

COLORADO UNDER WATER: A PRIMER ON THE NATIONAL FLOOD INSURANCE PROGRAM

Abstract

Each year, media reports highlight certain catastrophic events that capture the attention of the entire country. Focus was placed on Colorado recently – but not because of its hailstorms or wildfires that typically occur; instead, the nation watched in disbelief as prolonged, heavy rainfalls caused massive flooding that destroyed homes and infrastructure and interrupted small business operations. Although standard property insurance policies provide recovery for various damages caused by many types of perils, flooding is an excluded peril. Because of the challenges of insuring flood losses in the private market, the National Flood Insurance Program (NFIP) was established in 1968 to help individuals and businesses recover from direct physical flood damage.

Colorado Under Siege by Flooding

During the week of Sept. 9, 2013, Colorado experienced an all-time record or near-record precipitation across the Front Range. Over the seven-day period, torrential downpours caused unprecedented flooding across 2,000 square miles affecting communities around the foothills of the Rocky Mountains. According to the National Weather Service (NWS), these floods of “biblical” proportions (having a 0.1 percent chance of occurring in any given year) were triggered by widespread torrential rains of 4”-6” that fell in less than 12 hours.

The Federal Emergency Management Agency (FEMA) estimates that more than 26,000 households in Colorado were directly impacted by the floods; 18,000 people were forced to leave their homes,¹ about 1,880 homes were demolished and thousands more were damaged. The deluge also devastated 968 businesses, shutting down many for days, and damaged much of the state’s infrastructure (over 200 miles of highways and roads and railroad tracks, dams and bridges).² Gov. Hickenlooper has signed an Executive Order to declare a disaster emergency for 24 counties – the two hardest hit being Boulder and Larimer Counties.³ The statewide property damage is estimated to be about \$2 billion.⁴ Regrettably,

¹ Colorado Department of Local Affairs, Oct. 9, 2013.

² Colorado Office of Emergency Management and Egecat (a disaster and risk-modeling firm).

³ Colorado Department of Local Affairs, Oct. 9, 2013; the 24 counties are: Adams, Arapahoe, Boulder, Broomfield, Chaffee, Clear Creek, Crowley, Denver, El Paso, Fremont, Gilpin, Jefferson, Lake, Larimer, Lincoln, Logan, Morgan, Otero, Park, Prowers, Pueblo, Sedgwick, Washington and Weld.

⁴ Egecat; using data from the National Center for Atmospheric Research, PCI has determined that Colorado’s \$2 billion flood loss in 2013 alone is greater than its total flood losses from 1955 to 2003 combined (in today’s dollars).

eight people have died, 218 people were injured and one person is still missing from this “once in a millennium” event (as described by the NWS).⁵

Although 23,078 households in Colorado have applied for disaster assistance with FEMA (as of Oct. 6, 2013),⁶ most flood victims do not have insurance coverage for this type of loss. FEMA data show that roughly 6,200 home and business owners in Boulder and Larimer Counties have flood insurance policies (Boulder – 4,877 policies and Larimer – 1,322 policies). El Paso County has the second largest number of policies (3,698). Throughout the state, there are only about 22,000 flood insurance policies in force, or about 1 percent of the total number of households.⁷

One reason for the very small percentage (in Colorado and other states) is that people mistakenly think flood insurance is unnecessary because they do not live in a high-risk flood zone and will not be adversely affected. That certain areas have very low probabilities of severe flooding does not mean this type of occurrence will never happen – indeed, the Front Range is a prime example that such a horrendous event can take place. Another reason for the pervasive lack of flood coverage is the common misconception that it is already part of standard property insurance policies issued throughout the country. This is not the case – unlike hail or fire damage, flood damage is excluded from standard residential policies and most business insurance policies in the private market.

The Flood Peril is Very Costly to Insure in the Private Market

Flooding is the most common and deadly natural disaster in the nation, but it has unique challenges that make it very difficult and costly to insure in the private market. Although flood insurance is provided under automobile comprehensive (i.e., “other than collision”) coverage⁸ and many inland marine policies due to covered transportable property that can be readily removed from flood-threatened areas, most private insurers are reluctant to provide flood coverage for properties in fixed locations in high-risk flood zones. In addition, properties located in areas with a high chance of flooding are not independently exposed to loss.

Because of the seasonal nature and higher-than-average loss potential associated with the flood peril, property owners in high-risk zones are more likely to seek insurance coverage – unlike those with little exposure. This adverse selection by those vulnerable to potentially catastrophic losses results in premium levels that would be too high for most insurance customers to pay. Hence, even residents in flood-prone areas have been reluctant to obtain this coverage.

⁵ Colorado Department of Local Affairs, Oct. 9, 2013.

⁶ Colorado Department of Local Affairs, Oct. 9, 2013. Disaster assistance provides money to individuals, families and businesses in an area whose property has been damaged or destroyed following a Presidential-declared disaster and whose losses are not covered by insurance.

⁷ NFIP “Statistics in Effect on Report as of Aug. 31, 2013” and U.S. Census Bureau.

⁸ According to National Association of Insurance Commissioners data, about three-fourths of insured cars in Colorado have comprehensive coverage.

Premiums from such a small policyholder base would likely be inadequate to cover massive payouts in the wake of a large disaster, threatening the financial stability of insurers. The lack of data to identify all properties in floodplains and the inability to accurately measure market penetration and future flood losses create other serious challenges for insurers in terms of managing this singular, high risk. In light of all of these conditions, there is no incentive for insurers to issue flood policies in the private market, especially in high-risk areas. Instead, insurers can choose to partner with the federal government and become “Write Your Own (WYO)” companies under the National Flood Insurance Program that was set up to cover property losses in defined flood zones.

Introduction to the National Flood Insurance Program

This section provides 12 FAQs to help educate policymakers and others on the fundamentals of the National Flood Insurance Program (NFIP) and its operations. For additional details, visit the NFIP website at www.fema.gov/national-flood-insurance-program.

1) What is the National Flood Insurance Program?

The NFIP was established in 1968 by the U.S. Congress to provide consumers with available and affordable coverage for catastrophic and widespread flood losses. Managed by FEMA, this program provides federally-backed flood insurance to residents and businesses in participating communities⁹ throughout the country. The federal government agrees to make flood insurance available (in exchange for a premium) if NFIP regulations for land use, new construction, and floodplain management are adopted and enforced in Special Flood Hazard Areas (SFHAs). Federal flood insurance is available only in these areas. The NFIP also alerts communities to the dangers of flooding and enforces and encourages the mitigation of future flood losses.

Community participation in the NFIP is voluntary, although some states require it as part of their floodplain management program. A community can opt out of the program if it chooses to do so. Participants are usually given a Flood Insurance Rate Map (FIRM), which is an official map of a community on which FEMA has delineated both the applicable special hazard areas and risk premium zones.¹⁰

2) How is NFIP flood insurance sold?

Flood insurance is sold to property owners in one of two ways, either through: (1) state licensed property and casualty insurance agents and brokers who deal directly with FEMA; or (2) private insurance companies under the “Write Your Own (WYO)” program.

The WYO program began in 1983 as a cooperative undertaking of the insurance industry and FEMA. Under this mechanism, FEMA allows private insurers to administer coverage under their own names to

⁹ In most cases, a community is an incorporated city, town, township, borough, or village, or an unincorporated area of a county or parish. However, some states have statutory authorities that vary from this description.

¹⁰ Rates vary by NFIP zone, depending on the degree of flood risk; e.g., high-velocity zone V = coastal areas subject to waves of at least three feet in a 100-year flood; non-velocity zone A = all other coastal and inland areas in 100-year floodplains; and zone X = areas outside SFHAs (i.e., 100-year floodplains). Other defined zones exist as well.

increase participation. WYO insurers write policies and process claims, for which they receive an expense allowance, while the federal government is responsible for all program claims and costs. All WYO companies and their agents are regulated by the states in which they sell flood insurance; coverage is identical among all insurers since it is underwritten by the federal government, and all rates are established by and subject to federally-set NFIP rules and regulations.

The goals of the WYO program are to:

- increase the NFIP policy base and the geographical distribution of policies;
- improve service to NFIP policyholders using insurance industry knowledge; and
- provide the insurance industry with direct operating experience with flood insurance.

3) *What factors are used to determine the level of the flood risk?*

Historical flood experience is one element that determines a community's flood risk. More critical factors can be made by evaluating the community's rainfall and river-flow data, topography, wind velocity, tidal surge, flood-control measures, development (existing and planned), community maps, and other data. Over time, additional development or changes in these factors can alter the flood risk and flood maps may be revised.

4) *Who can purchase NFIP flood insurance?*

NFIP coverage is available only in participating communities that join the NFIP; all owners of eligible property (a building and/or its contents) can obtain coverage. This group includes property owners and renters, owners of buildings in the course of construction, condominium associations, and owners of residential condominium units.¹¹

Almost all communities with serious flooding potential have joined the NFIP – there are now more than 21,000 participating communities in the U.S. and its territories, representing about 95 percent of all properties in the nation's SFHAs.¹² In Colorado, 248 communities currently participate in this program, while 17 communities do not.¹³ Nearly everyone in this state (99.5 percent) lives in an NFIP community and is therefore eligible for federal flood protection.¹⁴

5) *Is the purchase of NFIP flood insurance mandatory?*

Since 1973, federal regulations have required flood insurance on structures located in identified SFHAs that have a federally-backed mortgage. And since 1994, recipients of certain flood disaster assistance have been required to purchase and hold flood insurance to protect against future flood losses. Some

¹¹ Some Coastal Barrier Resources System areas and "Otherwise Protected Areas" are ineligible for NFIP insurance.

¹² FEMA, "Talking Points: Flood Insurance 101," Nov. 2010.

¹³ FEMA, "Community Status Book Report," Oct. 21, 2013; the 17 non-participating communities are: Bennett (Adams County), Blue River (Summit County), Bow Mar (Jefferson and Arapahoe Counties), Custer County, Dinosaur (Moffat County), Elizabeth (Elbert County), Empire (Clear Creek County), Grand County, Hot Sulphur Springs (Grand County), Hugo (Lincoln County), Kit Carson (Cheyenne County), Lakeside (Jefferson County), Nucla (Montrose County), Pitkin (Gunnison County), Sawpit (San Miguel County), Starkville (Las Animas County) and Ward (Boulder County).

¹⁴ PCI, based on U.S. Census Bureau data.

financial institutions may also require flood insurance for properties outside the SFHA as part of their own risk management process.

6) What types of property may be insured against flood loss?

Insurance may be written on any building eligible for coverage with two or more outside rigid walls and a fully secured roof that is affixed to a permanent site. Buildings must resist flotation, collapse, and lateral movement. The structure must be located in a community that participates in the NFIP. Manufactured homes (i.e., mobile, travel trailers without wheels) that are affixed and anchored to a permanent foundation are eligible for coverage. Contents coverage for personal belongings located within an eligible building can also be purchased.

Buildings that are entirely over water or principally below ground, gas and liquid storage tanks, animals, birds, fish, aircraft, wharves, piers, bulkheads, growing crops, shrubbery, land, livestock, roads, machinery or equipment in the open, and most motor vehicles are not insurable through the NFIP.

7) What types of flood losses are covered?

In general, coverage is provided for direct physical loss from a flood which is described as a general and temporary condition of partial or complete inundation of two or more acres of normally dry land area or of two or more properties. An overflow of inland or tidal waters is covered, as is unusual and rapid accumulation or runoff of surface waters from any source. Damage caused by mudflows, as specifically defined in the policy forms, is covered.

Unless there is a general condition of flooding in the area and flooding is the proximate cause of sewer or drain backup, sump pump discharge or overflow, or seepage of water, the NFIP does not insure for physical loss caused directly or indirectly by any of the following:

- Backups through sewers or drains;
- Discharges or overflows from a sump, a sump pump, or related equipment; or
- Seepage or leaks on or through the covered property.

Other exclusions are losses from earth movement (even if caused by flooding). Examples of earth movement include earthquake, land subsidence,¹⁵ landslide, slope failures, saturated soil moving down a slope, sinkholes, destabilization or movement of land resulting from accumulation of water, and gradual erosion.

8) What are the three different forms of the NFIP's Standard Flood Insurance Policy (SFIP)?

The single-peril Standard Flood Insurance Policy (SFIP)¹⁶ comes in three different forms:

¹⁵ Land subsidence is not covered under the flood policy except under certain circumstances. For example, subsidence of land along a lakeshore or similar body of water that results from the erosion or undermining of the shoreline caused by waves or currents of water exceeding cyclical levels that result in a flood is covered.

¹⁶ The specific differences of the three SFIP forms are beyond the scope of this paper.

- Dwelling Form – used to insure one to four family residential buildings and single family dwelling units in a condominium building
- General Property Form – used to insure five or more family residential buildings and non-residential buildings
- Residential Condominium Building Association Policy Form – used to insure residential condominium association buildings

Each form offers coverage for Building Property and Personal Property (Contents). Contents coverage is not automatically included in a standard flood policy and must be purchased separately. Policyholders can usually choose different deductibles for Building Property and Personal Property coverage, and the deductibles will apply separately to these two types of claims. Only one building and its contents can be insured on a policy.

The term of the SFIP is one year. There is a 30-day waiting period before flood coverage goes into effect, unless a lender determines that an uninsured building in an SFHA should be protected by flood insurance prior to making a loan; in this case, flood coverage is effective immediately upon payment of the premium.

9) How much of the actual damages does the SFIP pay?

The SFIP pays just the replacement cost or actual cash value (ACV) of actual flood damages, up to the policy limit. The SFIP is neither a valued policy, which pays the limit of liability in the event of a total loss, nor a guaranteed replacement cost policy, which pays the cost to rebuild one's home regardless of the limit of liability.

10) What are the policy limits of the SFIP?

Maximum coverage limits for residential buildings and contents are \$250,000 and \$100,000, respectively, while coverage limits for non-residential buildings and contents are \$500,000 each. Items such as artwork, photographs, collectibles, memorabilia, rare books, autographed items, jewelry, watches, gems, furs, and articles of gold, silver, or platinum are limited to \$2,500 in the aggregate.

11) Does the SFIP provide additional living expenses or business interruption expenses?

No – the SFIP covers only direct physical flood damage and debris removal. It does not provide for additional living expenses, which are the extra charges over and above the customary living expenses incurred when someone's home is uninhabitable. The flood policy also does not cover business interruption, which replaces lost income and pays for temporary relocation expenses and other expenses resulting from an event that suspends the operations of the business.

12) What factors are used to determine flood insurance premiums?

The various factors considered in determining the premium for flood insurance coverage include the amount of coverage purchased, the deductible amount selected, the flood zone, location, age of the building, building occupancy, and design of the building (foundation type). For buildings in SFHAs built

after the community entered the flood program (i.e., post-FIRM), the elevation of the building in relation to the “base flood elevation” (BFE) is also a factor in determining the premium.

When communities join the NFIP’s voluntary incentive Community Rating System (CRS), their policyholders may receive a discount on flood insurance premiums. The CRS recognizes communities for their additional efforts to: (1) reduce flood damage to insurable property; (2) strengthen and support the insurance aspects of the NFIP; and (3) encourage a comprehensive approach to floodplain management that exceeds the minimum NFIP requirements.

It should be noted that NFIP flood rates have long been subsidized since the program’s inception. They have not reflected the true flood risk for many properties and even though the Biggert-Waters Flood Insurance Reform Act, passed in July 2012, provides for a gradual elimination of these subsidies, the premiums charged will not reflect the costs associated with providing this coverage in the private market.

Concerns with the NFIP

Although millions of individual homeowners and businesses depend on the NFIP to help them recover after flooding, this program is not without its deficiencies. According to the Congressional Research Service, many people in the U.S. who should have flood insurance do not. Despite flood insurance being required under certain circumstances, the number of households with coverage has historically been low – the federal government’s exposure to uninsured property losses from flooding remains substantial. Furthermore, many of the flood maps are outdated and do not provide an accurate picture of the true risk of flood-prone areas (another reason why rates are not actuarially sound).

Most people agree that the largest concern is the NFIP’s financial condition that highlights structural weaknesses in how the program has been funded – primarily its rate structure. The flood program is undercapitalized and expenses continue to grow as homeowners rely on the safety of levees and the false belief that disaster aid will cover all or most uninsured losses. Rate subsidies have created an approximate \$1.3 billion deficit for the program each year.¹⁷ Although the NFIP can borrow money from the U.S. Treasury, this means that taxpayers may ultimately subsidize the program’s losses at times. The program has been heavily in debt for years and the recent devastation in the Northeast caused by Superstorm Sandy (2012) has only made it worse; additional money will need to come from the Treasury to help victims recover from this storm.¹⁸ As of July 2013, unprecedented losses arising from Hurricanes Katrina, Rita and Wilma (2005) and Superstorm Sandy have caused the NFIP to owe the Treasury about \$24 billion.¹⁹

¹⁷ The \$1.3 billion deficit is estimated by the Congressional Budget Office, although the Government Accountability Office suggests the true program subsidy is far higher.

¹⁸ On Jan. 4, 2013, the President signed into law H.R. 41 to provide a \$9.7 billion increase in the NFIP’s borrowing authority, from \$20.725 billion to \$30.425 billion, to pay flood claims related to Superstorm Sandy.

¹⁹ Government Accountability Office Testimony, “National Flood Insurance Program: Continued Attention Needed to Address Challenges,” Sept. 18, 2013, before the U.S. Senate Subcommittee on Economic Policy

The Need for Reauthorization of the NFIP

Discussions on the reauthorization of the NFIP have been a critical issue for Congress and the insurance industry since the last reauthorization expired on Sept. 30, 2008. Short-term extensions of the program finally led to the passage of the Biggert-Waters Flood Insurance Reform Act, which extended the NFIP through Sept. 30, 2017. This law made significant changes in the financial structure to help increase NFIP premium revenues as well as in the program's operational and management structures. Three significant provisions of the Act are: (1) the phasing in of actuarial rates over time, for certain subsidized (pre-FIRM) properties;²⁰ (2) increasing the annual rate cap from 10 percent to 20 percent; and (3) working to ensure that flood maps are updated and more accurate.

After the recent catastrophic floods, Congress has been placing more attention on possible long-term reforms to ensure the program's financial viability and continued comprehensive coverage for all high-risk properties. To prevent its debt from growing further, discussions surrounding NFIP reform have even included ideas to dismantle the program and privatize it. Private insurers could offer flood insurance policies at actuarial prices in flood-prone areas and finance the risk themselves. If this were to happen, one result could be significantly higher premiums that reflect the purchase of reinsurance, the cost of capital and profit as well as taxes and assessments – these items currently are not considered by the NFIP in its rate determination.

PCI concludes that the federal government has been providing flood insurance at roughly one-half the amount of private sector costs. As of Aug. 31, 2013, the average annual NFIP flood insurance premium nationwide was \$675.24 per policy and Colorado's average premium was \$821.40 per policy.²¹ If privatization of flood insurance had taken place over this past summer, this coverage could have cost Coloradoans an average of about \$1,640 a year.

Given the Biggert-Waters phase-out provision of the NFIP rate subsidy that would substantially increase national flood insurance rates, NFIP rates in the future may be much higher. However, one of the authors of Biggert-Waters, Maxine Waters (D-CA), recently introduced legislation that would delay the rate increases contained in the reauthorization bill for two years and would allow for another two years of analysis and comment by FEMA and Congress. If this legislation passes, rate increases designed to phase out the subsidies will disappear essentially until the next reauthorization is required, on Sept. 30, 2017.

Conclusion

The NFIP framework continues to be explored and is moving toward fiscal soundness and long-term stability. FEMA reports that the existing "unified floodplain management strategy" saves the nation an

²⁰ Pre-FIRM properties are either built before flood maps were issued for them or before 1975, whichever is later.

²¹ PCI, based on data from NFIP "Statistics in Effect on Report as of Aug. 31, 2013," the nationwide premium reflects the U.S. and its territories.

estimated \$1.6 billion annually in avoided flood losses.²² These savings are achieved, for example, when buildings are constructed in compliance with NFIP building standards. Structures built to NFIP criteria experience 80 percent less damage than non-compliant structures.²³ The federal program also benefits property owners who live in locations with a substantial flood risk and who are required by mortgage lenders to have flood insurance.

Thanks in part to the marketing efforts of WYO insurers, the NFIP has successfully more than doubled its number of covered participants. There are now more than 5.5 million flood policies in force in the U.S. and its territories, on properties with a total insured value of \$1.3 trillion.²⁴ Some say that this federal program has encouraged, rather than discouraged, people to relocate to flood-prone areas and more properties to be built in these areas. Since 1978, the NFIP has paid out over \$50 billion in flood claims, even when a disaster was not declared. More than 20 percent of the claims came from outside defined high-risk zones. Specifically in Colorado, about 1,300 flood claims have been filed through Aug. 2013, resulting in a total payment of \$11.4 billion.²⁵

In order to help more Coloradoans recover from another tragic flooding event, it is critical to urge all households to purchase NFIP policies. Consumers of this state need greater predictability and financial security in terms of flood protection. They should not have to shoulder another \$2 billion dollar disaster; instead, they can rely on federally-backed flood insurance policies.

*The **Property Casualty Insurers Association of America (PCI)** is a national trade association consisting of more than 1,000 insurers of all sizes and types. PCI members represent 39 percent of the total general insurance market and 32 percent of the total homeowners market in the U.S. In Colorado, PCI members represent 30 percent of the homeowners market.*

*The **Rocky Mountain Insurance Information Association (RMIIA)** is a non-profit communications organization that represents property casualty insurers in Colorado, New Mexico, Utah and Wyoming.*

²² Congressional Research Service, "The National Flood Insurance Program: Status and Remaining Issues for Congress," Feb. 6, 2013.

²³ FEMA, "Talking Points: Flood Insurance 101," Nov. 2010.

²⁴ NFIP "Statistics in Effect on Report as of Aug. 31, 2013."

²⁵ NFIP website and NFIP "Loss Statistics from Jan. 1, 1978 Through Report as of Aug. 31, 2013;" the number of claims reflects both open and closed claims.