

**FLORIDA COMMISSION ON HURRICANE  
LOSS PROJECTION METHODOLOGY**

Post Office Box 13300  
32317-3300  
1801 Hermitage Boulevard, Suite 100  
Tallahassee, Florida 32308  
(850) 413-1349  
[www.sbafla.com/methodology](http://www.sbafla.com/methodology)

Anne Bert  
Chief Operating Officer,  
Florida Hurricane Catastrophe Fund

Floyd Yager, FCAS, Chair  
Actuary,  
Florida Hurricane Catastrophe Fund Advisory Council

Jainendra Navlakha, Ph.D.  
Computer Systems Design Expert,  
Florida International University

Barry Gilway  
President/CEO & Executive Director,  
Citizens Property Insurance Corporation

Steve Paris, Ph.D., ASA  
Statistics Expert,  
Florida State University

Robert Lee, FCAS  
Actuary,  
Florida Office of Insurance Regulation

Hugh Willoughby, Ph.D.  
Meteorology Expert,  
Florida International University

Jeffrey McCarty, FCAS  
Actuary,  
Property and Casualty Industry

Vacant  
Insurance Consumer Advocate,  
Florida Department of Financial Services

Jared Moskowitz, J.D.  
Director,  
Florida Division of Emergency Management

Vacant  
Professional Structural Engineer

Vacant  
Insurance Finance Expert

June 13, 2019

Mrs. Kay Cleary  
Risk Management Solutions, Inc.  
7575 Gateway Boulevard  
Newark, California 94560

Dear Mrs. Cleary:

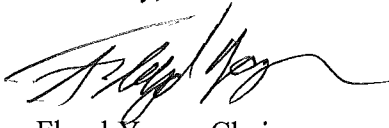
This will confirm the finding of the Florida Commission on Hurricane Loss Projection Methodology on June 13, 2019, that the Risk Management Solutions, Inc. model has been determined acceptable for projecting hurricane loss costs and hurricane probable maximum loss levels for residential rate filings. The determination of acceptability expires on November 1, 2021.

The Commission has determined that the North Atlantic Hurricane Models 18.1 (Build 1945) on the RiskLink<sup>®</sup> 18.1 (Build 1945) platform limited to the options selected in the input form provided in Standard A-1, Hurricane Modeling Input Data and Output Reports, Disclosure 4 complies with the standards adopted by the Commission on October 25, 2017, and concludes that the North Atlantic Hurricane Models 18.1 (Build 1945) on the RiskLink<sup>®</sup> 18.1 (Build 1945) platform limited to the Florida hurricane model options selected (Standard A-1, Hurricane Modeling Input Data and Output Reports, Disclosure 4) is sufficiently accurate and reliable for projecting hurricane loss costs and hurricane probable maximum loss levels for residential property in Florida.

Mrs. Kay Cleary  
Risk Management Solutions, Inc.  
June 13, 2019  
Page Two

On behalf of the Commission, I congratulate you and your colleagues. We appreciate your participation and input in this process.

Sincerely,

A handwritten signature in black ink, appearing to read "Floyd Yager", with a long horizontal flourish extending to the right.

Floyd Yager, Chair  
Florida Commission on Hurricane Loss Projection Methodology

**FLORIDA COMMISSION ON HURRICANE  
LOSS PROJECTION METHODOLOGY**

Post Office Box 13300  
32317-3300  
1801 Hermitage Boulevard, Suite 100  
Tallahassee, Florida 32308  
(850) 413-1349  
[www.sbafla.com/methodology](http://www.sbafla.com/methodology)

Anne Bert  
Chief Operating Officer,  
Florida Hurricane Catastrophe Fund

Floyd Yager, FCAS, Chair  
Actuary,  
Florida Hurricane Catastrophe Fund Advisory Council

Jainendra Navlakha, Ph.D.  
Computer Systems Design Expert,  
Florida International University

Barry Gilway  
President/CEO & Executive Director,  
Citizens Property Insurance Corporation

Steve Paris, Ph.D., ASA  
Statistics Expert,  
Florida State University

Robert Lee, FCAS  
Actuary,  
Florida Office of Insurance Regulation

Hugh Willoughby, Ph.D.  
Meteorology Expert,  
Florida International University

Jeffrey McCarty, FCAS  
Actuary,  
Property and Casualty Industry

Vacant  
Insurance Consumer Advocate,  
Florida Department of Financial Services

Jared Moskowitz, J.D.  
Director,  
Florida Division of Emergency Management

Vacant  
Professional Structural Engineer

Vacant  
Insurance Finance Expert

June 13, 2019

Mrs. Kay Cleary  
Risk Management Solutions, Inc.  
7575 Gateway Boulevard  
Newark, California 94560


Dear Mrs. Cleary:

In accordance with the procedures for *Review and Acceptance Criteria for Functionally Equivalent Model Platforms* in the 2017 Hurricane Standards Report of Activities, the Florida Commission on Hurricane Loss Projection Methodology has determined that the North Atlantic Hurricane Models 18.1 (Build 1945) in Risk Modeler™ 2.1 on the RMS Risk Intelligence™ platform is functionally equivalent to the North Atlantic Hurricane Models 18.1 (Build 1945) on the RiskLink® 18.1 (Build 1945) platform and is acceptable for projecting hurricane loss costs and hurricane probable maximum loss levels for residential rate filings in Florida.

This determination of acceptability under the 2017 Hurricane Standards expires on November 1, 2021.

On behalf of the Commission, I congratulate you and your colleagues. We appreciate your participation and input in this process.

Sincerely,



Floyd Yager, Chair

# FLORIDA COMMISSION ON HURRICANE LOSS PROJECTION METHODOLOGY

Post Office Box 13300  
32317-3300  
1801 Hermitage Boulevard, Suite 100  
Tallahassee, Florida 32308  
(850) 413-1349  
*sbafla.com/methodology*

Timothy Barnett, FCAS, CPCU, ARe  
Actuary,  
Property and Casualty Industry

Floyd Yager, FCAS, Chair  
Actuary,  
Florida Hurricane Catastrophe Fund Advisory Council

Robert Lee, FCAS  
Actuary,  
Florida Office of Insurance Regulation

Anne Bert  
Chief Operating Officer,  
Florida Hurricane Catastrophe Fund

Steve Paris, Ph.D., ASA, Vice Chair  
Statistics Expert,  
Florida State University

Jared Moskowitz, J.D.  
Director,  
FL Division of Emergency Management

Patricia Born, Ph.D.  
Insurance Finance Expert,  
Florida State University

Jainendra Navlakha, Ph.D.  
Computer Systems Design Expert,  
Florida International University

Tasha Carter  
Insurance Consumer Advocate,  
Florida Department of Financial Services

Hugh Willoughby, Ph.D.  
Meteorology Expert,  
Florida International University

Barry Gilway  
President/CEO & Executive Director,  
Citizens Property Insurance Corporation

Vacant  
Licensed Professional Structural Engineer

September 10, 2020

Mr. Matthew Nielsen  
Risk Management Solutions, Inc.  
7575 Gateway Boulevard  
Newark, California 94560

Dear Mr. Nielsen:

On July 23, 2020, Risk Management Solutions, Inc. (RMS) notified the Florida Commission on Hurricane Loss Projection Methodology (Commission) of a Type 1 error in the currently-accepted model, North Atlantic Hurricane Models 18.1 (Build 1945) on the RiskLink® 18.1 (Build 1945) platform.

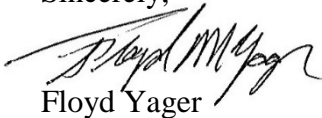
In accordance with the procedures for the discovery of Type 1 differences in a model after a model has been determined to be acceptable by the Commission, as Chair, I reviewed and assessed, with input from a subset of the Professional Team, the documentation and regression test results submitted, and on August 3, 2020, requested additional information on the updates and revisions in North Atlantic Hurricane Models 18.1.1 (Build 1945).

On August 31, 2020, RMS provided the additional information requested. I have reviewed and assessed the additional information, with input from the Professional Team subset, and have determined the model updates in North Atlantic Hurricane Models 18.1.1 (Build 1945) does not produce significant differences in hurricane loss costs and hurricane probable maximum loss levels.

Mr. Matthew Nielsen  
Risk Management Solutions, Inc.  
September 10, 2020  
Page Two

This will confirm that the North Atlantic Hurricane Models 18.1.1 (Build 1945) on the RiskLink® 18.1 (Build 1945) platform is acceptable for projecting hurricane loss costs and hurricane probable maximum loss levels for residential property in Florida. The determination of acceptability expires on November 1, 2021.

Sincerely,

A handwritten signature in black ink, appearing to read "Floyd Yager", written over a horizontal line.

Floyd Yager

Chair

Florida Commission on Hurricane Loss Projection Methodology

# FLORIDA COMMISSION ON HURRICANE LOSS PROJECTION METHODOLOGY

Post Office Box 13300  
Tallahassee, Florida 32317-3300  
1801 Hermitage Boulevard, Suite 100  
Tallahassee, Florida 32308  
(850) 413-1349  
[www.sbafla.com/methodology](http://www.sbafla.com/methodology)

Timothy Barnett, FCAS, CPCU, ARe  
Actuary,  
Property and Casualty Industry

Floyd Yager, FCAS, Chair  
Actuary,  
Florida Hurricane Catastrophe Fund Advisory Council

Jainendra Navlakha, Ph.D.  
Computer Systems Design Expert,  
Florida International University

Patricia Born, Ph.D.  
Insurance Finance Expert,  
Florida State University

Steve Paris, Ph.D., ASA, Vice Chair  
Statistics Expert,  
Florida State University

Kayne Smith, Ph.D., FCAS  
Actuary,  
Florida Office of Insurance Regulation

Tasha Carter  
Insurance Consumer Advocate,  
Florida Department of Financial Services

Hugh Willoughby, Ph.D.  
Meteorology Expert,  
Florida International University

Barry Gilway  
President/CEO & Executive Director,  
Citizens Property Insurance Corporation

Gina Wilson, ARe, CPA, CPM, CPCU  
Chief Operating Officer,  
Florida Hurricane Catastrophe Fund

Kevin Guthrie  
Director,  
Florida Division of Emergency Management

Vacant  
Licensed Professional Structural Engineer

June 22, 2021

Mr. Matthew Nielsen  
Risk Management Solutions, Inc.  
7575 Gateway Boulevard  
Newark, California 94560

Dear Mr. Nielsen,

On December 21, 2020, Risk Management Solutions, Inc. (RMS) requested the Florida Commission on Hurricane Loss Projection Methodology (Commission) consider the North Atlantic Hurricane Models 18.1.1 (Build 1945) on the RiskModeler platform functionally equivalent to the North Atlantic Hurricane Models 18.1.1 (Build 1945) on the RiskLink 18.1 (Build 1945) platform.

In accordance with the procedures for Interim Model Updates after a Model has been Determined to be Acceptable by the Commission and for Review and Acceptance Criteria for Functionally Equivalent Model Platforms, as Chair, I have reviewed and assessed, with input from a subset of the Professional Team, the documentation and regression test results submitted, and on January 20, 2021, requested additional information.

On February 16, 2021, RMS provided the additional information requested. On March 20, 2021, follow-up clarification questions were sent, and on May 27, 2021, RMS provided a response. I have reviewed and assessed the additional information, with input from a subset of the Professional Team, and have confirmed that the North Atlantic Hurricane Models 18.1.1 (Build 1945) on the RiskModeler platform does not produce significant differences in hurricane loss costs and hurricane probable maximum loss levels from the currently-accepted North Atlantic Hurricane Models 18.1.1 (Build 1945) on the RiskLink 18.1 (Build 1945) platform.

Mr. Matthew Nielsen  
Risk Management Solutions, Inc.  
June 22, 2021  
Page Two

This letter confirms that the North Atlantic Hurricane Models 18.1.1 (Build 1945) on the RiskModeler platform is functionally equivalent to the currently-accepted North Atlantic Hurricane Models 18.1.1 (Build 1945) on the RiskLink 18.1 (Build 1945) platform and is acceptable for projecting hurricane loss costs and hurricane probable maximum loss levels for residential rate filings in Florida. The determination of acceptability expires on November 1, 2021.

Sincerely,

A handwritten signature in black ink, appearing to read "Floyd Yager", written in a cursive style.

Floyd Yager  
Chair  
Florida Commission on Hurricane Loss Projection Methodology

# FLORIDA COMMISSION ON HURRICANE LOSS PROJECTION METHODOLOGY

Post Office Box 13300  
Tallahassee, Florida 32317-3300  
1801 Hermitage Boulevard, Suite 100  
Tallahassee, Florida 32308  
(850) 413-1349  
[www.sbafla.com/methodology](http://www.sbafla.com/methodology)

Timothy Barnett, FCAS, CPCU, ARe  
Actuary,  
Property and Casualty Industry

Floyd Yager, FCAS, Chair  
Actuary,  
Florida Hurricane Catastrophe Fund Advisory Council

Jainendra Navlakha, Ph.D.  
Computer Systems Design Expert,  
Florida International University

Patricia Born, Ph.D.  
Insurance Finance Expert,  
Florida State University

Steve Paris, Ph.D., ASA, Vice Chair  
Statistics Expert,  
Florida State University

Kayne Smith, Ph.D., FCAS  
Actuary,  
Florida Office of Insurance Regulation

Tasha Carter  
Insurance Consumer Advocate,  
Florida Department of Financial Services

Hugh Willoughby, Ph.D.  
Meteorology Expert,  
Florida International University

Barry Gilway  
President/CEO & Executive Director,  
Citizens Property Insurance Corporation

Gina Wilson, ARe, CPA, CPM, CPCU  
Chief Operating Officer,  
Florida Hurricane Catastrophe Fund

Kevin Guthrie  
Director,  
Florida Division of Emergency Management

Vacant  
Licensed Professional Structural Engineer

June 22, 2021

Mr. Matthew Nielsen  
Risk Management Solutions, Inc.  
7575 Gateway Boulevard  
Newark, California 94560

Dear Mr. Nielsen,

On December 21, 2020, Risk Management Solutions (RMS) notified the Florida Commission on Hurricane Loss Projection Methodology (Commission) of a Type 1 error in the currently-accepted model, North Atlantic Hurricane Models 18.1 (Build 1945) on the RiskLink 18.1 (Build 1945) platform.

In accordance with the procedures for the discovery of Type 1 differences in a model after a model has been determined to be acceptable by the Commission, as Chair, I have reviewed and assessed, with input from a subset of the Professional Team, the documentation and regression test results submitted for North Atlantic Hurricane Models 18.1.2 (Build 1945), and on January 20, 2021, requested additional information on the software issue in the RiskLink 18.1 (Build 1945) platform.

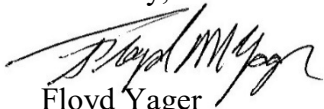
On February 16, 2021, RMS provided the additional information requested. On March 20, 2021, follow-up clarification questions were sent, and on May 27, 2021, RMS provided a response. I have reviewed and assessed the additional information, with input from a subset of the Professional Team, and have determined that the software revision in North Atlantic Hurricane Models 18.1.2 (Build 1945) does not produce significant differences in hurricane loss costs and hurricane probable maximum loss levels.



Mr. Matthew Nielsen  
Risk Management Solutions, Inc.  
June 22, 2021  
Page Two

This letter confirms that the North Atlantic Hurricane Models 18.1.2 (Build 1945) is functionally equivalent to the currently-accepted North Atlantic Hurricane Models 18.1 (Build 1945) and is acceptable for projecting hurricane loss costs and hurricane probable maximum loss levels for residential rate filings in Florida. The determination of acceptability expires on November 1, 2021.

Sincerely,

A handwritten signature in black ink, appearing to read "Floyd Yager", written over a horizontal line.

Floyd Yager  
Chair

Florida Commission on Hurricane Loss Projection Methodology

# FLORIDA COMMISSION ON HURRICANE LOSS PROJECTION METHODOLOGY

Post Office Box 13300  
Tallahassee, Florida 32317-3300  
1801 Hermitage Boulevard, Suite 100  
Tallahassee, Florida 32308  
(850) 413-1349  
[www.sbafla.com/methodology](http://www.sbafla.com/methodology)

Timothy Barnett, FCAS, CPCU, ARE  
Actuary,  
Property and Casualty Industry

Floyd Yager, FCAS, Chair  
Actuary,  
Florida Hurricane Catastrophe Fund Advisory Council

Jainendra Navlakha, Ph.D.  
Computer Systems Design Expert,  
Florida International University

Patricia Born, Ph.D.  
Insurance Finance Expert,  
Florida State University

Steve Paris, Ph.D., ASA, Vice Chair  
Statistics Expert,  
Florida State University

Kayne Smith, Ph.D., FCAS  
Actuary,  
Florida Office of Insurance Regulation

Tasha Carter  
Insurance Consumer Advocate,  
Florida Department of Financial Services

Hugh Willoughby, Ph.D.  
Meteorology Expert,  
Florida International University

Barry Gilway  
President/CEO & Executive Director,  
Citizens Property Insurance Corporation

Gina Wilson, ARE, CPA, CPM, CPCU  
Chief Operating Officer,  
Florida Hurricane Catastrophe Fund

Kevin Guthrie  
Director,  
Florida Division of Emergency Management

Vacant  
Licensed Professional Structural Engineer

June 22, 2021

Mr. Matthew Nielsen  
Risk Management Solutions, Inc.  
7575 Gateway Boulevard  
Newark, California 94560

Dear Mr. Nielsen,

On December 21, 2020, Risk Management Solutions, Inc. (RMS) requested the Florida Commission on Hurricane Loss Projection Methodology (Commission) consider the software update in North Atlantic Hurricane Models 18.2 (Build 1960) acceptable under the 2017 Hurricane Standards.

In accordance with the procedures for Interim Model Updates after a Model has been Determined to be Acceptable by the Commission, as Chair, I have reviewed and assessed, with input from a subset of the Professional Team, the documentation and regression test results submitted, and on January 20, 2021, requested additional information on the software update.

On February 16, 2021, RMS provided the additional information requested. On March 20, 2021, follow-up clarification questions were sent, and on May 27, 2021, RMS provided a response. I have reviewed and assessed the additional information, with input from a subset of the Professional Team, and have confirmed that the software update in North Atlantic Hurricane Models 18.2 (Build 1960) does not produce significant differences in hurricane loss costs and hurricane probable maximum loss levels from the currently-accepted North Atlantic Hurricane Models 18.1 (Build 1945).

Mr. Matthew Nielsen  
Risk Management Solutions, Inc.  
June 22, 2021  
Page Two

This letter confirms that the North Atlantic Hurricane Models 18.2 (Build 1960) is functionally equivalent to the currently-accepted North Atlantic Hurricane Models 18.1 (Build 1945) and is acceptable for projecting hurricane loss costs and hurricane probable maximum loss levels for residential rate filings in Florida. The determination of acceptability expires on November 1, 2021.

Sincerely,

A handwritten signature in black ink, appearing to read "Floyd M. Yager", written in a cursive style.

Floyd Yager  
Chair  
Florida Commission on Hurricane Loss Projection Methodology