I. INTRODUCTION

On September 18, 2003, the huge mass of Hurricane Isabel slammed the shores of North Carolina and surged its way through Virginia and beyond. It left over four million people without power. It damaged buildings and businesses over several states. It caused damages roughly estimated at over $1 billion. It was one of the largest hurricanes the Atlantic Coast – and the insurance industry -- has ever faced.

As with any catastrophic loss, recovery is difficult. But it is not impossible. Millions of dollars can be saved or recovered by insurers who have armed themselves with professionals trained to handle coverage and subrogation issues in the disaster context. Cozen O’Connor has extensive experience serving that function. From Hurricanes Hugo to Andrew to Fran to Floyd, we have saved our clients multiple millions in claims payments.

This paper serves as an initial analysis of the factual and legal issues affecting subrogation opportunities, providing various theories of recovery in the catastrophe context, with emphasis on North Carolina and Virginia law.

II. THE STORM AND ITS CONSEQUENCES

The large eye of Hurricane Isabel descended on the coast of North Carolina mid-day September 18, 2003. The storm struck at 12:15 p.m. between Cape Lookout and Ocracoke Island in the southern part of North Carolina’s Outer Banks. Upon landfall, winds were sustained at 95 miles per hour and gusts reached up to 105 miles per hour. Dubbed “Izzy” by coastal residents, the storm eased down to 80 miles per hour in sustained winds as it crossed the west end of Ocracoke Island, but gusts reached at least 98 miles per hour. At Cape Lookout, gusts reached 89 miles per hour. At Frying Pan Shoals, the automated reporting station...
recorded sustained winds of 70 mph with
gusts of 84 mph. The station at Cape
Hatteras reported wind gusts up to 79 mph
and rains of six to ten inches. Highway 12,
which runs along the chain of barrier islands,
was entirely destroyed in Hatteras Island and
rendered impassable in the remaining chain
of islands from Kitty Hawk to Frisco,
covered in sand and water and power lines.
The bridge on the north end of Hatteras
Island was severed on both ends by the force
of the waves.

Before the storm, North Carolina and
Virginia had furiously prepared for the worst.
A hurricane warning was issued several days
before which stretched from Cape Fear,
North Carolina, northward to Chincoteague,
Virginia. In addition, tropical storm
warnings were issued from Cape Fear
southward to South Santee River in South
Carolina, and north from Chincoteague to
Sandy Hook, New Jersey. The governors of
Virginia, North Carolina, Delaware, and
Maryland declared states of emergency. In
excess of 100,000 people evacuated North
Carolina and Virginia. As the storm
approached, government offices North
Carolina, Virginia, and Washington area
were ordered closed.

Although the storm only reached
Category 2 level, its sheer size and sustained
force left a significant amount of destruction
in its wake. In the words of Max Mayfield,
National Hurricane Center Director, “This
hurricane will not be remembered for how
strong it is. It will be remembered for how
large it is.” After crossing the islands, Isabel
continued to maintain hurricane-force winds
– at least 74 miles per hour – to a radius of
over 115 miles from the center. Tropical
storm-force winds extended up to 345 miles
from the eye. On September 18, President
Bush signed an emergency disaster
declaration covering 26 counties in eastern
North Carolina, and 18 counties and 13 cities
in Virginia. On September 19th, as Isabel
was moving through northern Pennsylvania,
downgraded to a tropical storm but still
carrying sustained winds of up to 40 miles
per hour.

The storm left nearly two dozen people
dead and more than four million people
without power. Structures collapsed and
were flooded over a wide geography.
Countless trees toppled over homes and other
buildings. Seventy-five percent of residential
properties were destroyed in several coastal
cities, some containing standing water
several feet high. There is still tremendous
concern regarding the aftermath of the storm,
including rising rivers and the response of
utilities companies and government agencies.
As with many other major storms, the total
damage will not be fully assessed until
several weeks after Isabel’s strike.

III. SUBROGATION ISSUES

In any large loss, the potential for
subrogation should never be overlooked, not
even when the loss is caused by a so-called
“act of God” such as Isabel. Indeed, Cozen
O’Connor has recovered millions of dollars
in several “storms of the century.” The focus
on such claims is on third parties who played
a contributing role by failing to properly
prepare for or respond to the danger --
supporting players in the Act of God.

This section addresses not just
hurricanes, but also the tornadoes, floods,
and lightning they can spawn. Section A
provides an overview of the nature of
hurricanes and their “offspring.” Section B
provides an overall legal analysis of third-
party liability in the face of such natural
disasters. Section C addresses the liability of adjoining landowners. Section D discusses how to overcome the act of God defense. Section E discusses particular forms of improper preparedness and response in the hurricane context. Section F addresses governmental liability. Section G provides a list of disaster resources.

A. Overview of Hurricanes and Their Offspring

Hurricanes are severe tropical storms with winds that rotate clockwise and reach sustained levels of at least 64 knots (74 miles per hour). They develop over warm tropical oceans and can produce torrential rains and flooding. They can also spawn tornadoes and cause flooding and flash floods. The winds can reach 160 miles per hour and extend inland for hundreds of miles causing tremendous property damage along the seaboard states. The hurricane season lasts from June through November. Satellite systems and hurricane hunters provide ready information on the development of hurricanes over the ocean. The National Hurricane Center in Miami will issue hurricane watches and warnings soon as a hurricane appears to be a threat. A hurricane watch will typically provide advance warning one to two days before the hit.

Tornadoes are storms with violent whirling winds that extend from thunderstorm clouds down toward the ground. The winds can reach 300 miles per hour, uprooting trees, buildings, and other objects and turning them into devastating projectiles in the process. They can create paths of damage over a mile wide and fifty miles long. They form with little advance warning. Every state is susceptible to potential tornadoes, but they occur most often in the Midwest, Southeast and Southwest. It should be noted that auditoriums, cafeterias, and gymnasiums that are covered with a flat, wide-span roof are not considered safe shelter areas.

Of all the natural disasters, floods are perhaps the most common and widespread throughout the states. Most floods develop from spring rains, heavy thunderstorms, or winter snow thaws. They often develop slowly over a period of days. Flash floods, however, come without warning, descending upon communities in a crash of water in mere minutes, usually from intense storms, like hurricanes, or dam failure.

Lightning strikes are common in the course of a hurricane, often resulting in fires. If the structure was improperly equipped with lightning strike protection or fire protection, an action may lie against the architects, contractors, or others that failed to provide, or install, such equipment.

B. Overview of Liability in the Disaster Context

Most liability scenarios in the hurricane context involve claims in the peripheral areas where the winds were below the level of a hurricane or tornado. In such cases, liability is premised on the argument that the property in question failed to conform with building codes, which usually require buildings to withstand winds in the range of 70 to 90 miles per hour. Liability may be relatively straightforward in such claims as long as the claim is supported by experts who can opine on the standard of care in construction and in the degree of force applied to that construction. It will be important for those experts to analyze the degree of damages to surrounding structures to assess how well they held up to similar conditions.
Because hurricanes can spawn tornadoes, it will be important to look for a tornado path. If the damaged structure is outside that path, it is possible to make the case that the structure was only subjected to partial impact. When feasible, an aerial photograph of the structure and its surrounding structures should be taken.

In cases involving direct-path damage from a true hurricane or tornado, other possible theories may also be available. For example, consider the property owner who fails to “batten down the hatches,” e.g., fails to protect the windows or close the garage door. Such failure can result in the roof blowing off from uplift – a condition that could have been prevented if these openings had been properly secured. If neighboring landowners incur damage from the debris of that home, a possible claim may lie for improperly securing the structure. Other theories may include lack of post-disaster governmental response, e.g., pre-storm failure to maintain sewage systems or post-storm failure to install new stop signs or traffic signals within a reasonable time after the storm.

Regardless of whether the claim is a peripheral damage or direct damage case, some basic theories of liability can be used to make the case.

1. Negligence

As with any negligence claim, the elements for a negligence claim against a third party for damage caused in the disaster context are: (1) duty of care, (2) breach of the duty, (3) proximate cause, and (4) actual damages. In the natural disaster context, these elements have special considerations.

a. Duty of Care

Almost all jurisdictions agree that a party with actual or constructive knowledge of an unreasonably dangerous condition owes a duty to adjoining property owners to make the condition safe. In addition, courts in an increasing number of jurisdictions will impose the added duty of inspecting the property for potential defects or hazards, as discussed more fully in Section C, below.

b. Breach

The question of whether a party failed to take the appropriate precautions and thus breached the standard of care is typically an issue for the jury to decide after hearing all of the evidence.

c. Proximate Cause

Even if a landowner breached a duty of care and was thus technically negligent, the landowner will not be liable if the damages would have occurred from an act of God regardless of that negligence. However, the party will be liable for negligence committed in concurrence with an act of God, as discussed more fully in Section C, below.

2. Trespass and Nuisance

Even if negligence cannot be proven, an action for trespass or nuisance may still lie. A trespass is generally defined as an unauthorized entry onto property which results in interference with the property owner’s possessory interest therein. The owner must prove an invasion of the land that interfered with the right of exclusive possession of the land as a direct result of some act committed by the defendant. Any physical entry upon the land constitutes such an invasion, whether the entry is “walking upon it, flooding it with water, casting objects upon it, or otherwise.” W. Page
Keeton et al., Prosser and Keeton on the Law of Torts § 13, at 70 (5th ed. 1984). Similarly, nuisance is any act that unreasonably interferes with the quite use and enjoyment of the land of another. Unlike trespass, however, a nuisance can occur without actual physical entry upon the land. Sounds, smells, and other detractors can suffice.

In the natural disaster context, trespass or nuisance claims can provide a basis for third-party liability even when “the act” of that third party was not technically “negligent.” In Akers v. Mathieson Alkali Works, 151 Va. 1, 144 S.E. 492 (1928), for example, the plaintiff sued under theories of continuing trespass and nuisance for leakage of chemical “muck” from the defendant’s storage basin. Defendant argued that the right of recovery was predicated upon a finding of negligence by defendant. The Virginia Supreme Court rejected that argument, stating:

The law requires that every person so use his own property as not to injure the property of another …. When defendant permitted the muck to escape from its land and injure land of the plaintiff, without his fault, defendant was liable for the damages sustained by the plaintiff. The loss in such cases must be borne by plaintiff or defendant and it seems just that it fall upon the defendant by whose conduct it was made possible.

C. Liability of Adjoining Landowners for Debris Damage

A common subject of legal problems for disaster victims involves rights and responsibilities relating to fallen trees and other storm debris. Determining liability depends on an analysis of duty, breach of duty, and proximate cause.

1. Duty

In most jurisdictions, a property owner owes a duty of care to maintain man-made structures, cultivated trees, and other pieces of human-cultivated landscaping, and naturally occurring objects which he/she knows are in an unreasonably dangerous condition. The duty generally extends to lawful visitors, drivers on neighboring public roads, and adjoining property owners, so long as the landowner had actual or constructive knowledge of the dangerous condition.

2. Breach

The property owner is required to take reasonable precautions against damage to
neighboring property caused by a storm or other natural disaster. The extent of precautions necessary depends upon the likelihood and probably severity of the disaster and the efficacy and cost of precautions.

3. Proximate Cause

Assuming that the property owner has been negligent in some manner, the property owner may escape liability of the damage would have occurred even in the absence of the property owner’s negligence. However, if the property owner’s negligence concurred in causing the disaster, then the property owner can be held liable. If the disaster is so unexpected as to be deemed unforeseeable, then the disaster is a superseding cause, relieving the property owner of liability.

North Carolina

North Carolina subscribes to the general rule of negligence requiring the plaintiff to show that (1) the defendant owed a duty of care to the plaintiff under the circumstances, (2) the defendant failed to exercise the degree of care what would be exercised by a reasonably prudent person under similar circumstances, (3) the defendant’s negligence was a proximate cause of damage; and (4) the plaintiff suffered actual loss or damage. See Bolkhir v. N.C. State Univ., 321 N.C. 706, 709 (1988), McMurray v. Surely Federal Savings & Loan Ass’n., 82 N.C. App. 729, 731, cert. denied 318 N.C. 694 (1987); Keeton, Prosser and Keeton on the Law of Torts, § 30 (5th ed, 1981); Hester v. Miller, 41 N.C. App. 509, 512 (1979), cert. denied, 298 N.C. 296.

As of September 2003, no North Carolina cases have been uncovered which directly discuss the degree of precaution necessary in the context of an approaching storm. Absent direct law on the issue, establishing liability of adjoining property owners should begin with the principle that the law imposes a duty or ordinary care upon every person who engages in an active course of conduct. Toone v. Adams, 262 N.C. 403, 409 (1964). In addition, North Carolina law imposes a duty of care on a property owner to maintain man-made structures, cultivated trees, and other pieces of human-cultivated landscaping, and naturally occurring objects which the owner knows are in an unreasonably dangerous condition. Matheny v. Stonecutter Mills Corp., 107 S.E.2d 143 (NC 1959). The duty generally applies to lawful visitors but not to trespassers. Nelson v. Freedland, 507 S.E.2d 882, 892 (NC 1998). It extends, however, to drivers on public roads and to neighboring property owners, so long as the property owner had actual or constructive knowledge of the dangerous condition. Gibson v. Hunsberger, 428 S.E.2d 489 (NC Ct. App. 1993) (landowner is liable to drivers on public roads adjacent to land for dangerous conditions of which the owner had actual or constructive notice, but is not obligated to inspect property in rural, wooded settings); cf. Rowe v. McGee, 168 S.E.2d 77 (NC Ct. App. 1969) (owner who knows its tree is decayed and likely to fall and damage plaintiffs’ property has duty to eliminate danger but is not liable to defendant if plaintiff had equal ability to control the condition); Annotation, “Failure to Exercise Due Care to Prevent all of Tree”, 27 AM. JUR. 2d, Proof of Facts 639, section 1, at 645 (noting that both owners and occupiers of property have been held liable where the requisite control was found.).

The Gibson case held that in a rural, wooded setting, a property owner is not obligated to inspect the property to uncover
dangerous conditions of which the owner was not previously aware. This is consistent with the common law rule absolving the landowner of any duty to find or remedy naturally occurring conditions, a rule designed to avoid burdening rural landowners with inspection of large unpopulated woodlands. See generally Keeton, Prosser and Keeton on the Law of Torts, § 57 (5th ed. 1984). Other jurisdictions have held similarly. See, e.g., Ivancic v. Olmstead, 66 N.Y.2d 349, 488 N.E.2d, cert. denied 90 L. Ed 658, 106 S. Ct. 1975 (1985) (a duty to remedy the hazard arises where the landowner has actual or constructive knowledge of it, but landowner has no duty to inspect regularly for non-visible decay of trees). However, the Gibson case did not specifically address the duty of a landowner in a more populated setting.

**Virginia**

In Virginia, “[t]he law requires that every person so use his own property as not to injure the property of another, sic utere tuo ut alienum non laedas.” Akers v. Mathieson Alkali Works, 151 Va. 1, 144 S.E. 492 (1928). As stated in City of Portsmouth v. Culpepper, 192 Va. 362 (1951), “Any accident due to natural causes directly and exclusively without human intervention, such as could not have been prevented by any amount of foresight and pains, and care reasonably to have been expected.”

**Other Jurisdictions**

The trend in other jurisdictions has been to impose upon a landowner in an urban or residential setting the duty to inspect the property for defects in trees and other naturally occurring objects. See, e.g., Mahurin v. Lockhart, 71 Ill. App. 3d 691, 390 N.E.2d 523 (1979); Barker v. Brown, 236 Pa.Super 75, 340 A.2d 566 (1975).


**D. The “Act of God” Defense**

The general rule in most states is that an Act of God is no defense if the damages occurred in concurrence with another act. The principle has been stated succinctly as follows: “He whose negligence joins with the act of God in producing injury is liable therefor.” 1 AM. JUR. 2d, Act of God, § 11.

**North Carolina**

As held in Safeguard Ins. Co. v. Wilmington Cold Storage Co., 149 S.E.2d 27 (NC Ct. App. 1966), the landowner will be liable if the landowner’s negligence acted in concurrence with an act of God:


**Safeguard Ins.,** 149 S.E.2d 27 (N.C. Ct. App. 1966). However, the landowner will not be liable for damages if the damages would have occurred from an act of God regardless of that negligence.
This is said in 1 A M. Jur. 2d, Act of God, § 11: “All the authorities without exception agree that a person is not liable for injuries or damages caused by an act which falls within the meaning of the term ‘act of God,’ where there is no fault or negligence on his part. Even where the law imposes liability irrespective of negligence, liability will not be imposed where the injury or damage is solely the result of an act of God.”

The issue was further developed in Lea Co. v. North Carolina Board of Transp., 308 N.C. 603, 304 S.E.2d 164 (N.C. 1983), wherein the plaintiff instituted an action against the Board of Transportation for flooding on or across the plaintiff's property which flowed from an easement taken by the Board. This flooding was a result of a 100-year flood (i.e., a flood that is statistically predicted to occur once in every 100 years). Nonetheless, the North Carolina Supreme Court upheld the trial court determination that this flood was a reasonably foreseeable event. Id. at 175. That court adopted the definition for an Act of God set forth in Black's Law Dictionary, 31 (Revised 5th Edition 1979) as follows:

An Act occasioned exclusively by violence of nature without the interference of any human agency. It means a natural necessity proceeding from physical causes alone without the intervention of man. It is an act, event, happening or occurrence, due to natural causes an inevitable accident, or disaster; a natural and inevitable necessity which implies entire exclusion of all human agency which operates without interference or aid from man and which results from natural causes and is in no sense attributable to human agency.

Lea, 304 S.E.2d at 172 (emphasis added). See also Jenkins v. Helgren, 217 S.E.2d 120 (N.C. Ct. App. 1975) (even if source of spark was an act of God, for which installers of insulation in return duct connected to furnace could not be responsible, installers could be held liable to homeowners for damage caused by fire if their negligence created the hazardous condition upon which the act operated); Bennett v. Southern Railroad Co., 96 S.E.2d 31 (N.C. Ct. App. 1957) (even when an act of God combines or concurs with the negligence of the defendant to produce the injury or when any other efficient cause so combines or concurs; the defendant is liable if the injury would not have resulted but for his/her own negligent act or omission.); Lawrence v. Power Co., 190 N. C. 664, 130 S.E. 735 (1935) (defendant power company, who allowed dry grass to accumulate on its right-of-way under plaintiff’s tower, found liable for fire damage to plaintiff's tower after lightning struck defendant's transmission line causing an insulator on the tower to melt and fall upon the combustible grass below); Lawrence v. Yadkin River Power Co., 190 N.C. 664, 130 S.E. 735 (1925); Supervisor & Commissioner of Pickens Co. v. Jennings, 181 N.C. 393, 107 S.E. 312 (1921); Ridge v. Norfolk Southern R. R. Co., 167 N.C. 510, 83 S.E. 762 (1914).

Virginia

Virginia law does not allow the Act of God defense where the defendant’s negligence was a concurring force that proximately contributed to the damages. As explained long ago by the Supreme Court of Virginia in E.T. White v. Southern Railway Co., 151 Va. 302, 320 (1928):

It is universally agreed that, if the damage is caused by the concurring force of the defendant’s negligence and some other cause for which he is not responsible, including the ‘act of God,’ or superior human force directly intervening, the defendant is nevertheless responsible, if his negligence is one of the proximate causes of the damage . . . .
The Supreme Court of Virginia further discussed the Act of God defense in *City of Portsmouth v. Culpepper*, 192 Va. 362 (1951). In *Culpepper*, Vernon Culpepper sued the City of Portsmouth for damage to his crops that occurred when a city-maintained canal overflowed and flooded Culpepper’s farm in 1948. *Id.* at 365. Years before the flood, the city attempted to replace a washed-out dam located within the canal by constructing an earthen dam across the canal with dirt from the eastern bank of the canal. *Id.*

The removal of the dirt by the city lowered the bank to normal ground level for a distance of one hundred yards. *Id.* at 365-66. Before the city finished the dam, however, it was enjoined from completing its work and ultimately abandoned the project, leaving the earthen dam unfinished. *Id.* at 366. When severe rainstorms hit the area in 1948, water in the canal was obstructed by the partially finished dam and overflowed the canal at the very point where the city had lowered its eastern bank, ultimately flooding Culpepper’s farm. *Id.*

The City of Portsmouth raised the Act of God Defense and introduced evidence at trial showing that rain that caused the flood was the heaviest downpour on record. *Id.* Specifically, the City showed that the rainfall causing the flood was “in excess of anything shown since the Weather Bureau was created in 1879.” *Id.* The jury returned a verdict in favor of Culpepper and the City of Portsmouth appealed.

The Supreme Court of Virginia upheld the jury’s verdict and specifically rejected the City’s Act of God defense stating: “Undoubtedly the record shows that the rainfall in question was extremely severe, but under the circumstances and facts in this case, it cannot be termed an ‘Act of God’. It has been held in Virginia since 1849 that all human agency is to be excluded from creating or entering into the cause of mischief, in order that it may be deemed an Act of God.” *Id.* at 367 (citing Friend *v.* Woods, 6 Gratt. (47 Va.) 189) (emphasis added).

The court pointed to the following definition of “Act of God” in support of its reasoning: “Any accident due to natural causes directly and exclusively without human intervention, such as could not have been prevented by any amount of foresight and pains, and care reasonably to have been expected.” *Id.; see also Ellerson v. Chesapeake & Ohio Railway Co.*, 149 Va. 809 (1928) (defining “Act of God” as such an unusual and extraordinary manifestation of the forces of nature that it could not under normal conditions have been anticipated or foreseen).

Accordingly, defendants raising the Act of God defense in Virginia have the burden of establishing that no human intervention entered into the cause of a loss and that the so-called Act of God was so unusual and extraordinary that it could not have been foreseen. Regarding the “human intervention” element of the defense, early, aggressive and thorough inspections (something Cozen O’Connor attorneys have vast experience in) will be essential to properly evaluate which losses caused by Isabel present the possibility of recovery from third parties and the best avenue to that recovery. Regarding the “foreseeability” element, a defendant will be hard pressed, in light of today’s weather forecasting technology and reporting, to credibly argue that Isabel’s path and force could not have been foreseen.
Other Jurisdictions

Florida follows the general rule on the Act of God defense, deeming it inapplicable where defendant's act contributed to the damages. In *Atlantic Coast Line R. Co. v. Hendry*, 150 So. 598 (Fla. 1933), a railroad company constructed a railroad track which bisected the plaintiff's farm. There was a natural waterway near the farm and in order to cross the waterway, the railroad constructed a fill for its trackbed in which it placed a four-foot culvert for the passage of water. During heavy rains, the culvert overflowed and flooded the farm, destroying the plaintiff's crops and the plaintiff sued for damages.

The defendant railroad asserted that the plaintiff's crops were damaged solely as a result of an Act of God. The Florida Supreme Court upheld the determination that the defendant's negligence was a contributing proximate cause of the crop damage. The court determined that the burden was on the defendant who asserts the Act of God defense to show that the damages resulted solely from the Act of God. Further, the Court stated:

> The defense of vis major may be successfully interposed in an action for damages resulting solely from an Act of God; but if the defendant's negligence is a present contributing proximate cause, which, commingled with the Act of God, produces the injury, then the defendant is liable notwithstanding the Act of God. Citing *Davis v. Ivey*, 112 So. 264 (Fla. 1927).

Louisiana follows the majority view in imposing liability for negligence on defendants whose acts, coupled with an Act of God, have caused a loss. The fact that Hurricane Andrew was an Act of God should not, as a rule of law, relieve negligent defendants of liability in a subrogation claim.

Traditional notions of proximate cause provide that "where an Act of God combines or concurs with the negligence of a defendant to produce an injury, the defendant is liable if the injury would not have resulted but for his own negligent conduct or omission." *Gables v. Regent Development Corp.*, 470 So.2d 149, 152 (La. App. 5 Cir. 1985).

The Pennsylvania Supreme Court has followed a similar analysis concerning damages resulting from, or concurring with, an Act of God. In *Bowman v. Columbia Telephone Company*, 406 Pa. 455 (1962), the Pennsylvania Supreme Court considered a case in which a motorist was injured when four telephone poles snapped and fell on the roadway during a snowstorm. Plaintiff alleged negligent maintenance of the telephone poles. The defendant asserted an Act of God defense claiming that the snowfall was unprecedented and unforeseeable. The court stated:

> Sometimes all the ingenuity and industry of man can not avail against the turmoil and turbulence of the elements, but it is not enough to escape responsibility for the owner of the instrumentality which inflicts damage to assert that the instrumentality was propelled by the Supreme Being and that, therefore he could shake the clinging snow of responsibility from off his hands.

*Id.* at 459.

The South Carolina Supreme Court in *Belue v. City of Greenville*, 226 S. C. 192 (S. C. 1954). In *Belue*, addressed the Act of God defense in a case against a local municipality that had installed curbing and gutters on a street adjacent to the plaintiff's residence. The installation caused excessive surface water to accumulate (as a result of a five inch rain in three hours) on plaintiff's property. The homeowner sued the municipality to recover damages to his home. *Id.* at 632. The
Supreme Court of South Carolina held that even if the five inches of rainfall in three hours was unprecedented and exceptional, it did not relieve the defendant of liability because it was not the sole cause of injury to the plaintiff's property. *Id.* The court stated the test as follows:

> The principles embodied in all definitions is that the Act must be one occasioned exclusively by the violence of nature and all human agency must be excluded from creating or entering into the cause of the mischief. When the effect, the cause of which is to be considered, is found to be in part the result of the participation of man, whether it be from active intervention or neglect, or failure to act, the whole occurrence is thereby humanized, as it were, and removed from the operation of the rules applicable to the Acts of God.

*Id.* at 633, citing *Mincey v. Dultmeier Manufacturing Co.*, 223 Iowa 252, 272 (1937).

The Texas Supreme Court held similarly on the Act of God defense in *Texas Supreme Court in Luther Transfer and Storage, Inc. v. Walton*, 296 S.W2d 750 (Tex. 1956). In *Luther*, a flood case, the court held that while the damages resulting from an Act of God are not ordinarily chargeable to anyone, an exception to this general rule exists when the negligence of another person has concurred with the Act of God. In this regard, the court stated:

> The rule of non-liability of a ...company or person for damages caused by an extraordinary and unprecedented flood is subject to the exception that negligence in constructing and maintaining the structure concurring with an extraordinary and unprecedented flood in causing damage to another, makes, ... [the] company or person liable for damages, notwithstanding the fact that the flood was extraordinary and unprecedented.


For additional cases on this issue, see Annotation, “Failure to Exercise Due Care to Prevent fall of Tree”, 27 AM. JUR. Proof of Facts 639, § 6, at 657-59.

**E. Particular Forms of Improper Preparedness and Response**

Disaster preparedness is the process of planning for, responding to, and mitigating the damages of the event. The process should start early and stay dynamic. Contractors, property owners, and businesses should consider whom they might affect by failing to properly prepare against the effects of a natural disaster. The ramifications of improper planning can be widespread, affecting customers, suppliers, other contractors, shareholders, related businesses, tenants, landlords, and neighbors.

1. **Structural Considerations**

There are several ways to build, fortify, and/or retrofit a structure to prevent or minimize the effects of natural disasters, including:

a. Upgrading facilities to withstand the shaking of an earthquake or high winds.

b. "Floodproofing" facilities by constructing flood walls or other flood protection devices

c. Installing storm shutters for all exterior windows and doors

d. Removing dead or decaying trees or limbs

e. Securing light fixtures and other items that could fall or shake loose in an emergency
f. Moving heavy or breakable objects to low shelves
g. Attaching cabinets and files to low walls or bolting them together
h. Placing Velcro strips under typewriters, tabletop computers and television monitors
i. Moving work stations away from large windows
j. Installing curtains or blinds that can be drawn over windows to prevent glass from shattering onto employees
k. Anchoring water heaters and bolting them to wall studs

2. Response Systems

When a third party fails to adopt a feasible response system, an affected party may have a basis for recovery against that party. Some issues to consider are whether the third party conducted an analysis of and developed a plan for addressing the following:

a. Potential damage to adjoining property or connected businesses as a result of:
   1. Inadequate construction
   2. Inadequate foundation
   3. Inadequate floodproofing
   4. Susceptible gas mains
   5. Explosive materials
   6. Poorly secured chemicals

b. Governing codes, laws, or ordinances, including:
   1. Occupational safety and health regulations
   2. Environmental regulations
   3. Transportation regulations

4. Zoning regulations

c. In-house site maps that indicate:
   1. Utility shutoffs
   2. Water hydrants
   3. Water main valves
   4. Water lines
   5. Gas main valves
   6. Gas lines
   7. Electrical cutoffs
   8. Electrical substations
   9. Storm drains
   10. Sewer lines
   11. Location of each building (include name of building, street name and number)
   12. Floor plans
   13. Alarm and enunciators
   14. Fire extinguishers
   15. Fire suppression systems
   16. Exits
   17. Stairways
   18. Designated escape routes
   19. Restricted areas
   20. Hazardous materials (including cleaning supplies and chemicals)
   21. High-value items

3. Post-Disaster Mitigation

Damages in the aftermath of a disaster, especially business interruption losses, can sometimes exceed the initial physical losses. It is therefore critical to initiate repairs and bring systems back on-line as quickly as possible. Failure to do so can extend the damages not only of the affected property owner or business but also of lessees, renters, and adjoining property owners or businesses. In determining whether a third party has exacerbated the post-disaster damage, consider whether that party did the following:
a. Promptly assessed and protected against remaining hazards.
b. Protected undamaged property by:
   1. Closing building openings
   2. Removing smoke, water, and debris
   3. Protecting equipment against moisture
   4. Restoring sprinkler systems
   5. Physically securing the property
   6. Restoring power
c. Kept detailed records, including photographs, videotape, audiotape.
d. Coordinated actions with appropriate government agencies.

F. Governmental Liability

Every disaster will involve some aspect of governmental activity. Disasters affect the roadways, sewage systems, storm drains, power lines, firefighting activities, and so forth. However, each state has peculiar rules on whether and to what extent a governmental entity may be liable in tort for such damages.

North Carolina

Whether a governmental body will be held liable in tort for negligence depends upon the nature of the acts or omissions constituting negligence. There are two categories of governmental functions: “governmental” and “proprietary.” Sides v. Hospital, 287 N.C. 14, 213 S.E. 2d 297 (1975); Koontz v. City of Winston-Salem, 280 N.C. 513, 186 S.E. 2d 897 (1972), pet. for reh. denied, 281 N.C. 516 (1972); and Casey v. Wake County, 45 N.C. App. 522, 263 S.E. 2d 360 (1980), pet. for descr. rev. denied, 300 N.C. 371, 267 S.E. 2d 673 (1980). A municipality would enjoy sovereign immunity for “governmental” functions, but not for “proprietary” ones.

A good definition of the distinction between governmental and proprietary functions is the following:

Any activity of the municipality which is discretionary, political, legislative, or public in nature and performed for the public good in behalf of the State rather than for itself, comes within the class of governmental functions. When, however, the activity is commercial or chiefly for the private advantage of the compact community, it is private or proprietary.


Case law in North Carolina has helped clarify what functions are governmental and what are proprietary. For example, firefighting activities of a municipal fire department are generally considered governmental or discretionary functions for which the city is immune. See, e.g., Willis v. Town of Beaufort, 544 S.E.2d 600 (N.C. Ct. App. 2001). That immunity, however, can be waived to the extent of the limits of any insurance the department has obtained. N.C. Gen. Stat. §§ 153A-435 and 160A-485. Volunteer fire departments are immune from civil liability for any conduct in connection with their fire suppression efforts. N.C. Gen. Stat. § 58-82-5(b) (1999); see Spruill v. Lake Phelps Volunteer Fire Department, Inc., 351 N.C. 318, 523 S.E.2d 672 (N.C. 2000).

1 Also to note, under the public duty doctrine, certain law enforcement agencies may be shielded from liability in connection with an alleged failure to provide protection to specific individuals. Braswell v. Braswell, 330 N.C. 363, 410 S.E.2d 897 (1991); see also Lovelace v. City of Shelby, 351 N.C. 458, 526 S.E.2d 652 (2000). However, this protection is limited and should be analyzed carefully.
Sewage maintenance is generally considered proprietary in nature, thus conferring liability to municipalities for failure to maintain sewage systems, including storm drains. *Howell v. City of Lumberton*, 548 S.E.2d 835 (N.C. Ct. App. 2001) (“The general rule is that a municipality becomes responsible for maintenance, and liable for injuries resulting from a want of due care in respect to upkeep, of drains and culverts constructed by third persons when, and only when, they are adopted as a part of its drainage system, or the municipality assumes control and management thereof,” quoting *Hotels, Inc. v. Raleigh*, 268 N.C. 535, 151 S.E.2d 35 (1966)); *Pulliam v. City of Greensboro*, 103 N.C. App. 748, 754, 407 S.E.2d 567, 567 (1991) (municipality “not immune from tort liability in the operation of its sewer system.”). However, if some other entity besides the municipality assumed control over the sewage system, the municipality may not be liable. See, e.g., *Milner Hotels, Inc. v. City of Raleigh*, 268 N.C. 535, 151 S.E.2d 35 (1966), modified on reh’g, 271 N.C. 224, 155 S.E.2d 543 (1967) (a municipality is responsible for negligent maintenance of drains constructed by third persons only if it adopted them as part of its drainage system or assumed control and management thereof).

As to debris and/or traffic on state highways, the North Carolina State Highway Commission is immune from suit, except insofar as the right to sue is conferred by the Tort Claims Act. *Ayscue v. Highway Comm’n*, 270 N.C. 100, 102 (1967). As the Act has been interpreted, the Highway Commission is not liable for negligent omissions of failures to act. *Id.* at 103. Therefore, the owner of a car damaged by a tree that fell in the roadway cannot maintain an action against the highway commission for failure to maintain the tree. Moreover, a plaintiff probably cannot maintain an action for negligent failure to maintain manmade objects such as telephone poles. See *id.* (plaintiff could not maintain an action against the Commission based on the Commission’s negligent failure to removal gravel from a paved intersection, where the gravel had been strewn by cars from a nearby gravel road).

**Virginia**

Unlike North Carolina, Virginia has a specific six-month notice requirement for actions against a governmental agency. Virginia Code 1950 § 8.01-222. Fortunately, in *Miles v. City of Richmond*, 373 S.E.2d 715 (Va. 1988), the Virginia Supreme Court found the notice-of-claim statute, Virginia Code 1950 § 8.01-222, to be mandatory but not jurisdictional. The statute is to be construed liberally, and substantial compliance with its terms is sufficient. The statute reads as follows:

§ 8.01-222 Notice to be given cities and towns of claims for damages for negligence. No action shall be maintained against any city or town for injury to any person or property or for wrongful death alleged to have been sustained by reason of the negligence of the city or town, or of any officer, agent or employee thereof, unless a written statement by the claimant, his agent, attorney or representative of the nature of the claim and of the time and place at which the injury is alleged to have occurred or been received shall have been filed with the city attorney or town attorney, or with the mayor, or chief executive, within six months after such cause of action shall have accrued, except if the complainant during such six-month period is able to establish by clear and convincing evidence that due to the injury sustained for which a claim is asserted that he was physically or mentally unable to give such notice within the six-month period, then the time for giving notice shall be tolled until the claimant sufficiently
recovers from said injury so as to be able to give such notice; and statements pursuant to this section shall be valid, notwithstanding any contrary charter provision of any city or town.

This must be sent by certified mail, return receipt requested.

Similar to North Carolina, Virginia deems a governmental entity immune for governmental functions but not for proprietary functions. While the planning, designing, laying out, and construction of streets and roads are governmental functions, the routine maintenance of existing streets and roads is proprietary. *Bialk v. City of Hampton*, 242 VA 56, 58, 405 S.E.2d 619 (1991); *Taylor v. City of Charlottesville*, 240 Va. 367, 370-71, 397 S.E.2d 832 (1990).

For sewage systems, the general rule is in Virginia that the maintenance and operation of a sewer system is a governmental function for which a municipality is entitled immunity from tort liability. *See*, e.g., *Gayda v. Gibbs*, 45 Va. Cir. 176, 1998 Va. Cir. LEXIS 122 (Va. Cir. Ct. City of Norfolk 1998); *Mitchum v. Albemarle County Service Authority*, 34 Va. Cir. 208, 1994 Va. Cir. LEXIS 14 (Va. Cir. Ct., Albemarle County 1994) (Sewage authority acted as municipal corporation performing governmental functions in servicing a manhole which was part of its sewer system, and was thus entitled to immunity from liability and tort: “If collecting garbage and removing trash and debris are governmental functions, then collecting and disposing of other forms of waste must also be.”); *Stover v. Keystone Builders, Inc.*, 36 Va. Cir. 595, 1993 Va. Cir. LEXIS 717 (Va. Cir. Ct., Fairfax County 1993); *Linda Lee Corp.v. Covington Company*, 36 Va. Cir. 590, 1993 Va. Cir. LEXIS 716 (Va. Cir. Ct. Bedford County 1993) (The doctrine of sovereign immunity applies to the maintenance and operation of a storm water drainage system by a municipal corporation.); *Wilshin v. City of Fredericksburg*, 26 Va. Cir. 329, 1992 Va. Cir. LEXIS 577 (Va. Cir. Ct., City of Fredericksburg 1992) (Plaintiff’s, neighbors sued for damages caused by sewage backup, claiming the system malfunctioned, backed up or overflowed causing raw sewage to invade the lower levels of their homes; court held, “If collecting garbage and removing trash and debris are governmental functions, then collecting and disposing of other forms of waste must also be. In cities—which almost by definition are densely populated—where drain fields and other individualized modes of sewage disposal are impractical of not impossible, it is difficult to imagine anything more tied to public safety and safety for the benefit of all than the provision of a sanitary sewer system. . . . Therefore, the Court is of the opinion that in Virginia the operation and maintenance of a sewer system is a governmental function.”); *Jackson v. City of Danville*, 26 Va. Cir. 488, 1990 Va. Cir. LEXIS 444 (Va. Cir. Ct., City of Danville 1990) (Plaintiff alleged that her goods and property were damaged by sewage which backed up and flowed into her home as a result of the negligence of the City: “In this case, the City of Danville’s operation of a sanitary sewer system, in the Court’s opinion, falls within the Protective Doctrine of Sovereign Immunity. For this reason, the Court is of the opinion that the City of Danville is entitled to summary judgment as requested in its Motion.”).

However, a few cases are distinguishable from the general rule. In *Mjornell v. Town of Front Royal*, 41 Va. Cir. 399, 1997 Va. Cir. LEXIS 44 (Va. Cir. Ct., Warren County 1997), the court held that a municipality is
immune from liability for an alleged negligent design of a sewer system, but may be liable for damages caused by its negligence with regard to the construction, operation and maintenance of water and sewer systems, which activities are proprietary functions. In addition, the case of *Hampton Road’s Sanitation District v. McDonnell*, 234 Va. 235, 360 S.E.2d 841, (Va. 1987) allowed recovery where the action of the municipality was done as a continuing trespass. Similarly, in *McConnell v. Board of Supervisors of Fairfax County*, 20 Va. Cir. 5, 1989 Va. Cir. LEXIS 402 (Va. Cir. Ct., Fairfax County 1989), the court allowed plaintiff to maintain a cause of action for inverse condemnation in the case of an alleged continuing trespass. The case involved a storm drain which backed up from time to time, causing flooding which damages Plaintiffs’ nearby property. The court held as follows:

Plaintiffs alleged that the Defendant is responsible for this flooding since they are charged with the allegation of designing and maintaining this storm sewer system. In their second amended petition, Plaintiffs allege one court for declaratory relief and one count for inverse condemnation. They presently seek leave to add a count for trespass. … [A] claim for inverse condemnation is essentially a claim that the government has ‘taken’ property without the due process of law in violation of the Fifth Amendment to the U.S. Constitution. As explained in *Barnes v. United States*, 538 F.2d 865 (Ct. Cl. 1976), case law has developed the law of eminent domain as applied to instances of flooding. Property may be taken by the invasion of water where subjected to “intermittent, but inevitably recurring, inundation due to authorized government action.” Id. at 870, citations omitted. A cause of action for unconstitutional taking therefore does not accrue until the flooding becomes inevitable. . . . [T]he Court simply cannot say on the basis of this record that flooding became inevitable at least three years prior to the commencement of this suit, as the defendant contends. Rather, this poses a question of fact to be determined at trial.

As to post-disaster remediation, in *Fenon v. City of Norfolk*, 203 Va. 551, 125 S.E.2d 808 (1962), the Virginia Supreme Court considered a tort claim against a city for failure to clear a tree from the road and found the city immune. Plaintiff claimed injury for striking a tree that fell by a storm and was obstructing a street. The fallen tree was one of some 800 downed trees blocking the streets of Norfolk in the wake of Hurricane Donna, which struck the area in 1960. The Court held that the city's effort to cope with the "emergency situation" resulting from the storm was the exercise of a governmental function, not routine street maintenance. 203 Va. at 555-56.

Similarly, in *Bialk v. City of Hampton*, 242 Va. 56, 58, 405 S.E.2d 619, 620 (1991), the City of Hampton was deemed immune from plaintiff’s suit for personal injuries received when he was struck by snow thrown from the blade of a snowplow which was being operated by a city employee. The Court cited *Fenon* and held that the City of Hampton was entitled to sovereign immunity for negligence committed during its snow-removal efforts. Specifically, the court stated:

Because the City’s snow-removal operations in this case were acts done for the common good in coping with an emergency, they constituted the exercise of a governmental function. Although that function coincided with the City's proprietary function of keeping its streets in safe condition for travel, where those functions coincide, "the governmental function is the overriding factor." The trial court correctly ruled, therefore, that the City was entitled to governmental immunity.
However, the case of *Burson v. City of Bristol*, 10 S.E.2d 541 (Va. 1940) found the city liable in post-fire repair efforts to a building. Five days after a fire had been extinguished members of city volunteer fire department were employed to pull down walls of burned building to make streets safe for passers-by. The court held that the members of volunteer fire department were not acting in the discharge of their duties as firemen so as to relieve city from liability for damages to adjoining property caused by firemen's negligence, nor was city relieved from liability under the statute relating to the destruction of houses to prevent the spread of fire. Code 1936, §§ 3133-3135.

### G. Resources

This section provides the following information sources:

1. Publications

   The Federal Emergency Management Agency (FEMA) provides numerous publications on their website, [www.fema.gov](http://www.fema.gov). Hardcopies can also be obtained by writing to: FEMA, Publications, P.O. Box 70274, Washington, DC 20024. Useful publications include:

   - Disaster Mitigation Guide for Business and Industry (FEMA 190) -- Technical planning information for building owners and industrial facilities on how to reduce the impact of natural disasters and man-made emergencies.
   - Principal Threats Facing Communities and Local Emergency Management Coordinators (FEMA 191) -- Statistics and analyses of natural disasters and man-made threats in the U.S.
   - Floodproofing Non-Residential Structures (FEMA 102) -- Technical information for building owners, designers and contractors on floodproofing techniques (200 pages).
   - Non-Residential Flood-proofing -- Requirements and Certification for Buildings Located in Flood Hazard Areas in Accordance with the National Flood Insurance Program (FIA-TB-3).
   - Building Performance: Hurricane Andrew in Florida (FIA 22) -- Technical guidance for enhancing the performance of buildings in hurricanes.
   - Building Performance: Hurricane Iniki in Hawaii (FIA 23) -- Technical guidance for reducing hurricane and flood damage.
   - Answers to Questions About Substantially Damaged Buildings (FEMA 213) -- Information about regulations and policies of the National Flood Insurance Program regarding substantially damaged buildings (25 pages).
   - Design Guidelines for Flood Damage Reduction (FEMA 15) -- A study on land use, watershed management, design and construction practices in flood-prone areas.

   Publications from other sources include:


2. Websites

- National Oceanic and Atmospheric Administration website: [www.noaanews.noaa.gov](http://www.noaanews.noaa.gov)
- National Weather Service: [www.nws.noaa.gov](http://www.nws.noaa.gov)
- Rainfall data: [http://www.srh.noaa.gov](http://www.srh.noaa.gov) (gives rainfall and other data for a particular area, and narrows it down to specific cities.)
- Mapping of precipitation: [http://www.srh.noaa.gov/lub/wx/precip_freq/precip_index.htm](http://www.srh.noaa.gov/lub/wx/precip_freq/precip_index.htm) (provides maps which classify rainfall events by time interval -- 30 minute, 1 hour, 2 hour, 3 hour, 6 hour, 12 hour, 24 hour -- and according to severity -- 1 year, 2 year, 5 year, 10 year, 25 year, 50 year and 100 year).
- National Climatic Data Center: [www.ncdc.noaa.gov](http://www.ncdc.noaa.gov)
- The Weather Channel: [www.weather.com](http://www.weather.com)
- Accuweather.Com: [www.accuweather.com](http://www.accuweather.com)
- The Weather Network: [www.theweathernet.com](http://www.theweathernet.com)
- Weather Underground: [www.wunderground.com](http://www.wunderground.com)
- Intellicast Weather: [www.intellicast.com](http://www.intellicast.com)

- Online Meteorology Guide: [http://ww2010.atmos.uiuc.edu](http://ww2010.atmos.uiuc.edu)
- World Climate: [www.worldclimate.com](http://www.worldclimate.com)
- Automated Weather Service: [www.aws.com](http://www.aws.com)
- The Weather Center/WeatherWatch.Com: [www.weatherwatch.com](http://www.weatherwatch.com)
- WeatherNet: [http://cirrus.sprl.umich.edu/wxnet](http://cirrus.sprl.umich.edu/wxnet)
- WeatherConcepts: [www.weatherconcepts.com](http://www.weatherconcepts.com)
- National Interagency Fire Center: [www.nifc.com](http://www.nifc.com)
- Center for Analysis and Prediction of Storms, Univ. Oklahoma: [www.caps.ou.edu](http://www.caps.ou.edu)

3. Experts

Cozen O’Connor maintains a database of forensic experts, including engineers, contractors, meteorologists, and numerous others. Recommendations for experts are available from Cozen O’Connor upon request.

The above is just a short list of possible areas for subrogation. Cozen O’Connor, at no charge, will provide an attorney to investigate subrogation potential on those claims exceeding $100,000. Cozen O’Connor is prepared to handle your company’s subrogation claims arising from the losses caused by Hurricane Isabel.
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