Hurricane Katrina: Wind Versus Flood Issues
Preface

The Department of Homeland Security, Office of Inspector General, was established by the Homeland Security Act of 2002 (Public Law 107-296) by amendment to the Inspector General Act of 1978. This is one of a series of audit, inspection, and special reports prepared as part of our oversight responsibility to promote economy, efficiency, and effectiveness within the department.

This report addresses the Federal Emergency Management Agency’s (FEMA) oversight of the Write-Your-Own companies’ performance in adjusting National Flood Insurance Program flood claims in the wake of Hurricane Katrina. We were directed in the Department of Homeland Security Appropriations Act, 2007 to determine whether damages from wind were improperly attributed to flooding. We examined relevant documentation and interviewed FEMA and insurance officials to assess the flood insurance adjustment process. This report provides Congress and FEMA with our findings and conclusions.

The recommendations herein have been developed according to the best knowledge available to our office, and have been discussed in draft with those responsible for implementation. It is our hope that this report will result in improvements to the National Flood Insurance Program. We express our appreciation to all of those who contributed to the preparation of this report.

Richard L. Skinner
Inspector General
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Abbreviations

CAT      Catastrophe Adjusting Firm
CFR      Code of Federal Regulations
DHS      Department of Homeland Security
FEMA     Federal Emergency Management Agency
FIRM     Flood Insurance Rate Map
FY       Fiscal Year
GAO      Government Accountability Office
NFIP     National Flood Insurance Program
NOAA     National Oceanic and Atmospheric Administration
OIG      Office of Inspector General
WYO      Write-Your-Own
Executive Summary

The Department of Homeland Security Appropriations Act, 2007 (Public Law 109-295), directed us to investigate whether, and to what extent, insurance companies participating in the National Flood Insurance Program, referred to as Write-Your-Own Companies (WYOs), improperly attributed damages from Hurricane Katrina to flooding rather than to windstorms covered under homeowner policies or wind insurance pools. We concluded that the NFIP did not pay for wind damage for structures included in our sample. However, some of the same types of damages, e.g., ceiling repairs, loss of personal property, were paid by both flood and homeowner/wind pool policies.

We evaluated flood claims from Mississippi, Louisiana, and Alabama. We also reviewed associated homeowner claims for wind coverage made available to us by the insurance companies through administrative subpoenas. Our review included flood and homeowner claim files.

We recognize the difficulty of distinguishing wind versus water damage – especially when there is nothing remaining of a property except for a foundation. Congress, as well as state and local officials in the Gulf Coast, have made allegations of conflict of interest between WYO and homeowner insurance company adjusters. From an internal control standpoint, the Federal Emergency Management Agency (FEMA) needs to increase oversight of the adjustment processes used by WYOs to ensure the integrity of flood insurance settlements – especially WYOs that issue both homeowner and flood policies.

Pricing of items for repair differed between wind and water in several cases, but these differences are not considered significant based on our analysis. In the opinion of the General Adjusters experienced in performing quality reviews of flood adjustments, pricing was consistent with market conditions after Hurricane Katrina. In addition, several cases of potential overpayments by the National Flood Insurance Program were identified and are being referred to FEMA for further action.
We are recommending that FEMA (1) require WYOs to document the rationale and methodology for calculating flood and wind damage, and revise the *NFIP Adjuster Claims Manual* to reflect these requirements; (2) expand the reinspection and operational review process to include a review of and determination of flood and wind damage on the same structure; (3) provide clear and concise guidance for adjusting total loss claims when structures are completely destroyed; (4) begin a dialogue with WYOs, insurance associations, state regulators, and Congress to explore ways to address the perception of conflict of interest when adjusters for flood and homeowner policies represent the same company; and (5) pursue overpayments identified as a result of this review and ensure reinspection procedures place additional emphasis on recovery of overpayments made by the NFIP.
Background

Hurricane Katrina made landfall on the Mississippi coast on August 29, 2005. For the coastal areas in Mississippi, estimates for wind gusts ranged from 70 to 121 miles per hour, and storm surge reached a maximum height of 28 feet. Property damage was caused by the hurricane force winds and the storm surge flooding. The Department of Homeland Security Appropriations Act, 2007 (Public Law 109-295) directed the Department of Homeland Security (DHS), Office of Inspector General (OIG), to investigate whether and to what extent, insurance companies under the Write-Your-Own (WYO) program improperly attributed damages from Hurricane Katrina to flooding covered under the NFIP rather than to windstorms covered under homeowner policies or wind insurance pools.

Homeowner insurance policies typically cover wind but not flood damage. WYOs are private sector insurance companies authorized by the National Flood Insurance Program (NFIP) to sell flood insurance. WYOs have no financial exposure when damage is caused by flood because the federal government, through the NFIP, reimburses WYOs for claims they pay. Although the NFIP does not have direct control over the WYOs, they agree each year to terms and conditions with the Federal Emergency Management Agency (FEMA) on various compliance and business issues. This agreement provides in part that WYOs will comply with written standards, procedures, and guidance issued by FEMA.

The National Insurance Act of 1968 mandated the creation of a National Flood Insurance Program. There had been attempts at passing similar legislation since the 1950s; however, the destruction brought about by Hurricane Betsy in 1965 provided the momentum to make it a reality. Prior to 1968, relief for people affected by flooding was limited to disaster assistance. The Act prescribes three main objectives to be accomplished:

- Provide affordable flood insurance to qualified homeowners,
- Identify and map the Nation’s floodplains, and
- Reduce flood damage through floodplain management regulations.

In creating the NFIP, Congress envisioned that a large flood insurance program with “large scale participation of the Federal Government, and carried out to the maximum extent practicable by the private insurance industry, is feasible and can be initiated.” In keeping with this purpose, FEMA has contractual arrangements with approximately 100 private insurance companies to sell policies and adjust and process claims, in what is called the “Write-Your-Own” program. This differentiates the WYOs from the “NFIP Direct” program, or policies written directly by the NFIP.
Approximately 98% of flood policies are written by WYO's. In 2004, Congress enacted the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act that addressed repetitive loss properties and established the regulatory appeals process for claimants.

The terms in NFIP policies and standard homeowner policies are generally the same in that the burden of proof of loss rests with the insured. These terms require:

- Prompt notice be given;
- Damaged and undamaged property be separated and be put in the best possible order;
- An inventory of damaged property showing the quantity, description, cash value, and amount of loss; and
- Proof of loss, which is the statement of the amount claimed.

While the burden is placed on the insured, adjusters from the NFIP as well as homeowner policies are sent to the site to verify losses and assist the insured in filing claims.

The chart below identifies the number of flood insurance claims and the corresponding dollar value for hurricanes Katrina, Rita, and Wilma.

<table>
<thead>
<tr>
<th>Hurricane</th>
<th>Number</th>
<th>Dollar Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Katrina</td>
<td>209,404</td>
<td>$15,850,563,024</td>
</tr>
<tr>
<td>Rita</td>
<td>14,711</td>
<td>$454,431,207</td>
</tr>
<tr>
<td>Wilma</td>
<td>16,756</td>
<td>$361,122,756</td>
</tr>
</tbody>
</table>
Results of Review

Based on the files in our sample, NFIP did not pay for wind damage; engineering reports generally supported flood damage. Our review, however, did highlight difficulties in distinguishing between wind and flood damage when they occur concurrently, and especially when there is nothing remaining except a foundation (slab). Our review also revealed instances of duplication between homeowner and flood policies, each paying for the same item, and instances of pricing differences on repairs that were deemed insignificant. In addition, anti-concurrent clauses in homeowner insurance policies generally provide that wind damage will not be covered when flooding occurs concurrently. These clauses were not a major factor in denial of insurance benefits by insurance carriers. There is also a perception that adjusters, especially those working for the same WYO company on both flood and wind claims, are not objective and tend to attribute more damage to flooding than to wind thereby benefiting the WYO company at NFIP’s expense. We did not find any evidence of such attribution of damages in our review.

FEMA’s oversight of WYOs needs improvement to address the foregoing problems. FEMA’s agreement with the WYOs needs to address quality control responsibilities through access to homeowner claims when associated with flood claims. Such oversight should extend to FEMA’s routine operational reviews of WYOs to ensure the NFIP is not paying for wind related damages.

Wind Damage Versus Flooding

Storm surge (flooding) was the primary cause of damages sustained along the Gulf Coast, but high wind before the surges also caused damage. The central question is whether WYOs, in settling claims, may have improperly attributed damage caused by wind to flooding in order to avoid liability under standard homeowner policies. This question is especially relevant in situations where the same WYO holds both homeowner and flood policies for the same property.

Several of the flood files reviewed included references to, and photographic evidence of, wind damage; however, there was no information on how much wind damage occurred, the cost of the damage, or whether wind claims were filed. Our review of related homeowner files did show that most homeowner polices paid for damage attributed to wind.

The chart below illustrates the payments for flood and wind policies in our sample.
Total flood payments  

<table>
<thead>
<tr>
<th>Amount</th>
<th>Files</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 21,273,206</td>
<td>131</td>
</tr>
</tbody>
</table>

Total wind payments:  

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Files</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homeowners policies</td>
<td>$ 3,638,127</td>
<td></td>
</tr>
<tr>
<td>MS wind pool policies</td>
<td>$ 4,131,569</td>
<td>$ 7,769,696</td>
</tr>
</tbody>
</table>

$ 29,042,902

Note: The above figures represent the best estimates that could be compiled from the files, given the documentation available. Flood payments were made for 131 and wind payments for 123 of the files reviewed.

Settlements of Flood Versus Wind

Based on the review of files in our sample, we did not find material evidence that the NFIP paid for wind damage. Although 44 out of 131 cases (34%) included errors that related to cause of damage resulting in some degree of duplication, e.g., flood and homeowners policies paying for the same type of damage (ceiling repair, loss of personal property), only two (1.5%) of these cases clearly identified wind as the preponderant cause of damage, thus resulting in an improper payment by NFIP in the amount of $432,600.

Our review of the files with available flood and wind settlement information revealed that 69 cases did not show any material errors. Of the remaining 62 cases, we detected minor errors in 18 instances, such as poor documentation, payment for items not covered under the policy, wrong estimating method used, etc. These errors did not relate to a determination of the cause of damage. The following chart and graph illustrate the results of our review of claim files.

<table>
<thead>
<tr>
<th>Description</th>
<th>Files</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFIP paid for wind</td>
<td>2</td>
<td>1.5%</td>
</tr>
<tr>
<td>Other issues related to cause of damage</td>
<td>42</td>
<td>32.1%</td>
</tr>
<tr>
<td>Other issues not related to cause of damage</td>
<td>18</td>
<td>13.7%</td>
</tr>
<tr>
<td>Files with no payment issues</td>
<td>69</td>
<td>52.7%</td>
</tr>
<tr>
<td></td>
<td>131</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Hurricane Katrina: Wind Versus Flood Issues
In addition to our review of claim files, we interviewed 20 NFIP adjusters who assessed damages for properties reviewed to determine how they conducted their claims adjustments. The adjusters said they were not under pressure from WYOs to attribute wind damage to flooding. The process used by these adjusters is shown in Appendix C. Representatives from two insurance industry associations were not aware of any instances of wind damage being attributed to flooding.

We held discussions with 11 representatives of WYOs in our sample that explained they base adjustments on physical evidence at the damaged property. In total loss cases where only a foundation (slab) remained (see picture on page 11), it was often difficult to determine whether wind or flood caused the damage.

We reviewed reinspections performed by General Adjusters from the NFIP Bureau and Statistical Agent. These reinspections are designed to assess the quality of the original flood adjustment. There were 599 reinspections performed on Hurricane Katrina flood claims in Mississippi, and we reviewed 135 of those reports. None of the reports contained evidence that wind damage had been attributed to flooding; however, it must be noted that wind settlement information is not generally made available for these reinspections. See Appendix F for more information on the reinspection process.

We also interviewed 36 homeowners included in our sample of flood claims to determine whether they felt their insurance companies improperly attributed wind damage to flooding. Four of the 36 homeowners did not have insurance that covered wind damage. Payments for wind damage were received by the other 32. The amounts received ranged from $630 to
$500,000. In 25 cases, those receiving wind settlements told us they were satisfied with the amounts received. There were seven homeowners who were not satisfied with the amount of settlement for wind. Some reasons for their lack of satisfaction include:

- They did not feel they received payment for damages caused by rain leaking through damaged roofs,
- Payments did not reflect increased costs of labor and materials after the storm, and
- Detached buildings were not covered.

**Timelines Between Flood and Wind Inspections**

We did a trend analysis focusing on the arrival time of NFIP adjusters versus the arrival time of adjusters for the homeowner or wind pool policies. Generally, the arrival time of the NFIP adjuster preceded the arrival of the homeowner/wind pool adjuster by a median of 29 days on 48% of the cases in our sample (63 out of 131). This difference in time may be attributed to NFIP requirements for contacting, inspecting the property, and processing claims. For example, NFIP requires that the inspection be performed 15 days after notice is given by the insured. These requirements apply nationwide and are presented during training sessions for adjusters, and included in the standard NFIP forms that most WYOs use for their claim submissions. Our review of operating guidance subpoenaed from several companies showed varying timeline standards by company and by geographical region of the country, which could make them more difficult to follow and enforce. The chart below illustrates the timing of inspections in our sample.

<table>
<thead>
<tr>
<th>Timing of Inspections</th>
<th>Number of Occurrences</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flood first</td>
<td>63</td>
<td>48%</td>
</tr>
<tr>
<td>Wind first</td>
<td>30</td>
<td>23%</td>
</tr>
<tr>
<td>Concurrent</td>
<td>21</td>
<td>16%</td>
</tr>
<tr>
<td>Undetermined</td>
<td>17</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>131</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**Expedited Claims Policy**

In September 2005, the Acting Administrator/Director of FEMA’s Mitigation Division issued a memorandum that outlined the procedures for expedited handling of claims (see Appendix D). This was the first time such procedures were developed and were in response to the unprecedented flood losses, especially in selected parishes in Louisiana. According to NFIP officials, claims experts from several WYO companies assisted in developing these procedures. These procedures were designed to identify the characteristics of
flood claims that would lend those losses to expedited handling. The procedures require the WYOs to use their best judgment, based on the depth and duration of the water in the structure, to determine if it is likely that covered damage exceeds policy limits. If so, then a site visit may not be required. If the depth of water in the structure was not likely to cause damage in excess of the policy limits, the WYO was required to use normal claims processing procedures requiring a site visit.

Our review of the flood claim files in our sample revealed little evidence that the expedited process was used. Most claims were reviewed by adjusters on site rather than using water depth data and contacting the homeowner via telephone to determine information such as square feet of the structure. We found only one instance of an inspection conducted via telephone in our sample.

**Engineering Reports**

The use of engineers in assessing damages in Hurricane Katrina has been a subject of Congressional concern in that it was perceived that the reports were biased toward attributing damages to flood rather than wind. Our review of corporate guidance obtained from insurance companies revealed that most companies encouraged their adjusters to request an engineer if there was a question regarding the cause of damage. Such a request had to be approved by a management-level official of the company.

Of the flood and homeowner files reviewed, 16 included reports from engineering firms that assisted the insurance carrier or the homeowner. The majority of these reports (15 or 79%) were commissioned by the carrier, and attributed the cause of damage to flooding. The chart below summarizes these results.

<table>
<thead>
<tr>
<th></th>
<th>Predominant Cause Of Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flood</td>
</tr>
<tr>
<td>Total reports</td>
<td>19</td>
</tr>
<tr>
<td>Commissioned by carrier</td>
<td>15</td>
</tr>
<tr>
<td>Commissioned by insured</td>
<td>4</td>
</tr>
</tbody>
</table>

*Note: Three properties in our sample had 2 reports, the remaining 13 only 1.*

**Complicating Factors When Wind and Flood Occur Together**

Although nothing came to our attention during our review of the files in our sample to indicate that WYOs attributed wind damage to flooding, we cannot rule out the possibility that it occurred. Our review revealed no evidence that the adjusters acted improperly in adjusting flood claims, and based on file

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documentation we reviewed, their determinations were made on the physical evidence they observed. There are factors that complicate determining whether wind damage may have been attributed to flooding including:

- Difficulty in differentiating wind versus flood damage,
- Homeowner insurance clauses that preclude payment for damages when wind and flood occur concurrently,
- The perception that insurance adjusters are favoring adjusting for flood settlement rather than wind because of a conflict of interest with WYO's, and
- FEMA's limited oversight of the entire process.

**Difficulty in Distinguishing Wind Versus Flood Damage**

Experts we talked to, as well as our review of claim files for both flood and wind, have highlighted the difficulties in distinguishing between wind and flood damage when the two perils occur concurrently, and especially when nothing remains of the property except a foundation (slab). NFIP adjusters do not generally identify or quantify damages that may have been caused by wind. The NFIP Adjuster Claims Manual does not direct adjusters to document whether wind was also involved in damages to a structure.

According to data available from other federal agencies, as well as other sources such as university engineering departments, winds played a role in damages to the Gulf Coast – especially in Mississippi. For example, hurricane force winds were present up to 4 hours prior to the storm surge that ravaged the Mississippi coast. Experts said that such a differential could contribute toward significant damage caused by wind. Appendix H graphically shows the time difference and impact of winds and surge. However, there is a consensus that only extreme loads, caused by surge and wave action, could be capable of displacing certain structures from their foundations. Appendix I presents the conclusions of a survey by the Mississippi State University, College of Engineering of damages to various structures along the Gulf Coast relating to storm surge.

**Insurance Coverage Excluded When Concurrent Events Occur**

Insurance policies are difficult to understand and are often misunderstood. Most homeowner insurance contracts exclude flood damage. A typical homeowner policy is a contract with no negotiation and few people read or understand its contents. The insurance industry is primarily regulated at the state level with little federal intervention. Policy forms are reviewed and approved by state agencies. As many in the Gulf Coast have learned, most

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1 *Technical Report*, Mississippi State University, College of Engineering, March 2006

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homeowner policies have standard flood exclusions effectively denying coverage no matter what caused the flood.

A typical policy states:

_We do not insure for loss caused directly or indirectly by any of the following excluded events. Such loss is excluded regardless of any other cause or event contributing concurrently or in any sequence to the loss. These exclusions apply whether or not the loss event results in widespread damage or affects a substantial area._

_Water damage meaning:_

_Flood, surface water, waves, tidal water, tsunami, overflow of a body of water, or spray from any of these, all whether driven by wind or not._

This provision is referred to as an “anti-concurrent causation” clause and has been standard in homeowner policies for decades. Insurers have sought to draft, file, and get state approval of policy language to make it as clear and unambiguous as possible that no damage occurring due to flooding is covered. This involved seeking to implement industry-standard language designed to cover “all risks” not specifically excluded by the contract language. The
“anti-concurrent causation” doctrine was designed to prevent the theory of concurrent causation from providing coverage for losses never intended to be covered by standard property insurance policies.2

Conflict of Interest Allegations

Our review of the files in our sample did not reveal evidence that conflicts of interest contributed toward the NFIP paying for damages that were not flood related.

The conflict of interest argument centers on the idea that WYOs have no financial exposure for flood damage, so some adjusters, hired by the WYOs, might favor finding flood damages rather than wind damage to reduce the WYOs financial exposure. Approximately 66% of claims included in our sample were cases where the same company issued both the homeowners and flood policies and, in most of these claims the same adjusters were not used. This reduces the probability that adjusters working for the same company are attributing damage to flooding instead of wind to shift the financial burden to the NFIP instead of the insurance companies.

The Government Accountability Office (GAO) has looked into this issue. In a recent report3, GAO concluded that an inherent conflict of interest exists when a single WYO insurance company is responsible for adjusting both the wind and flood claim on a single property. FEMA must ensure that its internal controls are sufficient to minimize the potential adverse impacts of this conflict on the accuracy of damage determinations and flood claims. GAO recommends that FEMA be able to access wind damage claims information from the WYO insurer in certain circumstances. We agree with GAO’s assessment and our review supports its conclusion on this issue.

FEMA Oversight of Process

The NFIP is a big business and requires management oversight associated with running an operation that has over $1 trillion exposure to liabilities. FEMA oversight is primarily performed through reinspections of how flood claims were adjusted, and periodic operational reviews of WYOs to ensure financial integrity of the program.

FEMA’s agreement with the WYOs provides that claim adjustments shall be binding upon FEMA. Accordingly, FEMA needs to increase its oversight role of WYOs and this could be accomplished by amending agreements with

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WYOs to make better use of its two quality control functions: reinspections and operational reviews.

FEMA’s reinspection process focuses primarily on whether the flood claim was correctly adjudicated, with little or no consideration for wind damage as a contributing factor. Thus, it is difficult to determine whether the NFIP paid a higher percentage of the entire damage claim involving both perils.

FEMA also performs operational reviews of WYOs on a rotating basis. These reviews typically encompass claim adjusting, underwriting and litigation activities, including a sample of claims to determine whether NFIP standard procedures have been followed. These reviews could be broadened to include an assessment of whether wind damage information was available in cases where the accuracy of the flood claim required it.

In addition, the NFIP Adjuster Claims Manual currently provides no guidance to ensure that wind damage is not attributed to flooding. As the principal source of official guidance for flood adjusters, this manual should address wind versus flood damage.

Expanding the scope of these quality control measures could help FEMA ensure that the WYOs are not improperly attributing wind damage to flooding.

Management Comments and OIG Analysis to Interim Report

On December 21, 2007, FEMA responded to our earlier Interim Report, Hurricane Katrina: A Review of Wind Versus Flood Issues, issued in July 2007. FEMA’s response is included as Appendix G. That Interim Report included the following three recommendations:

Interim Recommendation #1: Require WYOs to document and make available to NFIP the rationale and methodology for calculating flood and wind damage when there is evidence that both contributed to the damage, and revise the NFIP Adjuster Claims Manual to reflect these new requirements.

FEMA did not concur with recommendation 1. FEMA stated that NFIP adjusters do not need the documentation of wind damage to determine the amount of flood damage caused to a building and that it should not be required as settlement of a flood claim.

We disagree with FEMA’s position on this recommendation. The NFIP should have access to records of wind damage to make fair adjustments to claims filed for flood damage when wind and flood occur concurrently. Without this data, the potential for duplicate payments exists and FEMA needs to address this issue. Our review has demonstrated duplication of

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insurance adjustments between flood and wind. This is an issue that should be of concern to WYOs that issue both homeowner and flood policies. Wind damage should be considered when settling a flood claim as a prudent business practice; especially given the trillion dollar exposure to liabilities that FEMA faces.

**Interim Recommendation #2:** Expand the scope of re-inspections and operational reviews to include a review of, and determination, that flood and wind damage on the same structure were settled in a fair and equitable manner to ensure that wind damage was not paid under flood policies.

FEMA did not concur with recommendation 2. FEMA stated that the NFIP has no jurisdiction over WYOs’ other insurance lines and has no authority to request copies of wind claims.

We disagree with FEMA’s position on this recommendation. Again, we reiterate that NFIP should have access to wind damage to make fair adjustments to claims filed for flood damage when wind and water damage occur concurrently. If FEMA lacks the necessary authority to obtain the information, it should seek such authority to obtain wind documentation when both occur during a disaster.

**Interim Recommendation #3:** Provide clear and concise guidance for adjusting total loss claims after catastrophic events when structures are completely destroyed by wind and water.

FEMA concurs with recommendation 3. FEMA stated it will provide adjusters with guidance in the form of wind or water investigative tips as a tool to help determine whether damage was caused by wind, water, or a combination. FEMA issued the *Wind/Water Investigative Tips* on February 25, 2008.

We agree with FEMA’s position on this recommendation and proposed actions to be taken.

**Conclusions and Recommendations**

The NFIP would benefit from including wind damage information in the adjustment process for flood assessments by (1) making the flood adjustment process more transparent, and (2) allowing a more complete evaluation of a flood claim by looking at the total damage sustained; thereby preventing duplicate payments. The failure of the NFIP adjusters to meet NFIP standards, and differences in pricing of repairs between wind and flood adjusters of various damaged areas lends support for corrective change. The
adjustment process would benefit if both the homeowner insurance files and the flood insurance files were made available for review.

FEMA needs to increase its oversight over damage claims that involve both wind and water on the same structure. Quality control measures such as the reinspection process, operational reviews, and the Adjuster Claims Manual should be updated to reflect the need for wind damage information in certain cases involving both types of damage.

Standard clauses in homeowner policies specify that if a concurrent event such as flooding occurs, wind damages will not be paid since flooding is not covered in a standard homeowner policy. While our review of the files in our sample did not support the contention that these clauses constitute a major factor in denying insurance benefits, they were a source of contention in many lawsuits filed in Mississippi.

We recommend that the Administrator, Federal Emergency Management Agency:

**Recommendation #1:** Require WYOs to document and make available to NFIP the rationale and methodology for calculating flood and wind damage when there is evidence that both contributed to the damage, and revise the NFIP Adjuster Claims Manual to reflect these new requirements.

**Recommendation #2:** Expand the scope of reinspections and operational reviews to include a review of, and determination, that flood and wind damage on the same structure were settled in a fair and equitable manner to ensure that wind damage was not paid under flood policies.

**Recommendation #3:** Provide clear and concise guidance for adjusting total loss claims after catastrophic events when structures are completely destroyed by wind and water.

**Recommendation #4:** Coordinate with WYOs, insurance associations, state insurance regulators, state wind pools, and Congress to explore ways to address the perception of conflict of interest when flood and homeowner adjusters represent the same WYO.

**Recommendation #5:** Pursue and collect overpayments for flood losses that have been identified and ensure that reinspection procedures place additional emphasis on the issue of recovery for overpayments made by the NFIP.
Considerations for Congress

The results of this review present matters that should be considered by Congress because the actions recommended are beyond FEMA’s existing authorities.

1. Examine FEMA’s authority to obtain homeowner insurance information prior to settling flood insurance claims;

2. Seek ways to work with state insurance regulators to address the clauses in current homeowner policies that preclude coverage if wind and flood damage occur concurrently; and

3. Provide the resources commensurate with the fact that the NFIP is a large business enterprise. This should include resources to implement better controls over claims processing and financial management, as well as enhanced oversight of WYO's.

Management Comments and OIG Analysis to Exit Conference

The audit results were discussed with FEMA officials on April 1, 2008. Officials generally agreed with our findings. The NFIP indicated they intend to make the adjustment process more transparent. However, officials stated that gaining access to wind adjustment information would involve serious cost considerations, making it difficult to implement. We explained the main reason for gaining access to wind damage information is to avoid duplication of recoveries, and to ensure the total insurance settlement does not exceed the market value of the property.

Officials stated statutes that govern the NFIP do not recognize the concept of apportionment of damages between flood and homeowner policies. They stated this omission was by design as the intent of legislators was for the NFIP to provide assistance to flood victims regardless of reimbursements they could receive elsewhere.

We disagree with FEMA's position on this. When we asked FEMA to provide the specific statutory reference for its position, FEMA referred us to the Code of Federal Regulations (CFR), specifically, 44 CFR Chapter 1, Part 61, Appendix A, the NFIP standard flood insurance policy. FEMA has the authority to make changes to the CFR and to the terms of the insurance policy. We note that the current policy already requires policyholders to submit “details of any other insurance that may cover the loss” when submitting claims under the NFIP (44 CFR Part 61, Appendix A(1).VII.J.4.d). Moreover, we do not agree with FEMA’s assertion that the NFIP is an assistance
program; rather, it provides affordable flood insurance to qualified homeowners who pay premiums for coverage.

Regarding our finding on the expedited adjustment process, NFIP officials stated it was used, at a minimum on 10% of total cases adjusted. They offered to provide data to support this statement; however, we have not yet received this information.

In reference to our consideration for Congress to provide resources to enhance oversight and implementation of better controls over claims processing and financial management, NFIP officials stated they requested more funding in the fiscal year (FY) 2009 budget. Their FY 2009 Congressional Budget Justification identifies an additional $45.6 million was requested over the FY 2008 budget.

Management Comments and OIG Analysis to Draft Report

FEMA provided written comments on the draft of this report (See Appendix B). FEMA concurred with two of the five recommendations in this report, and provided technical comments, which we have incorporated into the report as appropriate. The following summarizes FEMA’s responses to each recommendation, our analysis of FEMA’s responses, and the status of each recommendation.

**Recommendation #1:** Require WYOs to document and make available to NFIP the rationale and methodology for calculating flood and wind damage when there is evidence that both contributed to the damage, and revise the NFIP Adjuster Claims Manual to reflect these new requirements.

FEMA non-concurs with this recommendation. FEMA states that OIG did not find evidence of NFIP paying for wind damage. It considers current procedures adequate to safeguard the program, and that implementing this recommendation would unnecessarily burden the claims settlement process by increasing claims adjustment costs and delaying settlements.

**OIG Analysis:** We disagree with FEMA’s position on this recommendation. The NFIP should have access to records of wind damage to make fair adjustments when both flood and wind occur concurrently. Our review shows evidence of duplication of insurance adjustments between flood and wind, each paying for the same item, as well as instances of pricing differences on repairs. This issue should be of concern to WYOs that issue flood and homeowner policies. Therefore, we consider this recommendation unresolved.
Recommendation #2: Expand the scope of reinspections and operational reviews to include a review of, and determination, that flood and wind damage on the same structure were settled in a fair and equitable manner to ensure that wind damage was not paid under flood policies.

FEMA non-concurs with this recommendation. FEMA states our review did not find evidence that NFIP settled wind and flood damage on the same structure unfairly or inequitably. General adjusters and insurance examiners are aware of their responsibility to assure a flood policy does not pay for wind damage. FEMA will consider a requirement for adjusters to identify and photograph wind damage and to describe it in the narrative of their report.

OIG Analysis: We disagree with FEMA’s position on this recommendation. We reiterate that NFIP should have access to wind damage records to make fair adjustments to claims ensuring that the flood insurance program does not pay for damage caused by wind and to ensure that duplicate losses are not reimbursed by both homeowner and flood policies. However, we do agree with FEMA’s consideration of requiring adjusters to identify and photograph wind damage and provide a description of that damage in their report. We consider this recommendation unresolved.

Recommendation #3: Provide clear and concise guidance for adjusting total loss claims after catastrophic events when structures are completely destroyed by wind and water.

FEMA concurs with this recommendation. FEMA has issued the Wind/Water Investigative Tips bulletin, and is revising the NFIP Adjuster Claims Manual to provide specific instructions to adjusters for estimating flood damage to completely destroyed structures.

OIG Analysis: We consider FEMA’s planned action responsive to the recommendation. Therefore, the recommendation is resolved and open pending FEMA’s issuance and our review of the revised NFIP Adjuster Claims Manual.

Recommendation #4: Coordinate with WYOs, insurance associations, state insurance regulators, state wind pools, and Congress to explore ways to address the perception of conflict of interest when flood and homeowner adjusters represent the same WYO.

FEMA non-concurs with this recommendation. FEMA states the OIG has no finding of an actual conflict of interest, and therefore, it is only perceived to exist. WYO companies hire adjusting firms and the adjusters are independent contractors, not employees of the adjusting firms or the WYO companies, except in rare instances. NFIP flood adjusters often work for more than one
adjusting firm in a given storm and different WYO companies. The oversight function of FEMA’s Claims and Appeals Branch ensures NFIP flood adjusters do not interpret provisions of the Standard Flood Insurance Policy too broadly for exclusions, or too narrowly for coverage. FEMA states that some appeals they review and respond to indicate this is the case and they address accordingly.

OIG Analysis: We disagree with FEMA’s position on this. While there was no specific evidence of a conflict of interest occurring, there is still the perception that it does exist. As stated in our report, 66% of claims had the same company for both the homeowners and flood policies, but most used different adjusters. GAO states that when the WYO insurer determines the damage caused by flooding covered by the flood policy and the damage caused by wind under its own property-casualty policy, it creates an inherent conflict of interest that must be managed or mitigated. Therefore, we consider this recommendation unresolved.

Recommendation #5: Pursue and collect overpayments for flood losses that have been identified and ensure that reinspection procedures place additional emphasis on the issue of recovery for overpayments made by the NFIP.

FEMA concurs with this recommendation. In response to this recommendation, FEMA states that if an improper payment was made, they will pursue collection as they normally do if an overpayment is identified.

OIG Analysis: We consider FEMA’s planned action responsive to the recommendation. However, we reiterate that FEMA should ensure reinspection procedures place additional emphasis on recovery for overpayments. Therefore, the recommendation is resolved and closed.

General Comments

Improve or Increase Oversight: FEMA states the OIG is recommending improved or increased oversight to the adjustment process in which we found no fault. They state that improved oversight to address perceptions of conflict of interest would be costly to implement and will not improve program oversight. They state the same adjuster settles wind and flood claims for State Wind Pools and that it is not unique to the WYOs. We disagree as there was evidence of duplicate payments between flood and homeowners policies, and the perception of conflict of interest does exist. Further, our review was not of the State Wind Pools but of the NFIP and WYO program.

Sample Selection Methodology: FEMA states our methodology is not described in the Executive Summary. Our methodology is included in Appendix A. We identify databases and parameters used for our selection process of our sample.

Settlements of Flood versus Wind: FEMA states they have not received or reviewed the wind settlement files in our sample. DHS OIG subpoenaed these files as part of our review. As identified in Appendix A, our review was performed with the assistance of General Adjusters from the NFIP who did review each of the subpoenaed files.
Our objective was to determine whether NFIP claims records included evidence that participating insurance companies attributed wind damage to flooding. The Department of Homeland Security Appropriations Act, 2007 (Public Law 109-295), directed our office to investigate whether, and to what extent insurance companies under the WYO program improperly attributed damages from Hurricane Katrina to flooding covered under the NFIP rather than to wind included in the standard homeowner policies.

We reviewed a sample of Hurricane Katrina flood claims in Mississippi, Louisiana, and Alabama. Our sample included claims that would reflect the general conditions caused by Hurricane Katrina on the Mississippi coast and in Louisiana and Alabama.

We employed a systematic process that used data from FEMA’s flood insurance database, the National Oceanic and Atmospheric Administration’s (NOAA) storm surge maps, NOAA wind speed data, and various online mapping programs to identify streets and properties. Main parameters used for our selection process were the location and the amount of the settlement. We also selected some sites that were farther away from the coastline, as well as some with varying settlements.

Our review was performed with the assistance of General Adjusters from the NFIP, who signed independence statements declaring there were no conditions they were aware of that would impair their judgment during this review. We reviewed 131 flood claim and homeowner claim records out of a total of 227 in our sample. Administrative subpoenas were issued to obtain information on wind damage to include corporate guidance. From our subpoenas, we obtained 131 homeowner claim records that corresponded with the flood claim records. We examined adjuster comments and calculations relating to damage caused by flood, as well as other evidence in the claim files such as photographs and correspondence between the insured and WYOis. Legal opinions, reinspection reports and NFIP complaint files were also reviewed. Officials from FEMA, the Mississippi Coast Coliseum and Convention Center, insurance association representatives, insurance adjusters, WYO officials, and other experts were also consulted.

We also interviewed FEMA and NFIP Bureau and Statistical Agent personnel, as well as experts in the field of wind and flood damage assessment. In addition, we interviewed 20 adjusters and 11 officials from 12 WYOis in our sample of claims, as well as representatives from two insurance associations. In addition, 36 homeowners were interviewed to determine whether they received wind settlements and their satisfaction with the amount received.
Appendix A
Objectives, Scope, and Methodology

Our sample included flood claims in areas of high and low surges, with some settlements paid at policy limits and others at less than the policy limit. Meteorological data for three counties in Mississippi illustrates wind speed versus flood surge data and is shown in Appendix H.

Fieldwork was performed in Washington, DC; at the NFIP Bureau and Statistical Agent facilities in Lanham, Maryland; in Mississippi; and at Clemson University in South Carolina. Fieldwork was conducted between December 2006 and December 2007. An interim report was issued in July 2007. This review was conducted under authority of the Inspector General Act of 1978, as amended, and according to generally accepted government auditing standards.
MEMORANDUM FOR: Richard L. Skinner  
Inspector General

FROM: Marko Bouffard  
Director  
Office of Policy & Program Analysis

SUBJECT: FEMA Response to DHS Office of the Inspector General Report,  
Hurricane Katrina: Wind versus Flood Issues (OIG-07-62 dated July  
2008)

This memorandum provides FEMA’s response to the subject Office of the Inspector General draft report.

We sincerely appreciate the opportunity to provide updated status in our effort to respond to the OIG’s recommendations in this report. As FEMA works toward refining its programs, the Office of the Inspector General’s independent analysis of program performance greatly benefits our ability to continuously improve our activities. We look forward to continuing this partnership in the future. Questions concerning the attached document should be addressed to Brad Shefka, Chief, FEMA GAO/OIG Audit Liaison Office, 202-646-1308.

Attachment:  
FEMA Response
FEMA’s Response to

**TECHNICAL COMMENTS**

**NFIP Only Paid for Flood Damage, Not Wind Damage**

The report concludes that there is no evidence that the NFIP improperly paid for wind damage. Page 6 states that “based on the review of files in our sample, we did not find material evidence that the NFIP paid for wind damage.” Page 10 states that “…nothing came to our attention during the review … to indicate that the WYO’s attributed wind damage to flooding”. There are inconsistencies between these key findings and the text of the Executive Summary and the report that OIG must resolve.

*Executive Summary and Results of Review, page 5 - OIG advises FEMA to improve or increase oversight of the adjustment process, with which it has found no fault. OIG states that the sample demonstrates that the “NFIP did not pay for wind damage”. OIG points out the difficulties in distinguishing between wind and flood damage when both occur concurrently and the perception that adjusters are not objective and tend to attribute more damage to flood.*

OIG’s recommendations for improved oversight and addressing perceptions of conflict of interest will be costly to implement and will not improve program oversight. Beginning with the 2007 claims operation review cycle, oversight has been more robust than in previous cycles. Mitigation revised the NFIP Financial Control Plan to support this added effort and is planning to initiate a rulemaking to finalize the changes.

In the Executive summary and elsewhere, OIG should state that the same adjuster settles both flood and wind claims for State Wind Pools as well as WYO Companies. This perceived conflict of interest is not unique to the WYO Program.

**Sample Selection Methodology**

*Executive Summary, page 1 - The report should describe the sample selection methodology. Was the sample the result of random selection or was it adversely or judgmentally selected? If the sample was random, was it large enough to generalize the results to all claims from Hurricane Katrina? If adversely or judgmentally selected, what were the selection criteria? The reader should understand what, if any, conclusions he or she can draw from the sample of claims reviewed.*
Evidence of Overpayments

Settlements of Flood versus Wind, page 6 - FEMA has not received, nor reviewed the 131 sampled files with available flood and wind settlement information that were reviewed by the IG. These files include the two stated instances for which wind was the preponderant cause of damage; the 44 cases where there were errors resulting in duplication of payment from both flood and wind policies and; 18 instances of minor errors not related to cause of damage. FEMA would like to review these claims files.

Other

FEMA Oversight of Process, page 13 – The NFIP is a large government insurance program, not a “big business”. The report incorrectly asserts that there are only two primary levels of control when in fact the NFIP has a robust Financial Control Plan that includes several layers of control.

Management Comments and OIG Analysis, page 17 – The legislation authorizing the NFIP only mentions flood, not any other natural peril. By design, the flood insurance policy pays for covered flood damage and the NFIP does not control payments made under other insurance contracts.

FEMA will provide the requested information on the expedited adjustment process.

RECOMMENDATIONS

Recommendation #1: Require WYOs to document and make available to NFIP the rationale and methodology for calculating flood and wind damage when there is evidence that both contributed to the damage, and revise the NFIP Adjuster Claims Manual to reflect these new requirements.

FEMA non-concurs with this recommendation. OIG notes that there is no evidence that the current NFIP procedures result in payment for wind damage. FEMA believes that current procedures adequately safeguard the program and that this recommendation would unnecessarily burden the claims settlement process by increasing claims adjustment costs and delaying settlements.

The flood adjuster can usually distinguish between flood and wind damage when both perils affect the same building. The water-height line is a visible and lasting marker of the height to which floodwater rose in a building. This is verifiable by the exterior water-height line, which the adjuster records. Flooding causes damage below the water-height line and does not cause damage above that mark. However, as the distance between the lines of separation narrows and crosses, it becomes increasingly more difficult for the adjuster to determine which peril caused the damage. As OIG points out on page 9, the NFIP calls upon engineers to determine causation and WYO Companies encourage adjusters to request an engineer in such cases. This is a most effective method to
determine causation and provides a professional opinion upon which the NFIP can rely when needed. Having the wind claim from another adjuster provides nothing definitive or defensible.

Page 8 of the report discusses the timing of inspections. Flood adjusters inspected losses before wind adjusters at least 48% of the time. It is unclear if the concurrent inspections (16%) were single adjusters participating in the NFIP Single Adjuster Program for WYO Companies or State Wind Pools and adjusting both the wind and flood. The wind adjuster inspected first only 23% of the time. The NFIP prides itself in providing the first funds flowing into communities to repair buildings and replace contents. It would be contrary to sound claims practices to delay payment to NFIP policyholders 48 to 77% of the time merely to have the wind claim information.

There are additional practical reasons to question this recommendation. The WYO flood carrier and the wind insurer are not the same for at least one-third of the NFIP flood policies written by WYO Companies. None of the NFIP policies written by the NFIP Servicing Agent have the same wind carrier. It is also unclear if OIG is suggesting that adjusters should request wind claim information from non-WYO wind carriers. We must also be ready to decide how the NFIP should react when a non-WYO wind carrier requests the NFIP flood file before making a wind payment.

This recommendation will not improve NFIP flood versus wind claim settlements. The NFIP does not adjust claims involving both wind and flood by determining the percentage of wind and the percentage of flood damage. The NFIP flood adjusters provide detailed, room-by-room unit-cost estimate of the flood damage to the insured building, which is a more precise damage estimate. The NFIP does not use wind claim information and should not have to require it to settle a flood claim.

Recommendation #2: Expand the scope of reinspections and operational reviews to include a review of and determination, that flood and wind damage on the same structure were settled in a fair and equitable manner to ensure that wind damage was not paid under flood policies.

FEMA non-concurs with this recommendation. OIG did not find evidence that the NFIP settled flood and wind damage on the same structure in an unfair or inequitable manner. Operation reviews and routine reinspections examine randomly selected claims using a method approved by GAO. General Adjusters and Insurance Examiners are keenly aware of their responsibility to assure that a NFIP policy does not pay for wind damage. The NFIP does not have the legal basis to apportion damages based on the percentage of damage caused by flood versus wind, which would often lead to claim payment delays. Instead the current requirements for expert estimates of flood damage with due care not to include damage caused by other perils should be continued. The NFIP will consider a requirement for adjusters to identify and photograph wind damage and to describe the damage caused by wind in the narrative report.
Recommendation #3: Provide clear and concise guidance for adjusting total loss claims after catastrophic events when structures are completely destroyed by wind and water.

FEMA concurs with this recommendation. In its March 4, 2008, Analysis of Responses to Interim Report, OIG agreed with FEMA’s position and with the Wind/Water Investigative Tips bulletin. In addition to publishing the bulletin, FEMA agreed to include it in the NFIP Adjuster Claims Manual that is currently undergoing revision.

Section II-5, paragraph t. of the current NFIP Adjuster Claims Manual provides specific instruction to adjusters for estimating flood damage to completely destroyed buildings. The pertinent part of this section reads:

The repair estimate should be prepared on a room-by-room, unit-cost basis, clearly indicating room dimensions and unit costs, except when the building has been completely destroyed. For buildings that have been destroyed, value determination by a standard insurance industry method, such as Marshall-Swift, Boeckh, etc., is acceptable. The adjuster must personally prepare the repair estimates. If circumstances require the involvement of a contractor or other expert, the adjuster must obtain the authorization of the NFIP Servicing Agent or WYO Company.

Recommendation #4: Coordinate with WYOs, insurance associations, state insurance regulators, state Wind Pools, and Congress to explore ways to address the perception of conflict of interest when flood and homeowner adjusters represent the same WYO.

FEMA non-concurs with this recommendation. Beyond suggesting that there is a perceived conflict of interest, OIG has made no finding of an actual conflict of interest.

The flood adjuster may have reasons to have more allegiance to the NFIP than to homeowner carriers. WYO Companies hire adjusting firms, not individual adjusters. Adjusters are independent contractors and not employees of adjusting firms or of the WYO Companies, except in rare instances. Many of these adjusters, while experienced in other lines of insurance, prefer to handle NFIP flood claims and do so almost exclusively. The flood adjuster typically handles only flood claims or the combined wind and flood claim under the NFIP’s Single Adjuster Program (SAP) for the WYO Company or State Wind Pool. NFIP flood adjusters often work for more than one adjusting firm in a given storm and thereby different WYO Companies. One of the areas of oversight for the Claims and Appeals Branch is to make certain NFIP flood adjusters do not interpret the provisions of the Standard Flood Insurance Policy addressing exclusions too broadly and the provisions addressing coverage too narrowly. Some NFIP appeals we review and respond to indicate that this is the case and we address these as part of our review.
Appendix B
Management Comments to the Draft Report

Recommendation #5: Pursue and collect overpayments for flood losses that have been identified and ensure that reinspection procedures place additional emphasis on the issue of recovery for overpayments made by the NFIP.

FEMA concurs with this recommendation. If the NFIP made an improper payment, we will vigorously pursue collection, as is always the case with other identified overpayments.
NFIP uses federal employees, contractors, and private sector organizations to process flood claims. Contractors and private sector organizations consist of insurance carriers, flood claims processing companies, catastrophe adjusting firms (CAT), and information technology management companies that support core NFIP databases and systems.

The following flowchart highlights the key activities involved in a standard NFIP flood claim adjustment process.

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**NFIP Claims Adjustment Process**

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**Hurricane Katrina: Wind Versus Flood Issues**

Page 29
A reason for using a standard process is to ensure that similar loss scenarios are assessed and adjusted similarly by different adjusters, regardless of experience, capabilities, or company affiliation. Flood adjusters are required to be certified by the NFIP, but this requirement is waived in the case of adjusters employed directly by one of the flood insurance carriers. FEMA requires that uncertified adjusters receive appropriate supervision and direction from certified or more experienced adjusters.
MEMORANDUM FOR: Write Your Own Principal Coordinators and the NFIP Servicing Agent

FROM: David L. Maurstad
Acting Administrator / Director
Mitigation Division
Federal Emergency Management Agency

SUBJECT: Hurricane Katrina - Flood Claim Handling Standards

The numbers and severity of Katrina flood losses are unprecedented in the history of the National Flood Insurance Program (NFIP). The complexities presented, both logistically and in terms of claim handling itself, have not been encountered before. To date, the WYO companies and the NFIP Servicing Agent have reported 150,000 claims. As a point of reference, the NFIP handled 74,000 flood claims nationwide in 2004. The situation requires innovative claim handling that will assist our policyholders to quickly recover from these losses, while maintaining adequate controls over NFIP funds.

FEMA, with the help of claims experts from some of our WYO companies, has sought to identify characteristics of flood claims that would lend those losses to an expedited claim handling process.

As a result, we have developed three processes, described in Attachment A, for handling claims with specific characteristics. Process #1 should be used to expedite the claims handling of structures that have or have had standing water in them for an extended period of time. In order for your company to participate in this process, you must be able to acquire a reliable square foot measurement so that an accurate value can be developed. Some companies have a homeowner policy base that largely matches the flood policy base and may develop the square foot measurement from that information.

Process #2 is to be used when it has been determined that the structure has been washed off its foundation by flood water and the square foot measurements are known. The company should use the same settlement procedures as in process #1. All other claims require a site visit and will be handled using the company’s normal claim procedures (process #3).
As part of a separate e-mail to individual companies, we will provide depth data that includes three sets of data identified by the value in the “floodarea” field. One set includes areas that are known to have flooded (identified as “in”). The second set includes areas that may have flooded (identified as “near0”). The third set includes areas that did not flood to the best of our knowledge (identified as “out”). If a company receives a claim for a risk located in an area identified as “out” in the third set, it cannot use process # 1 or # 2.

Attached to this memorandum are three documents:

Attachment A: Description of Katrina Expedited Claim Handling Processes;
Attachment B: File Documentation Requirements; and
Attachment C: Example of a Valuation Worksheet

The NFIP’s general adjusters will be involved in closely monitoring the performance and procedures of the WY0 carriers utilizing this process. Their activities will include site visits to field operations and the homes and businesses of insureds.

The existing NFIP fee schedule will be modified for the claims handled by processes # 1 and # 2. The fee will be $750.00 for each claim + $400.00 if a site visit is necessary at a later date. Process # 3 will be paid based upon the existing NFIP fee schedule. FEMA will not seek reimbursement from the company when a subsequent review identifies overpayments resulting from the company’s proper use of the FEMA depth data and a reasonable method of developing square foot value in concluding claims.

If your company has a method of acquiring reliable square foot measurements and wants to participate in these processes of handling Katrina claims, please reply to Jim Shortley or Tim Johnson at: James.Shortley@dhs.gov or Timothy.Johnson@dhs.gov. If your company chooses not to participate in process # 1 or # 2, it should still use process # 3 for those circumstances.

Attachments (3)

cc: Vendors, IBHS, FIPNC, WY0 Marketing Committee, Government Technical Representative

Suggested Routing: Claims, Marketing, Underwriting
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### Building Attributes

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Appendix F
Reinspection Process

As part of our evaluation of the NFIP claims adjustment process, we reviewed a sample of reinspections performed on Hurricane Katrina-related flood claims in Mississippi. The primary purpose of this review was to determine if any of the reinspections identified situations where wind damages were attributed to flooding.

NFIP uses a claims adjustment reinspection process ("reinspection") to review a judgmentally selected sample of claims adjustments after each flood event. The purpose of this reinspection is to determine whether the adjustment process conformed to NFIP standards and guidelines. It is also used to identify cases of over- or underpayments of damage settlements or fees. The review is conducted by experienced claims adjusters (General Adjusters) employed by NFIP’s Bureau and Statistical Agent.

Reinspections are selected in two ways. First, NFIP conducts routine reinspections of a judgmentally selected sample of claims adjustments on an ongoing basis. Special request reinspections are also conducted in the event of an appeal or formal complaint of an adjustment, or in any case when more information is needed regarding a specific adjustment.

According to the reinspection database maintained by the NFIP’s Bureau and Statistical Agent, 599 reinspections were performed on Hurricane Katrina-related flood claim adjustments in Mississippi. Reinspection documentation includes a reinspection report, a detailed itemization of the results of the reinspection against a standard NFIP reinspection checklist, and comments from the General Adjuster who performed the reinspection.
MEMORANDUM FOR: Richard Skinner
Inspector General
Department of Homeland Security

FROM: R. David Paulison
Administrator


I am providing you the FEMA response to the Interim Inspector General Report, Hurricane Katrina: A Review of Wind versus Flood Issues. In the report, you made three recommendations regarding the National Flood Insurance Program (NFIP). I have addressed your recommendations in the following paragraphs:

Recommendation #1: Require Write Your Own Insurance Companies to document and make available to the NFIP the rationale and methodology for calculating flood and wind damage when there is evidence that both perils contributed to the damage, and revise the NFIP Claims Adjuster Manual to reflect these new requirements.

Response: In the NFIP, the adjusters do not need the wind file to determine the amount of flood damage caused to a building. The NFIP does not adjust wind and flood claims by determining the percentage of wind versus water. The adjusters provide a detailed cost estimate of flood damage to the insured building. Documentation of wind damage is not needed and therefore should not be required in the settlement of a flood claim.

Recommendation #2: Expand the reinspection process to include a review of and determination that flood and wind damage on the same structure was settled in a fair and equitable manner to ensure that wind damage was not paid under the flood policy.

Response: The NFIP has no jurisdiction over the WYO Companies’ other lines of business and has no authority to demand copies of their wind claim files. As previously stated, the NFIP does not need a wind file in order to determine a flood claim was paid properly.

U.S. Department of Homeland Security
500 C Street, SW
Washington, DC 20572

www.fema.gov

Hurricane Katrina: Wind Versus Flood Issues
Page 35
Richard Skinner  
DECEMBER 2007  
Page 2

Recommendation #3: Provide clear and concise guidance for adjusting total loss claims after catastrophic events when structures are completely destroyed by wind and water.

Response: I will provide adjusters guidance in the form of wind or water investigative tips as a tool to help determine whether the damage was caused by wind or water or a combination of both. A bulletin will be sent to the WYO Companies within 90 days and this guidance will be added to the NFIP Adjuster Claims Manual which is currently under review for revision.

Thank you for giving FEMA the opportunity to respond to this interim report. If you have any questions, please have a member of your staff contact Brad Shefka, FEMA GAO/OIG Liaison by telephone at 202-646-1308.

cc: David I. Maurstad, Assistant Administrator, Mitigation Directorate

Hurricane Katrina: Wind Versus Flood Issues  
Page 36
Memorandum for: David I. Maurstad
Assistant Administrator
Mitigation Directorate
Federal Emergency Management Agency

From: Matt Jadacki
Deputy Inspector General
Office of Emergency Management Oversight


In Administrator Paulison’s response to the subject interim report, he indicates that he does not concur with recommendations 1 and 2, but does concur with, and provided a corrective action plan for, recommendation 3.

Recommendation 1 is to require Write Your Own (WYO) insurance companies to document and make available to the National Flood Insurance Program (NFIP) the rationale and methodology for calculating flood and wind damage when there is evidence that both perils contributed to the damage, and revise the NFIP Claims Adjuster Manual to reflect these new requirements.

FEMA’s Response:

You state that adjusters do not need the documentation of wind damage to determine the amount of flood damage caused to a building. The NFIP does not adjust wind and flood claims by determining the percentage of wind versus water. The adjusters provide a detailed cost estimate of flood damage to the insured building. Documentation of wind damage is not needed and therefore should not be required in the settlement of a flood claim.

OIG Analysis:

We disagree with FEMA’s position on this recommendation. The NFIP should have access to records of wind damage to make fair adjustments to claims filed for flood damage when wind and flood occur concurrently. Without this data, the potential for duplicate payments exists and FEMA needs to address this issue. Our review has demonstrated duplication of insurance adjustments between flood and wind. This is an issue that should be of concern to WYOs that issue both homeowner and flood policies. Wind damage should be considered when settling a flood claim as a prudent business practice; especially given the trillion dollar exposure to liabilities that FEMA faces.
Recommendation 2 is to expand the reinspection process to include a review of and determination that flood and wind damage on the same structure was settled in a fair and equitable manner to ensure that wind damage was not paid under the flood policy.

FEMA’s Response:

You state that NFIP has no jurisdiction over the WYO companies’ other lines of business and has no authority to demand copies of their wind claim files. You again indicated the NFIP does not need a wind file in order to determine a flood claim was paid properly.

OIG Analysis:

We disagree with FEMA’s position on this recommendation. Again, we reiterate the NFIP should have access to wind damage to make fair adjustments to claims filed for flood damage when wind and water damage occur concurrently. If FEMA lacks the necessary authority to obtain the information, it should seek such authority to obtain wind documentation when both perils occur during a disaster.

Recommendation 3 is to provide clear and concise guidance for adjusting total loss claims after catastrophic events when structures are completely destroyed by wind and water.

FEMA’s Response:

You concur with this recommendation and state you will provide adjusters guidance in the form of wind or water investigative tips as a tool to help determine whether the damage was caused by wind, water, or a combination. A bulletin is to be sent to the WYO companies within 90 days and the guidance will be added to the NFIP Adjusters Claims Manual, which is currently being revised.

OIG Analysis:

We agree with FEMA’s position on this recommendation and proposed actions to be taken, and consider this recommendation to be resolved. Please provide us a copy of the bulletin when issued, and a copy of the guidance added to the NFIP Adjusters Claims Manual. Upon receipt of this documentation, we will consider this recommendation closed.

We will be issuing our draft final report in the next several weeks. Based on our analysis as addressed above, we will include these recommendations along with others. You will be asked to respond to the recommendations within 30 days in order for us to include your response in our final report.

Should you have any questions, please call me, or have your staff contact Mark McLachlan, Assistant Deputy Inspector General for Emergency Management Oversight, at (202) 254-4100.

cc: DHS Audit Liaison  
    FEMA Audit Liaison
The graphs shown on the following pages are the products of a computer simulation by WorldWinds, Inc., using data gathered from FEMA, NOAA’s National Weather Service, U.S. Geological Service, National Aeronautics and Space Administration, U.S. Army Corps of Engineers, as well as other sources.

These graphs demonstrate that winds reached speeds between 90 and 110 mph prior to maximum water surge in Hancock, Harrison, and Jackson counties in Mississippi. The high winds preceding the flooding indicate that there probably was damage to structures from both wind and flooding. The Saffir-Simpson Hurricane Scale estimates potential property damage and flooding expected along the coast from hurricane landfall. Wind speed is the determining factor in the scale. Below are summaries of the estimated damages to property based on the following hurricane categories:

- **Category One Hurricane**: Winds of 74-95 mph. Storm surge is generally 4-5 feet above normal. No damage to building structures. Damage primarily to shrubbery, trees, and unanchored mobile homes.

- **Category Two Hurricane**: Winds 96-110 mph. Storm surge is generally 6-8 feet above normal. There is some roofing material, door, and window damage to buildings. Considerable damage to shrubbery and trees with some trees blown down. Considerable damage to mobile homes, poorly constructed signs, and piers.

- **Category Three Hurricane**: Winds of 111-130 mph. Storm surge is generally 9-12 feet above normal. Some structural damage to small residences and utility buildings. Damage to shrubbery and trees with foliage blown off and large trees blown down. Mobile homes and poorly constructed signs are destroyed.

- **Category Four Hurricane**: Winds of 131-155 mph. Storm surge is generally 13-18 feet above normal. Some complete roof structure failures on small residences. Shrubs, trees, and all signs are blown down. Complete destruction of mobile homes. Extensive damage to doors and windows.

- **Category Five Hurricane**: Winds greater than 155 mph. Storm surge is generally greater than 18 feet above normal. Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away. All shrubs, trees, and signs blown down. Complete destruction of mobile homes. Severe and extensive window and door damage.
Bay Saint Louis, MS
Coordinates: 30.32, 89.27

Note: Wind over 100 mph before water reaches 10 ft.
Wind speeds remain above hurricane force for 4 hours before water peaks.

Source: WorldWinds, Inc.
**Biloxi, MS**
**Coordinates 30.41, 88.9**

**Note:** Wind speeds sustained above hurricane force for 4 hours before water peaks.

Source: WorldWinds, Inc.
Slidell, LA
Coordinates 89.485, 30.15

*Note: Wind speeds remain above 100 mph for more than 4 hours.

Source: WorldWinds, Inc.
Appendix I
Building Performance Relating to Storm Surge

The Mississippi State University, College of Engineering conducted a survey\textsuperscript{5} of damage to properties and infrastructure along U.S. Highway 90 corridor on the Gulf Coast.

The report states that "There are a variety of extreme loads imposed on structures by a hurricane. In initial stages of the hurricane, wind and wave action raise the water surface substantially, resulting in a storm surge… Wind driven waves associated with the raised water level during the storm surge impact structures and cause significant structural damage. This wave action is perhaps the most severe structural load during the storm, and is believed to be the cause of most of the damage surveyed in this report. The high winds accompanying the hurricane primarily damage roofs and exterior structural components, but pose much less of a threat to structures than the storm surge and wave action, which are severe enough in many cases to destroy entire structural systems. Additional associated loads include impact from water-borne and air-borne debris. Foundation erosion may also pose significant risks to structural stability."

In the specific case of Hurricane Katrina, the report concludes, "…the first row of structures and trees along the coastline absorbed much of the storm surge energy… Residences further back from the coastline sustained less serious, if little apparent structural damage."

Effects on Various Types of Structures

The report further states that "Reinforced concrete and steel commercial structural frames in general performed well, suffering little visible damage, even on the coastline. However, building facades and infill walls did not perform well for buildings of any type. In general, commercial structural frames survived but building envelopes and interior walls were typically missing for the first few floors. This indicates surging water was the primary cause of failure for coastline buildings rather than wind (wind speed is typically greater at higher floor levels)."

It further indicates, "Light-frame wood structures on the coastline were almost entirely destroyed. For structures that did not collapse, common damage was:

1) Roof failures (Figs 4.33, 4.34) - Generally occurred away from the coastline, where the water surge was not great enough to topple the structure. These types of failures are due to wind damage
2) Siding failures (Fig 4.35) - Siding stripped from the structure is primarily a sign of wind damage, though more extensive damage to sheathing may indicate high water loads.

\textsuperscript{5} Technical Report, Mississippi State University, College of Engineering, March 2006
(3) **Side-sway failures** (Fig 4.36) - These were much less common than the types above, and represent a loss of lateral stability. This could either be induced by a wind or water pressure overload.

Heavy timber construction appeared to fare as well as steel and reinforced concrete... Timber structural systems that survived include post-and-beam pier systems to support a light-frame structure above, docks (Fig. 4.39), and commercial-grade glued-laminated frames (Fig. 4.40)."

![Figure 4.33 Roof Failure on House](image-url)
Figure 4.34 Roof Structural Failure on Wood Building

Figure 4.35 Siding Damage on Wood Building
Figure 4.36 Side-Sway Failure in Wood House

Figure 4.39 Survived Wood Dock
Figure 4.40 Survived Wood Glued-Laminated Structural Frame
Appendix J
Major Contributors to This Report

Gina Smith, Director
Cliff Melby, Senior Program Analyst
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Deputy Secretary
Chief of Staff
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Congressional Oversight and Appropriations Committee, as appropriate
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