U.S. Inland Flood Model – Single-Site Analysis

Enabling confidence in underwriting and managing flood risk

Highly Granular Risk Modeling
As the #1 natural disaster in the United States\(^1\) with an average annual economic loss exceeding $50 Billion\(^2\), flooding represents a significant under-insured risk in the United States. As the insurance industry explores diversifying and growing business with flood products, they are seeking highly granular models to address the management of a peril where the amount of damage is influenced by water flood depths measured in inches. Insurers relying on a probabilistic flood model for individual risk underwriting and pricing demand detailed location analytics and comprehensive hazard modeling that combine the range of loss potential with peril modeling consistency across the regional U.S. Leveraging more than 80 distinct geographic data sets, 300,000 simulations of seasonal flooding, and 10-meter resolution elevation data, the U.S. Inland Flood Model from CoreLogic\(^3\) provides a granular, up-to-date, detailed risk model. Allied with parcel-level geocoding from CoreLogic PxPoint\(^4\) the release of the single-site probabilistic model empowers the industry to appropriately and rationally estimate underwriting risk to obtain better underwriting outcomes.

Comprehensive Flood Modeling Methodology
Damaging floods are very disruptive and come in many different forms. The U.S. Inland Flood Model includes sources of flooding from riverine, stream, off-plain, and flash flooding. It delivers a comprehensive analytic view of the risk, utilizing widespread coverage of hydrologic and hydraulic data that reflects regional flooding and drainage patterns. Completing the suite of CoreLogic probabilistic flood models, 10-meter resolution coastal storm surge modeling is available as part of the North Atlantic Hurricane Model.

The U.S. Inland Flood Model from CoreLogic includes multiple risk attributes to improve the understanding of modeled outputs including, ground elevation, distance to flood zone, the hydrologic unit code and probabilistic water depths. The results allow transparency in modeling that translates to confidence in managing risk and meeting regulatory requirements.

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The Right Solution for Better Damage Assessment

Flood policy underwriting and management requires the incorporation of high resolution building and hazard information in analytic output. All CoreLogic building vulnerability models are building component based. Components such as first-floor elevation are used to calculate structural and contents damage, in addition to time element damage such as business interruption and additional living expenses. Separate and independent vulnerability functions are used for calculating losses for each building component and coverage type.

With over twenty years of experience in identifying flood risk for the mortgage and insurance industry, CoreLogic has the right solution for better coverage.

Why Consider CoreLogic?

Increasing exposure to catastrophic events are challenging the P&C insurance industry to revisit existing catastrophic risk management and loss adjustment strategies by improving the overall understanding of all natural hazards. CoreLogic is dedicated to the science of understanding natural hazard risk. The delivery of a new probabilistic risk model affirms the commitment to delivering decision support data and products to the insurance industry.

With over twenty years of experience in identifying flood risk for the mortgage and insurance industry, CoreLogic has the right solution for better coverage. With a staff of Ph.D.-level scientists and engineers, we have taken risk assessment a step further by developing a proprietary methodology that enables a more granular level of risk management control and reporting.

CoreLogic Advanced Flood Risk Solutions

The U.S Inland Flood Model is just one important part of the advanced flood risk solutions from CoreLogic. As flood risk evolves due to urbanization and change in baseline stream and sea levels—the flood risk methodology from CoreLogic is designed to stay abreast of the latest flood risk data and research, ensuring continuity of risk insights into the future. Catastrophe Risk Management from CoreLogic offers a comprehensive look at risk by evaluating probable events, and verifying current and post event impacts. These solutions include scoring, data visualization and other tools that collectively address the management of flood risk throughout the entire insurance process, from underwriting and portfolio management to risk transfer and re-insurance.

As a leading provider of risk assessment solutions to the insurance, financial and real estate industries, CoreLogic has a long history of managing flood, providing a comprehensive set of GIS, natural peril and property data solutions that can work for you.

Seamless Ordering and Delivery

Available as part of a suite of catastrophic risk management products, The U.S. Inland Flood Model from CoreLogic provides an unparalleled understanding of hydraulic science and catastrophe modeling that provides a clear assessment of loss for flood risk.

RQE® – Available for install at your place of business. Our global multi-peril catastrophe modeling platform, RQE, brings the data and information you need in your controlled secure environment.

Seamless Integration – The U.S Inland Flood Model is designed to make your workflow easier. Our intuitive interface is easy to use and the underlying functionality can be personally customized with a seamless integration into your existing system to best support and improve your business workflow.

About CoreLogic Insurance Solutions

CoreLogic delivers unique and comprehensive data, analytics and services to property & casualty insurance companies—powerful information found at the core of smart decisions. We offer more than 180 Catastrophe risk models worldwide and more than 30 natural hazard and weather peril verification reports.