Administration (FHWA) floodplain studies, etc.]. Adequate documentation of this source is necessary, including an electronic copy if available, or scanned images of pertinent parts of studies. These can be attached to the NT using the documents button to attach them (see [Section 6.1.2, View](#), for how to load documents).
- Streambed Elevation from FIS – Include the elevation obtained from the flood profiles in the FIS.
- Flash Flooding\* – Information on whether or not the structure is subject to flash flooding may be obtained from the FIS or community officials’ knowledge of the area.

\*This field must be completed to generate the FEMA 551 report.

- Flood Velocity\* – Mean flood velocity within the floodway can be obtained from the FIS. For flood velocities at sites outside of the floodway, historical flood data might provide more accurate velocity estimations.

\*This field must be completed to generate the FEMA 551 report.

- In Floodway\* – If a floodway analysis was performed as part of the FIS, the floodway delineation on the FIRM or floodway map will indicate whether the site is located within or outside of the floodway.

\*This field must be completed to generate the FEMA 551 report.

- Flood Zone Characteristics – In this section, the type and characteristics of the flood zone should be included (ice jams, sewer backflows, other, riverine, coastal, sheet flow, shallow floods, ponding).
- Flood Frequency Based Discharges (Q) and Elevations Table – Discharge information is available for certain points along a detailed studied stream and is found in the Summary of Discharges table in the Hydrologic Analyses section of the FIS. The elevations are usually available for detailed studied flood areas from the flood profiles and are necessary to run FEMA's Mitigation Benefit Cost Analysis (BCA) Toolkit.
- Depth of 100 year flood at site – This depth will be calculated automatically if information on the BFE and Lowest Adjacent Grade is entered in the *EC or Elevation Data* section of this screen.

### **6.3.3 Claims Tab**

Claims information from the NFIP download is recorded in this section.

File View Reports Tools Help

**FEMA National Flood Mitigation Data Collection Tool**

#9999002 - 123 10TH PLACE SE 123 10TH PLACE SE, DISASTERVILLE, DC 999930000 [Prev Address](#) \* [Detailed View](#) \*

Additional Site Information | Elevation and Hazard | Claims | Events and Total Damages

**Reported Value** \$78,000.00 (See Events and Total Damages for Total Payments)

**NFIP Summary**

<b>Cumulative Payments</b>	\$146,215.21	<b>Avg. Cumulative Payment</b>	\$36,553.80
<b>Avg. Building Payment</b>	\$14,953.03	<b>Avg. Contents Payment</b>	\$21,600.78

**Known Claims** - (Claims with identical dates are displayed as one claim with all payments combined.)

Loss Date	Building Payments	Contents Payments	Cumulative Payments
01/02/1999	\$5,100.88	\$555.99	\$5,656.87
10/08/1996	\$15,540.52	\$32,454.11	\$47,994.63
03/13/1993	\$38,116.21	\$53,393.00	\$91,509.21
08/31/1985	\$1,054.50	\$0.00	\$1,054.50

Additional Claims Filed  Claims Update Required [NOTES](#)

**Missing Claims**

Loss Date	Building Payments	Contents Payments	Uninsured Building	Uninsured Contents	Cumulative Payments
07/01/2007	\$10,000.95	\$5,000.00	\$0.00	\$0.00	\$15,000.95

[Add](#) [Edit](#) [Delete](#)

Record 1 of 998    Go to PL #:  [Go](#)    [Find Properties](#)    [Go to Limited View](#)    [Save](#)

Go to Record #:  [Go](#)    [Show All Properties](#)    [Close](#)

**Reported Value** – This is the reported value of the building associated with the most recent loss as recorded in NFIP. It is determined by taking the replacement cost value (RCV) when available or, alternately, the actual cash value (ACV). The figures for RCVs were not reported prior to May 1, 1997. If the reported value from the most recent date of loss is not acceptable, the value from the previous date of loss is examined and used if deemed acceptable. Acceptable is defined as any value that is greater than zero, but less than \$10 million for one-to-four family properties and greater than zero but less than \$100 million for other properties. If multiple occurrences of flooding are found for any date of loss, the "ASSUMED CONDO" label is used in the property value field. If no value meeting the definition of acceptable is found, the "VALUE NOT AVAILABLE" label is inserted in the property value field.

### 6.3.3.1 NFIP Summary

- **Cumulative Payment** – This refers to the total of all payments from claims as noted in the last column of the Known Claims table.
- **Average Building Payment** – This refers to the average payment per claim for building payments only. It does not include the contents value.
- **Average Cumulative Payment** – This refers to the average payment per claim, including both contents and building. The entry is calculated from

claims in the *Building Payments* and *Contents Payments* columns of the *Known Claims* table.

- Average Contents Payment – This refers to the average payment per claim for contents payments only. It does not include the building value.

#### 6.3.3.2 *Known Claims*

The *Known Claims* table values are imported from NFIP and contains information for each claim made on the structure, up to a maximum of nine claims. It includes information on the loss date, building payments, and contents payments.

- Additional Claims Filed – This box should be checked when there is an indication from the owner or other source (such as a local official) that a claim was made on the structure that was erroneously excluded from the NFIP data.
- Claims Update Required – This box should be checked when there are data to support a missing claim and adequate data for the claim to be further investigated and/or added to the NFIP data can be provided.

#### 6.3.3.3 *Missing Claims*

The information in the *Missing Claims* table is similar to that in the *Known Claims* section except that it allows you to enter missing records. When information is provided or obtained that indicates that a claim was made, but not properly recorded with the corresponding structure (it may have been recorded with another structure) in the NFIP records, the claim information may be recorded in this table. This information may be obtained from copies of checks, adjusters' statements, proof of loss records gathered from property owners or local officials, or documented claims or records within the NFIP data. Additionally, uninsured losses for building and contents corresponding to known claims (such as deductibles or damages exceeding the limits of the policy) may be added to this section. The source of the data should be noted in the Notes field on the screen and any documentation (digital files) should be added via the documents attachment function (see [Section 6.1.2, View](#)). Records in the *Missing Claims* section can be added, edited, or deleted using the keys on the bottom left of the screen.

### 6.3.4 **Events and Total Damages Tab**

This tab has additional information about reported damages to the structure where there are no insurance claim records to be entered. This screen also summarizes all of the losses for the structure, including known claims, missing claims and other events.

File View Reports Tools Help

**FEMA National Flood Mitigation Data Collection Tool**

#9999002 - 123 10TH PLACE SE 123 10TH PLACE SE, DISASTERVILLE, DC 999930000 [Prev Address](#) \* [Detailed View](#) \*

Additional Site Information | Elevation and Hazard | Claims | Events and Total Damages

**More important if detailed FIS information is not available**

Event Name	Event Date	Freq	Freq Source	Depth	Velocity	Flash Flood	Debris Flow
Hurricane Alice	7/1/2008			Very Shallow, less than	Slow/Moderate (<5 ft/s)	No	No

**Add** **Edit** **Delete**

**Total Damages (Claims and Events)**

	Building	Contents	Total
<b>Payments</b>	\$69,813.06	\$91,403.10	\$161,216.16
<b>Uninsured Damages</b>	\$0.00	\$0.00	\$0.00
<b>Total Losses</b>	\$69,813.06	\$91,403.10	\$161,216.16

Record 1 of 998

Go to PL#:  **Go** **Find Properties** **Go to Limited View** **Save**

Go to Record #:  **Go** **Show All Properties** **Close**

#### 6.3.4.1 Events Table

The *Events* table enables you to enter information about specific flood events, including their recurrence interval and flood depth. These events may or may not correspond to claims made that were recorded on the previous screen. If there are losses associated with the event that were not insured, the loss information should also be included in this table and explained. Records can be added, edited, or deleted using the keys on the bottom left of the table. In order to add an event, the following information should be provided:

- Event Name (e.g., Hurricane Floyd or February 1991 snowmelt and rainfall event)
- Event Date
- Frequency of the Event (e.g., 25-year flood or 100-year flood)

Note: FEMA's Mitigation BCA Toolkit provides guidance on acceptable methodologies for determining flood recurrence intervals.

- Frequency Source of Information - Clear documentation of the sources used for determining the recurrence interval/frequency of the event as well as any losses should be provided. The following are considered acceptable sources for flood event frequency determination: FEMA FIS, U.S. Geological Survey (USGS) Post-Event Reports, USACE Post-Event Report, and National Weather Service (NWS) or National Oceanic and

Atmospheric Administration (NOAA) recurrence interval estimates. Estimates vary from location to location, so accurate documentation is necessary.

- Depth of flood
  - very shallow (<1 ft)
  - shallow (1 to 3 ft)
  - moderate (3 to 6 ft)
  - deep (>6 ft)
- Velocity of flood
  - fast (>5 ft/s)
  - slow/moderate (<5 ft/s)

The appropriate boxes should be checked if the following has occurred:

- Flash Flooding
- Ice/Debris Flow (<1 hr)
- Declaration Declared
- Were there pollutants in the flood waters that required any special cleanup?

Finally, this table should include the monetary amount of any flood damages caused by flooding events that were reported by the property owner with either a NFIP policy not in effect or with damages incurred that did not exceed the deductible or \$1,000 paid under the NFIP.

The screenshot shows a software window titled "Add Event". It contains several input fields and checkboxes. The "Name of Event" field is filled with "Hurricane Isabel". The "Date of Occurrence" field is filled with "9/15/2003". The "Frequency of Event" field is filled with "150 year". Below these is a section titled "Source of Frequency Determination Information" with a text box containing "DC Geological Survey". There are two dropdown menus: "Flood Depth" is set to "Shallow, 1-3 ft." and "Flood Velocity" is set to "Slow/Moderate (<5 ft/s)". Below these are three checkboxes: "Flash Flooding (<1 hr)", "Ice/Debris Flow", and "Declaration Declared", all of which are currently unchecked. A section titled "Question for the owner:" contains the text "Were there pollutants in the flood waters that required any special cleanup?" followed by an unchecked checkbox. At the bottom of the window is a section titled "Uninsured Damages" with two input fields: "Building" with the value "\$1,500.00" and "Contents" with the value "\$500.00". At the very bottom of the window are two buttons: "Save" and "Cancel".

**6.3.4.2 Total Damages (Claims and Events)**

The *Total Damages* section contains information on all damages entered on the *Claims* and *Events and Total Damages* screens and presents it in the form of a concise summary. The table contains information on total payments (both building and contents), total uninsured damages, and total losses. Any edits made to either the *Missing Claims* table (in the *Claims* tab) or the main table of the *Events and Total Damages* tab will be reflected in the *Total Damages* section.

<b>Total Damages (Claims and Events)</b>			
	<b>Building</b>	<b>Contents</b>	<b>Total</b>
<b>Payments</b>	\$86,230.28	\$37,200.00	\$123,430.28
<b>Uninsured Damages</b>	\$0.00	\$0.00	\$0.00
<b>Total Losses</b>	\$86,230.28	\$37,200.00	\$123,430.28

## **Appendix A – System Requirements, Installation, and Maintenance Instructions**

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## **A.1 System Requirements**

- Microsoft Excel 5.0 or higher
- Microsoft Access 2002 (XP) , 2003 or 2007
- Adobe Acrobat Reader
- While there are not strict guidelines for PC processing speeds or RAM when using the NT, a Pentium III processor with at least 512MB of RAM or better will help to facilitate the following: 1) successful import of NFIP data when there are hundreds or thousands of records; 2) successful appending of records when there are hundreds or thousands of records; 3) faster record loading times when browsing through records; 4) faster display of thumbnails when browsing through records; and 5) faster download of pictures in the image gallery.
- Recommended screen resolution of 1024 by 768 pixels

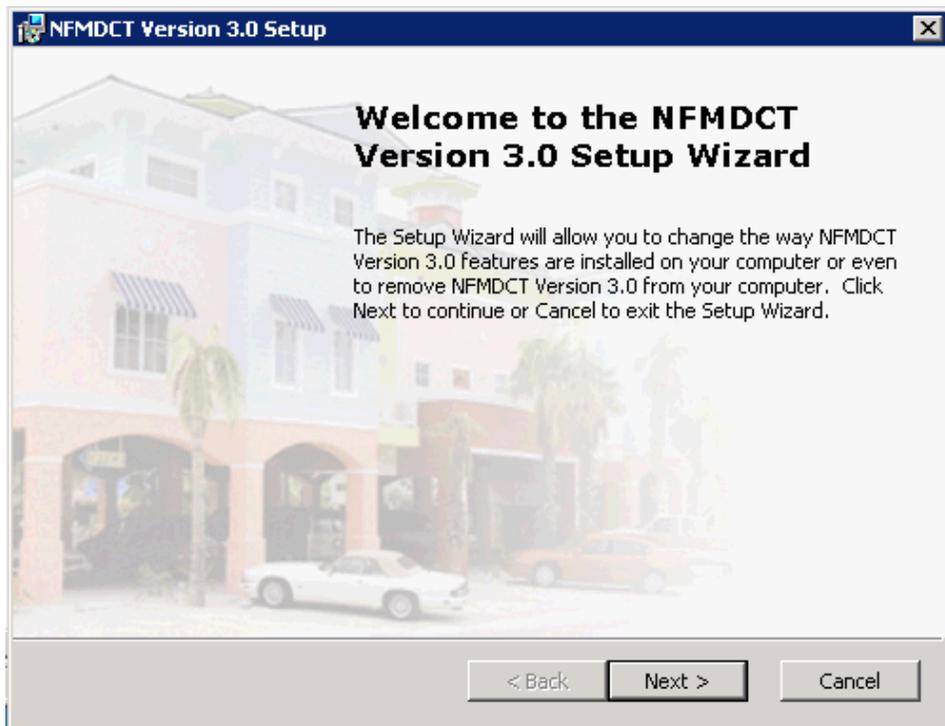
## A.2 Installation Instructions

1. Load the installation CD. If it does not automatically start, browse to the installation CD folder and click NTSetup.exe.
2. The following screen will appear:

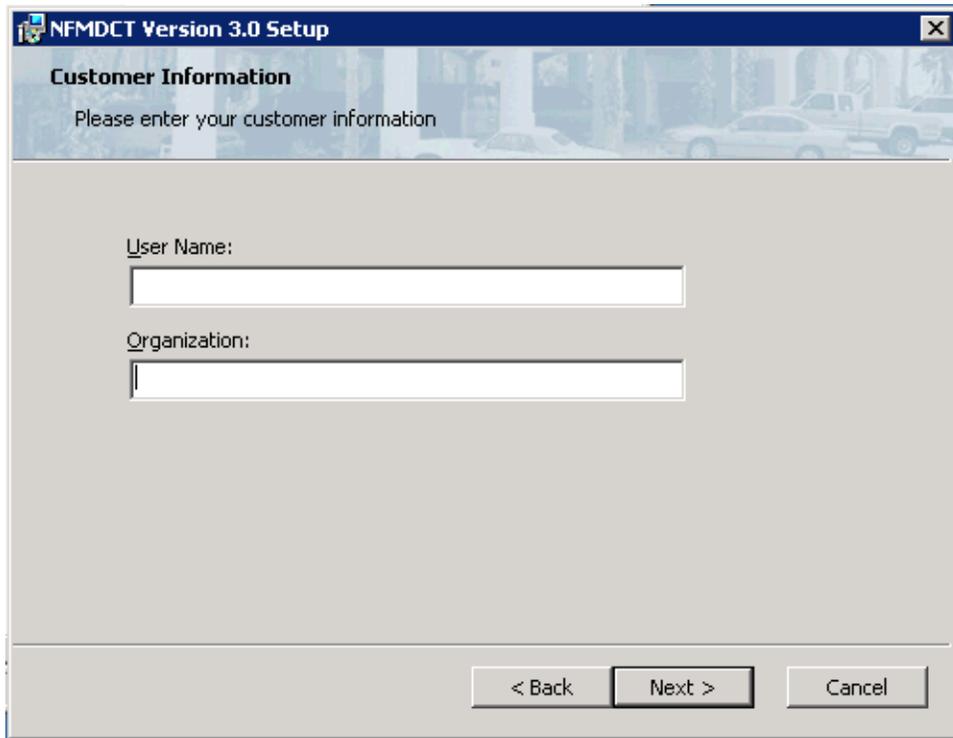


Click *Yes* to continue. The program installation will start.

3. Next, the Setup Wizard will appear. Click Next to continue.

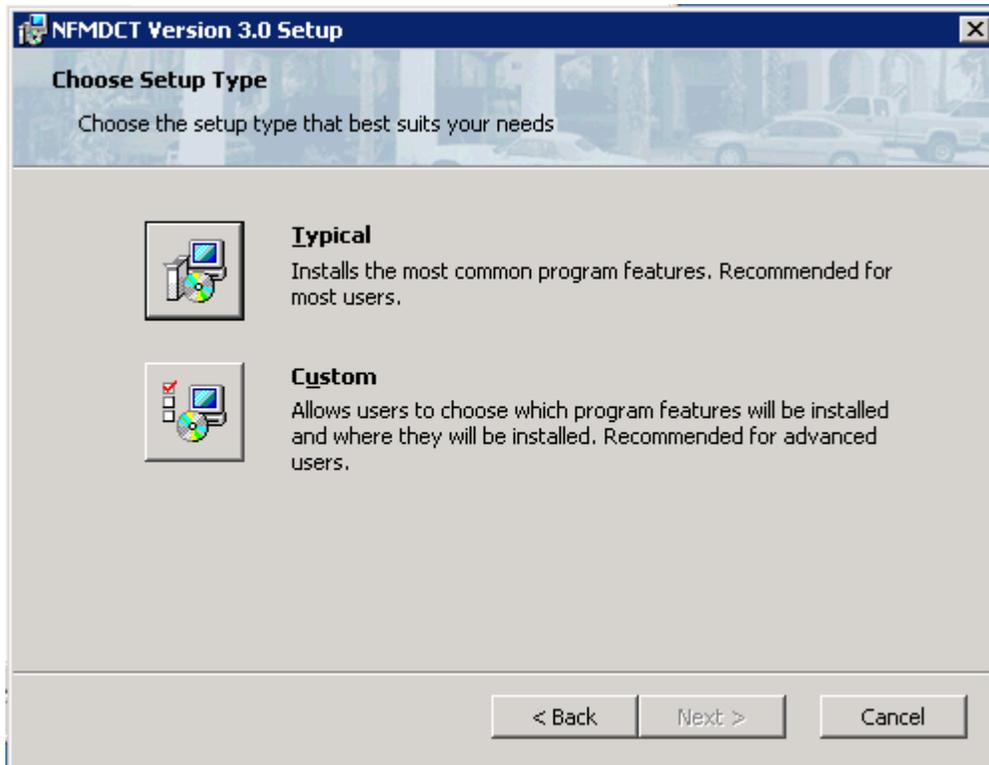


4. Enter your username and organization. This information is usually already filled in.



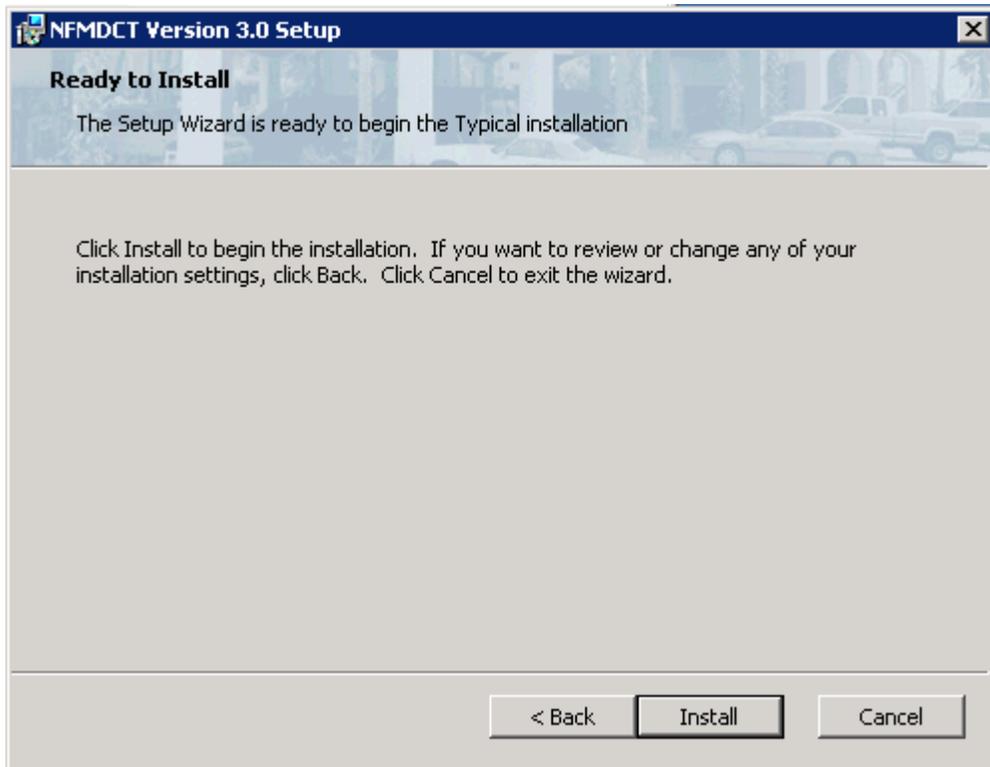
The screenshot shows a Windows-style dialog box titled "NFMDC Version 3.0 Setup". The main heading is "Customer Information" with the instruction "Please enter your customer information". There are two text input fields: "User Name:" and "Organization:". At the bottom of the dialog are three buttons: "< Back", "Next >", and "Cancel".

5. Select Typical as your Setup Type. Select the option Custom to change the default installation folder.

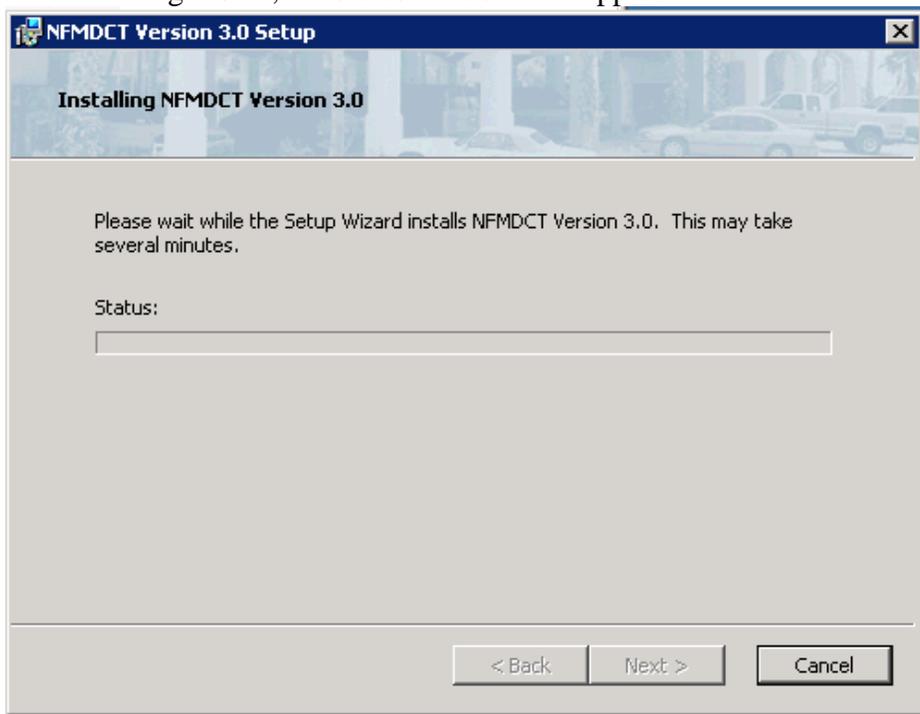


Click Next to continue.

6. Click Install to begin the installation process. To review your settings, click Cancel to exit the Setup Wizard.



After clicking Install, the status window will appear:



7. When the installation process is completed, click Finish to exit the Setup Wizard.



If you have Access 2002 or Access 2007, the icon that appears in the Start > All Programs list needs to be modified to point to the correct Microsoft Office folder.

To do this, go to Start > All Programs and right click on the NFMDCT\_V3 icon. Select Properties, and modify the target field to point to the correct Office folder (Office12 for Access 2007 or Office10 for Access 2002).

### **A.3 Installing the Repetitive Loss Property (RLP) Viewer**

1. Open the Setup Disk.
2. Run the MapWinGISOCXOnly.exe program and follow the instructions.
3. Once the MapWinGISOCXOnly installation is done, open the Release folder inside the Setup CD.
4. Run the Setup.exe file.

The RLP Viewer was developed using Visual Studio .NET. If this is the first installation in the computer, it will start the deployment of Microsoft .NET Framework. Just follow the instructions. At the end of the process, it could ask to reboot the computer.

5. After rebooting the computer, if asked, the installation process will continue.
6. View the PowerPoint presentation in the Presentation folder on the CD.
7. Instructions for downloading shapefiles can be found in this file in the presentation folder: RLP Viewer 2.0 GIS Data Formatting.doc or in Appendix A.3.1.

### A.3.1 RLP Viewer 2.0 GIS Data Formatting

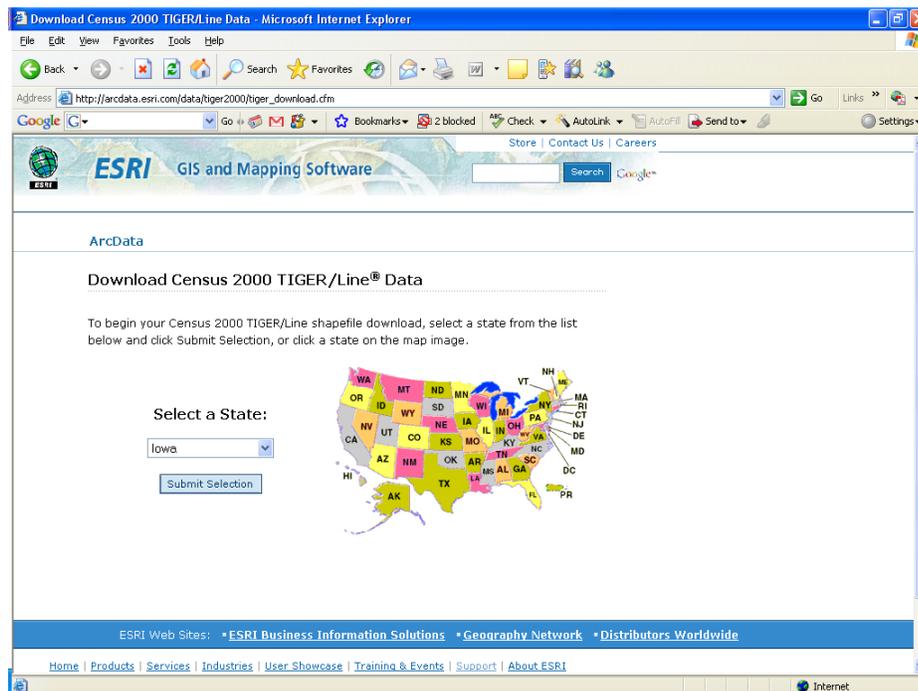
There are two steps involved before using the RLP Viewer: 1) obtaining your GIS data and 2) formatting your GIS data.

Note: Also view the PowerPoint presentation in the Presentation folder on the RLP Viewer CD.

#### *Step 1: Obtaining your GIS data*

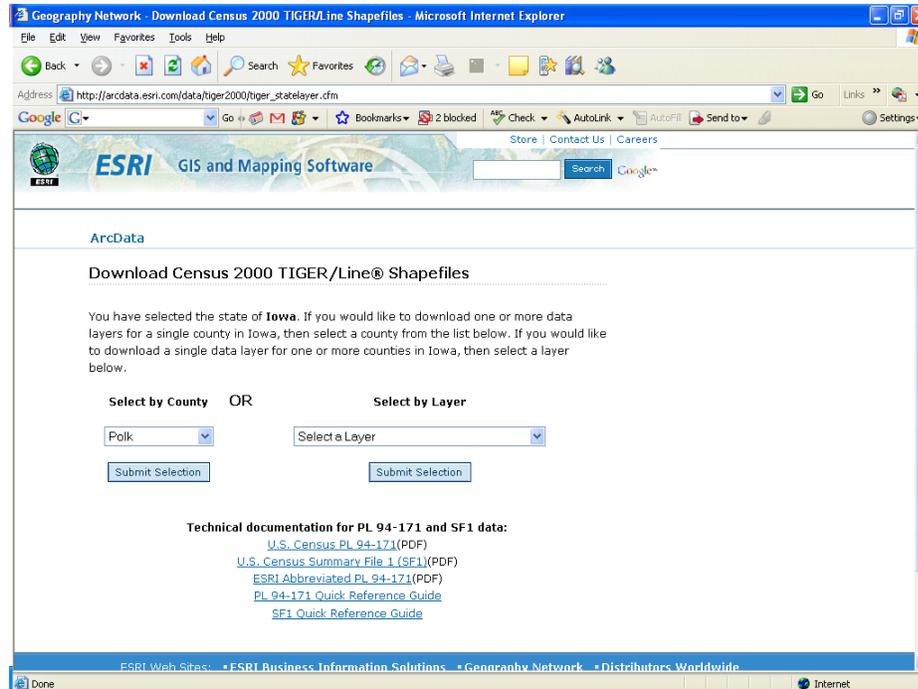
1. Navigate your web browser to the URL:  
[http://arcdata.esri.com/data/tiger2000/tiger\\_download.cfm](http://arcdata.esri.com/data/tiger2000/tiger_download.cfm).

Next, select a state from the drop down list (Figure 1).



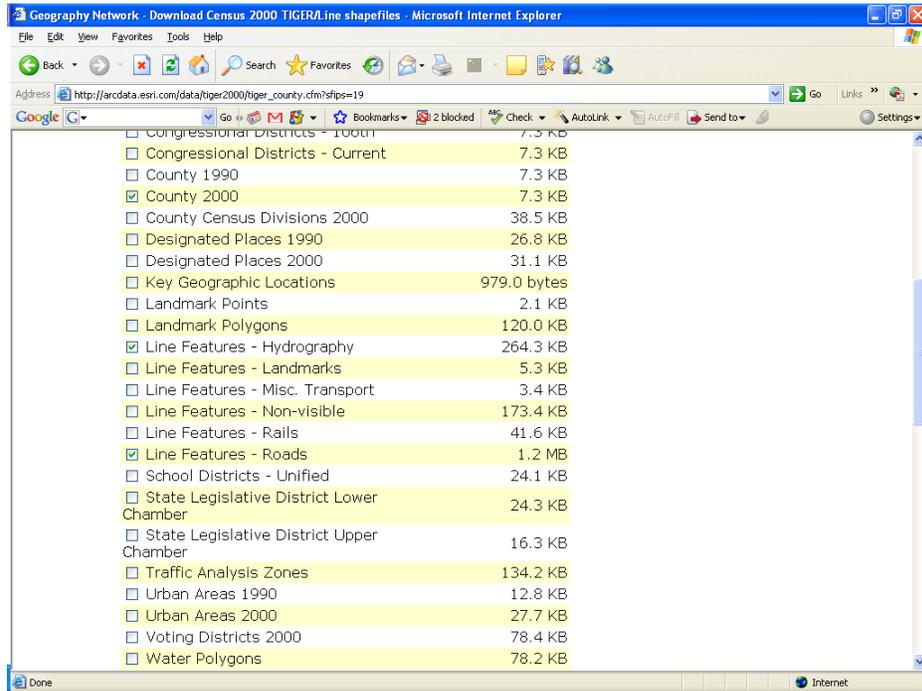
(Figure 1)

- From the next drop down list, select the county that pertains to your data, click "Submit Selection."



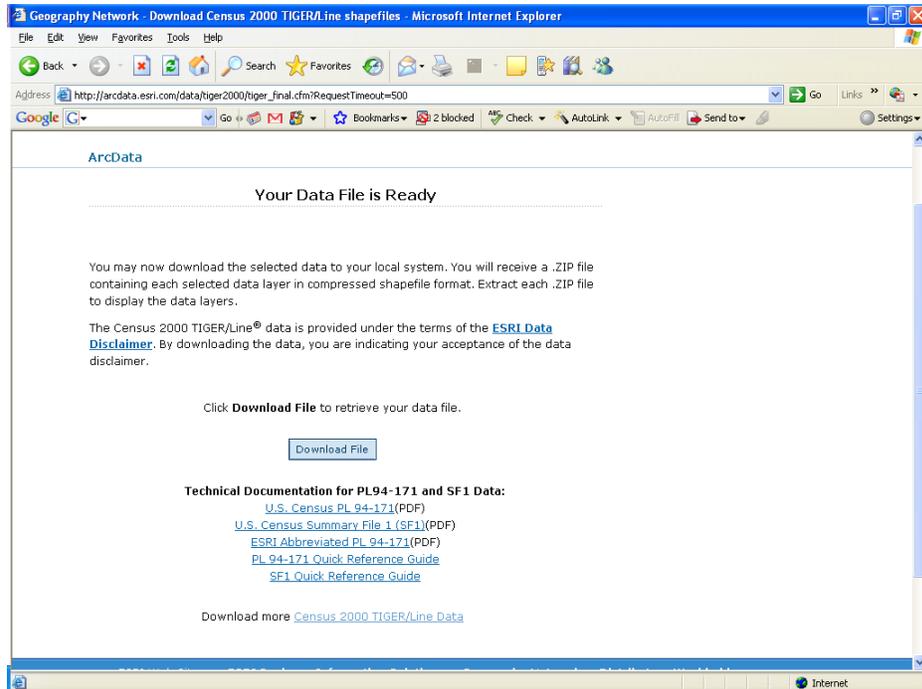
(Figure 2)

3. From the list of available GIS data layers check the box next to: “County200,” “Line Features – Hydrography,” and “Line Features – Roads” (Figure 3). At the bottom of the page, click “Proceed to Download” (not shown).



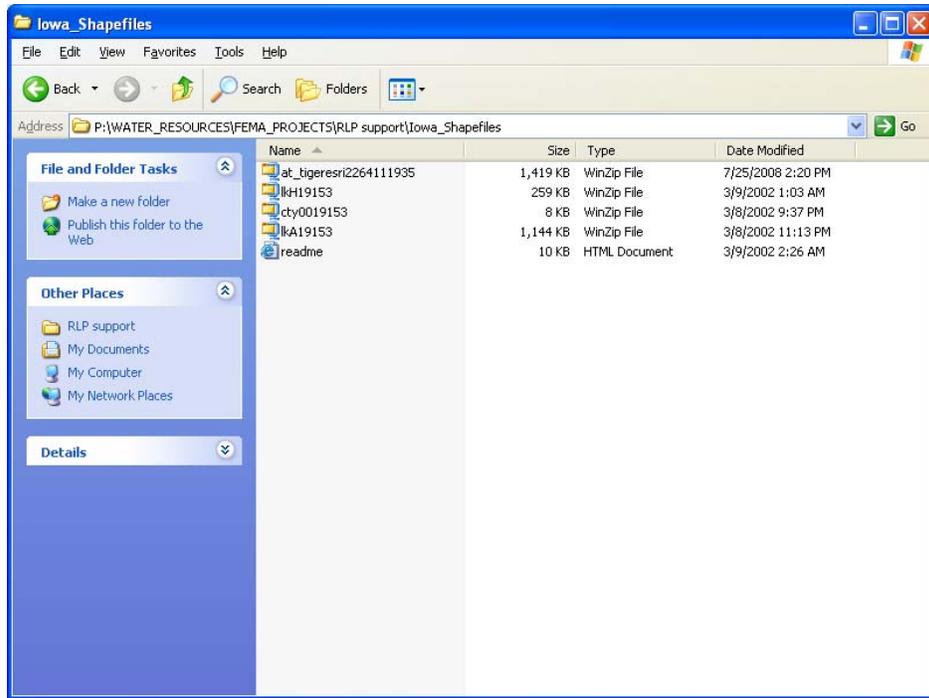
(Figure 3)

4. At this page, click “Download File” (Figure 4). Download the data to the desired folder location.

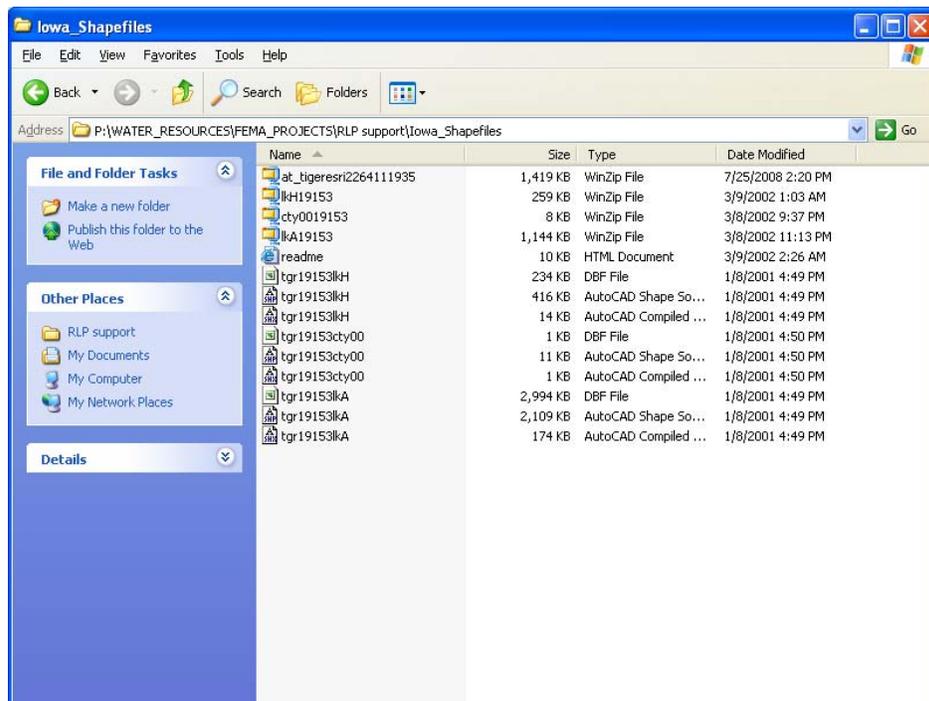


(Figure 4)

5. After the download is complete, extract the individual WinZip folders (Figure 5), then extract the shapefile components (Figure 6).



(Figure 5)



(Figure 6)

**Step 2: Formatting your GIS data**

For each GIS layer you will see a collection of 3 files with the same name, but different file extensions (Figure 6 in Step 1). This collection of files that comprise each GIS layer needs to have the same name in order to work properly. The naming convention needs to match the example on page 8 of the RLP Viewer 2.0 manual. The minimum requirement is the county boundary shapefile.

For our example (and for all data retrieved from ESRI ArcData site) the file name changes should be:

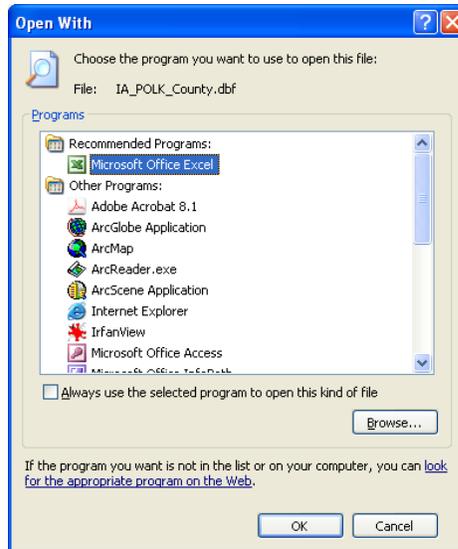
<u>Original File Name</u>	<u>New File Name</u>
tgr19153cty00	IA_POLK_County
tgr19153lkA	IA_POLK_Roads
tgr19153lkH	IA_POLK_Streams

Your shapefile components also need to have the appropriate name and attribute fields in order for RLP Viewer 2.0 to map your properties.

Layer	Field Name	Field Type	Description
Properties	PROPLOCATR	Text (50)	It corresponds to the Property Locator number in the NT database
Roads	TIPTTEXT	Text	Text to be displayed as a “tip” when the user stops the cursor over a street segment
	NAME	Text	For labels
Stream	TIPTTEXT	Text	Text to be displayed as a “tip” when user stops the cursor over a stream segment
	NAME	Text	For labels
Q3	FLOODWAY	Text	For identifying flood way
	ZONE	Text	For thematic coloring the flood map and to be displayed as a “tip” when the user stops the cursor over a flood polygon.
Community	TIPTTEXT	Text	Text to be displayed as a “tip” when user stops the cursor over a community polygon
	NAME	Text	For labels
County	NAME	Text	For selecting which new property feature will be added to the properties shapefile avoiding points outside the extent of the county polygon.

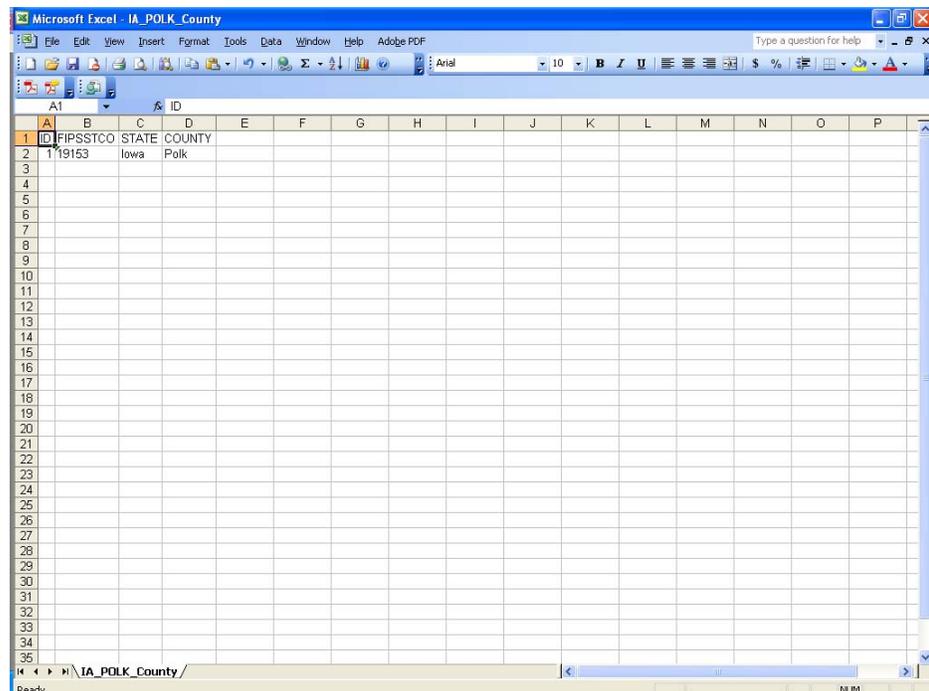
(Figure 7)

1. To add a field, open the .dbf file using Excel. Right click on the .dbf file and choose the option “Open With.” Select Microsoft Office Excel (Figure 8).



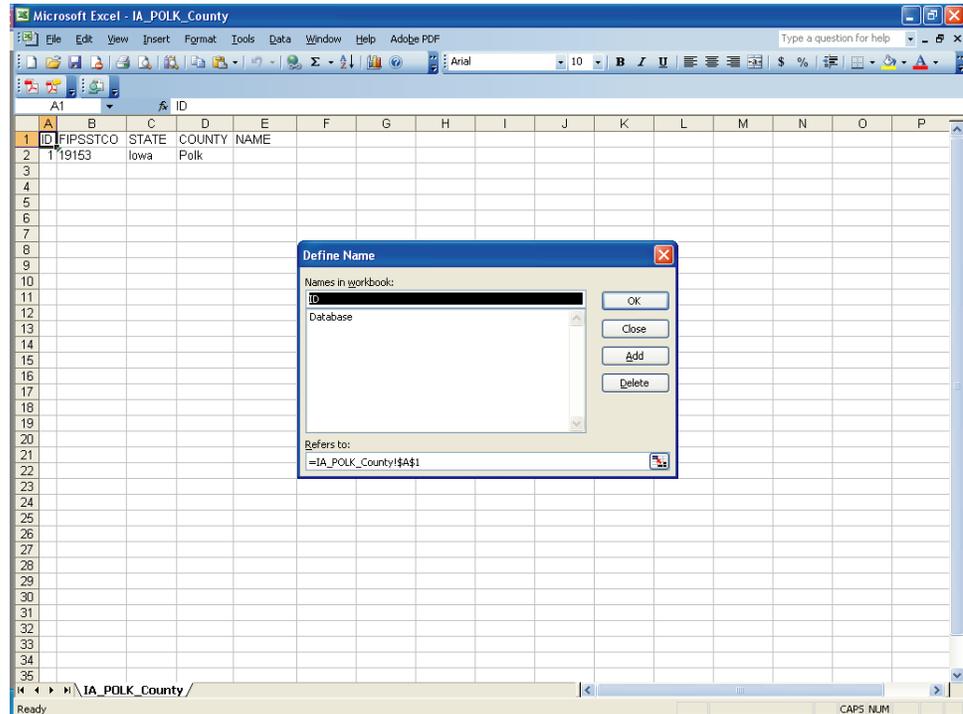
(Figure 8)

2. You should see the following (Figure 9):



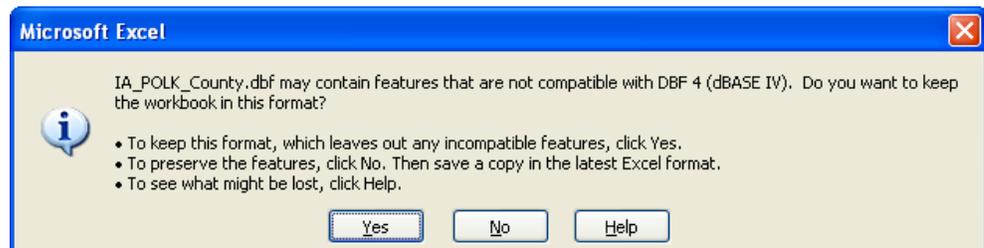
(Figure 9)

- Next, type “NAME” into the next empty column header. In order for the .dbf file to save correctly, select ‘Insert’ from the main menu, then “Name,” then “Define.” Delete all names in the workbook and select “OK” (Figure 10).



(Figure 10)

- Save the file and exit Excel. When prompted choose to save the file in the DBF 4 format (Figure 11).



(Figure 11)

- Repeat these steps to add the required fields for the streams and roads files, adding the appropriate column headers from Figure 7.

Your GIS data is now properly formatted for use with RLP Viewer 2.0.

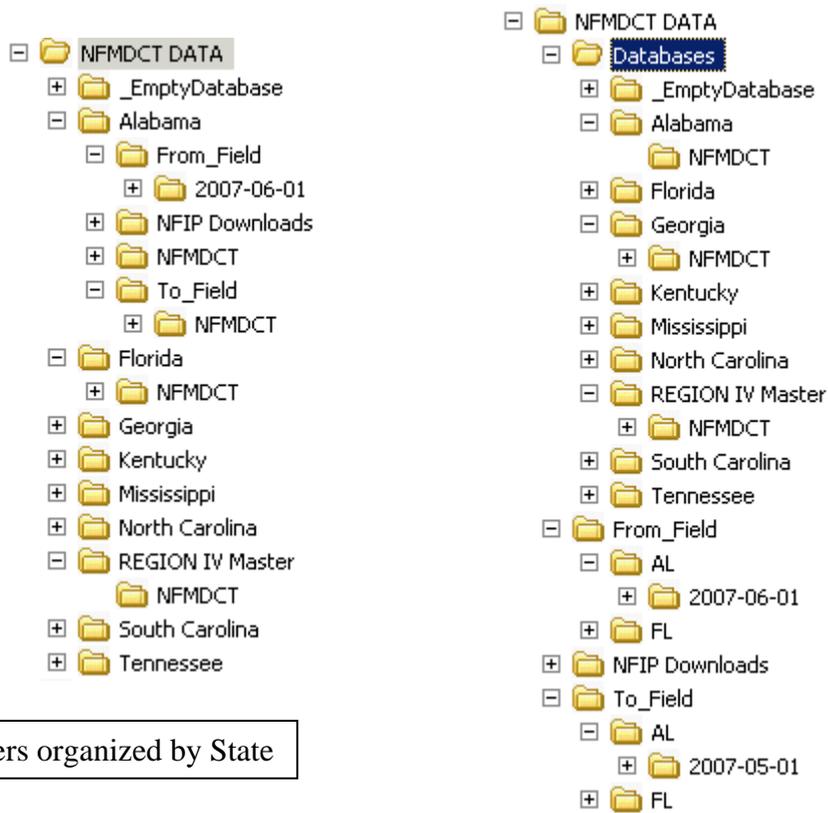
## A.4 NT Folder Organization and Maintenance

By default, an NT database and a documentation folder will be installed into **C:\Documents and Settings\<username>\NFMDCT\_V3**, but you can change this location during installation to another folder on your hard drive or network. The documentation folder within the NFMDCT\_V3 folder is called NFMDCT. The nested NFMDCT folder initially contains only the NT documentation; however, it is also the repository for all images and documents uploaded into the NT.

If you install to the default folder and want to move it later to the network or other location, you can do so without any problems. **You do not need to reinstall from the CD to the network.**

The NT can store and organize properties in any way you prefer: by community, county, state, or FEMA region. How you work with field inspectors and others who use the data will determine the best way to set up your folder structure. Keep the following in mind:

- Always keep one database (the master) up-to-date with the latest field inspections and NFIP data. Updating multiple databases can be confusing and time-consuming. See also Section 4.4.7.1, Updating a Master Database from a Subset Database.
- Create subset databases from the master database as needed (by state, county, community, etc.) for field inspectors, community officials, or other users. Creating subset databases from the master ensures that you will always have the most recent data.
- Organize the field inspector's databases by date so you can rebuild the master if necessary.
- Organize downloaded NFIP spreadsheets by date.
- You will need an empty version of the NT database each time you want to create a subset database, so copy the NFMDCT\_V3\_Empty.mdb database from the installation CD to a folder on your local PC or network so it's easy to retrieve when needed.
- If there are other users who need to use the master database on the network, provide a separate copy to work with instead of the original. This will help to protect the master database from accidental data and/or file corruption.
- See the graphics below for a few ideas for folder structure. These are only suggestions; do what works best for your needs.



Folders organized by State

Folders organized by Function

If you have access to a network, it's strongly recommended that you store your databases on the network. It not only provides a regular backup of the data but also allows for unlimited storage capabilities.

As images and documents are added to the database, you will need an increasing amount of disk space to store them. How much space is needed depends upon the size and quantity of images/documents.

If you do store the databases on your local PC, make sure you back it up frequently to an external device.

## **A.5 Enhancements Made to Version 3.0**

### **1. NEW FEATURES**

- a. Added the ability to Export a Property data Template spreadsheet. The spreadsheet will be populated with all of the data fields in the NT. It can then be modified and imported back into the NT. The only fields not importable are Possible Mitigation Measures Observed and the Certifiers Information.
- b. Added the ability to Export Claims and Flood Event information into an Excel spreadsheet.
- c. Added the last 10 properties worked on to the File menu.
- d. Added a Merge feature to the Utilities menu. You can now merge the data entry fields from one property into another.
- e. Added 4 new Tutorials: Importing NFIP Data into the NT, Creating a Subset NT Database, Appending Data into an Existing NT Database, and Maintaining a Master Database.
- f. Added the ability to print reports to PDF without having a PDF printer. During the NT installation, two additional files will be installed called DynaPDF.dll and StrStorage.dll. They will be installed in the same folder as the database. If you move the database and it can't find the files, you won't be able to print to PDF without a PDF printer.
- g. Added the ability to track multiple site visits on the Data Collection screen.
- h. Added a Photo Gallery that is available from the View menu in Limited and Detailed views, or from the Utilities menu.

### **2. SCREEN CHANGES**

- a. Made the Property Locator/RL# red and bolded and added "SRL(indicator)" after it to indicate SRL properties.
- b. Added the NFIP Data As of Date (from the collections screen) to the Limited View / NFIP Address section.
- c. Added Insured Status from the Insurance Screen to the Limited View / NFIP Address section.

- d. The Data Collection screen will now collect multiple site visit information as well as track data changes made through the screen interface or through the Property Data Template import process. To enter site inspection information, click on the inspectors name or date in the Limited View.
- e. Added the Data Collection screen and FEMA Regions to the View Menu.
- f. Added new buttons to the bottom of the Limited and Detailed Views: Find Properties, Show All Properties, Go to Detailed/Limited View, Save, Close, Go to PL# and Go to Record #.
- g. Made the thumbnail image larger and it will now appear in the last place it was dragged.
- h. All screens that open from the View menu can be sized and left open as you scroll through properties.
- i. The thumbnail will stay open when you switch between limited and detailed views. You can also turn the image on and off from the detailed view as well as limited.
- j. Reformatted the Help screen and the Help menu. Added sections for Documentation, Tutorials, Tools and Helpful Links. Added a link to the RLP Viewer program.
- k. Added Last Claimant Name (Revised) to the Insurance screen.
- l. Added Streambed Elevation from FIS to the detailed view.
- m. If notes exist, they will be displayed when the mouse is moved over the Notes buttons in Limited and Detailed views.
- n. Added a “551” image next to each field that is needed in order to run the FEMA 551 worksheets.
- o. Added “Clear All” buttons next to the HVAC, Duct Work and Potential Hydraulics Impacts. This is the only way to ‘deselect’ all options.
- p. FIND SCREEN – Reformatted into Tabs.
  - i. Added Zone Insured In, Inspection Date, NFIP Data as of Date, Severe Rep Loss Indicator and Community ID starts with.
  - ii. When you press Enter it will automatically perform the Find.
  - iii. Reformatted and grouped items.
  - iv. Fixed a bug in the Find Number of Claims payments.
  - v. Added Last Claimant Name and Last Claimant Name (Revised).

### 3. NFIP IMPORT

- a. Importing additional fields from the NFIP spreadsheet: Severe Rep Loss indicator, County and Local Property Identifier. The Local Property Identifier is being imported into the Local Lot/Parcel ID field (detailed view). The user can still overwrite the data. If there is a value in the field when the NFIP data is imported, it will NOT be overwritten with the NFIP data.
- b. Added a third report produced in the NFIP Import Process. It is a summary report by CID showing the number of properties per CID in the database before the Import, how many were Imported, the properties not Imported, and the new properties Imported.
- c. The community name, CID, city, county, state and zip fields will be filled in on the Limited View / Address Updates section. This will happen only for new records, or if these fields are blank.
- d. Added the ability to cancel an import.

### 4. APPEND PROCESS

- a. Added an Append Options screen which provides additional ways to append the data.
- b. Modified the Append process to capture “53 – File Not Found” errors. If the file isn’t found then it is added to a new “Missing Images/Document” report. The new report will display after pressing the Report button and closing the first report.
- c. When Appending into another database, the NT documentation files (user’s guide, tutorials, etc) will also be copied to the NFMDCT folder (if they don’t currently exist).
- d. Fixed an issue when appending the same data into a database causing the images to be duplicated.

### 5. REPORTS

- a. Added the following new reports: FEMA 551 worksheets A and B, AW501, Missing Images and Documents and Mitigation.
- b. Changed the Severe Rep Loss report screen drop-down box to list each of the SRL types.

- c. The SRL type was added after the property locator number on all of the reports.
- d. Modified the report criteria screen for the Photo summary report so you can sort the properties by Rep Loss #, Community Name or CID number. You can get to this screen through the main menu – Reports option. Also, only properties with photos will now appear in the list.
- e. Reformatted the Basic and Severe Rep Loss reports.
- f. Added the Inspection Date to the Properties Requiring Action/Update report.

## **6. DATA STRUCTURE CHANGES**

- a. Widened the Tax id field (detailed view) from 30 characters to 50 characters.
- b. Widened the filename field for document names when loading pictures and documents from 42 characters to 247 characters.
- c. Widened the Local Lot/Parcel ID field in the Additional Site Information Tab of the Detailed Data view to 75 characters.

## **7. MISCELLANEOUS**

- a. Replaced the term “BureauNet” with “NFIP.”
- b. Changed the View menu to say Detailed View OR Limited View, not Detailed Data.
- c. Changed the CID field to a character field throughout the system in order to display the leading 0.
- d. Removed the # in all filenames that are uploaded to the tool and replaced it with “\_”.
- e. Eliminated having to be administrator to load the tool – removed all OCX and DLL files that had to be registered.
- f. If there any entries in the Mitigation Updates Field boxes in the Limited View, the “Updates Made” checkbox will automatically be checked when the property is saved. Also when saving the Limited View, the system will check the field mitigation actions to ensure they have been appropriately entered.

- g. Added progress bars to several processes.
- h. Modified the transition process between the Limited and Detailed views to be smoother and quicker.
- i. Fixed several bugs throughout the system.

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## **Appendix B – Troubleshooting and FAQs**

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## B.1 Troubleshooting

### *Main Menu Function*

#### **NFIP Import**

**Problem – The NFIP import process begins, but “hangs” before it is finished.**

**Solution –** This is generally a computer processing issue related to the speed and memory specifications of the PC. See System Requirements in Appendix A for suggested PC configuration and try importing smaller portions of data (fewer records) if necessary.

**Problem – After choosing a file for import, there is an error message, “The Following error has occurred: -2147418113 – Catastrophic failure”**

**Solution –** Make sure you have the correct drill down. There are drill downs with similar but not identical formats to the one used with the tool – the *RL Data for National Tool*. Be sure the drilldown being used is in the correct format and refer to Section 4.4.1 of the User’s Guide on how to access this data.

**Problem – When importing NFIP data for updates of existing records, the older data are not being replaced with data from the new import. Instead, new records are created.**

**Solution –** Make sure that the Property Locator/Rep Loss number on the record matches the one in the NFIP spreadsheet.

#### **Appending Data**

**Problem – I appended data more than once from the same database. Some of my image names have changed to include “\_01” or “\_02” and the disk space used has increased dramatically.**

**Solution –** When you append data into the database, it also appends the images into the NFMDCT folder where your database resides. During the append process you can select how duplicate images are handled. If you selected to Not overwrite files with the same name, then the file

was renamed with a sequential number. This doubles up the amount of disk space used and isn't very efficient.

To correct the situation, you can use one of these two options.

1. Manually remove the extra images by deleting them from each property record.
2. Create a new database and append the data only one time. If there are a lot of renamed images, this may be less time-consuming than Option 1. To create a new database, copy the empty NFMDCT database from the appropriate folder on the installation CD. Append the data from the original database only one time into the empty database.

**Problem – I appended data from a previous version of the NT and the “Total Number of Claims per NFIP” field on the Insurance screen contains “Unknown.”**

**Solution –** This occurs because this field did not exist in the older versions of the NT. To fix the problem, re-import the latest NFIP data.

## Images

**Problem – TIF images are not loading on the image screen or being displayed as a thumbnail.**

**Solution –** Microsoft Office 2003 does not include TIF graphics filter files which are necessary for proper viewing of TIFs in this application. You can load the necessary files from installation CDs for previous versions of OFFICE (XP). To load the files, load the Microsoft Office CD into the PC and choose Custom Installation. Load the Graphics Filters found under Office Shared Features, Converters, and Filters. Make sure to click on all other entries and apply the “X” so the older applications are not installed.

## PDF Documents

**Problem – When clicking on a PDF document link, my screen flashes and the document never displays.**

**Solution –** PDF documents are located throughout the NT application, but reside mostly on the HELP screen. Adobe Reader 7.0 has a known bug where it won't display PDF documents when they are linked from a Microsoft Office document. If you have Adobe Reader 7.0, uninstall

it and download the latest version of Adobe Reader from the Adobe web site ([www.adobe.com](http://www.adobe.com)).

**Problem – When clicking on a PDF document link, I receive the error “Unable to open ...PDF. No program is registered to open this file.”**

**Solution –** Several of the supporting documents for the NT are PDFs (Portable Document Format). These documents need Adobe Acrobat Reader in order to open them. You can download Adobe Reader from the Adobe web site ([www.adobe.com](http://www.adobe.com)). **Please note the Adobe Reader 7.0 issue in the preceding problem and solution.**

**Problem – I could not print to PDF.**

**Solution –** During the NT installation, two additional files will be installed called DynaPDF.dll and StrStorage.dll into the same folder as the database. Check the location of these files. These are necessary in order to print to PDF. If you move the database and not the files, you won't be able to print to PDF without a PDF printer.

## Miscellaneous

**Problem – My database continues to grow in size. Can it be compacted?**

**Solution –** Yes. Microsoft Access databases do not recover unused space until they are compacted. As with all Microsoft Access databases, it will need to be compacted periodically. Access has a built in feature to compact automatically every time the database is closed. However, this feature is **not** included in the NT program because of the time delay and risk of corruption. If the compact process is interrupted, the database will be corrupted. Therefore, compacting is a process that must be performed manually.

There are two ways you can compact:

- Through the use of the **Compact\_MDB** program in NT
- Through Microsoft Access

### Compacting using the **Compact\_MDB** program in NT

1. Locate the Compact\_MDB.exe file on the NT Installation CD and copy it to the same location as the master database.

2. Double-click the filename to execute.
3. Click “Browse” to locate the database to be compacted, then press OK.
4. An **\*\*\*Important\*\*\*** information box is displayed (as shown at upper right). The database will be backed up into a new folder called “Backup.” Do not interrupt the compact process once it has started. If it is interrupted, the database will be corrupt. If that happens, you can restore it from the backup folder located where the database resides.
6. Click Yes to continue and the database will be compacted. When completed, a message will be displayed.
7. The database is now compacted. A backup is captured for you in the Backup folder. As other compactions are done, the backups will be numbered sequentially in the Backup folder.

#### Compacting through Microsoft Access 2002 or 2003

1. Open Microsoft Access.
2. On the toolbar, select Tools / Database Utilities / Compact and Repair Database menu item.
3. You are prompted for the “Database to Compact From” file. Browse to and select the master database and press Compact.
4. You are then prompted for the “Compact Database Into” filename. Enter a new filename (example: NFMDCT\_RegionIV\_Master\_Compacted.mdb) and press Save. The compacting process will begin.
5. When the compacting process is finished, exit Microsoft Access.
6. Rename the old master database to something more meaningful (example: NFMDCT\_RegionIV\_Master\_Backup1.mdb)
7. Rename the compacted database to the original name (NFMDCT\_RegionIV\_Master.mdb).

#### Compacting through Microsoft Access 2007

1. Open Microsoft Access 2007.
2. Click on the Office button in the top left corner of the screen.
3. Click Manage on the left, then Compact and Repair Database.

4. You are prompted for the “Database to Compact From” file. Browse to and select the master database and press Compact.

You are then prompted for the “Compact Database Into” filename. Enter a new filename (example: NFMDCT\_RegionIV\_Master\_Compacted.mdb) and press Save. The compacting process will begin.

5. When the compacting process is finished, exit Microsoft Access.

6. Rename the old master database to something more meaningful (example: NFMDCT\_RegionIV\_Master\_Backup1.mdb)

7. Rename the compacted database to the original name (NFMDCT\_RegionIV\_Master.mdb).

## B.2 FAQs

- Q: How do I create a smaller database with specific properties?  
A: Create a subset NT database (Section 4.4.7).
- Q: How do I combine several community databases into one main county database?  
A: Append properties (Section 4.4.4).
- Q: How do I create a spreadsheet with selected properties so I can update information in a single category all at once?  
A: There are two ways: 1) From Limited or Detailed Views, use Find Properties to select the properties you want, and then select Export Property Data Template from the Tools Menu. And 2) From the Main Menu, select Utilities, then Export Property Data Template. Delete the rows for properties you don't want to import.
- Q: I exported the Claims and Flood Events spreadsheet and updated it. Why can't I import it into NT?  
A: This spreadsheet cannot be imported into NT. The data from this spreadsheet is for use with FEMA's Benefit Cost Analysis (BCA) program. To add updated Claims or Flood Events data, update the data fields in the Property Data Template spreadsheet under the appropriate worksheet tab and then import the Property Data Template into NT to add the information.
- Q: I need to have the same photo associated with several different properties. Should I rename the photo file each time I want to add it to a different property before importing?  
A: You can go into the Photo Gallery, locate the image, right click it and assign it to additional properties. Alternatively, in the property data template spreadsheet, enter the same document path and file name of the photo for each property you want. The photo will be imported once, but NT will associate it with all of the different properties. Same reasoning works for the same document associated with several different properties (Section 4.4.3).
- Q: I entered all of my field information into a property and then later found out that it is the duplicate of another property. Do I have to retype all of the same information into the main property?  
A: No, you can Merge properties (Section 4.4.5).
- Q: Why did I receive an error after trying to import several photos? I included the entire path.  
A: Make sure the filenames of your photos do not have any blank spaces. If they do, either replace the spaces with an underscore (" \_ ") or remove the spaces entirely.

### B.3 Importing Property Data into the NT

Many data fields for multiple properties can be imported at one time by populating a Property Data Template (a Microsoft Excel spreadsheet) with the Property Locator/Rep Loss Number and a column for each data field found in NT. Any errors during the import process are displayed in a report immediately following the import.

#### **Steps for Importing Property Data** (with notes for each step)

##### 1. **Export the property data template.**

- This template is run from the Utilities Menu or from the Tools menu in Limited and Detailed Views.
- Template is a Microsoft Excel spreadsheet containing a column for each data field that can be imported.
- The property data for each property is also exported.
- Some of the columns limit your entries by using drop down lists.
- Three worksheets are exported – Import Data, Claims, and Flood Events.
- You can limit the properties exported by using the *Find Properties* feature in the Limited or Detailed Views.

##### 2. **Populate the spreadsheet with the values to be imported.**

- Delete or hide the columns you don't want to import. It won't hurt to keep an empty column.
- Delete the rows for properties you don't need to import.
- Delete the additional worksheets you will not be using to import data.
- The Property Locator/Rep Loss Num column is required and must exist in the spreadsheet. The number does not have to contain the leading zeros.
- Do NOT rename any of the column names. If you do, the import process will fail for that column.
- If you enter inspector information, make sure to enter the inspection date. If you don't, the inspection information will not be imported.
- Claims and flood events will also not import without the date.

- You can import multiple image and document files for a property by separating the filenames with a comma *or* a semi-colon (e.g., c:/RL00001899\_1.jpg, c:/RL00001899\_2.jpg, etc.). Do not mix commas and semi-colons as a file separator in the same cell. **Also, do not include blank spaces in the filename.** Replace blank spaces with an underscore (“\_”) or hyphen (“-”).
- If multiple properties share the same image or document file, enter the same document path and filename for each property in the spreadsheet. The file will only be moved once, but it will be associated with each property it was assigned to.

NOTE: This same process applies to existing image or document files in the database. That is, if you are importing a file that has already been imported for another property, the file will not be moved (if your path is the NFMDCT folder). However, an association will be made between the new property and the existing file. The image or document file can then be viewed in both property records.

### 3. Import the data.

- Open the NT database, go to the Utilities menu, and select *Import the Property Data Template*. Browse to locate and select the spreadsheet, and then press *Import* to continue or *Close* to cancel.
- If any warnings or errors are detected in the import process, a *Property Data Import Warnings and Errors* report will be generated to provide more detailed information about the errors. The following table lists possible warnings and errors included on the *Property Data Import Warnings and Errors* report with their solutions.

#### Possible Warnings, Errors, and Solutions

Warning/Error	Solution
The Property Locator/Rep Loss Num column was not found in the spreadsheet.	The Property Locator/Rep Loss Num column is required. Make sure the column exists and the spelling of the column name is correct.
Invalid Column. Not imported.	The column name is not recognized as a valid column. Check the spelling of the column name against the template columns and/or export the data template and copy the column name.
Text data too long. Only <i>n</i> chars allowed.	The column data value for this row contains too many characters. It is limited to the number of characters given.
Invalid Date.	The column data value for this row does not contain a date in valid date format. Format the column as a date field ( <i>mm/dd/yyyy</i> ).

Invalid value. Must match a value in the drop-down box.	The data value for this column does not match a valid value from the drop down box in the NT. Check the NT screen drop down box for this field for valid values or print the drop down box values from the Help menu.
File doesn't exist in the path stated.	The image/document doesn't exist in the path stated. Check the spelling and location of the image/document path. If both commas <i>and</i> semi-colons were used in the same cell to separate multiple image/document names, change to only one type of separator. You cannot use both commas and semi-colons in the same cell when separating filenames.
Number too large. Must be < 999,999,999.	The number value is too large. Make sure it is less than the number listed.
Invalid value. Valid Values are: <i>x, x, x</i>	The value entered is invalid. Select one of the values listed.
Inspection must contain an inspection date. Not imported.	The inspection date is missing for this row. The inspection record won't be imported unless it has a valid inspection date. Enter the inspection date in the format <i>mm/dd/yyyy</i> .
Warning: Image/Document already exists for property: <i>n</i> . This property will be assigned to the existing Image/Document.	<p>The image/document being imported already exists in the NFMDCT folder; therefore, this image/document was not imported. The imported property was assigned to the existing image/document.</p> <p>If the imported property shouldn't be assigned to the existing image/document, you can un-assign it by going to the View &gt; Images or Documents menu and deleting the image/document. The image/document will not be permanently deleted from NT until it is deleted from the last property assigned to it.</p> <p>If the image/document name is not spelled correctly, change it before re-importing.</p>
Warning: Image/Document already existed in the NFMDCT folder, but it was not assigned to any properties. The existing Image/Document was overwritten with the new Image/Document.	<p>The image/document being imported already existed in the NFMDCT folder, but there were no properties assigned to the image/document. This may occur when images/documents are manipulated outside of the NT database.</p> <p>Since the image/document wasn't assigned to a property, the new image/document replaced the existing image/document.</p>

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## **Appendix C – Field Data Collection Suggested Equipment and Forms**

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### ***Suggested Field Equipment***

- Laptop with the NT installed and up to date NFIP data imported
- Handheld GPS unit
- Digital camera
- Mapped travel route
- Area road maps and FIRMs

**Address and Updates Tab**

Property Locator / Repetitive Loss #: \_\_\_\_\_

**Address Updates:**

Incorrect Community and/or Address

Community \_\_\_\_\_

CID \_\_\_\_\_

Notes: \_\_\_\_\_

Street # \_\_\_\_\_ Directional \_\_\_\_\_ St Type \_\_\_\_\_ Unit \_\_\_\_\_

Street Name \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

County \_\_\_\_\_

**Mitigation Updates:**

- |                           |                          |  |
|---------------------------|--------------------------|--|
|                           | Field                    | Field  |
| Unable to Locate Property | <input type="checkbox"/> |  |
| Flood Protection Provided | <input type="checkbox"/> | 1: (Circle One)  |
|                           |                          | <ul style="list-style-type: none"> <li>a. The building was elevated to or above the Base Flood Elevation (BFE).</li> <li>b. The building was elevated, but not to the BFE.</li> <li>c. The building (non-residential) was floodproofed to the BFE.</li> <li>d. The building was partially floodproofed (but, not to the BFE).</li> <li>e. The building was protected by a flood control/stormwater management project.</li> <li>f. The building was replaced by a new elevated/floodproofed building.</li> </ul> |
| No Building on Property   | <input type="checkbox"/> | 2: (Circle One)  |
|                           |                          | <ul style="list-style-type: none"> <li>g. The building was demolished, but not acquired through any program.</li> <li>h. The building was acquired and demolished as part of a program.</li> <li>i. The building was relocated out of the floodplain.</li> </ul>   |
| Historic Building         | <input type="checkbox"/> | 3: (Circle One)  |
|                           |                          | <ul style="list-style-type: none"> <li>j. Hazard Grant Mitigation Program (HMGP)</li> <li>k. Flood Mitigation Assistance Program (FMA)</li> <li>l. Pre-Disaster Mitigation Grant Program (PDM)</li> <li>m. Repetitive Flood Claims (RFC)</li> <li>n. Sever Repetitive Loss Program (SRL)</li> <li>o. Section 1362 Acquisition Program</li> <li>p. Other FEMA Programs</li> <li>q. Increased Cost of Compliance (ICC) Coverage</li> <li>r. U.S. Housing &amp; Urban Development (HUD) Community</li> </ul>        |

- Development Block Grant (CDBG)
- s. U.S. Army Corps of Engineers or Natural Resources Conservation Services (NRCS) Project
- t. Other Federal Program
- u. State Program
- v. Local Program
- w. Property Owner
- x. Natural Disaster or Fire
- y. Unknown

4: (Circle One) [If not available or unknown, circle letter "y"]

- j. Hazard Grant Mitigation Program (HMGP)
- k. Flood Mitigation Assistance Program (FMA)
- l. Pre-Disaster Mitigation Grant Program (PDM)
- m. Repetitive Flood Claims (RFC)
- n. Sever Repetitive Loss Program (SRL)
- o. Section 1362 Acquisition Program
- p. Other FEMA Programs
- q. Increased Cost of Compliance (ICC) Coverage
- r. U.S. Housing & Urban Development (HUD) Community Development Block Grant (CDBG)
- s. U.S. Army Corps of Engineers or Natural Resources Conservation Services (NRCS) Project
- t. Other Federal Program
- u. State Program
- v. Local Program
- w. Property Owner
- x. Natural Disaster or Fire
- y. Unknown

Notes: \_\_\_\_\_

Additional Research Needed    Notes: \_\_\_\_\_

Mitigation Observed: *(Select one)*

- |   |  |
|---|--|
| <input type="checkbox"/> Structure appears to have been elevated                    | <input type="checkbox"/> Flood control project should have reduced the threat    |
| <input type="checkbox"/> Structure appears to have been floodproofed                | <input type="checkbox"/> Owner/neighbor/local official report mitigation actions |
| <input type="checkbox"/> There is a floodwall, berm, or other type of barrier       | <input type="checkbox"/> Further Research Required                               |
| <input type="checkbox"/> Lower area subject to damage appears to have been modified | <input type="checkbox"/> Other (explain in notes)                                |
| <input type="checkbox"/> Drainage improvements appear to have been made             |  |

Notes: \_\_\_\_\_

Mitigation Verified\*     Yes     No     N/A    Notes: \_\_\_\_\_

*\*(Verification of FEMA data observed in the field)*

Duplicate Listing / with Property Locator # \_\_\_\_\_

**Site Observations Tab**

Property Locator / Repetitive Loss #: \_\_\_\_\_

Inspection Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Inspector: \_\_\_\_\_

Latitude: \_\_\_\_\_ +/-

Longitude: \_\_\_\_\_ +/-

No. of Stories \_\_\_\_\_

Basement

Occupied:  Yes  No  Seasonal

- Neighborhood:
- Commercial Highway
  - Commercial Office
  - Commercial Retail/Downtown
  - Heavy Industrial
  - Light Industrial
  - Residential – high density (multi family/apts)
  - Residential – low density (single family)
  - Residential – medium density (2-family/townhouses, rowhouses)
  - Rural residential

- Residence:
- Primary
  - Rental
  - Seasonal

- Fill:
- Below Street Grade
  - None
  - 0-1 Feet
  - 1-2 Feet
  - 2-3 Feet
  - 3-4 Feet
  - >4 Feet

- Elevated:
- Not Applicable
  - At Grade
  - 0-1 Feet
  - 1-2 Feet
  - 2-3 Feet
  - 3-4 Feet
  - 4-6 Feet
  - 6-8 Feet
  - 8-12 Feet
  - >12 Feet

Land Use:

- Single-family residential
- 2-4 family residential
- Multifamily residential (5 or more units)
- Commercial (highway, office, retail, downtown)
- Industrial (light, heavy)
- Institutional (hospitals, churches)
- Educational (schools, colleges)
- Non-profit
- Public
- Semi-Public
- Transportation
- Other (explain in notes)

Notes: \_\_\_\_\_

Adequate Vents Present:  Yes  No  N/A  Undetermined

- Spoke with:
- Owner/Occupant
  - Neighbor

- Flooding this site have community-wide implications

If box is checked, select one:

- Important for flood warning/response (e.g. lumber supply companies)
- Important for disaster recovery
- Important for public health (e.g. wastewater treatment plant)
- Contains hazardous materials
- Contains special population (e.g. nursing home)
- Important utility service
- Other (explain in notes)

Notes: \_\_\_\_\_

Structure Type:

- |  |   |
|--|---|
| <input type="checkbox"/> Wood frame            | <input type="checkbox"/> Unreinforced concrete    |
| <input type="checkbox"/> Engineered wood frame | <input type="checkbox"/> Masonry                  |
| <input type="checkbox"/> Steel                 | <input type="checkbox"/> Reinforced Masonry       |
| <input type="checkbox"/> Light steel           | <input type="checkbox"/> Unreinforced Masonry     |
| <input type="checkbox"/> Heavy steel           | <input type="checkbox"/> Manufactured home        |
| <input type="checkbox"/> Concrete              | <input type="checkbox"/> Modular Housing          |
| <input type="checkbox"/> Reinforced concrete   | <input type="checkbox"/> Other (explain in notes) |

Notes: \_\_\_\_\_

- Condition of Structure:     Good (optional minor repairs)     Fair (needs minor repairs)
- Poor (needs significant repairs)

Foundation Type:

- Slab-on-grade
- Basement sub-grade on all sides
- Basement sub-grade with windows
- Basement with walkout
- Split-level - slab-on-grade
- Split-level
- Piers, posts, piles, columns, or parallel shear walls
- Piers, posts, piles, columns, or parallel shear walls w/ full or partial enclosure
- Elevated foundation walls w/full or partial enclosure
- Crawlspace – floor at or above grade on at least 1 side
- Other (explain in notes)
- Unable to determine

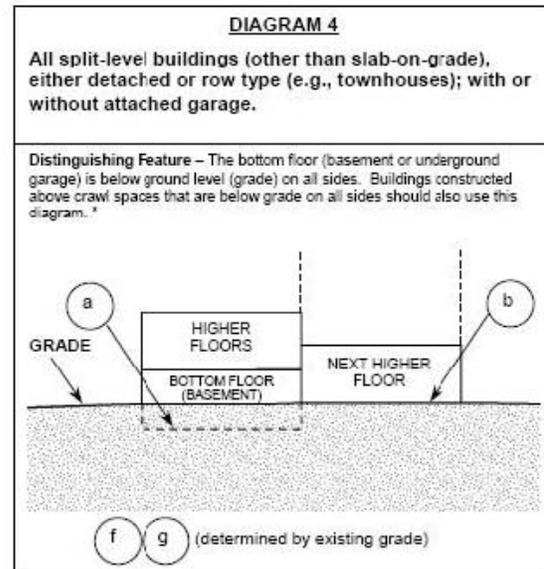
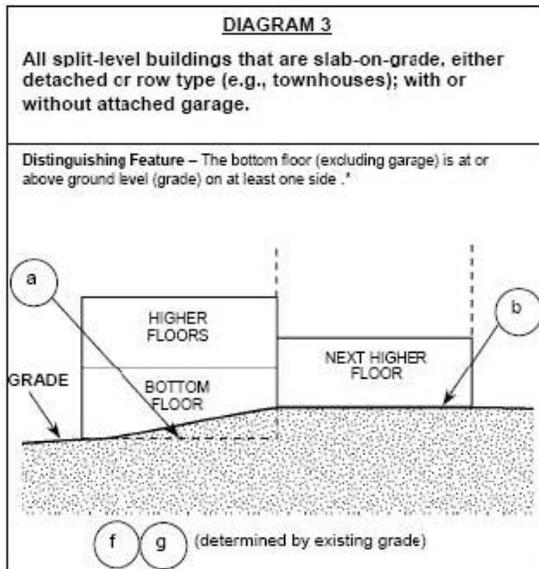
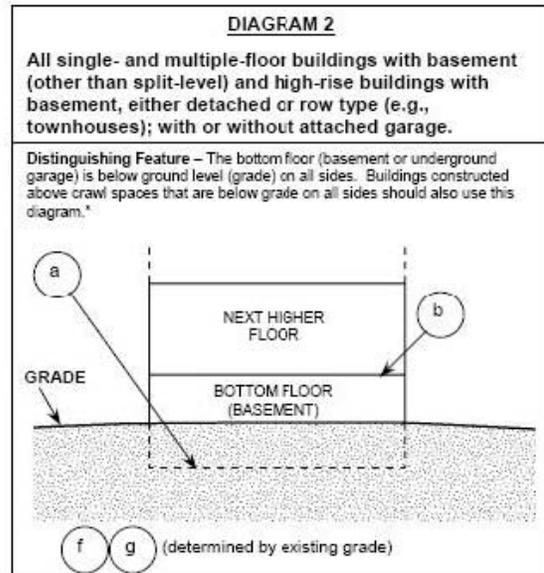
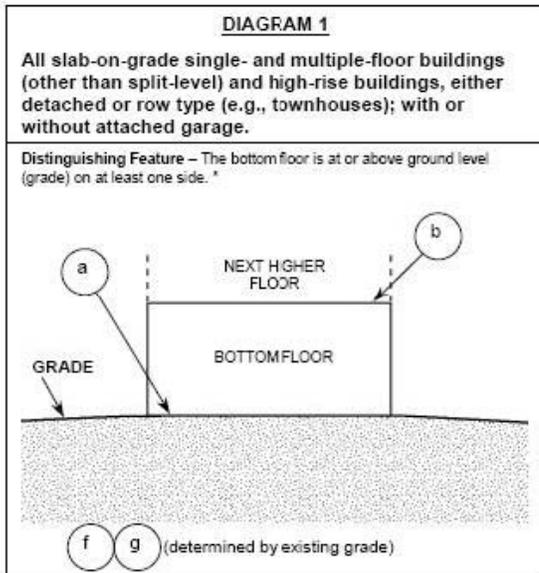
Notes: \_\_\_\_\_

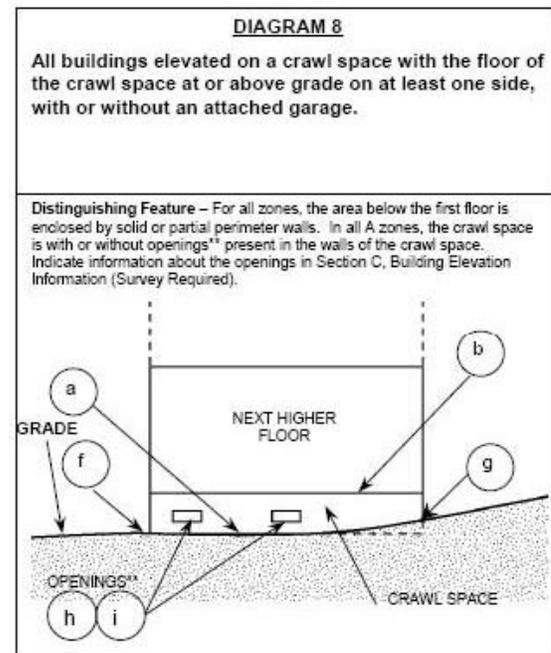
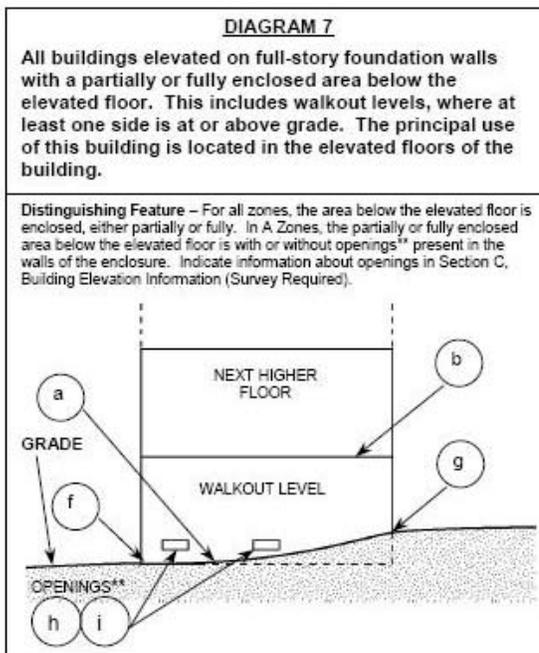
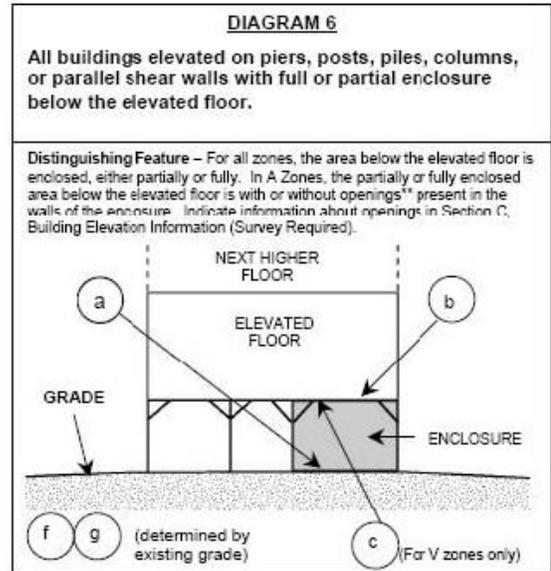
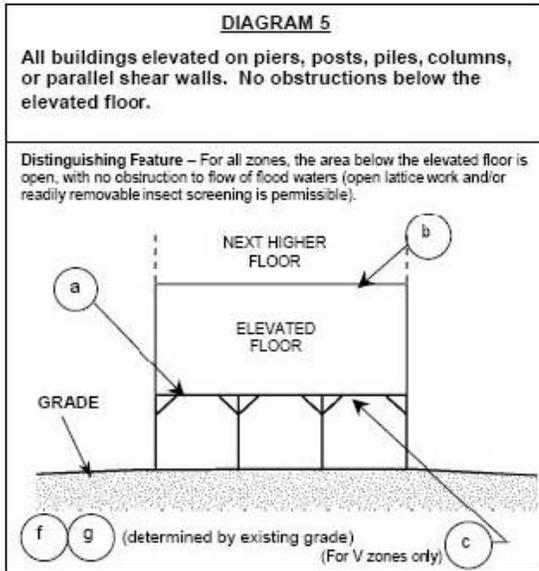
- Condition of Foundation:     Good (optional minor repairs)
- Fair (needs minor repairs)
- Poor (needs significant repairs)
- Needs further investigation

EC Diagram Number: \_\_\_\_\_

(See diagrams that follow and select one)

1. Slab-on-grade
  2. Basement
  3. Split level slab-on-grade
  4. Other split level
  5. Piers, posts, piles, columns, parallel shear walls
  6. Piers, posts, piles, columns, parallel shear walls with enclosure
  7. Full story foundation walls with enclosure
  8. Crawlspace
- Unable to determine





- Appurtenant Structure:     Carport                       Detached Garage                       Other  
    Deck                                       Shed                                       None Observed

Notes: \_\_\_\_\_  
\_\_\_\_\_

- |       |   |   |
|-------|---|---|
| HVAC: | Machinery: <i>(Select all that apply)</i>                 | Ductwork: <i>(Select all that apply)</i>                  |
|       | <input type="checkbox"/> Crawlspace/under elevated floor  | <input type="checkbox"/> Crawlspace/under elevated floor  |
|       | <input type="checkbox"/> Inside-in basement               | <input type="checkbox"/> Inside-in basement               |
|       | <input type="checkbox"/> Inside-on first floor            | <input type="checkbox"/> Inside-on first floor            |
|       | <input type="checkbox"/> Inside-on second floor or higher | <input type="checkbox"/> Inside-on second floor or higher |
|       | <input type="checkbox"/> Outside-At/close to grade        | <input type="checkbox"/> Outside-At/close to grade        |
|       | <input type="checkbox"/> Outside-Lower than first floor   | <input type="checkbox"/> Outside-Lower than first floor   |
|       | <input type="checkbox"/> Outside-Higher than first floor  | <input type="checkbox"/> Outside-Higher than first floor  |
|       | <input type="checkbox"/> Cannot tell                      | <input type="checkbox"/> Cannot tell                      |
|       | <input type="checkbox"/> Other (explain in notes)         | <input type="checkbox"/> Other (explain in notes)         |

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Flood Risk and Mitigation Possibilities Tab**

Property Locator / Repetitive Loss #: \_\_\_\_\_

FIRM Index Date: \_\_\_\_\_

Panel # and Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Flood Zone:

BFE/Depth \_\_\_\_\_

- A                     B/XShaded
- AE A1-30         C/XShaded
- AH                     D
- AO                     V
- AR                     VE V1-30
- A99

Notes: \_\_\_\_\_

Vertical Datum: \_\_\_\_\_

Likely Source of Flooding:

- Stream or other source of riverine flooding
- Ocean, lake or other source of coastal flooding
- Sheet flow
- Natural drainage - Site is flat or drains poorly
- Natural drainage - Ponding, or site is low or site is in a bowl
- Natural drainage- Exceptionally heavy precipitation overwhelmed drainage system
- Drainage System - Undersized culvert or inadequate drainage feature downstream
- Drainage System - Drainage from lot is blocked by roadbed or other feature
- Drainage System - System can't handle runoff from recent upstream development
- Sewer backup
- Cannot tell
- Other (explain in notes)

Notes: \_\_\_\_\_

Likely Areas of Flood Damage:

- Water over 1st floor - Flood level higher than floor level
- Water over 1st floor - Building is on slab close to grade
- Water below 1st floor - Water in crawlspace
- Water below 1st floor - Water in enclosed area below elevated floor
- Water in areas below grade - Building is a bilevel, split level or has finished areas below grade
- Water in areas below grade - Building has basement with below grade window wells or stairwell
- Water in areas below grade - Building has basement, no obvious entry point for water
- Damage to items outside the structure-Likely damage to deck, bulkhead, etc.
- Damage to items outside the structure - Outside A/C unit is low
- Damage to items outside the structure - Storage tanks present
- Cannot tell
- Other (explain in notes)

Notes: \_\_\_\_\_

Potential Hydraulics Impacts: *(Select all that apply)*

- |  |   |
|--|---|
| <input type="checkbox"/> Low Bridge            | <input type="checkbox"/> Levees                   |
| <input type="checkbox"/> Culvert(s)            | <input type="checkbox"/> Run off from U/S dev.    |
| <input type="checkbox"/> Storm Drainage System | <input type="checkbox"/> Retention Basins         |
| <input type="checkbox"/> Planned Projects      | <input type="checkbox"/> Detention Basins         |
| <input type="checkbox"/> Pump Stations         | <input type="checkbox"/> Other (explain in notes) |
| <input type="checkbox"/> Dams                  |   |

Notes: \_\_\_\_\_  
 \_\_\_\_\_

Adequate Clearance

**Mitigation Observations:**

Possible mitigation measures observed

<b>Pending mitigation actions:</b> <i>(Select all that apply)</i>	<b>Possible retrofitting project:</b> <i>(Select all that apply)</i>	<b>Possible flood control project:</b> <i>(Select all that apply)</i>
<input type="checkbox"/> A pending flood control/drainage improvement project may mitigate the flooding <input type="checkbox"/> Community has plans to mitigate the structure <input type="checkbox"/> Owner has plans to mitigate the structure <input type="checkbox"/> Other (explain in notes)	<input type="checkbox"/> Structure may be elevated <input type="checkbox"/> Structure may be dry floodproofed <input type="checkbox"/> Structure may be wet floodproofed <input type="checkbox"/> Structure may be protected by a barrier <input type="checkbox"/> Structure may be acquired <input type="checkbox"/> Structure may be relocated	<input type="checkbox"/> Removal of undersized culvert or other downstream obstruction <input type="checkbox"/> Increased drainage capacity via channel or pumping improvements <input type="checkbox"/> Construction of a levee or other barrier <input type="checkbox"/> Construction of an upstream storage basin <input type="checkbox"/> Other (explain in notes)

No possible mitigation measures observed

Additional Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Additional Site Information Tab**

Property Locator/Repetitive Loss #: \_\_\_\_\_

**Regulatory Requirements:**

- Freeboard:             1.0 ft             3.0 ft
- 1.5 ft             Other (explain in notes)
- 2.0 ft

Notes: \_\_\_\_\_  
\_\_\_\_\_

Code Height Restrictions            Notes: \_\_\_\_\_  
\_\_\_\_\_

Compensatory Storage Requirements    Notes: \_\_\_\_\_  
\_\_\_\_\_

Other Higher Regulatory Standards    Notes: \_\_\_\_\_  
\_\_\_\_\_

**Equipment/Contents:**

Value of Equipment and Contents: \$ \_\_\_\_\_

Equipment - Describe contents, equipment or inventory of value: \_\_\_\_\_  
\_\_\_\_\_

**Building Information:**

Tax ID: \_\_\_\_\_

Construction Date: \_\_\_\_\_

Local Lot/Parcel ID: \_\_\_\_\_

Footprint (Sq. Ft) \_\_\_\_\_

Total Sq. Ft.: \_\_\_\_\_

**Building Market Value:**

Value: \_\_\_\_\_

Date of info: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Source: \_\_\_\_\_

- Source Type:     Certified Appraiser     Community Tax Record
- Other (explain in notes)

Notes: \_\_\_\_\_  
\_\_\_\_\_

**Building Replacement Value:**

Value: \_\_\_\_\_

Date of info: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Source: \_\_\_\_\_

Notes: \_\_\_\_\_  
\_\_\_\_\_

**Land Value:**

Value: \_\_\_\_\_

Date of info: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Source: \_\_\_\_\_

Source Type:     Certified Appraiser     Community Tax Record  
                   Other (explain in notes)

Notes: \_\_\_\_\_  
\_\_\_\_\_

**Source of Information:**

**Date**

- |  |                     |
|--|---------------------|
| <input type="checkbox"/> Site Visit        | _____ / ____ / ____ |
| <input type="checkbox"/> Engineering Study | _____ / ____ / ____ |
| <input type="checkbox"/> Local Official    | _____ / ____ / ____ |
| <input type="checkbox"/> Owner             | _____ / ____ / ____ |
| <input type="checkbox"/> Neighbor          | _____ / ____ / ____ |

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Elevation and Hazard Tab**

Property Locator/Repetitive Loss #: \_\_\_\_\_

**EC or Elevation Data (Complete only if you have certified data):**

Source of Information: \_\_\_\_\_

Map and Panel #: \_\_\_\_\_

Date of FIRM Index: \_\_\_\_\_

Building Diagram #: \_\_\_\_\_

BFE/Depth: \_\_\_\_\_

Flood Zones(s):

- A                       B/XShaded
- AE A1-30            C/XShaded
- AH                      D
- AO                      V
- AR                      VE V1-30
- A99

Vertical Datum:    NGVD 1929     NAVD 1988     Other

Conversion/Comments: \_\_\_\_\_

Top of bottom floor: \_\_\_\_\_

Top of next higher floor: \_\_\_\_\_

Bottom of lowest horizontal structural member: \_\_\_\_\_

Attached garage: \_\_\_\_\_

Lowest elevation of machinery and/or equipment: \_\_\_\_\_

Lowest Adjacent Grade: \_\_\_\_\_

Highest Adjacent Grade: \_\_\_\_\_

No. of permanent openings: \_\_\_\_\_

Total area of permanent opening (flood vents): \_\_\_\_\_

**Certifier's Information:**

Name: \_\_\_\_\_

License Number: \_\_\_\_\_

Street Address: \_\_\_\_\_

Title: \_\_\_\_\_

\_\_\_\_\_

Company Name: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Zip Code: \_\_\_\_\_

Notes: \_\_\_\_\_

\_\_\_\_\_

**Additional Flood Hazard Data:**

Date of FIS: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Flash Flooding:  Yes  No  Unknown

Flood Velocity: \_\_\_\_\_ ft/sec

Date of other source: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

In floodway:  Yes  No  Unknown

Describe source (if other than FIS):  
 \_\_\_\_\_  
 \_\_\_\_\_

Flood Zone Characteristics:

- Riverine
- Coastal
- Sheet flow
- Shallow floods
- Ponding
- Sewer backflow
- Ice jams
- Other

Notes: \_\_\_\_\_  
 \_\_\_\_\_

Streambed Elevation from FIS: \_\_\_\_\_

<b>Freq.</b>	<b>Q (cfs)</b>	<b>Elev (ft)</b>
10 yr.	_____	_____
50 yr.	_____	_____
100 yr.	_____	_____
500 yr.	_____	_____

Depth of 100 yr flood at site: *(Automatically calculated by NT)*

*(Flood depth is determined by subtracting the Lowest Adjacent Grad Elevation from the Base Flood Elevation.)*

Notes: \_\_\_\_\_  
 \_\_\_\_\_

**Claims Tab**

Property Locator/Repetitive Loss #: \_\_\_\_\_

**Known Claims:** *[Information provided by NFIP]*

*(Claims with identical dates are displayed as one claim with all payments combined.)*

Additional Claims Filed

Claims Update Required

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Missing Claims:**

Loss Date	Building Payments	Contents Payments	Uninsured Contents	Uninsured Building

**Insurance/Claim Information**

*[Found as an NT pop-up window OR going to View > Insurance/Claim Information]*

Insurance Company Number: \_\_\_\_\_

NFIP Policy Number: \_\_\_\_\_

Premium: \$ \_\_\_\_\_

Notes: \_\_\_\_\_

\_\_\_\_\_

**Events and Total Damages Tab**

*[Add additional pages if needed for more events]*

Property Locator/Repetitive Loss #: \_\_\_\_\_

**(More important if detailed FIS information is not available)**

Name of Occurrence: \_\_\_\_\_

Date of Event: \_\_\_ / \_\_\_ / \_\_\_

Frequency of Event: \_\_\_\_\_

Source of Frequency Determination: \_\_\_\_\_

Flood Depth:  Very shallow, less than 1 ft.  Deep, greater than 6 ft.  Shallow, 1 – 3 ft.  Moderate, 3 – 6 ft.

Flood Velocity:  Slow/Moderate (<5 ft/s)  Fast (>5 ft/s)

Flash flood (<1 hr)  Ice/Debris Flow  Declaration Declared

*Question for the owner:*

Were there pollutants in the flood waters that required any special cleanup?  Yes  No

Uninsured damages: Building: \$ \_\_\_\_\_ Contents: \$ \_\_\_\_\_

Name of Event: \_\_\_\_\_

Date of Occurrence: \_\_\_ / \_\_\_ / \_\_\_ Frequency: \_\_\_\_\_

Source of Frequency Determination: \_\_\_\_\_

Flood Depth:  Very shallow, less than 1 ft.  Deep, greater than 6 ft.  Shallow, 1 – 3 ft.  Moderate, 3 – 6 ft.

Flood Velocity:  Slow/Moderate (<5 ft/s)  Fast (>5 ft/s)

Flash flood (<1 hr)  Ice/Debris Flow  Declaration Declared

*Question for the owner:*

Were there pollutants in the flood waters that required any special cleanup?  Yes  No

Uninsured damages: Building: \$ \_\_\_\_\_ Contents: \$ \_\_\_\_\_

Name of Event: \_\_\_\_\_

Date of Occurrence: \_\_\_ / \_\_\_ / \_\_\_ Frequency: \_\_\_\_\_

Source of Frequency Determination: \_\_\_\_\_

Flood Depth:  Very shallow, less than 1 ft.  Deep, greater than 6 ft.  Shallow, 1 – 3 ft.  Moderate, 3 – 6 ft.

Flood Velocity:  Slow/Moderate (<5 ft/s)  Fast (>5 ft/s)

Flash flood (<1 hr)  Ice/Debris Flow  Declaration Declared

*Question for the owner:*

Were there pollutants in the flood waters that required any special cleanup?  Yes  No

Uninsured damages: Building: \$ \_\_\_\_\_ Contents: \$ \_\_\_\_\_

**LIMITED DATA VIEW**

Address and Updates Tab

**Address Updates**

*State: All 50 states plus the District of Columbia and 7 U.S. territories:*

AK	Alaska	KY	Kentucky	NY	New York
AL	Alabama	LA	Louisiana	OH	Ohio
AR	Arkansas	MA	Massachusetts	OK	Oklahoma
AZ	Arizona	MD	Maryland	OR	Oregon
CA	California	ME	Maine	PA	Pennsylvania
CO	Colorado	MI	Michigan	RI	Rhode Island
CT	Connecticut	MN	Minnesota	SC	South Carolina
DC	District of Columbia	MO	Missouri	SD	South Dakota
DE	Delaware	MS	Mississippi	TN	Tennessee
FL	Florida	MT	Montana	TX	Texas
GA	Georgia	NC	North Carolina	UT	Utah
HI	Hawaii	ND	North Dakota	VA	Virginia
IA	Iowa	NE	Nebraska	VT	Vermont
ID	Idaho	NH	New Hampshire	WA	Washington
IL	Illinois	NJ	New Jersey	WI	Wisconsin
IN	Indiana	NM	New Mexico	WV	West Virginia
KS	Kansas	NV	Nevada	WY	Wyoming
AS	American Samoa			NoM	Northern Mariana Islands
DC	District of Columbia			PR	Puerto Rico
FSM	Federated States of Micronesia			RMI	Republic of the Marshall Islands
GU	Guam			VI	Virgin Islands

**Mitigation Updates**

***Field 1:***

- a. The building was elevated to or above the base flood elevation (BFE).
- b. The building was elevated, but not to the BFE.
- c. The building (non-residential) was floodproofed to the BFE.
- d. The building was partially floodproofed (but not to the BFE).
- e. The building was protected by a flood control/stormwater management project.
- f. The building was replaced by a new elevated/floodproofed building.

***Field 2:***

- g. The building was demolished, but not acquired through any program.
- h. The building was acquired and demolished as part of a program.
- i. The building was relocated out of the floodplain.

***Field 3:***

- j. Hazard Grant Mitigation Program (HMGP)
- k. Flood Mitigation Assistance Program (FMA)
- l. Pre-Disaster Mitigation Grant Program (PDM)
- m. Repetitive Flood Claims (RFC)
- n. Sever Repetitive Loss Program (SRL)
- o. Section 1362 Acquisition Program
- p. Other FEMA Programs
- q. Increased Cost of Compliance (ICC) Coverage
- r. U.S. Housing & Urban Development (HUD) Community Development Block Grant (CDBG)
- s. U.S. Army Corps of Engineers or Natural Resources Conservation Services (NRCS) Project
- t. Other Federal Program
- u. State Program

## Drop Down Menus

---

- v. Local Program
- w. Property Owner
- x. Natural Disaster or Fire
- y. Unknown

### **Field 4:**

- j. Hazard Grant Mitigation Program (HMGP)
- k. Flood Mitigation Assistance Program (FMA)
- l. Pre-Disaster Mitigation Grant Program (PDM)
- m. Repetitive Flood Claims (RFC)
- n. Sever Repetitive Loss Program (SRL)
- o. Section 1362 Acquisition Program
- p. Other FEMA Programs
- q. Increased Cost of Compliance (ICC) Coverage
- r. U.S. Housing & Urban Development (HUD) Community Development Block Grant (CDBG)
- s. U.S. Army Corps of Engineers or Natural Resources Conservation Services (NRCS) Project
- t. Other Federal Program
- u. State Program
- v. Local Program
- w. Property Owner
- x. Natural Disaster or Fire
- y. Unknown

### Site Observations Tab

### **Neighborhood:**

Commercial Highway  
Commercial Office  
Commercial Retail/Downtown  
Heavy Industrial  
Light Industrial  
Residential – high density (multi family/apts)  
Residential – low density (single family)  
Residential – medium density (2-family/townhouses, rowhouses)  
Rural residential

### **Elevated:**

Not Applicable  
At Grade  
0-1 Feet  
1-2 Feet  
2-3 Feet  
3-4 Feet  
4-6 Feet  
6-8 Feet  
8-12 Feet  
>12 Feet

### **Land Use:**

Single-family residential  
2-4 family residential  
Multifamily residential (5 or more units)  
Commercial (highway, office, retail, downtown)  
Industrial (light, heavy)  
Institutional (hospitals, churches)  
Educational (schools, colleges)

Non-profit  
Public  
Semi-Public  
Transportation  
Other (explain in notes)

***Flooding this site will have community-wide implications:***

Important for flood warning/response (e.g. lumber supply companies)  
Important for disaster recovery  
Important for public health (e.g. wastewater treatment plant)  
Contains hazardous materials  
Contains special population (e.g. nursing home)  
Important utility service  
Other (explain in notes)

***Structure Type:***

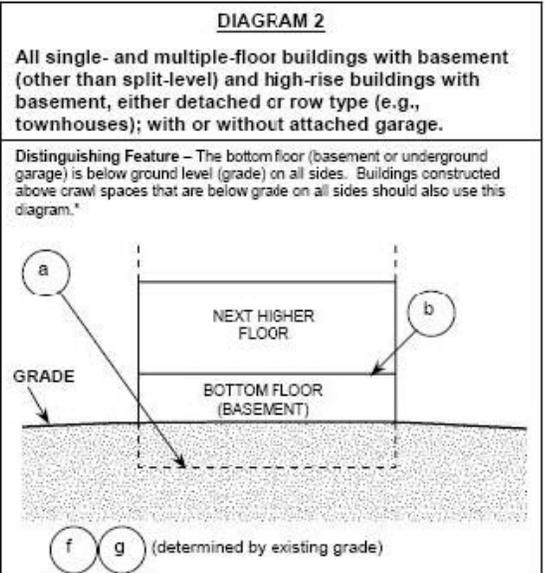
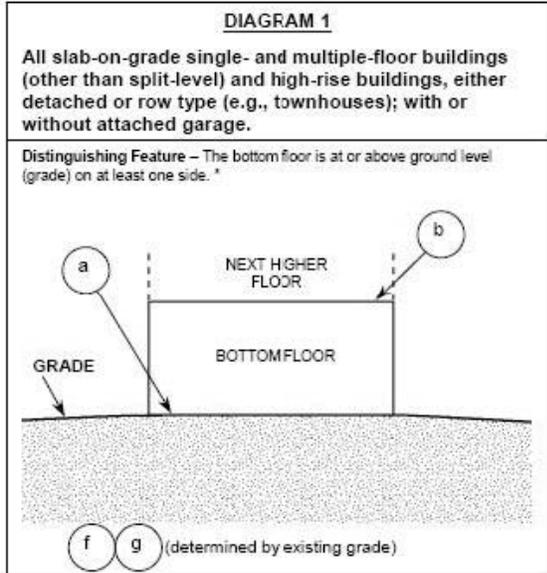
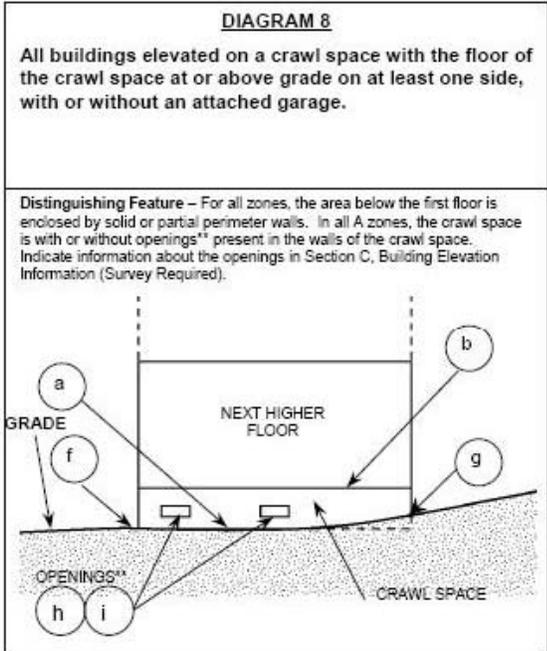
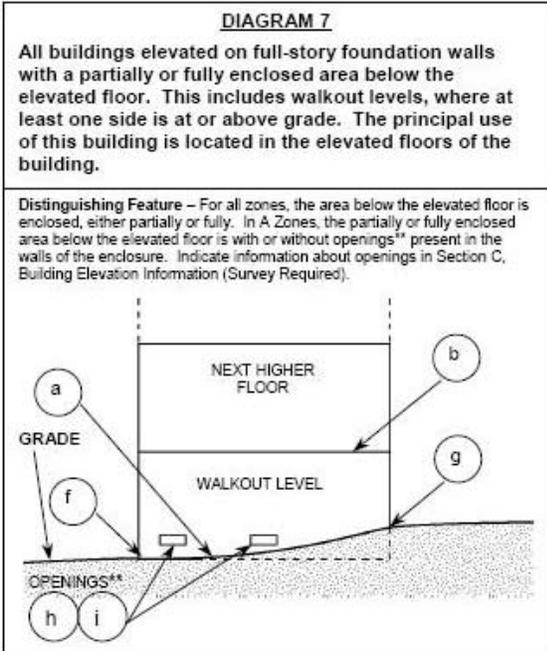
Wood frame  
Engineered wood frame  
Steel  
Light steel  
Heavy steel  
Concrete  
Reinforced concrete  
Unreinforced concrete  
Masonry  
Reinforced Masonry  
Unreinforced Masonry  
Manufactured home  
Modular Housing  
Other (explain in notes)

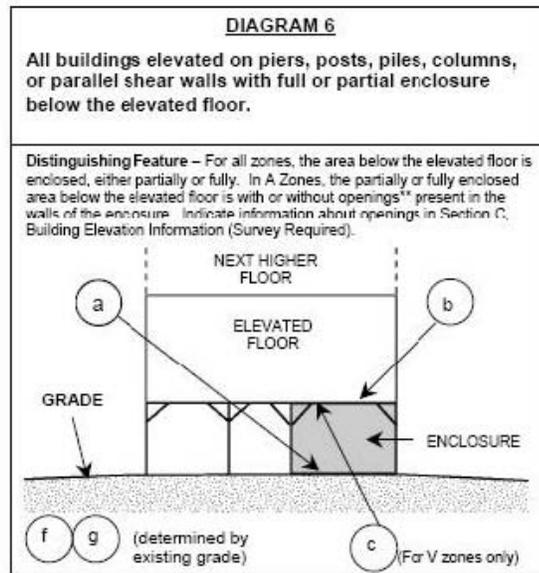
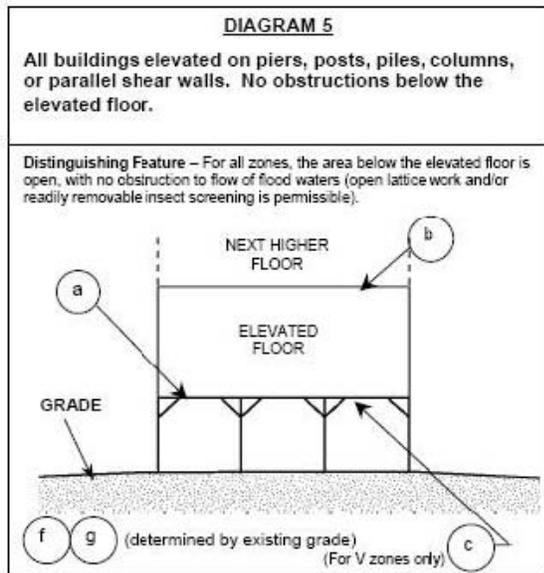
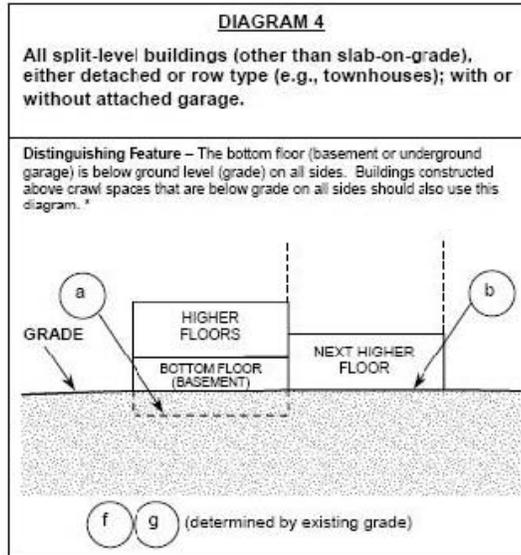
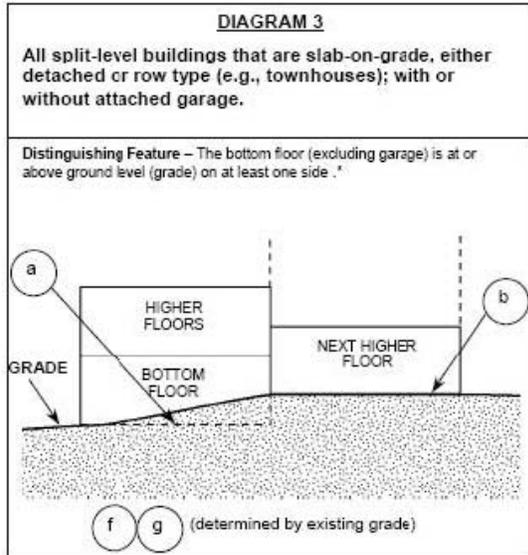
***Foundation Type:***

Slab-on-grade  
Basement sub-grade on all sides  
Basement sub-grade with windows  
Basement with walkout  
Split-level - slab-on-grade  
Split-level  
Piers, posts, piles, columns, or parallel shear walls  
Piers, posts, piles, columns, or parallel shear walls w/ full or partial enclosure  
Elevated foundation walls w/full or partial enclosure  
Crawlspace – floor at or above grade on at least 1 side  
Other (explain in notes)  
Unable to determine

***Elevation Diagram No. (See diagrams that follow)***

1. Slab-on-grade  
2. Basement  
3. Split level slab-on-grade  
4. Other split level  
5. Piers, posts, piles, columns, parallel shear walls  
6. Piers, posts, piles, columns, parallel shear walls with enclosure  
7. Full story foundation walls with enclosure  
8. Crawlspace  
Unable to determine





**HVAC**

**Machinery (select all that apply):**

- Crawlspace/under elevated floor
- Inside-in basement
- Inside-on first floor
- Inside-on second floor or higher
- Outside-At/close to grade
- Outside-Lower than first floor
- Outside-Higher than first floor
- Cannot tell
- Other (explain in notes)

***Duct Work (select all that apply):***

- Crawlspace/under elevated floor
- Inside-in basement
- Inside-on first floor
- Inside-on second floor or higher
- Outside-At/close to grade
- Outside-Lower than first floor
- Outside-Higher than first floor
- Cannot tell
- Other (explain in notes)

Flood Risk and Mitigation Possibilities Tab

**Flood Risk**

***Flood Zone:***

- A
- AE A1-30
- AH
- AO
- AR
- A99
- B/XShaded
- C/XUnshaded
- D
- V
- VE V1-30

***Likely Source of Flooding:***

- Stream or other source of riverine flooding
- Ocean, lake or other source of coastal flooding
- Sheet flow
- Natural drainage - Site is flat or drains poorly
- Natural drainage - Ponding, or site is low or site is in a bowl
- Natural drainage- Exceptionally heavy precipitation overwhelmed drainage system
- Drainage System - Undersized culvert or inadequate drainage feature downstream
- Drainage System - Drainage from lot is blocked by roadbed or other feature
- Drainage System - System can't handle runoff from recent upstream development
- Sewer backup
- Cannot tell
- Other (explain in notes)

***Likely Areas of Flood Damage:***

- Water over 1st floor - Flood level higher than floor level
- Water over 1st floor - Building is on slab close to grade
- Water below 1st floor - Water in crawlspace
- Water below 1st floor - Water in enclosed area below elevated floor
- Water in areas below grade - Building is a bilevel, split level or has finished areas below grade
- Water in areas below grade - Building has basement with below grade window wells or stairwell
- Water in areas below grade - Building has basement, no obvious entry point for water
- Damage to items outside the structure-Likely damage to deck, bulkhead, etc.
- Damage to items outside the structure - Outside A/C unit is low
- Damage to items outside the structure - Storage tanks present
- Cannot tell
- Other (explain in notes)

***Potential Hydraulics Impacts (select all that apply):***

- Low Bridge
- Culvert(s)
- Storm Drainage System
- Planned Projects
- Pump Stations
- Dams
- Levees
- Run off from U/S dev.
- Retention Basins
- Detention Basins
- Other (explain in notes)

**DETAILED DATA VIEW**

Elevation and Hazard Tab

**EC or Elevation Data (complete only if you have certified data)**

***Flood Zones(s):***

- A
- AE A1-30
- AH
- AO
- AR
- A99
- B/XShaded
- C/XUnshaded
- D
- V
- VE V1-30

***State: All 50 states plus the District of Columbia and 7 U.S. territories:***

AK	Alaska	KY	Kentucky	NY	New York
AL	Alabama	LA	Louisiana	OH	Ohio
AR	Arkansas	MA	Massachusetts	OK	Oklahoma
AZ	Arizona	MD	Maryland	OR	Oregon
CA	California	ME	Maine	PA	Pennsylvania
CO	Colorado	MI	Michigan	RI	Rhode Island
CT	Connecticut	MN	Minnesota	SC	South Carolina
DC	District of Columbia	MO	Missouri	SD	South Dakota
DE	Delaware	MS	Mississippi	TN	Tennessee
FL	Florida	MT	Montana	TX	Texas
GA	Georgia	NC	North Carolina	UT	Utah
HI	Hawaii	ND	North Dakota	VA	Virginia
IA	Iowa	NE	Nebraska	VT	Vermont
ID	Idaho	NH	New Hampshire	WA	Washington
IL	Illinois	NJ	New Jersey	WI	Wisconsin
IN	Indiana	NM	New Mexico	WV	West Virginia
KS	Kansas	NV	Nevada	WY	Wyoming
AS	American Samoa			NoM	Northern Mariana Islands
DC	District of Columbia			PR	Puerto Rico
FSM	Federated States of Micronesia			RMI	Republic of the Marshall Islands
GU	Guam			VI	Virgin Islands

***Flood Zone Characteristics:***

- Riverine
- Coastal
- Sheet flow
- Shallow floods
- Ponding
- Sewer backflow
- Ice jams
- Other

## **Appendix D – Regional Repetitive Loss Coordinators**

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**Regional Repetitive Loss Coordinators**  
As of January 1, 2008

REGION	CONTACT NAME	CONTACT PHONE #	BACK-UP CONTACT	SUPERVISOR
I	Daisy Sweeney	617-832-4788	None Designated	Mike Goetz
II	Sharon Edwards	212-680-3633	Richard Einhorn 732-427-1543	Bruce Swiren
III	David Odegard	215-931-5506	Richard Rein 215-931-5732	Marty Frengs / Nancy Carpenter
IV	Robert Durrin	770-220-5428	Jackie Bell 770-220-5439	Susan Wilson
V	Eric Kuklewski	312-408-5230	None Designated	Terry Fell
VI	Ross Richardson (interim)	940-898-5210	David Boston 940-898-5348	Frank Pagano
VII	Connie Wisniewski	816-283-7013	Jim Donley 816-283-7010	Roger Connell
VIII	Diana Heyder	303-235-4606	None Designated	Mike Hillenburg
IX	Mike Hornick	510-627-7260	Sam Schultz 510-627-7224	
X	Jeffery Woodward	425-487-4664	Denise Atkinson 425-487-4677 Steven Randolph 425-487-4671	Chris Jonientz-Trisler

**FEMA HEADQUARTERS CONTACT**

Errol Garren  
(202) 646-3678

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## **Appendix E – NT Sample Reports**

The following Sample Reports were generated using the NT with fabricated property addresses and Property Locator Numbers for the purposes of providing examples in this User's Guide.

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National Flood Insurance Program

NFIP REPETITIVE LOSS UPDATE WORKSHEET (AW-501)

THE INFORMATION ON THIS FORM IS BASED ON CLAIMS ON OR BEFORE: 5/31/2008

REPETITIVE LOSS NUMBER: 9999002

Internal Use Only [ ] A [ ] N/A [ ] FRR [ ]

NFIP COMMUNITY NAME: BEACHCOMBER, CITY OF CID#: 099992

LOCAL PROPERTY IDENTIFIER: Lat: 235.1234 Long: 555.6624 Local Lot/Parcel ID:

Table with 2 columns: CURRENT PROPERTY ADDRESS, PREVIOUS PROPERTY ADDRESS/COMMUNITY ID #. Includes last claimant: DOE, JOHN AND JAYNE.

INSURED: NAMED INSURED: ANDERSON, HANS C.

DATES OF LOSSES: 1/2/1999, 10/8/1996, 3/13/1993, 8/31/1985 TOTAL NUMBER OF LOSSES FOR PROPERTY: 4

REQUESTED UPDATES

MARK ALL UPDATES BELOW THAT APPLY (IMPORTANT - SEE INSTRUCTIONS)

- 1. [ ] INFORMATION PROVIDED NOT SUFFICIENT TO IDENTIFY PROPERTY
2. [ ] COSMETIC CHANGES REQUIRED TO THE ADDRESS:
3. [ ] PROPERTY NOT IN OUR COMMUNITY OR JURISDICTION:
4. [ ] FLOOD PROTECTION PROVIDED
5. [ ] NO BUILDING ON PROPERTY
6. [ ] DUPLICATE LISTING WITH RL NUMBER: COMBINE AS ONE LISTING.
7. [ ] HISTORIC BUILDING:

COMMENTS SECTION

# Basic Report

<b>Property Locator / Rep Loss #</b> 9999006	<b>Community Name:</b> BEACHCOMBER, CITY OF
97 BIRCHWOOD ST, DISASTERVILLE, DC 99993	<b>CID #:</b> 099992
	<b>County:</b> KELTY COUNTY
	<b>Tax ID:</b> 99-22-56-99
<b>Latitude:</b> 223.2456	<b>Longitude:</b> 112.5689
	<b>Local Lot/Parcel ID:</b> Lot 7, Block 6

<b>Site Information</b>			
<b>No. of Stories:</b> 2	<b>Const. Date:</b> 1/1/1960	<b>Total Sq. Ft.:</b> 0	
<b>Occupancy:</b> SINGLE FMLY	<b>Occupied:</b> Yes	<b>FIRM:</b> PRE	
<b>Residence:</b> Primary			
<b>Land Use:</b> Single-family residential			
<b>Structure:</b> Wood Frame			
(Condition) Good (optional minor repairs)			
<b>Foundation:</b> Basement with walkout			
(Condition) Good (optional minor repairs)			
<b>EC Diagram #:</b>			
<b>Values:</b>	<b>Building Market:</b> \$0.00	<b>Land:</b> \$0.00	



<b>Flood Risk and Elevation</b>	
<b>Likely Source of Flooding:</b> Natural drainage-Site is flat or drains poorly (Property located in low spot at end of culdesac)	
<b>Likely Areas of Flood Damage:</b> Water in areas below grade-Building has basement, no obvious entry point for water(Water flows in through garage and fills up basement)	
<b>Potential Hydraulics Impacts:</b> Storm Drainage System,(Inadequate catch basin)	
<b>Flood Zone:</b> AO	<b>BFE/Depth:</b> 10
<b>Top of Bottom Floor:</b>	
<b>Top of Next Higher Floor:</b>	
<b>Bottom of Lowest Horizontal Structural Member:</b>	
<b>Lowest Adjacent Grade:</b>	

<b>Mitigation Observations</b>
<input type="checkbox"/> Possible mitigation measures observed
<b>Pending Mitigation Actions:</b>
<b>Structure may be protected with a retrofitting project:</b>
<b>Flooding may be relieved by a flood control project:</b>

<b>Claims Summary</b>			
<b>Current Insured's Name:</b>	MICHAEL D. & TUESDAY B.	BLOOMIN	
<b>Name of Last Claimant:</b>	MICHAEL BLOOMINGDALE		
<b># Claims per NFIP:</b>	4		
<b>Total Payments Made:</b>	<b>Building</b> \$7,488.14	<b>Contents</b> \$2,837.44	<b>Total</b> \$10,325.58

Most Recent Claims			
Date	Building	Contents	Total
1/2/1999	\$2,592.05	\$1,158.49	\$3,750.54
3/13/1993	\$2,484.28	\$244.00	\$2,728.28
8/31/1985	\$1,215.25	\$1,434.95	\$2,650.20
6/18/1982	\$1,196.56	\$0.00	\$1,196.56

<b>Mitigation Updates</b>					
	<i>Field</i>	<i>FEMA</i>	<i>Field</i>	<i>FEMA</i>	<input type="checkbox"/> Additional Research Needed
Unable to Locate Property	<input type="checkbox"/>	<input type="checkbox"/>			
Flood Protection Provided	<input type="checkbox"/>	<input type="checkbox"/>	1: <input type="checkbox"/>	1: <input type="checkbox"/>	<b>Mitigation Observed:</b>
No Building on Property	<input type="checkbox"/>	<input type="checkbox"/>	2: <input type="checkbox"/>	2: <input type="checkbox"/>	
Historic Building	<input type="checkbox"/>	<input type="checkbox"/>	3: <input type="checkbox"/>	3: <input type="checkbox"/>	
			4: <input type="checkbox"/>	4: <input type="checkbox"/>	
					<b>Mitigation Verified:</b>
<input type="checkbox"/> Updates Made <input type="checkbox"/> Duplicate Listing with PL #:					

## Benefit-Cost

**Community Name / CID#: BEACHCOMBER, CITY OF / 099992**

# 1      **Property Locator /** 9999002      **Latitude:** 235.1234  
          **Rep Loss #:**      **Longitude:** 555.6624

**Address** 123 10TH PLACE SE, 123 10TH PLACE SE      **Tax ID:**  
 DISASTERVILLE, DC 999930000      **Local Lot/Parcel ID:**

**Occupied?** Yes      **Construction Date**      **Tot. Floor Area (sq ft):** 2200

**Land Use?** Single-family residential

**Structure Type:** Wood Frame      **Number of Stories:** 2      **Basement:** No

**Foundation Type:** Slab-on-grade

**HVAC Location:**      **Ductwork Location:**

**Other Structures on the Lot?**      • Deck

	Value	As of Date
<b>Building Market:</b>		
<b>Building Replacement:</b>		
<b>Land:</b>		
<b>Reported Value:</b>	\$78,000	5/31/2008
<b>Equipment/Content:</b>		

**Notes:**

**Flood Zone:**      **Base Flood Elevation:**      **Streambed Elevation:**

**Source of Flooding:** Natural drainage-Site is flat or drains poorly

**Potential Hydraulics Impact:**      **Notes:**

<b>Source of EC or Elevation data:</b>	<b>Bottom of lowest horizontal structural member:</b>	
<b>Top of Bottom Floor:</b>	<b>Top of Next Higher Floor:</b>	<b>Lowest elevation of machinery and/or equipment:</b>
<b>Lowest Adjacent Grade:</b> 10.00	<b>Highest Adjacent Grade:</b>	

**Date of FIS:**      **Date of Other Source:**

**Other Source of Flood Data:**

Flood Frequency	Discharge (cfs)	Elevation (ft)
10 yr.	0.0	0.0
50 yr.	0.0	0.0
100 yr.	0.0	0.0
500 yr.	0.0	0.0

Event Name	Date	Freq.	Frequency Source	Depth	Velocity

## CID Summary

### CID #099992 BEACHCOMBER, CITY OF

Property Locator / Rep Loss #	Address	City	State	Zip
9999002	123 10TH PLACE SE, 123 10TH PLACE SE	DISASTERVILLE	DC	999930000
9999003	CHOWDER EIGHT UNIT 3 FIRE PL	DISASTERVILLE	DC	999930000
9999004	6 CHOWDER HOUSE N SIDE CENTRAL AVE & FRIENDSHIP	DISASTERVILLE	DC	99993
9999005	500 N CHOWDER DRIVE	DISASTERVILLE	DC	99993
9999006	97 BIRCHWOOD ST Tax ID: 99-22-56-99 Local Lot/Parcel ID: Lot 7, Block 6	DISASTERVILLE	DC	99993
9999007	559 MAYJAR LN	DISASTERVILLE	DC	99993
9999008	215 BLACKWOOD ST	DISASTERVILLE	DC	999930000
9999009	2008 FEMA BLVD Tax ID: 28-53-992-99 Local Lot/Parcel ID: Lot 5, Block 7	DISASTERVILLE	DC	999910000
9999010	2008 FEMA BLVD	DISASTERVILLE	DC	999930000
9999011	2008 FEMA BLVD	DISASTERVILLE	DC	999930000
9999012	LAKESIDE ELEVEN, 95 FIRE PL UNIT 6	DISASTERVILLE	DC	99993
9999013	98 BIRCHWOOD ST	DISASTERVILLE	DC	999930000
9999014	BIRCHWOOD ST BLK A LOT J	DISASTERVILLE	DC	999930000
9999015	FRIENDSHIP & FIRST PLACE	DISASTERVILLE	DC	999930000
9999016	S MAIN STREET AND FRIENDSHIP, BEACH CONDO UN 4 LT 7 & 9	DISASTERVILLE	DC	999930000
9999017	S MAIN STREET AND FRIENDSHIP, BEACH CONDO UN 3 LT 7 & 9	DISASTERVILLE	DC	999930000
9999018	S MAIN STREET AND FRIENDSHIP, BEACH CONDO UN 2 LT 7 & 9	DISASTERVILLE	DC	999930000
9999019	S MAIN STREET AND FRIENDSHIP, BEACH CONDOMINIUM	DISASTERVILLE	DC	999930000
9999020	UNIT 6 LAKESIDE SEVEN CONDOMINIUM, FIRE AVENUE AND 10TH PLACE	DISASTERVILLE	DC	99993

## Community Summary

<b>Number of Properties Inventoried by CID #</b>		<b>Number of Properties Inventoried</b>
Community Name / CID # <b>BEACHCOMBER, CITY OF/099992</b>		<b>364</b>
Total Claims <b>1,744</b>	Total NFIP Payments <b>\$44,404,857.55</b>	

<b>Number of Properties Requiring Updates</b>	<b>New</b>	<b>Field Verified</b>	<b>FEMA</b>
Incorrect Community and/or Address	N/A	0	N/A
Unable to Locate Property	0	0	0
Flood Protection Provided	0	0	0
No Building on Property	0	0	0
Historic Building	0	0	0

<b>Number of Properties Reported as Mitigated</b>	<b>Number Observed</b>	<b>Number Verified</b>
Appears to have been elevated	0	0
Appears to have been floodproofed	0	0
Floodwall, berm, or other type of barrier	0	0
Lower area appears to have been modified	0	0
Drainage improvements appears to have been made	0	0
Flood control project reduced the threat	0	0
Owner/neighbor/local official reported mitigation action taken	0	0
Further research needed	0	0
Other	0	0

<b>Number of Properties By Flood Source</b>	
Stream	1
Coastal	0
Sheet flow	0
Natural drainage	0
Drainage system	0
Sewer backup	0
Cannot Tell	0
Other	0

<b>Number of Properties By Land Use</b>	
Single-family residential	1
2-4 family residential	0
Multi-family residential (5 or more)	0
Commercial (hwy, ofc, retail, etc.)	0
Industrial (light, heavy)	0
Institutional (hospitals, churches)	0
Educational (schools, colleges)	0
Non-profit	0
Public	0
Semi-Public	0
Transportation	0
Open space	0
Other	0

<b>Number of Properties</b>	
Inspected	1
Mitigated	0
Insured	280

<b>Number of Properties By SRL Type</b>					
	<b>Number</b>	<b>Updated</b>		<b>Number</b>	<b>Updated</b>
Validated	183	0	Pending	0	0
Validated Uninsured	0	0	Pending Uninsured	0	0
Validated Nonresidential	0	0	Pending Nonresidential	0	0
Validated Nonresidential Uninsured	0	0	Pending Nonresidential Uninsured	0	0

## ***Missing Image and Document Files***

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The following files are associated with the listed Rep Loss #, but were not found in the NFMDCT folder.

To correct this, you can either locate the file and move it into the NFMDCT folder, or you can remove the association to the property.

To remove the association to the property, navigate to the Images (or Documents) option from the View menu (in either the Limited or Detailed Views). For images, right click on the file and select Delete. For Documents, highlight the file and click the Delete button.

---

	<b>Type</b>	<b>Filename</b>
<hr/>		
<b># 9999009</b>		
<hr/>		
1.	Image	RL9999009_3.JPG
2.	Image	RL9999009_2.JPG
3.	Image	RL9999009_1.JPG
4.	Image	RL9999009_4.JPG
<b># 9999010</b>		
<hr/>		
1.	Image	RL9999010_2.JPG
2.	Image	RL9999010_1.JPG
3.	Image	RL9999010_3.JPG
<b># 9999011</b>		
<hr/>		
1.	Image	RL9999011_2.JPG
2.	Image	RL9999011_1.JPG
3.	Image	RL9999011_3.JPG

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**Total Missing Files: 10**

## Mitigation Report

**Community Name / CID#: BEACHCOMBER, CITY OF / 099992**

**# 1 Property Locator / Rep Loss #** 9999006  
 97 BIRCHWOOD ST  
 DISASTERVILLE, DC 99993  
**County:** KELTY COUNTY

**# of Stories:** 2  
**Basement:** Yes  
**Const.Date:** 1/1/1960  
**Total Sq. Ft.:** 0  
**Latitude:** 223.2456  
**Longitude:** 112.5689  
**Tax ID:** 99-22-56-99  
**Local Lot/ Parcel ID:** Lot 7, Block 6  
**FIRM:** PRE  
**EC Diagram #:**



**Residence:** Primary  
**Occupancy:** SINGLE FMLY **Occupied:** Yes  
**Land Use:** Single-family residential  
**Structure:** Wood Frame  
 (Condition) Good (optional minor repairs)  
**Foundation** Basement with walkout  
 (Condition) Good (optional minor repairs)  
**HVAC:** Inside-in basement  
**Ductwork:** Inside-in basement, Inside-on first floor  
**Other Structures:** Shed

	Value	As of Date		Value	As of Date
<b>Building Market:</b>			<b>Land:</b>		
<b>Bldg Replacement:</b>			<b>Reported Value:</b>	\$72,600	5/31/2008
<b>Equipment/Contents</b>	\$0				

**Flood Zone:** AO **Base Flood Elev.:** 10  
**Source of Flooding:** Natural drainage-Site is flat or drains poorly (Property located in low spot at end of culdesac)  
**Areas of Damage:** Water in areas below grade-Building has basement, no obvious entry point for water (Water flows in through garage and fills up basement)  
**Potential Hydraulics Impact:** Storm Drainage System, (Inadequate catch basin)  
**EC/Elev. data source:** Community Development Files  
**Date of FIS:** **Other Source of Flood Data:** Locally funded study (4/1/2008)

<b>Top of Bottom Floor:</b>		<b>Bottom of lowest horizontal structural member:</b>	
<b>Top of Next Higher Floor:</b>		<b>Lowest elevation of machinery and/or equipment</b>	
<b>Lowest Adjacent Grade:</b>		<b>Highest Adjacent Grade:</b>	

Flood Frequency	Discharge (cfs)	Elevation (ft)
10 yr.	0.0	0.0
50 yr.	0.0	0.0
100 yr.	0.0	0.0
500 yr.	0.0	0.0

Claim Information			
<b>Insured's Name:</b>	MICHAEL D. & TUESDAY B.	BLOOMINGDALE	
<b>Last Claimant:</b>	MICHAEL BLOOMINGDALE		
<b># Claims per NFIP:</b>	4		
<b>Payments Made:</b>	<b>Building</b>	<b>Contents</b>	<b>Total</b>
	7,488	2,837	10,326

Event Name	Date	Freq.	Frequency Source	Depth	Velocity
Hurricane Alice	7/1/2008		USACE event analysis	Very Shallow, less than 1 ft.	Slow/Moderate ( <5 ft/s)

## Photo Summary

**Property Locator/Rep Loss #** 9999012  
**Community Name/CID#:**  
BEACHCOMBER, CITY OF / 099992  
**Property Address:**  
LAKESIDE ELEVEN, 95 FIRE PL UNIT 6  
DISASTERVILLE, DC 99993  
**Latitude:** 235.6678      **Longitude:** 112.5689  
**Tax ID:** 15.678.231.55  
**Local Lot/** Lot 1, Block 2, Peabody Edition  
**Parcel ID:**  
**Total Number of Claims per NFIP:** 4

	<b>Building:</b>	\$34,589
<b>Payments Made</b>	<b>Contents:</b>	\$11,596
	<b>Total:</b>	\$46,185



RL9999012\_3.JPG  
(1 of 3)



RL9999012\_2.JPG  
(2 of 3)



RL9999012\_1.JPG  
(3 of 3)

**Properties Requiring Action/Update**

---

**Property Locator/Rep Loss #** 9999002  
**Community Name/CID#:** BEACHCOMBER, CITY OF / 099992  
**Property Address:** 123 10TH PLACE SE, 123 10TH PLACE SE **Latitude:** 235.1234  
DISASTERVILLE, DC 999930000 **Longitude:** 555.6624  
**Inspection Date:** 7/17/2008  
**Tax ID:**  
**Local Lot/Parcel ID:**  
**Current Insured's Name:** ABBOTT AND COSTELLO  
**Last Claimant's Name:** ABBOTT AND COSTELLO  
**Updates Made**

**ACTION/UPDATED ITEMS**

Address Updates

**New Community:** BEACHCOMBER, CITY OF **New CID:** 099992  
**New Address:**  
**New City,State Zip:** DISASTERVILLE, DC 999930000

---

**Property Locator/Rep Loss #** 9999003  
**Community Name/CID#:** BEACHCOMBER, CITY OF / 099992  
**Property Address:** CHOWDER EIGHT UNIT 3 FIRE PL **Latitude:** 123.4567  
DISASTERVILLE, DC 999930000 **Longitude:** 321.6547  
**Inspection Date:** 7/17/2008  
**Tax ID:**  
**Local Lot/Parcel ID:**  
**Current Insured's Name:**  
**Last Claimant's Name:** JACK CORONATO  
**Updates Made**

**ACTION/UPDATED ITEMS**

Address Updates

**New Community:** BEACHCOMBER, CITY OF **New CID:** 099992  
**New Address:**  
**New City,State Zip:** DISASTERVILLE, DC 999930000

Mitigation and Funding Codes\*

	<u>Field</u>	<u>FEMA</u>	<u>Field</u>	<u>FEMA</u>
<b>Flood Protection Provided:</b>	<input checked="" type="checkbox"/>		1:	<input type="checkbox"/> a
<b>Historic Building:</b>			3:	<input type="checkbox"/> j
			4:	<input type="checkbox"/> p

**Mitigation Observed:** Drainage improvements appear to have been made  
**Mitigation Verified:** Yes

**Properties Requiring Action/Update**

---

Property Locator/Rep Loss # 9999004  
Community Name/CID#: BEACHCOMBER, CITY OF / 099992  
Property Address: 6 CHOWDER HOUSE N SIDE CENTRAL AVE & FRIENDSHIP  
DISASTERVILLE, DC 99993  
Latitude:  
Longitude:  
Inspection Date: 7/17/2008  
Tax ID:  
Local Lot/Parcel ID:  
Current Insured's Name:  
Last Claimant's Name: JOHNSON ASSOCIATES  
Updates Made

**ACTION/UPDATED ITEMS**

Address Updates

New Community: BEACHCOMBER, CITY OF      New CID: 099992  
New Address:  
New City,State Zip: DISASTERVILLE, DC 99993

Additional Research Needed: Needs demolition permit - see photo.

Mitigation and Funding Codes\*

	<u>Field</u>	<u>FEMA</u>	<u>Field</u>	<u>FEMA</u>
No building on Property:	<input checked="" type="checkbox"/>		2:	<input type="checkbox"/> g
Historic Building:			3:	<input type="checkbox"/> v
			4:	<input type="checkbox"/> y

---

Property Locator/Rep Loss # 9999007  
Community Name/CID#: BEACHCOMBER, CITY OF / 099992  
Property Address: 559 MAYJAR LN  
DISASTERVILLE, DC 99993  
Latitude:  
Longitude:  
Inspection Date: 7/17/2008  
Tax ID:  
Local Lot/Parcel ID:  
Current Insured's Name: JACK J LEYMAN  
Last Claimant's Name: JACK J LEYMAN  
Updates Made

**ACTION/UPDATED ITEMS**

Address Updates

New Community: BEACHCOMBER, CITY OF      New CID: 099992  
New Address:  
New City,State Zip: DISASTERVILLE, DC 99993

Additional Research Needed: Address doesn't exist

Mitigation and Funding Codes\*

	<u>Field</u>	<u>FEMA</u>	<u>Field</u>	<u>FEMA</u>
Unable to Locate Property:	<input checked="" type="checkbox"/>			



**Instructions to complete Worksheet A: Technical Considerations Scorecard**

1. For each of the questions, based on the property information, put a check mark in the appropriate box in the "Response" column.
2. For the row with a check mark in the "Response" column, check all boxes that are not blacked out.
3. After completing the questions, review each of the mitigation measures columns. Select the "Appropriate Mitigation Measures" box only for those columns that do not have any blacked out boxes in the selected response row.

## Worksheet A: Technical Considerations Scorecard

Date Prepared: 7/17/2008 Date Property Visited: 7/17/2008  
 Property Owner Name: \_\_\_\_\_  
 Property Address: 123 10TH PLACE SE, 123 10TH PLACE SE, DISASTERVILLE, DC 999930000  
 Repetitive Loss Property Locator Number: 9999002  
 Prepared by: Janet Inspector

**Legend**

Mitigation measure is not appropriate.

Mitigation measure may be appropriate and requires additional consideration.

Mitigation measure is appropriate.

*NT Reference indicates where the information may be found in the National Tool.*

Question	Response	Drainage Improvements	Barriers	Wet Flood-proofing	Dry Flood-proofing	Elevation	Relocation	Acquisition	Comments
1. What is the structure type? <i>NT Reference - Limited Data View, Site Observations tab</i>	<input checked="" type="checkbox"/> Wood Frame / Metal / Other	<input checked="" type="checkbox"/>							
	<input type="checkbox"/> Concrete / Masonry / Brick Faced	<input type="checkbox"/>							
	<input type="checkbox"/> Manufactured Home	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. What is the condition of the structure? <i>NT Reference - Limited Data View, Site Observations tab</i>	<input type="checkbox"/> Good	<input type="checkbox"/>							
	<input checked="" type="checkbox"/> Fair	<input checked="" type="checkbox"/>							
	<input type="checkbox"/> Poor	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	
3. What is the foundation type? <i>NT Reference - Limited Data View, Site Observations tab</i>  Diagram numbers refer to Elevation Certificate found in the NT.	<input checked="" type="checkbox"/> Slab-on-Grade (Diagram 1, 3, 6 or 7)	<input checked="" type="checkbox"/>							
	<input type="checkbox"/> Basement/Split Level (Diagram 2 or 4)	<input type="checkbox"/>							
	<input type="checkbox"/> Piers, Posts, Columns, or Crawlspace (Diagram 5 or 8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. What is the number of stories? <i>NT Reference - Limited Data View, Site Observations tab</i>	<input checked="" type="checkbox"/> 1-2	<input checked="" type="checkbox"/>							
	<input type="checkbox"/> 3 or more	<input type="checkbox"/>							

## Worksheet A: Technical Considerations Scorecard

Date Prepared: 7/17/2008 Date Property Visited: 7/17/2008  
 Property Owner Name: \_\_\_\_\_  
 Property Address: 123 10TH PLACE SE, 123 10TH PLACE SE, DISASTERVILLE, DC 999930000  
 Repetitive Loss Property Locator Number: 9999002  
 Prepared by: Janet Inspector

Legend	
<div style="background-color: black; width: 15px; height: 10px; display: inline-block;"></div>	Mitigation measure is <u>not</u> appropriate.
<div style="background-color: #cccccc; width: 15px; height: 10px; display: inline-block;"></div>	Mitigation measure <u>may</u> be appropriate and requires additional consideration.
<div style="background-color: white; width: 15px; height: 10px; border: 1px solid black; display: inline-block;"></div>	Mitigation measure is appropriate.
<i>NT Reference indicates where the information may be found in the National Tool.</i>	

Question	Response	Drainage Improvements	Barriers	Wet Flood-proofing	Dry Flood-proofing	Elevation	Relocation	Acquisition	Comments
5. What is the building footprint? <i>NT Reference -Detailed Data View, Additional Site Information tab</i>	<input checked="" type="checkbox"/> < 2,500 sq ft	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	<input type="checkbox"/> > 2,500 sq ft	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<div style="background-color: #cccccc; width: 15px; height: 10px; display: inline-block;"></div>	<div style="background-color: #cccccc; width: 15px; height: 10px; display: inline-block;"></div>	<input type="checkbox"/>	
6. What is the flood protection depth? <i>NT Reference -Detailed Data View, Elevation and Hazard tab</i>	<input type="checkbox"/> Deep (> 6 ft)	<div style="background-color: black; width: 15px; height: 10px; display: inline-block;"></div>	<div style="background-color: #cccccc; width: 15px; height: 10px; display: inline-block;"></div>	<div style="background-color: black; width: 15px; height: 10px; display: inline-block;"></div>	<div style="background-color: black; width: 15px; height: 10px; display: inline-block;"></div>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/> Moderate (3 to 6 ft)	<input type="checkbox"/>	<div style="background-color: #cccccc; width: 15px; height: 10px; display: inline-block;"></div>	<input type="checkbox"/>	<div style="background-color: black; width: 15px; height: 10px; display: inline-block;"></div>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/> Shallow (< 3 ft)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Does flash flooding occur at the project site? <i>NT Reference -Detailed Data View, Elevation and Hazard tab</i>	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/>	<div style="background-color: #cccccc; width: 15px; height: 10px; display: inline-block;"></div>	<input checked="" type="checkbox"/>	<div style="background-color: #cccccc; width: 15px; height: 10px; display: inline-block;"></div>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	<input type="checkbox"/> No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. What is the flood velocity? <i>NT Reference -Detailed Data View, Elevation and Hazard tab</i>	<input checked="" type="checkbox"/> Fast (> 5 fps)	<div style="background-color: #cccccc; width: 15px; height: 10px; display: inline-block;"></div>	<div style="background-color: #cccccc; width: 15px; height: 10px; display: inline-block;"></div>	<input checked="" type="checkbox"/>	<div style="background-color: #cccccc; width: 15px; height: 10px; display: inline-block;"></div>	<div style="background-color: #cccccc; width: 15px; height: 10px; display: inline-block;"></div>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	<input type="checkbox"/> Slow/Moderate (< 5 fps)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Is the structure located in the floodway? <i>NT Reference -Detailed Data View, Elevation and Hazard tab</i>	<input checked="" type="checkbox"/> Yes	<div style="background-color: #cccccc; width: 15px; height: 10px; display: inline-block;"></div>	<div style="background-color: #cccccc; width: 15px; height: 10px; display: inline-block;"></div>	<input checked="" type="checkbox"/>	<div style="background-color: #cccccc; width: 15px; height: 10px; display: inline-block;"></div>	<div style="background-color: #cccccc; width: 15px; height: 10px; display: inline-block;"></div>	<div style="background-color: #cccccc; width: 15px; height: 10px; display: inline-block;"></div>	<input checked="" type="checkbox"/>	
	<input type="checkbox"/> No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Appropriate Mitigation Measures</b>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

fps = feet per second  
 ft = feet  
 sq ft = square feet

**Instructions to complete Worksheet B: Appropriate Mitigation Measures**

1. List the mitigation measures from the "Appropriate Mitigation Measures" row from Worksheet A, Technical Considerations Scorecard (all checked boxes in last row of Worksheet A).
2. Using information from Chapters 4 through 10 of FEMA 551, Selecting Appropriate Mitigation Measures for Floodprone Structures, rank each measure as High, Moderate, or Low. See "Tips to Rank Mitigation Measures" on next page for additional information.
3. Check the appropriate box (High, Moderate or Low) under each of the decision factors.
4. Total the points for each mitigation measure. The LOWEST total points indicates the most appropriate mitigation measure(s).
5. Include notes describing how the determination was made for a particular ranking.

\* NOTE: Since Technical Considerations and Relative Costs are more significant in selecting appropriate mitigation measures(s), they are weighted higher than Human Intervention and Annual Maintenance.

## Worksheet B: Appropriate Mitigation Measures

Date Prepared: 7/17/2008 Date Property Visited: 7/17/2008  
 Property Owner Name: \_\_\_\_\_  
 Property Address: 123 10TH PLACE SE, 123 10TH PLACE SE, DISASTERVILLE, DC 999930000  
 Repetitive Loss Property Locator Number: 9999002  
 Prepared by: Janet Inspector

Decision Factors - LOWEST score is most appropriate - see Reverse for Notes					
Mitigation Measures	Technical Considerations*	Relative Costs*	Human Intervention	Annual Maintenance	Total Score
Drainage Improvements	H <input type="checkbox"/> (6 pts) M <input checked="" type="checkbox"/> (4 pts) L <input type="checkbox"/> (2 pts)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	_____ pts
Barriers	H <input checked="" type="checkbox"/> (6 pts) M <input type="checkbox"/> (4 pts) L <input type="checkbox"/> (2 pts)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	_____ pts
Wet Floodproofing	H <input checked="" type="checkbox"/> (6 pts) M <input type="checkbox"/> (4 pts) L <input type="checkbox"/> (2 pts)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	_____ pts
Dry Floodproofing	H <input checked="" type="checkbox"/> (6 pts) M <input type="checkbox"/> (4 pts) L <input type="checkbox"/> (2 pts)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	_____ pts
Elevation	H <input checked="" type="checkbox"/> (6 pts) M <input type="checkbox"/> (4 pts) L <input type="checkbox"/> (2 pts)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	_____ pts
Relocation	H <input checked="" type="checkbox"/> (6 pts) M <input type="checkbox"/> (4 pts) L <input type="checkbox"/> (2 pts)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	_____ pts
Acquisition	H <input type="checkbox"/> (6 pts) M <input type="checkbox"/> (4 pts) L <input checked="" type="checkbox"/> (2 pts)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	H <input type="checkbox"/> (3 pts) M <input type="checkbox"/> (2 pts) L <input type="checkbox"/> (1 pt)	_____ pts

**Tips to Rank Mitigation Measures (Worksheet B cont.)**

**Technical Considerations**

Use the responses in Worksheet A, Technical Considerations Scorecard, to determine a ranking of High, Moderate or Low for each mitigation measure.

- If there are no grayed out boxes checked for a mitigation measure, the technical consideration ranking is Low.
- If there are 1 or 2 grayed out boxes checked for a mitigation measure, the technical considerations score is Moderate.
- If there are 3 or more grayed out boxes checked for a mitigation measure, the technical consideration score is High.

List any considerations in the implementation process that could be a limiting factor or clear constraint in the Notes section.

**Relative Costs**

Rank each of the mitigation measures based on the estimated cost to address the flood risk and the likelihood of cost-effectiveness. Chapters 4 through 10 include information to rank each mitigation measure based on FEMA 312, Homeowner's Guide to Retrofitting: Six Ways to Protect Your House From Flooding, and FEMA 259, Engineering Principles and Practices of Retrofitting Floodprone Residential Structures. Low cost indicates Low ranking and high cost indicates High ranking.

**Need for Human Intervention**

This reflects the need for human intervention to operate the mitigation measure and the warning time to conduct the required activity. Generally, the more "passive" the system (i.e., requiring the least human interaction), the more reliable the system will be over time, thereby resulting in a Low ranking. Mitigation measures that require human intervention, such as barriers and dry floodproofing, receive a High ranking.

**Need for Annual Maintenance**

This reflects the level of effort of annual maintenance required by each mitigation measure. Similar to human intervention, less annual maintenance results in a Low ranking.

NOTE: If two or more mitigation measures tie with the lowest score, other decision factors should be considered in determining the most appropriate mitigation measure(s). These considerations include, but are not limited to aesthetics; access to site; housing of occupants during the project; compliance with all applicable codes, ordinances, and regulations; historic preservation concerns; and availability of contractors.

The other decision factors should be listed in the Comments section of Worksheet C.

**NOTES:**

Mitigation Measures	Technical Considerations

## Severe Repetitive Loss (SRL) Structures\*\*

### For ALL Severe Repetitive Loss Structures

This report includes information from the NFIP Bureau and Statistical Agent based on the displayed NFIP data as of date. SRL designations are subject to change.

Community Name/CID#: **BEACHCOMBER, CITY OF / 099992**

# 1 Property Locator/Rep Loss #: 9999500 Category: V-Validated NFIP data as of: 5/31/2008

1-15 DAVIDSON ST, FLOODING BEACH, DC 99997-0000

Latitude: Longitude: Photo: No Inspection Date: None

Tax ID:

Local Lot/ Parcel ID:

Occupancy: SINGLE FMLY Reported Value: \$143,000

Currently Issured: Special Direct Facility # Claims per NFIP:\* 5

#### (9 most recent claims )

Date	Building	Contents	Total
1/2/1999	\$9,852	\$1,445	\$11,297
10/8/1996	\$16,112	\$4,442	\$20,555
3/13/1993	\$10,994	\$4,619	\$15,613
8/31/1985	\$1,932	\$0	\$1,932
6/18/1982	\$4,357	\$3,211	\$7,568
<b>Total Payments Made:</b>	<b>\$43,247</b>	<b>\$13,718</b>	<b>\$56,964</b>
<b>Average Payment per Claim:</b>	<b>\$8,649</b>	<b>\$2,744</b>	<b>\$11,393</b>

# 2 Property Locator/Rep Loss #: 9999501 Category: V-Validated NFIP data as of: 5/31/2008

ROCKY PLAZA UNITS 1 - 11 1 SAMSA AVE, FLOODING BEACH, DC 99997-0000

Latitude: Longitude: Photo: No Inspection Date: None

Tax ID:

Local Lot/ Parcel ID:

Occupancy: SINGLE FMLY Reported Value: \$159,959

Currently Issured: Special Direct Facility # Claims per NFIP:\* 5

#### (9 most recent claims )

Date	Building	Contents	Total
6/21/2003	\$17,322	\$4,409	\$21,731
9/14/2001	\$3,969	\$4,944	\$8,914
7/22/2001	\$5,598	\$3,764	\$9,363
11/16/1997	\$6,504	\$5,203	\$11,706
7/20/1995	\$4,413	\$11,004	\$15,417
<b>Total Payments Made:</b>	<b>\$37,806</b>	<b>\$29,324</b>	<b>\$67,130</b>
<b>Average Payment per Claim:</b>	<b>\$7,561</b>	<b>\$5,865</b>	<b>\$13,426</b>

## Potential Mitigation Options

---

# 1      **Property Locator/Rep Loss #:** 9999003  
**Community Name/CID#:** BEACHCOMBER, CITY OF / 099992  
**Property Address** CHOWDER EIGHT UNIT 3 FIRE PL  
DISASTERVILLE, DC 999930000  
**Latitude:** 123.4567  
**Longitude:** 321.6547  
**Tax ID:**  
**Local Lot/Parcel ID:**  
**Owner Interested in Mitigation?**  
**Current Insured's Name:**  
**Last Claimant's Name:** JACK CORONATO



### Pending Mitigation Actions:

A pending flood control/drainage improvement project may mitigate the flooding.

### Structure may be Protected with a Retrofitting Project:

Structure may be elevated

### Flooding may be Relieved by a Flood Control Project:

Construction of an upstream storage basin

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## **Appendix F – Site Data Collection Notification and/or Explanation Letters**

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**SAMPLE PRE-NOTIFICATION LETTER FOR FEMA OR FEMA CONTRACTOR  
FIELD CREWS DOING MITIGATION DATA COLLECTION**



**FEMA**

U.S. Department of Homeland Security  
500 C Street, SW  
Washington, D.C. 20472

[DATE]

[Name]

[Address]

[City, State, Zip Code]

Dear [Resident]

Your property is either currently, or at some point in the past was, insured by the National Flood Insurance Program (NFIP) for damage from flooding. Flood insurance is underwritten by the National Flood Insurance Program (NFIP), a program that is administered by the Federal Emergency Management Agency (FEMA). FEMA has identified structures that have sustained repetitive flooding and have received claims payments on at least two occasions.

The NFIP allows occupants and owners with property vulnerable to flooding to purchase flood insurance; private companies generally do not underwrite flood insurance because of the high risk involved. In order to continue to keep flood insurance premiums affordable, FEMA and the NFIP must try to address those structures that are repetitively flooded.

[AGENCY OR CONTRACTOR ON BEHALF OF AGENCY] is currently surveying these repetitively flooded properties to collect data that will help FEMA understand why these structures are vulnerable to flooding and damages, and what mitigation measures may be feasible to protect them from future damages.

This letter is an early notification that you will be visited by a representative of [AGENCY OR CONTRACTOR ON BEHALF OF AGENCY] within a few weeks. That person will have identification and a copy of a letter similar to this one confirming his or her authorization to conduct this survey on behalf of FEMA.

The [AGENCY OR CONTRACTOR ON BEHALF OF AGENCY] will need about 30 minutes to observe features about the building's construction, assess the building's flood vulnerabilities, and take a few photos.

We look forward to your cooperation in this important data collection effort. If you have any questions regarding this survey, please contact [REGIONAL RL COORDINATOR OR PROJECT OFFICER] at [telephone number].

Sincerely,

FEMA Project Officer

**SAMPLE LETTER FOR FEMA OR FEMA CONTRACTOR FIELD CREWS  
DOING MITIGATION DATA COLLECTION**

U.S. Department of Homeland Security  
500 C Street, SW  
Washington, D.C. 20472



**FEMA**

[DATE]

[Name]

[Address]

[City, State, Zip Code]

Dear [Resident]:

Your property has been identified as having experienced repetitive damage and losses from flooding and is either currently or at some point in the past was insured by the National Flood Insurance Program (NFIP) for damage from flooding. The National Flood Insurance Program (NFIP), a program that is administered by the Federal Emergency Management Agency (FEMA), underwrites flood insurance. FEMA has identified structures that have sustained repetitive flooding and have received claims payments for two or more events.

[AGENCY OR CONTRACTOR ON BEHALF OF AGENCY] is currently surveying these repetitively flooded properties to collect data that will help FEMA understand why these structures are vulnerable to flooding and damages, and what mitigation measures may be feasible to protect them from future damages. This letter is a confirmation that [NAME AND AGENCY OF INSPECTOR] is authorized to conduct this survey on behalf of FEMA. [NAME and/or AGENCY] will have proper photo identification with them and a copy of this letter. The data collection effort will take approximately 30 minutes and will include collection of information about the building's construction and flood vulnerabilities. Some photos will also be taken.

We look forward to your cooperation in this important data collection effort. If you have any questions regarding this survey, please contact [REGIONAL RL COORDINATOR OR PROJECT OFFICER] at [telephone number].

Sincerely,

FEMA Project Officer

## **SAMPLE LETTER FOR LOCAL AGENCIES WITH FIELD CREWS DOING MITIGATION DATA COLLECTION**

[DATE]

Dear [Resident];

[ENTER AGENCY'S NAME or CONSULTANT ON BEHALF OF....] is conducting a study of properties that may be at risk for repetitive flood damage. The outcome of the study will identify structures in need of flood mitigation, determine what mitigation measures may be appropriate for each structure, and may develop an initial cost estimate for providing the recommended measure(s).

Mitigation measures may include elevating buildings, wet or dry flood proofing, relocation, acquisition, or construction of flood control structures. Upon completion of the study [ENTER AGENCY] plans to apply for Federal Grants and obtain the additional local cost share necessary to assist willing property owners in mitigating their flood prone buildings.

The study involves the collection of the following property level data elements:

1. Building Permit Records (including application and associated materials)
  - Date of Original Permit
  - Square footage
2. Structure and site elevation information (elevation certificate if available)
3. Tax ID and Lot and Parcel Number
4. Building Property Value on record (Assessed Value, Replacement Value or Both)
5. Land Property Value on record
6. Building Code/Floodplain Development Regulations Exceeding Minimum Standards
7. Historical flood events information
  - When
  - How much damage to community
  - How did it affect property
  - Estimated frequency of event

In addition, [AGENCY OR CONSULTANT NAME] will visit each property to survey the flood risk and to take photographs. Property owners are encouraged to visit with the surveyors to discuss any relevant flooding issues.

You can help us prepare mitigation plans and apply for funding by facilitating [CONSULTANT OR AGENCY NAME] in their information and data collection needs, and also by validating field observations. If you have any questions, feel free to call [POC OF SPONSERING AGENCY].

Sincerely,

[AGENCY POC or REP]



## **Appendix G – FEMA AW-501 Form and Instructions**

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## 2007 INSTRUCTIONS FOR COMPLETING THE NFIP REPETITIVE LOSS (RL) UPDATE AW-501 WORKSHEET

These instructions explain to communities participating in the National Flood Insurance Program's (NFIP) Community Rating System (CRS) how to make updates on the NFIP Repetitive Loss (RL) Update AW-501 Worksheet. If you have any questions on how to apply these instructions or any other repetitive loss issues, we suggest contacting either the person responsible for NFIP Repetitive Loss Updates identified below or your assigned ISO/CRS Specialist.

Please read Section 501 in the *2006 CRS Coordinators Manual* before completing these worksheets. All communities applying to and participating in the CRS with one or more repetitive loss properties will receive the NFIP Repetitive Loss Update Worksheet. We recognize there are many reasons why the property address information needs to be corrected on the community repetitive loss list. The RL Update Worksheet was developed to update any known errors on the list while making this process as easy and simple to use as possible.

### PROCEDURES

It is the responsibility of all CRS communities with at least one repetitive loss property to review and update the worksheets if applicable. Please review the properties listed under "Current Property Address" and select one or more of the seven update choices provided in the REQUESTED UPDATES section. All requested updates should be clearly legible. You should keep a photocopy of the original document for your records. **Please submit only those RL Update Worksheets you have updated and attach the transmittal sheet.** If you are submitting a new CRS application, modification, or will be undergoing a cycle application in 2007, the updated worksheets should be included in the documentation materials provided to your ISO/CRS Specialist. If you are providing voluntary updates, please send the updated worksheets and all necessary supporting documentation to the following NFIP Repetitive Loss Update address as soon as possible, but **no later than December 1, 2007:**

**NFIP Repetitive Loss Updates, c/o Ms. Sherry Harper, AICP, CFM; Insurance Services Office, Inc.; 2382 Susan Drive, Crestview, FL 32536. You may also provide the updated worksheet (AW-501) and any required supporting documentation electronically by emailing the documents to [sharper@iso.com](mailto:sharper@iso.com) or send them by FAX to 201-748-1869**

**"Repetitive Loss Number"** -- This number is assigned by the RL database computer and is primarily used for FEMA internal program tracking. The RL number may also be referred to as a property locator number and will likely be referred to in correspondence or discussions concerning submitted updates.

**"Local Property Identifier"** -- This optional information such as Tax Assessor's number, Lot & Block, etc., is provided by the community. Communities have requested the inclusion of this local information in FEMA databases.

**"Current Property Address"** -- This address will always be the most recent address known for a property. If an address update was submitted previously and processed, it will be shown in this section.

**"Previous Property Address"** -- This is the second most recent address for a repetitive loss property. There is no need to modify this address field. It is shown here and on subsequent listings only for informational and comparison purposes. So that you can see the current or revised address and community ID number versus the previous address and community ID number. If necessary, the previous address may help you locate the structure.

**“Last Claimant”** --The data shown here is the name of the insured that reported the latest claim for the property, and may or may not be the current owner. This data is provided for informational purposes only in an effort to help you locate the property, if necessary. This data cannot be updated. If this is the only discrepancy you detect or the only entry in need of update, there is no need to submit the AW-501 worksheet for processing.

**“Insured”** -- If FEMA records indicate this property is currently insured under the NFIP, a “YES” will be shown in this field and the current name associated with the related Policy will be shown in the Named Insured section. Once again, the current insured name is only for informational purposes and is not intended for you to update. If however you feel that a property is misidentified as uninsured when in fact it is insured, you may wish to call that to our attention. Provide as much information as possible in the additional comments section on the current insured’s name and/or possible alternate address or community identification number that the existing policy may be written under.

**“Dates of Losses”** -- The dates are shown as year/month/day. For example, January 14, 2005, would be shown **20050114**. If there are indications that the loss history reported for the property may be inaccurate, please call this to our attention. For missing claims or a claims history that may include more than one separately insured building, provide (in the Comments section of the form or as a separate document) all pertinent information such as date of missing claim, name of additional claimant, address of missing claim or information on the number of buildings on the site or address that brings in to question the claim record validity.

## SELECTING AND DOCUMENTING UPDATES

### REQUESTED UPDATES

**\* INFORMATION PROVIDED NOT SUFFICIENT TO IDENTIFY PROPERTY:** Before selecting this update it is expected that the address information provided will have been thoroughly researched including the claimant name and/or the current insured name. The claimant name provided is associated with the last reported loss for the property. It may or may not be the current property owner or may have been a past renter or occupant of the property. Possible sources of additional information that may help you identify the current property address are local tax records for the years of the claims, current and prior phone books, utility records, and the U.S. Postal Service. In addition, name search engines on the Internet may be useful in locating a current phone number or address for the name provided. You can also talk to long time citizens of your community to see if they can assist you in identifying the correct address of the flooded property.

Please describe the investigative steps you took to locate the property in the Comments section of the worksheet. AW-501s for properties previously updated using this selection are annotated to reflect the update by displaying in the additional comments section “Previously updated - this property is no longer considered a RL property. Updated as - Unable to locate.”

Previous versions of the AW-501 did not contain claimant or insured name information. If you were previously unable to locate the property, and are now seeing the name of the last claimant or current insured for the first time, please take the time to try to locate the property again using the newly provided information.

**\* COSMETIC CHANGES REQUIRED TO THE ADDRESS:** Use this area to correct misspellings, street suffixes, to provide newly established address information, or to include “Local Property Identifier” information that meets your needs. To better help you locate these addresses; we have provided the policyholder name associated with the last reported claim. The last claimant name associated with the insured location will change automatically if a future claim is paid to a new insured. In addition, if currently insured the name associated with the most recent policy is also provided. Please do not submit forms for which the only update is the spelling or accuracy of the claimant or insured name provided. Since this is an historical record, we are unable to make these types of updates. The names will be updated automatically, in the event of any future reported claims or changes of the named insured.

**\* PROPERTY NOT IN OUR COMMUNITY OR JURISDICTION:** If in using the information provided, you have positively identified the RL Property, and have determined that the building is not located in the community to which it is currently assigned, please provide the correct community name and NFIP Community ID number in the spaces provided. It is critical that the correct community name including county and the NFIP community ID number be provided. Without this information, the property will remain assigned to the community currently identified on the listing of RL Properties. If necessary, to assist the newly assigned community in locating the building, please make any known cosmetic changes required to the address (see above) as well.

**\* FLOOD PROTECTION PROVIDED:** Select this update only if some type of structural intervention has occurred to either the building, property or the source of flooding that would provide protection to the building from those types of flooding events that have occurred in the past. You also must provide the Mitigation Action Codes (a-f) and the Mitigation Funding Codes (j-y) that best describes the mitigation project. These codes are included in a separate file on the CD. Please include all available documentation with the RL Update Worksheet (AW-501) that supports the mitigation action taken along with any evidence available that indicates the mitigation was effective. It will also be necessary to provide a copy of a recent Elevation Certificate if the building was retrofitted or replaced. **If the property was previously updated in this manner and the Mitigation Codes are not shown or are incorrect, you must provide the appropriate codes. This will avoid the update from being removed in the future.**

**\* NO BUILDING ON PROPERTY:** Select this update only if the building in question can be positively identified as the previously flooded building and documentation is available to support that as a result of acquisition, relocation or demolition, an insurable building no longer exists at this location. You also must provide the Mitigation Action Codes (g-i) and Mitigation Funding Codes (j-y) that best describe the mitigation project. These codes are included in a separate file on the CD. Please include all available documentation with the RL Update Worksheet (AW-501) that supports the mitigation action taken. If the property was previously updated in this manner as a result of a non FEMA funded mitigation action and has since been replaced by a new elevated or floodproofed building, it will be necessary to select the **FLOOD PROTECTION PROVIDED** update described above and provide the new applicable Mitigation Action and Funding Codes. **Also, if the property was previously updated in this manner and the Mitigation Codes are not shown or are incorrect, you must provide the appropriate codes. This will avoid the update from being removed in the future.**

***Please note that if the mitigation action was primarily federally funded, it probably did not cover the entire cost of mitigation; consequently, a secondary funding code is required.***

*FLOOD PROTECTION PROVIDED and NO BUILDING ON PROPERTY are two categories that generally describe why a property is no longer subject to the types of events that caused the original flooding. If either of these two updates are selected and properly documented, future worksheets will show the following statement in the additional comments section: **“PREVIOUSLY UPDATED – THIS PROPERTY IS NO LONGER CONSIDERED A RL PROPERTY,”** and a bold **“X”** will be placed adjacent to the appropriate update. However, since the property did historically suffer the loss, the property will remain on the master repetitive loss list (even though the problem has been reported as corrected). If another claim is reported, the update will automatically be removed and the property will once again be considered a repetitive loss property.*

**\* DUPLICATE LISTING WITH RL NUMBER \_\_\_\_\_:** If you identify two or more (AW-501) worksheets with separate address listings that are for the same building, use this update to identify all identical listings so they can be combined. On each worksheet that is a duplicate property, list all other RL or property locator numbers that are a duplicate to that property. To ensure the proper processing of this type of update, please provide all duplicate listing worksheets, for each location, together. Also, please identify the appropriate address to use for the creation of the new listing. Remember, if any of the loss dates for the two or more properties are the same, it is not likely that they are a true duplicate listing. It is more likely that there is more than one insurable building on the site that has suffered repetitive claims. Please investigate the possibility of multiple buildings before requesting this update.

\* **HISTORIC BUILDING:** Choose this update if the property identified on the worksheet has either already been designated as a “Historical Building” on either a State or National Historic Registry or is eligible for inclusion in a registry. Please provide any appropriate documentation available to support this update.

\* **COMMENTS SECTION:** Use this area to provide comments on any of the above updates or to explain a situation that does not fit into one of the above update fields.

## **DOCUMENTATION REQUIREMENTS**

Several of the potential updates require that documentation be provided to support the claim of mitigation or to confirm the address or location of the subject building. The following provides additional clarification on the various types of mitigation actions and the type of documentation that would likely be acceptable in verifying and approving the requested update.

**ELEVATION OR DEMOLITION AND REBUILDING** – The most appropriate documentation for this type of mitigation is an accurately completed FEMA Elevation Certificate (EC) based on finished construction showing that either the lowest floor or the bottom of lowest horizontal structural member, if applicable and accompanying machinery is at or above the 100 year base flood elevation. In addition if applicable, the EC must show that the area below the next higher floor is constructed in a manner consistent with Federal and local floodplain regulations pertaining to the number and size of openings allowing the entry and exit of flood waters.

**ACQUISITION/DEMOLITION** – Appropriate documentation for this type of mitigation action would consist of a demolition permit issued by the community, local property tax records showing no improvements on the lot, photos of the vacated site and/or written statements from the community official, (on community letterhead), explaining the circumstances under which the property was cleared. A certified deed that shows the transfer of ownership of the property to the community and the open space use requirements provided for under all FEMA grant programs would also be acceptable.

**ACQUISITION/RELOCATION** – Documentation, similar to that specified above for acquisition/demolition, is required to verify the removal of the structure. A building permit and/or FEMA EC for the new structure showing that it was constructed either outside the special flood hazard area (SFHA) or, in accordance with Federal and local floodplain regulations would also be necessary.

**FLOODPROOFING** – This mitigation measure is usually reserved for non-residential structures. Verification would consist of an accurately completed FEMA Floodproofing Certificate showing the building as floodproofed to the base flood elevation. However, any projects that require human intervention will be closely reviewed. In communities approved for residential basement floodproofing, an accurately completed FEMA Residential Basement Floodproofing Certificate is required for new construction in the SFHA.

**DRAINAGE IMPROVEMENTS** – A thorough description of the improvements and their intended effect is required. The descriptions should include what was done and when, why the action taken was chosen, the previous and new level of protection and any evidence of the effectiveness of the project such as an analysis of how the system performed during a recent weather event. Letters from the community official in charge of the project that answers these questions and provides examples of the scope and nature of the project such as plans would help to support the approval of this flood protection action. In some cases a Letter of Map Revision (LOMR) based on the project is requested of and prepared by FEMA. In those instances providing a copy of the LOMR clearly showing the subject property in the amended area and out of the SFHA would suffice for documentation of this mitigation action.

The above actions represent mitigation actions that fully protect a structure from flooding up to and including the base flood elevation. Several repetitive loss properties are flooded simply as a result of more frequent, less severe events. For mitigation actions between the 25-year and 99-year protection levels, a “conditional” partial protection level will be assigned only with supporting data as certified by a design professional and or a community official that includes sufficient engineering data to demonstrate that at least 25-year protection has been provided. However, should another loss occur, we reserve the right to reevaluate the “conditional” approval and the property may be placed back into repetitive loss status. Property will be “conditionally” mitigated if evidence is supplied that the project meets the flood

protection level of the 25-year through 99-year recurrence events and the specific property is cited as being protected by the project. Examples of allowable protection projects include channelizations, culvert enlargements, retention/detention ponds etc.

The typical documentation required would consist of letters from the community; copies of the previous and revised Flood Insurance Reference Maps (FIRM) with property location shown indicating that the property was in the SFHA and is now removed; an engineering analysis provided by the community that demonstrates the level of protection provided; receipts from contractors; copies of FMA or HMGP documentation, if available for individual properties protected by a project.

**LEGAL DESCRIPTIONS** – Several property records in the RL database are known only by a “legal description.” If the documentation submitted for the mitigation project, as described above, now references a mailing or “group one” address as provided by the U.S. Postal Service, documentation to support that the “group one” address and the legal description listed currently are one and the same, is required. Tax records showing both a legal description and a local mailing address would suffice for documentation of this criterion.

***The above documentation stipulations represent those documents that should be available after a properly executed mitigation project is closed out. On occasion circumstances dictate otherwise. Each request for update will be evaluated on its individual merits and will be approved or denied based on sound engineering principles, the support of the documentation provided, and the claim history of the property.***

## **SUBMITTING UPDATES**

**UPDATES AUTHORIZED BY:** When submitting NFIP Repetitive Loss Update Worksheets (AW-501) in paper format by mail or fax, the RL Transmittal Sheet must be filled out, signed, and accompany the requested updates. When submitting updates by electronic methods, the RL Transmittal sheet must be filled out and accompany the submittal but the electronic signature on the email may be used for the authorizing signature. Any AW-501 updates submitted without a signed RL Transmittal Sheet will not be processed until the signed Transmittal Sheet is provided.

FEMA appreciates and thanks you for your support and assistance in providing this information. You may be contacted in the future if we have any questions concerning your updates.

Under the Privacy Act (5 U.S.C. 552a), personal identifiers, such as names, may be used only for limited purposes. One of the allowable uses of names and flood insurance policy numbers is to analyze the effectiveness of local flood loss reduction efforts. Communities may use personal identifiers for this purpose only and are prohibited from using them for solicitation, or other reasons.

**Federal Emergency Management Agency  
National Flood Insurance Program**

OMB 1660-0022 EXPIRES August 31, 2010

**NFIP REPETITIVE LOSS (RL) UPDATE WORKSHEET (AW-501)**

NOTE: SEE REVERSE SIDE FOR MITIGATION ACTION CODES AND PAPERWORK BURDEN STATEMENT

Printed On: **THE INFORMATION ON THIS FORM IS BASED ON CLAIMS ON OR BEFORE:**

REPETITIVE LOSS NUMBER:

Internal use only	<input type="checkbox"/>	<b>A</b>	<input type="checkbox"/>	<b>N/A</b>	<input type="checkbox"/>	<b>FRR</b>
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<b>CURRENT NFIP COMMUNITY NAME:</b>							
<b>COMMUNITY ID # :</b>							
<b>CURRENT PROPERTY ADDRESS</b>				<b>PREVIOUS PROPERTY ADDRESS/COMMUNITY ID #</b>			
<b>LAST CLAIMANT:</b>							
<b>INSURED:</b>				<b>NAMED INSURED:</b>			
<b>DATES OF LOSSES</b>				<b>TOTAL NUMBER OF LOSSES FOR PROPERTY:</b>			

**REQUESTED UPDATES**

MARK ALL UPDATES BELOW THAT APPLY (**IMPORTANT – READ THE INSTRUCTIONS**)

1.  INFORMATION PROVIDED NOT SUFFICIENT TO IDENTIFY PROPERTY.  
Choose this update if all attempts to locate the property fail. Please describe the steps you took to locate the property in the comments section below.
  
2.  COSMETIC CHANGES REQUIRED TO THE ADDRESS: \_\_\_\_\_  
Use this update to correct or update the property address shown above. \_\_\_\_\_  
Only change the address not the name. \_\_\_\_\_
  
3.  PROPERTY NOT IN OUR COMMUNITY OR JURISDICTION:  
Choose this update if you have positively determined that the property shown is not located in your community. Please provide the correct community name and if known the NFIP Community ID Number. If available, please attach a map showing the property location.  
  
ASSIGN TO COMMUNITY NAME: \_\_\_\_\_ NFIP COMMUNITY ID # \_\_\_\_\_
  
4.  FLOOD PROTECTION PROVIDED.  
Choose this update only if some type of structural intervention has occurred to the building, property or the source of flooding that protects the building from future events similar to those that occurred in the past. The correction must be supported by documentation such as an Elevation Certificate and the Mitigation information below must be provided.  
  
Mitigation Action 1.)  Source of Mitigation Funding 3.)  See the back of this form for the appropriate codes.
  
5.  NO BUILDING ON PROPERTY.  
Choose this update only if the property in question can be positively identified as the site of the previously flooded building and documentation is available to support that an insurable building no longer exists at this site. The correction must be supported by documentation such as a Demolition or Relocation Permit and the Mitigation information below must be provided.  
  
Mitigation Action 2.)  Source of Mitigation Funding 3.)  See the back of this form for the appropriate codes.
  
6.  DUPLICATE LISTING WITH RL NUMBER: \_\_\_\_\_ COMBINE AS ONE LISTING.  
Choose this update to identify two or more separate listings that are for the same building. List all other RL numbers that are duplicates to this property. Please indicate which address shown is the correct address to use.
  
7.  HISTORIC BUILDING: Check this box if you know the building is listed on a State or National Historic Registry.

ADDITIONAL COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**A SIGNED RL TRANSMITTAL SHEET MUST ACCOMPANY THIS FORM FOR APPROVAL OF THE UPDATE!**

**SEE PRIVACY ACT STATEMENT ON THE BACK**

## MITIGATION ACTION CODES

- 1.) If you checked the box that says "FLOOD PROTECTION PROVIDED," please enter the letter below (a –f) that best describes the situation:
  - a. The building was elevated to or above the Base Flood Elevation (BFE).
  - b. The building was elevated but not to the BFE.
  - c. The building (non-residential) was floodproofed to the BFE.
  - d. The building was partially floodproofed (but, not to the BFE).
  - e. The building was protected by a flood control/stormwater management project.
  - f. The building was replaced by a new elevated/floodproofed building.
  
- 2.) If you checked the box that says "NO BUILDING ON PROPERTY," please enter the letter below (g – i) that best describes the situation.
  - g. The building was demolished, but not acquired through any program.
  - h. The building was acquired and demolished as part of a program.
  - i. The building was relocated out of the floodplain.

## MITIGATION FUNDING CODES

- 3.) Please choose from the following (j – y) to identify the primary and secondary funding sources for the mitigation action described by a – i above.

<b>FEMA PROGRAMS</b>	<b>NON FEMA FUNDING SOURCES</b>
j. Hazard Mitigation Grant Program (HMGP). k. Flood Mitigation Assistance Program (FMA). l. Pre-Disaster Mitigation Grant Program (PDM). m. Repetitive Flood Claims (RFC) n. Severe Repetitive Loss Program (SRL) o. Section 1362 Acquisition Program. p. Other FEMA Programs	q. Increased Cost of Compliance (ICC) coverage. r. U.S. Housing & Urban Development (HUD) Community Development Block Grant (CDBG). s. U.S. Army Corps of Engineers or Natural Resources Conservation Service (NRCS) Project. t. Other Federal Program. u. State Program. v. Local Program. w. Property Owner x. Natural Disaster or Fire. y. Unknown

OMB Statement: Public reporting burden for this information collection is estimated at 35 hours for the application and certification process. Burden means the time, effort and financial resources expended by persons to generate, maintain, retain, disclose, or to provide information to us. You may send comments regarding the burden estimate or any aspect of the collection, including suggestions for reducing the burden to: Information Collections Management, U.S. Department of Homeland Security, Emergency Preparedness and Response Directorate, Federal Emergency Management Agency, 500 C Street, SW, Washington, DC 20472, Paperwork Reduction Project (OMB Control Number 1660-0022). You are not required to respond to this collection of information unless a valid OMB control number appears in the upper right corner of this form. Note: Do not send your completed questionnaire to this address.

Privacy Act: The information contained in this transmittal is legally privileged and confidential. Its use is protected under the Privacy Act of 1974, 5 U.S.C. Section 552(a). Use of the provided information is restricted to the applicable Routine Use(s) cited in the System Notice published at 67 FR 3193 January 23, 2003. The information provided should be used consistently with the purpose(s) for which the records were released as stated in the applicable Routine Use(s) cited herein.

Further, under the Privacy Act of 1974, 5 U.S.C. Section 552(a), personal identifiers, such as names, may be used only for limited purposes. One of the allowable uses of names and flood insurance claims history is to analyze the effectiveness of local flood loss reduction efforts. In addition, the Routine Use furthers the floodplain management and hazard mitigation goals of the Agency by making more detailed NFIP records available to communities. Communities may use personal identifiers for this purpose only and are prohibited from using them for solicitation, or other reasons.

# SAVE TIME

## WHEN SUBMITTING REPETITIVE LOSS UPDATES

**STATE** the nature of the address problem and steps taken to identify the property for Information Provided Not Sufficient To Identify Property.

**ATTACH** supporting documentation and include the Mitigation Action and Funding Codes when you select Flood Protection Provided or No Building On Property.

**PROVIDE** the name of the community where the property is located if the property is Not in your Community.

**INCLUDE** any missing or incorrect mitigation codes to previously updated listings.

**EXCLUDE** AW-501s that do not need updates.

**AUTHORIZE** your update by signing and dating the “Repetitive Loss Transmittal Sheet” provided or include a signed cover letter authorizing the updates.

See enclosed 2005 Instructions For Completing The NFIP Repetitive Loss (RL) Update AW 501 Worksheet for complete instructions.

### **NFIP Repetitive Loss Updates**

c/o Ms. Sherry Harper, AICP, CFM  
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